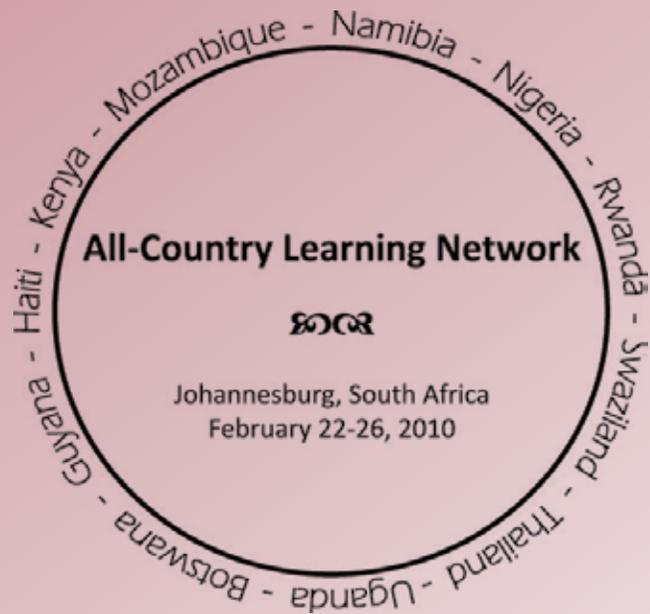


HEALTHQUAL INTERNATIONAL

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PROCEEDINGS



ALL COUNTRY LEARNING NETWORK

FEBRUARY 22-26, 2010

JOHANNESBURG, SOUTH AFRICA

SOUTHERN SUN O.R. TAMBO INTERNATIONAL
AIRPORT HOTEL AND CONFERENCE CENTER

EXECUTIVE SUMMARY

September 2010

Dear Colleague,

The first HEALTHQUAL/HIVQUAL International All Country Learning Network, February 22-26, 2010 in Johannesburg, South Africa was attended by 65 participants from 12 countries in Asia, Africa, South America and the US.

This unique opportunity for peer learning, built on the core principle of reinforcing programmatic sustainability in government-led quality management programs, was by any measure a true success. The following document represents the breadth of content areas presented, discussed and considered over one week in Johannesburg. Participants described their unique national approaches to performance measurement, quality improvement and their quality management programs, conveying their national successes and strategies for overcoming challenges in the implementation of their work. Expert panels offered valuable perspectives about specific topics in their QM programs, and plenary speakers advanced this discussion on topics ranging from early warning indicators and programmatic sustainability, to TB elimination and evaluation of capacity building efforts. The ACLN was an inspiring example of peer exchange in action to reinforce sustainable national capacity and the programmatic transition to country ownership.

This demonstration of peer learning was nowhere more evident than in the Open Space sessions, a participant-driven and self-organizing model for group learning, which produced an impressive range of discussion topics and sharing of experiences across countries that would have been impossible in other forums. The ACLN was characterized by impressive enthusiasm, participation and productivity in each presentation and exchange, especially those generated through the Open Space sessions.

The week ended with a dynamic conversation of lessons learned and next steps. Our way forward will focus on advancing the process of cross-country communication through a commitment to continued peer interaction and use of all tools to reinforce interactive exchange of experiences and ideas.

I want to thank all participants and HEALTHQUAL/HIVQUAL staff for their unique contributions to this first-time event, and acknowledge the truly remarkable work evident in each participating country.

Best wishes,

Bruce Agins, MD, MPH

Director, HEALTHQUAL/HIVQUAL International

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Dr. Bruce Agins, Director, HEALTHQUAL/HIVQUAL-International opened the first All Country Learning Network in Johannesburg welcoming participants and providing context for the week-long meeting. His presentation described the rationale for quality improvement and the organizational structure of HIVQUAL at the government level. Dr. Agins went on to describe program design, execution, and associated accomplishments and gaps in current implementation. The presentation demonstrated performance measurement strategies across implementing countries, performance trends, and quality improvement activities linked to performance by country and indicator. Dr. Agins discussed successes and challenges of the national quality programs and the important role of government in building sustainable quality management programs. He concluded with several key points to consider in advancing improvement programs.

1. Quality improvement is not rocket science
 - The 6S Model from Thailand: Short – few major steps; Simple – only essential data needed; Sampling – small sample size; Systematic – standard process and system; Specific – few major indicators, clinically relevant; Self-report – internal quality management.
2. Don't forget the fishbone
 - A straightforward model for process investigation
3. When implementing improvement, focus on 3 main questions:
 - What do we want to accomplish?
 - How will we know that a change is an improvement?
 - What kind of changes can we make that will lead to improvement?
4. Incorporate data quality into the QM program:
 - Documentation systems, legibility, accuracy of case lists, data collection plan, simple validations processes, review results before submitting
5. Start early and incorporate pre-service training in QI:
 - This should be seen as part of the job for doctors, nurses, medical assistants, pharmacists and public health professionals
6. Monitoring ourselves will help us do a better job and show others results:
 - Defining regular tracking indicators - # of patients eligible for review? # to be sampled? Participating clinics? # eligible?
7. Harmonize with other initiatives:
 - Early warning indicators (EWI), longitudinal ART cohorts, surveillance data, use other data sets to guide improvement priorities
8. Involve patients in QI
9. Make outcomes visible
10. Leadership involvement makes a substantial impact
11. Involve staff fully in QI:
 - Their investment in this process motivates participation
 - First hand observation of data and its use in changing systems often enhances job satisfaction
12. The Sustainability Pyramid
13. Focus QI on public health priorities

“Quality Never Goes Out of Style”



Following Dr. Agins' remarks, George Tidwell of the Health Resources and Services Administration (HRSA) welcomed all participants.

Next, Richard Birchard, HIVQUAL Deputy Administrative Director introduced ACLN participants to the concept of Open Space, a participant-driven, interactive forum for peer exchange utilized each afternoon (a more detailed description of Open Space, including session notes, appears on page 85).

Representatives from the ten participating countries (Botswana, Guyana, Kenya, Mozambique, Namibia, Nigeria, Rwanda, Swaziland, Thailand and Uganda) briefly presented on their country's demographic profile, HIV/AIDS epidemics, and HIVQUAL implementation. Common themes of QM program development described during these presentations included:

- Strong Foundation
- Acquisition and appropriate application of resources
- Integration of quality into health systems
- Incorporate and enhance patient involvement
- Capacity building toward country ownership
- Greater emphasis on a public health approach to QM (HIVQUAL to HEALTHQUAL)
- Making QI more visible
- Sustainability
- Partnerships/Collaboration with ministries of health, other relevant governmental bodies and civil society organizations (minimize duplication of effort)

Common challenges identified across countries included:

- Staff turnover and staff shortages
- Lack of support among leadership
- Competing priorities and heavy workload
- Collaboration
- Geographic constraints and natural disasters
- Resource deficits
- Poor data collection/data training
- Population (extreme highs and workforce shortages)



Overview of the Talk

- The Purpose
- The Team
- The Background: The Intro Talk
- The Accomplishments and The Gaps
- Government-level Quality Management
- Future Directions: Key Messages
 - “the view from Bruce”

ACLN: The Purpose

- *To provide a forum for peer exchange, through a mix of panel and expert presentations as well as participant-driven discussion sessions to advance knowledge and build country capacity to create sustainable national quality management programs.*

ACLN: Other Agendas!

- Increase standardization and consistency of packaging of program materials and tools while maintaining flexibility of local adaptation
- Strengthen systems for data interpretation and showing results
- Sharing national models of implementation of quality management programs
- Increase technical knowledge related to medical and public health goals for improving care
- Enhance harmonization with other data collection initiatives within the larger M&E portfolio

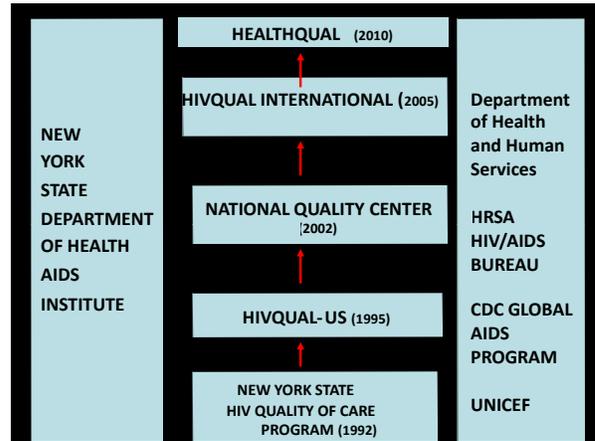
A Very Quick Overview

Why Quality Improvement?

- It’s about implementation
- It’s about systems
- It’s about staff using their own data

What Are We Asking?

- Are clients who are eligible for services receiving them?
- Are services appropriate when provided based on evidence or national guidelines or standards of service delivery?
- Is quality of service delivery resulting in the desired health outcomes?



The Intro Talk: Five Slides....

HEALTHQUAL:

A Public Health Approach to Quality Management

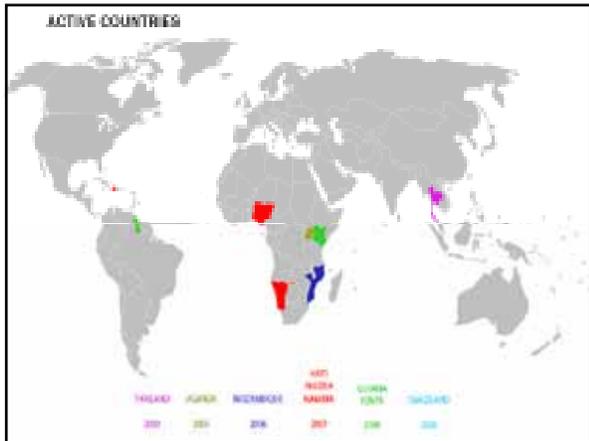


Program Design

- **AIM:**
Capacity building through coaching and mentoring to build **government-** and **facility-**based quality management programs
- **STRATEGIES:**
- **Measurement:** Guideline-derived indicators that are measured through abstraction of sampled medical records
- **Improvement:** Data-driven changes lead to system-wide improvements
- **Program Management:** Emphasis on processes and structures to support measurement and improvement
- **Human Resources:** US team → Country team (Ministry based) → Clinic teams
- **Sustainability:** National program implemented through Ministry of Health

Program Execution: National Level

- Engagement and staffing
- Indicators measure whether guidelines are being implemented appropriately
- Improvement education and implementation
- Coaching and mentoring by national country team
- Regional groups to share best practices, ideally based in local health units
- Patient involvement
- Benchmarking data reports
- Expansion geographically and to other service areas



The Accomplishments..... *and the Gaps*

Quick Definition of Terms

- Round: period of data collection
- Wave: group of clinics participating for the first time

Coverage

- Actively participating countries:
 - Guyana, Haiti, Namibia, Nigeria, Kenya, Swaziland, Uganda
 - Thailand
- Actively engaging countries:
 - Botswana, Rwanda
- Newly engaging country:
 - Vietnam

Coverage

- Number of eligible patients from whom randomized samples obtained
- Number of patient charts abstracted

Population Coverage

Year	Patient Population	Records Reviewed
2006		
2007		
2008		
2009		

* Records reviewed apply to visits indicator. Aggregate adult and pediatric for 2007 and 2008. No pediatric records reviewed in 2006, number reflects only adult records

HEALTHQUAL: Clinic Coverage (Aggregated)

Year	Adult Sites	Pediatric Sites	Total Sites
2008			
2007			
2006			

HIVQUAL International Participation

HIVQUAL International Aggregate Site Participation					
Adult Sites		Pediatric		TOTAL	
Wave 1	Wave 2	Wave 1	Wave 2		

HIVQUAL Site Visits (Conservative Estimates)

Country	Site Visits
Guyana	
Haiti	
Kenya	
Namibia	
Nigeria	
Swaziland	
Uganda	

HEALTHQUAL/HIVQUAL International Regional Groups *A Work in Progress*

COUNTRY	NUMBER OF REGIONAL GROUPS
Mozambique	
Namibia	
Uganda	

HEALTHQUAL Expansion: Coverage (Country-Level)

- Proportion of clinics involved by level
 - Adult
 - Pediatric
- Proportion of districts involved

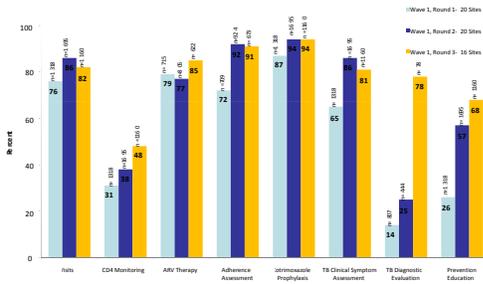
Performance Measurement

Examples of national performance data:

or

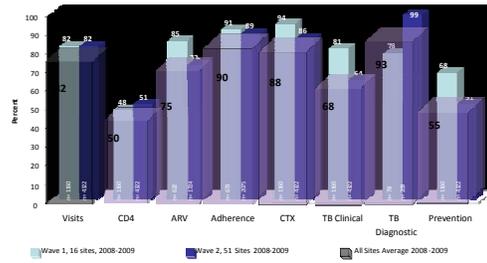
What are the data telling us?

Uganda: Wave 1 Aggregated (Adults)

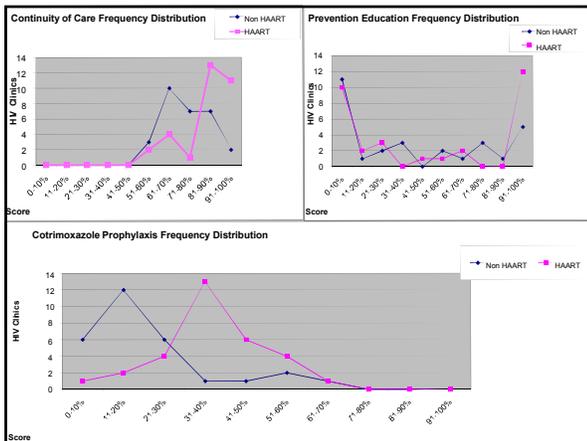
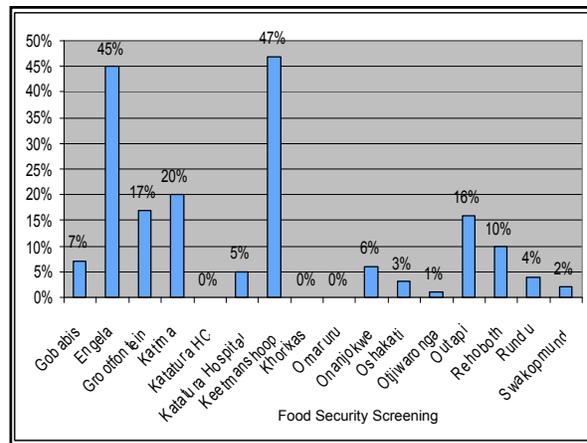
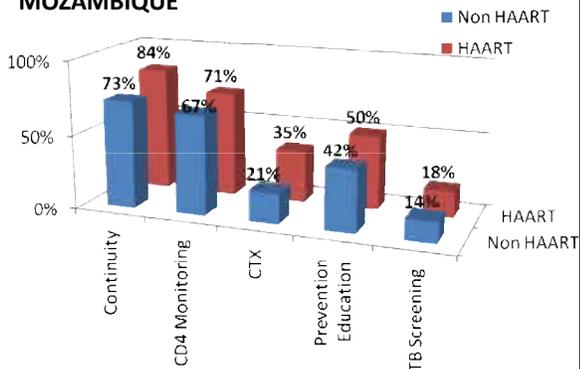


Uganda

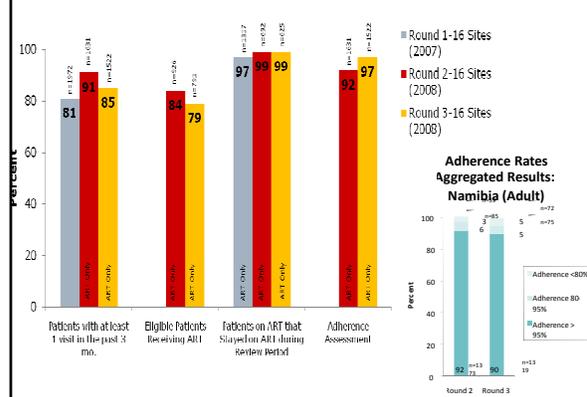
Uganda Recent Performance Cross-Section



Baseline data collection, national-level aggregate data MOZAMBIQUE

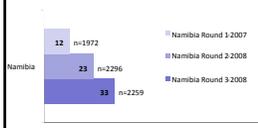


NAMIBIA: ART Suite of Measures

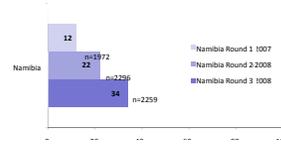


UNIQUE MEASURES

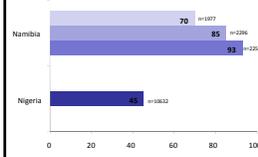
Alcohol Screening: Aggregated Results



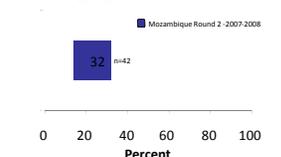
Food Security: Aggregated Results



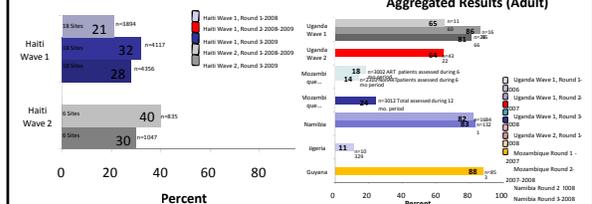
Weight Monitoring: Aggregated Results (Adult)



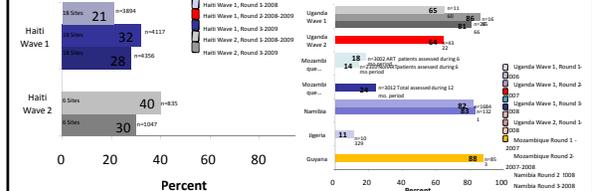
Post-Exposure Prophylaxis: Aggregated Results



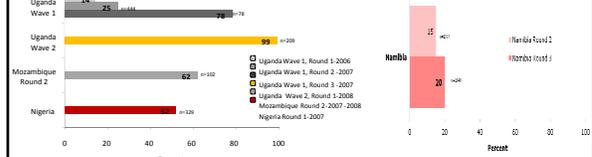
Latent TB Infection Screening



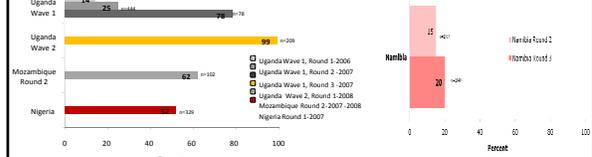
TB Clinical Symptom Assessment: Aggregated Results (Adult)



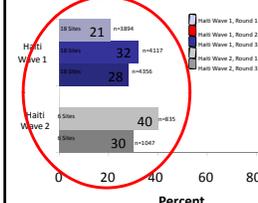
TB Diagnostic Evaluation: Aggregated Data (Adult)



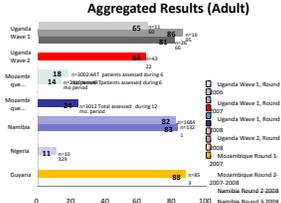
IPT NAMIBIA



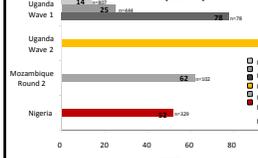
Latent TB Infection Screening



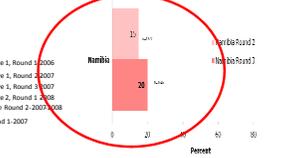
TB Clinical Symptom Assessment: Aggregated Results (Adult)



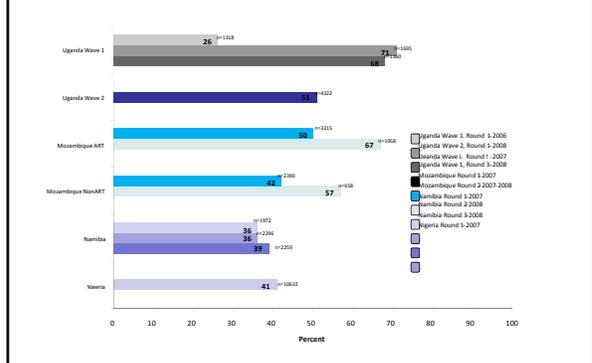
TB Diagnostic Evaluation: Aggregated Data (Adult)



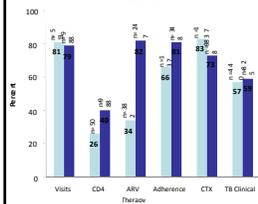
IPT NAMIBIA



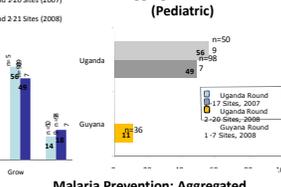
Prevention Education: Aggregated Results (Adult)



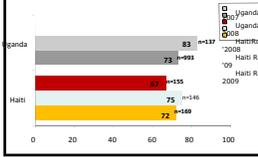
Uganda Aggregated Results (Pediatrics)



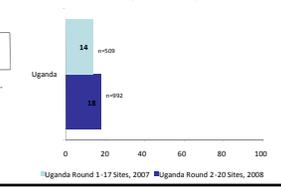
Growth Monitoring: Aggregated Results (Pediatric)



Cotrimoxazole Prophylaxis: Aggregated Results (Pediatric)

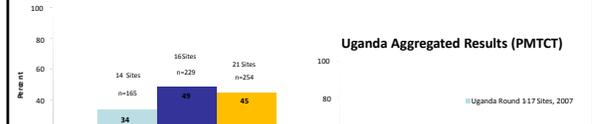


Malaria Prevention: Aggregated Data (Pediatrics)

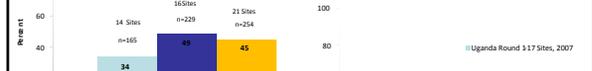


PMTCT: Initial Forays

Haiti Aggregated Results PMTCT



Uganda Aggregated Results (PMTCT)



Indicator: Number of HIV+ Pregnant Women Receiving ART

Number of Children in HIV/ART Clinic Referred from PMTCT service

QI activity, across countries, grouped by indicator

Indicator	Number of documented QI projects
Health/ Prevention Education	19
Hematocrit/ Liver Function	1
INH/IPT	12
Post-Exposure Prophylaxis	1
Prevention of Mother-to-Child Transmission (PMTCT)	17
TB Assessment and Screening	52
Weight Monitoring	2

QI Projects: CD4 Monitoring

Challenges and Barriers

- Transport of specimens
- Return for monitoring
- Laboratory equipment access

Improvement Strategies

- Provider education
- Ensure test done at first visit or in advance
- Accompanying patient to the lab
- Record test in clinic and health passport
- Develop satellite testing sites
- Transportation services by NGOs
- Look at process flow of transport of specimens and tracking of results
- Involve pharmacist in monitoring for date of test

CASE STUDY: Coordination of Team Activities at TASO Mbale

- Medical Officer: coordinate clinics & give health talks
- Triage Nurse: identifies clients for CD4 screening,
- Lab Technician: takes samples and release timely results,
- Data Officer: generates reports & ensures efficient filing system
- Front Desk Officer: streamline flow of clients
- Counselor: identifies clients, coordinates group sessions, educates clients about the importance of CD4 screening,
- Field Officer: links clients & streamlines field appointments for CD4 re-screening

Cotrimoxazole Prophylaxis

- Monthly meetings to discuss patient eligibility, screen patients and record results in patient's charts
- Improve cotrimoxazole documentation
- Ensure language regarding cotrimoxazole is uniform
- Improve criteria for prescription of cotrimoxazole
- Incentivize providers to capture cotrimoxazole prophylaxis on EMR
- Support group
- Community outreach to remind patients about regularly scheduled drug pick-ups
- Strengthen counselor's emphasis on cotrimoxazole
- Improve patient education on: adherence to drug pick-up and clinic visits
- Educate staff to identify patients eligible for cotrimoxazole prophylaxis and present these patients to doctors
- Increase surveillance for cotrimoxazole prescription by doctors and pharmacists using treatment response utility tool
- Increase identification of patients eligible for cotrimoxazole
- Make cotrimoxazole available in nurse/counselor's rooms
- Applied protocol for prescription of cotrimoxazole

QI Projects: TB Assessment and Screening

Challenges and Barriers

- Coordination between TB program and laboratory
- Documentation systems
- Patients not going to lab for sputum collection after visit
- Patients not picking up medication after diagnosis
- No access to MDRTB Treatment

Improvement Strategies

- Co-locate IPT in HIV clinic instead of providing only in TB clinic
- Synchronize TB clinic appts with HIV
- Provide decision support for providers via reminders
- Implement TB specific form
- Linkages between HIV program, TB program and laboratory
- Utilize community counselors to find patients
- Perform sputum collection in clinic
- Use non-clinical staff to transport sputum to lab
- Incentives for staff on TB units: Meals to boost immunity

TB SCREENING/IPT ASSESSMENT FORM

NAME	SYNOPTIC FORM	NO
CLINIC		
DATE		
HEALTH CARE		
ALREADY TAKING ANTITUBERCULAR		
IF YES, WHICH DRUGS ARE TAKEN		
CLINICAL AND RISK		
PREVIOUS AND LONG DISTANCE		
PREVIOUS TB		
PREVIOUS TB TREATMENT		
PREVIOUS TB TREATMENT		

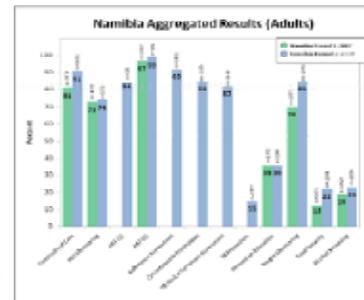
1. Eligible _____ Date Counsellor _____
 2. Not Eligible _____ Date of entry _____

Trends in Quality Improvement: Across Countries and Indicators

- Commonly cited interventions, tested across countries and indicators, to improve quality performance:
 - Improvement in documentation
 - Patient education
 - Increase sensitivity amongst providers
 - Increase screening in various indicator areas
 - Screening tool development
- The overwhelming majority of projects with 2 or more rounds of data collection, have led to improved indicator measures, regardless of the interventions used.

Success Story: Namibia

- Established in the National AIDS Control Program with quarterly regional group meetings
- Routine reporting of performance data from 16/34 District Hospitals, with roll out to remaining sites planned this year
- Key national challenges in HIV care identified by the HIVQUAL Namibia program are:
 - ◆ Use of Isoniazid Preventive Therapy for Tuberculosis
 - ◆ Routine prevention education for clients in HIV care
 - ◆ Screening for alcohol use and for food insecurity and appropriate referrals based upon identified need.



Courtesy: Gram Mutandi and Ndapewa Hamunime

Consumer Initiatives: The Next Level

- Participation in quality teams
- Representation on agency quality committee
- Review of performance data
- Prioritization of indicators
- Qualitative information about experience of care

Quality Management Program

Organizational Standards for Quality Management

Quality Management Program

- The structures, functions and processes that need to be implemented within an organization to implement and sustain measurement and improvement activities
- Structure
 - Organizational Structure: adapted to clinic size and staffing
 - Resource commitment: people, time
 - Leadership
 - Quality Management Plan
- Planning
 - Goals
 - Roles and responsibilities
 - Workplan
- Measurement
 - Indicators
 - Routine measurement

Quality Management Program

- Improvement
 - Team-based approach to improvement projects
- Staff Involvement
- Patient Involvement
- Evaluation of the Quality Management Program
- Information Systems

Organizational Assessments of the Quality Management Program

- Domains for assessing components of quality management program for HIV services
- Scored 1-5
- Used for guiding technical assistance and coaching
- Also used as needed for monitoring of agency performance
- Offers self-assessment tool for clinics to spur advancing quality management program

Completed OAs

	Number of Baseline OAs	Follow-Up OAs (2nd)	3 rd Round of OAs
Kenya	5	---	---
Guyana	3	---	---
Nigeria	20	---	---
Namibia*	16	16	---
Haiti	16	---	---
Uganda*	Wave 1=20 Wave 2=10	Wave 1=16	Wave 1=7
Mozambique	32	48	---
Swaziland	12	---	---

*2 or more OAs/site

Comparing OA Results Over Time: A Work in Progress

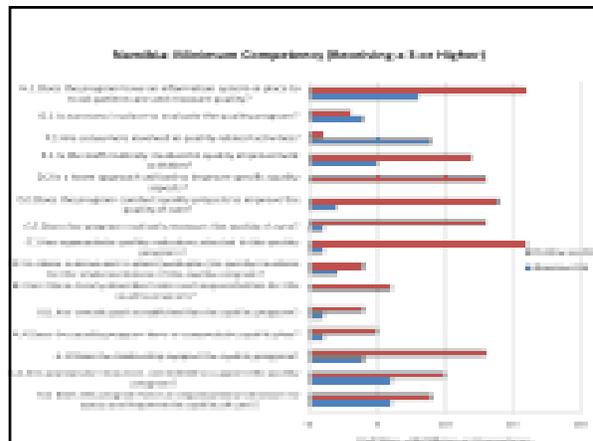
- Identify improvement in quality management programs over time
 - Measured through achievement of **competency**
 - Definition of Quality Competency: Achieving a three or higher on the OA tool.*
 - Identifying increases or decreases in OA performance scores
- Namibia and Uganda
 - Namibia: 16 baseline and follow-up OAs
 - Uganda: 20 baseline OAs for Wave 1 sites
 - 16 Wave 1 sites received follow-up OAs

Uganda: Quality Program Competency n=16 sites

OA Question	Sites with Minimum Competency, Baseline OA	Sites with Minimum Competency, Follow-Up OA	Increase/Decrease in Competency
Quality Structure			
A.1 Does the program have an organizational structure to assess and improve the quality of care?	8	13	↑
A.2 Are appropriate resources committed to support the quality program?	6	16	↑
A.3 Does the leadership support the quality program?	11	11	---
A.4 Does the quality program have a comprehensive quality plan?	3	10	↑
Quality Planning			
B.1 Are annual goals established for the quality program?	4	13	↑
B.2 Are there clearly described roles and responsibilities for the quality program?	5	15	↑
B.3 Is there a document in place (workplan) to specify timelines for the implementation of the quality program?	4	9	↑

Uganda: Site Improvement

OA Question	Sites Increasing by 2 or more	No Change	Sites Decreasing by 2 or less
A.1 Does the program have an organizational structure to assess and improve the quality of care?	5	6	0
A.2 Are appropriate resources committed to support the quality program?	9	2	0
A.3 Does the leadership support the quality program?	3	5	2
A.4 Does the quality program have a comprehensive quality plan?	8	5	1
B.1 Are annual goals established for the quality program?	9	2	0
B.2 Are there clearly described roles and responsibilities for the quality program?	9	2	1
B.3 Is there a document in place (workplan) to specify timelines for the implementation of the quality program?	6	6	0
C.1 Are appropriate quality indicators selected in the quality program?	5	6	0
C.2 Does the program routinely measure the quality of care?	5	5	1
D.1 Does the program conduct quality projects to improve the quality of care?	9	3	0
D.2 Is a team approach utilized to improve specific quality aspects?	8	0	0
E.1 Is the staff routinely involved in quality improvement activities?	2	1	1
F.1 Are consumers involved in quality related activities?	7	3	1
G.1 Is a process in place to evaluate the quality program?	8	4	0
H.1 Does the program have an information system in place to track patient care and measure quality?	6	10	0



Switching Gears: Quality Management at the National Program Level

The Role of Government in Promoting Quality Improvement: A Public Health Approach

- Defines expectations for quality management throughout healthcare system
- Quality management plan
- Leads indicator development
- Issues national reports
- Convenes key stakeholders; establishes national quality TWG
- Assures availability of training
- Ensures data collection systems available
- Disseminates data broadly
- Champions improvement
- Identifies successes and rewards top performers
- Oversees execution and implementation of national quality plan

The Role of Government: Practical Steps for Implementation

- *Set expectations* for specific quality improvement activities in all programs that provide HIV services.
- Focus on *improvement* not citation or penalty.
- *Convene* advisory groups of providers and consumers to define important indicators that measure quality. Engage other governmental units.
- *Emphasize* structures and processes that providers establish to monitor and improve quality in a routine manner as part of their work.
- *Evaluate* programs with common measures to assess the capacity of their quality improvement programs.
- *Define* uniform clinical performance measurement criteria that are consistent with national guidelines.
- *Promote* technical support from experienced quality management experts who can facilitate capability of providers to build their own sustainable QI systems.

Government: Practical Steps for Implementation

- Support information system technology that supports performance measurement activities. Harmonize systems.
- *Reward and recognize* excellent providers who have demonstrated success through their QI programs.
- *Encourage* consumer involvement and direct input into the statewide quality management program.
- *Link* quality management activities to desired health outcomes, policy development and epidemiologic systems.
- *Assure* transparency.

COUNTRY CAPACITY FOR QUALITY MANAGEMENT

Knowledge
Team
Plan



COUNTRY OWNERSHIP OF QUALITY MANAGEMENT

Identifies as QM Program
Site selection
Indicator selection
Reports
Using data for policy



LEADERSHIP OF QUALITY MANAGEMENT

Champion
Engaging all stakeholders
Oversight
Coaching and Mentoring
Recognition

KEY MESSAGES: *The View from Bruce*

1. "Quality Improvement is Not Rocket Science!"

-Margaret Palumbo circa 1996

HIVQUAL-T Strengths: The 6S Model from Thailand

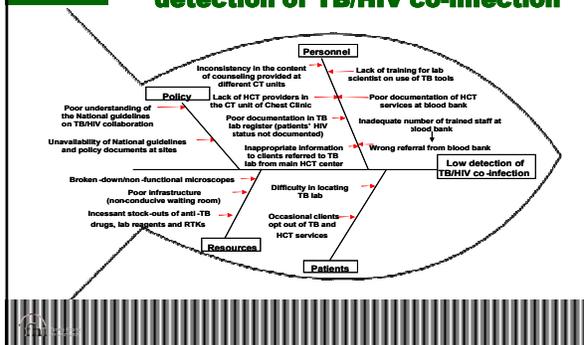
-Dr. Somsak Supawitkul, circa 2005

- **Short:** few major steps
- **Simple:** only essential data needed, paper/computer data entry
- **Sampling:** small sample size
- **Systematic:** standard process and system
- **Specific:** few major indicators, clinically related
- **Self-report:** internal quality management

2. Don't Forget the Fish!

TB/HIV

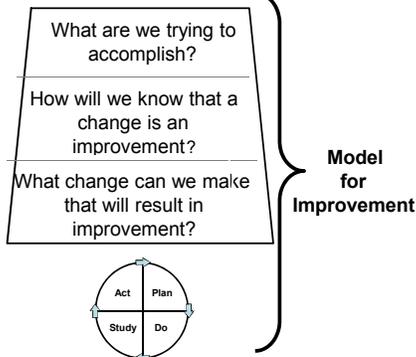
Root-cause analysis for low case detection of TB/HIV co-infection



3. There are Three Basic Questions....

Model for Improvement

-Langley, et. al., Associates



4. Thinking about Data Quality Makes Life a lot easier...

- Documentation systems
- Legibility
- Accuracy of case lists
- Data collection plan
- Simple validation processes
 - check for completeness
 - check for accuracy
- Review results *before* submitting

5. It's Good to Start Early...

Pre-service training in QI helps create the expectation that it is part of the job

- doctors, nurses, medical assistants (tecnicos), pharmacists, public health professionals



7. Monitoring ourselves will help us do a better job – and show others results

Defining regular tracking indicators:

- How many patients eligible for review?
- How many sampled?
- How many clinics participating?
- Of how many eligible?
- How many districts participating?
- Of how many eligible?
- How many site visits conducted for coaching?
- How many regional groups held?
- How many individuals trained?

8. Harmonize with other Initiatives

Almost any other public health evaluation will generate data that can be used to guide improvement activities, e.g.:

- EWI
- Longitudinal ART cohorts
- Surveillance data

9. Involve Patients in QI – They Keep us Honest and Know how the system is really working



Leonard Berry, Texas A&M University, IHI conference (2001)

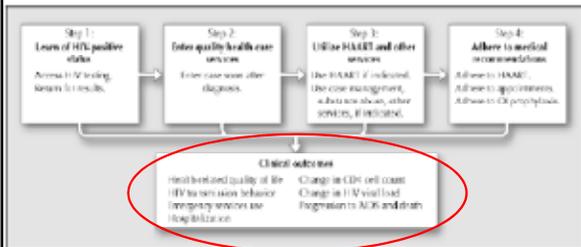
10. Keep Your Eyes on the Prize....Make Outcomes Visible

Process Improvements are the focus of QI but should lead to desired health outcomes:

Weight gain

TB treatment – sterilization

Decline in OI rates



11. Leadership Involvement

Makes a **HUGE** Impact

12. Go to the Ground

Involve staff fully in QI activities: their investment in the process motivates them to participate

First hand observation of data and its use in changing systems often enhances job satisfaction

Reward and recognize staff for their contributions



13. Sustainability Pyramid

Bray P, Cummings D, Wolf M, Massing M, Reaves J. *Joint Commission Journal* October 2009.



Figure 1. This model was developed a priori on the basis of the authors' observations as participants in quality improvement (QI) collaboratives. The more important activities, which are necessary to enable other actions, are at the pyramid's base. Although all elements can contribute, the proposed model suggests an empirical weighting of these five identified areas from most to least important on the basis of their critical role in sustaining the QI process.

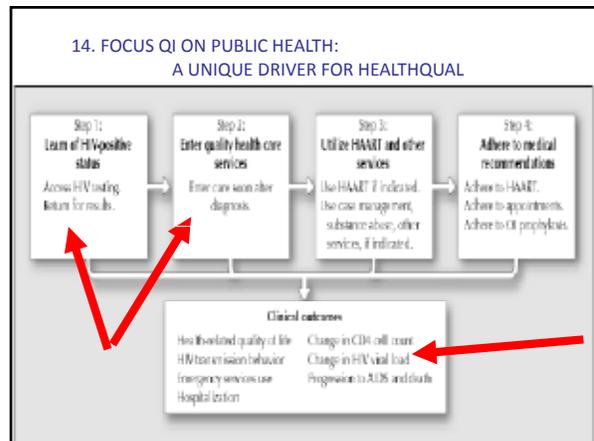
Ensure meeting time for teams to study current data reports.

Ensure meeting time for teams to study current data reports.

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Ensure meeting time for teams to study current data reports.



Acknowledgements and More Information

- www.hivqual.org/international
- Thanks to all of the HIVQUAL teams in participating countries, the HIVQUAL staff, our program managers from PEPFAR and UNICEF, and all of the providers and partners collaborating to improve the quality of HIV and strengthen health systems as part of our work.



WITH GRATITUDE

To the increasing number of collaborators in all participating countries who have contributed to the evolving work of HEALTHQUAL

With special thanks to those who helped contribute to the presentation:

Jeremy Konstam
Meredith Baumgartner
Lauren Antler
Joshua Bardfield
Richard Birchard
Margaret Palumbo

To Those at HRSA and CDC who support our work:

Barbara Aranda-Naranjo
Jose Rafael Morales
George Tidwell
Elliot Raizes

To HIVQUAL teams in each participating country

HIVQUAL International: Staffing

- Full-Time Positions
 - Deputy Directors: Margaret Palumbo (Program); Richard Birchard (Administrative)
 - Communications: Joshua Bardfield
 - QI Program Managers: Michelle Geis; Kathy Smith-DiJulio
 - Support: Pat Hunter
 - Interns (rotating annually)
- Part-Time Positions (full-time at AIDS Institute)
 - Clemens Steinbock – Senior Quality Improvement Specialist (NQC; HIVQUAL-US; NYS)
 - Daniel Tietz – Consumer involvement specialist
 - Joan Manuel Monserrate – Program Manager (HIVQUAL-US, Deputy Director)
 - Mahita Mishra – Program Manager (Part A/B Quality Management)
 - Keisha Lugay – Administrative manager (HIVQUAL-US)
- Consultants
 - Kathleen Clanon – QI Consultant
 - Lisa Hirschhorn and team (JSI) – Evaluation
 - Charles Hyman – Medical Director/QI
 - Dan Sendzik – QI consultant

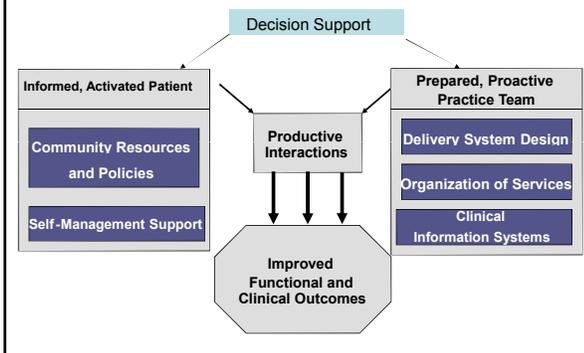
Uganda Frank Lule Christian Pitter Godfrey Kayita Julius Ssendiwaala Prosper Behumbiize Alice Namale Charmaine Matovu Nathan Kenya Mugisha	Nigeria Nasir Sani El Gwarzo Ahmad Aliyu Aloize Ananaba Vindi Singh Azeez Jamilu Ganiyu	Kenya John Wanyungu Mohamed Abass Mohammed Nicholas Muraguri Augustine Tom Oluoch Reinhard Kaiser	Thailand Bill Levine Pongsri Virapat Somsak Supawitkul Saowanee Sringsonam Suchin Chunwimaleung Philip Mock Kim Fox Michelle McConnell Peeramon Ningsanon Patchara Chitlada U Rangsim Lolekha Nicole Simmons Jordan Tappero Robert Gass The BATS HIVQUAL-T Team
Mozambique Mussa Calu Klaus Sturbeck Mauro Sanchez Pascoa Wate Ema Chuva Daniel Lee Kebba Jobarteh Florindo Mudender Sarah Gimbel-Sherr	Haiti Yves-Marie Bernard Patrice Joseph Daniel Lauture Nirva Micheline Louis Nicasky Celestin Roland Charles Rachel I-TECH IT Team	Swaziland Velephi Okello Bheki Lukhele Thembie Dlamini Sithembile Dlamini Fabian Mwanyumba George Bicego	Botswana Stephane Bodika
Namibia Gram Mutandi Ella Shihopo Nadapewa Hamunime Tom Kenyon Sharon Bloom Mark Netherda Francina Yvonne	Guyana Shanti Singh Nicholas Persaud Paul Persaud Janice Woolford Emily Cumberbatch Curtis LaFleur Minister Ramsammy		



Performance Measurement: Challenges

- Data Quality
- Standardization of data collection methods
- Information systems
- Linking process measures to public health outcomes
- Integrating QI measures into M&E systems that can enable providers to immediately generate real-time data from existing systems

Chronic Care Model



Two Dimensions of Quality

Technical Quality
Provider Perceptions
of Quality of HIV
Care

Experiential Quality
Patient Perceptions
of Quality of HIV
Care

Leonard Berry, Texas A&M University, IHI conference (2001)

Challenges to Sustainability

- Political instability
- Staff turnover
- Competing priorities
- Lack of stakeholder engagement
- Uncoordinated planning
- Donor confusion
- LEADERSHIP:
 - “will”

Sustainability

- Ministry-led program integrated into national and regional structures
- Capacity-building for government-led improvement, strengthening of systems and using data for improvements
- Routine collection of core national quality measures which are aggregated for benchmarking with aim to set priorities for national improvement strategies
- Use of QI data in health sector planning and reports for other donors as part of overall M&E portfolio
- Staff involvement at all levels increases worker capacity and motivation

Sustainability - 2

- Pre-service quality management curricula
- Linking with other related activities:
 - Indicators from EWI – *produce reports for equivalent measures*
 - Improvements targeted by PwP – *promoting identified strategies identified as “package” or “bundle”*
- Extension beyond HIV care to other areas of health, particularly chronic disease management and primary care
- Creating expectations

Sustainability - continued

- Leadership
- Time
- Use available data
- Culture

Sustainability: How do we know when we're there?

- Fledgling field
- Synthesis of capacity-building work, organizational theory and biomedical outcomes
- Structures, functions and processes in place
- Culture
- Demands quantitative and qualitative analysis
- National Organizational Assessment

- Rowe A. Potential of Integrated and Continuous Surveys and Quality Management to Support Monitoring, Evaluation and Scale-up of Health Interventions in Developing Countries. 2009. *Am J Trop Med Hyg.* 80(6): 971-979.

From Overseas Back to the US

- Clear goals related to patient outcomes or public health priorities
- Always guideline-driven – not payer driven
- Formal tools not always necessary when the system is already functioning at a high level



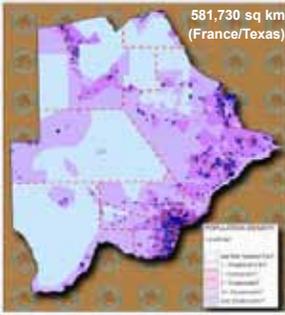
BOTSWANA HIV/AIDS QUALITY IMPROVEMENT INITIATIVES

Country: Botswana
Presenter: T Phindela

Core team members: J Tlale; Dr JH Mukendi-Kazadi; Dr S Bodika; Dr. P. Lekone; T Chadborn

CNtsuape; Dr T Gaqalathe; E Hulela; A Ali; G Awuonda; Dr M Anderson; Dr M Mine; Dr H Jibril; Dr J Chambo; Dr R Lebelonyane; Dr K Seipone

Population and HIV prevalence



- 2009 estimate: 1.9m
 - 62yrs life expectancy
 - 60% urban
 - 81% literate
- HIV prevalence: 17.6%
 - F – 20.4%; M – 14.2%
 - 15-49 yrs: 25.0%
 - <15 yrs: <5%
- TB/HIV: 60-80% of TB
- Free ARVs from 2002
 - 7.5% of pop. on ARV
 - Very few on waiting list

Background

- Strong GoB leadership and GoB financial commitment
- Primary healthcare model, emphasizing accessibility
- Ministry of Local Government
 - Low level: 209 clinics; 314 health posts; 687 mobile health stops
- Ministry of Health
 - Mid-level: 12 district Hospitals; 16 primary Hospital
 - High level: - 3 national referral hospitals .
- 2 private hospitals.
- 2007: initial investigation of Harvard model and HIVQUAL
Strong foundation with wide stakeholder engagement
- 2008: integrated national HIV quality improvement team

Rationale for the team included:

- need to examine the quality of our services.
- need to objectively measure services and programs
- need to harmonize, standardize and collaborate.

Foundation for Quality Improvement

- HIV/AIDS Programs:
 - PMTCT; HCT; ARV; STI/SMC; BCIC; CHBC; WWP
- Clinical/Pharmacy/Lab Master Trainers:
 - Site visits incl. QAI (chart reviews, customer satisfaction surveys)
- M&E systems:
 - national program data
 - electronic patient information system at >100 clinics
 - district IT M&E system with internet connection
- Quality improvement initiatives:
 - national audit teams
 - staff trained in total quality management
 - local Work Improvement Teams
 - sectors implementing various quality improvement initiatives

Program specific issues

What are your 2 key questions?

1. What are the best practices to adopt/adapt for Botswana?
2. How to ensure sustainable implementation after initiation?

What are 3 things that you believe could threaten the sustainability of your QI program?

1. Staff turnover (at all levels)
2. Competing priorities
3. Senior management ownership (at all levels)

Way forward/Program Growth

- 3 major goals that you would like to see implemented in your program

1. Harmonisation through one coordination mechanism in MoH
2. Sustainable dept. and district QI teams
3. Formation of district (internal) audit and national (external) audit teams



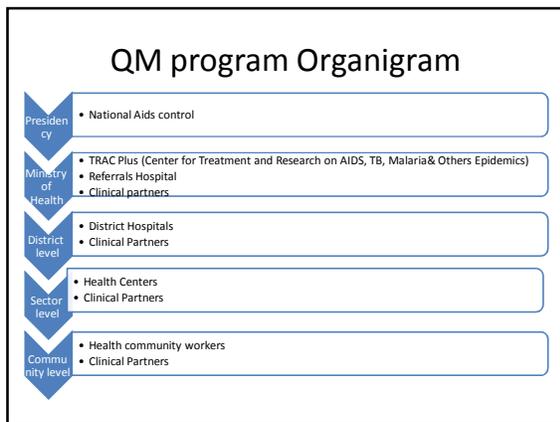
**HIVQUAL/HEALTHQUAL
International**

Country: RWANDA

Presenter: NIYONSENGA Simon Pierre /MOH
Caitlin Biedron, CDC-Rwanda

Background - Rwanda

- Population: ~10 millions (26,338 km²)
- Rural population: 83 % (DHS III, 2005)
- Generalized HIV epidemic
 - 23% prevalence in general population
 - 4.3% among pregnant women
- Rapid scale up of HIV services
 - 367 PMTCT sites
 - 398 VCT sites
 - 283 ART sites (Full package: VCT/PMTCT/ART)
 - On ART: 75 023 (66.5% coverage)

Integration and Coordination

Approach to date:

- Integration of HIV/AIDS proportion measures approved by TRAC-Plus into Performance-Based Financing (PBF) system in January 2009. Next steps involve increasing weight of results and sampling.
- Inclusion of QI domain and HIV/AIDS clinical performance measures in rapid assessment conducted in November 2009 to select sites to be transitioned during first year of Track 1.0 transition to MOH



Successes and Challenges

Key Elements of Program Success:	To ensure sustainability going forward:
<ol style="list-style-type: none"> Integration into existing national data collection systems (PBF, TRACnet, etc) Existence of QI committees at facilities and previous knowledge of QI based on QAP program Substantial QI work introduced by clinical partners in Rwanda; IQ chart used at many PEPFAR-supported sites 	<ol style="list-style-type: none"> Increase facility-level ownership of QI activities; currently partner-led initiatives; strengthen systems in place Establish a culture of data use at the facility-level; not currently emphasized Reduce burden of multiple reporting systems, increasing time available to use data collected; current focus is on reporting up the chain of command



Future Directions

Program Goals in 2010:

- Continue to assist with **Track 1.0 transition**, and efforts to monitor and evaluate the quality of care provided throughout transition, as well as strengthen QM structure and activities
- Liaise closely with **TRAC-Plus** to monitor performance measures and initiate QI projects at ART sites to improve retention
- Collaborate with **UNICEF-Rwanda and MOH UPDC** to model Integrated Formative Supervision in 5 districts, integrating HIV/AIDS indicators w/ MCH measures



HIVQUAL/HEALTHQUAL International Leadership and Core team members

Country: Kenya
 Presenter: Dr. Ibrahim Mohammed, Head - NASCOP

Leadership and Core team members:
 Dr. Ibrahim Mohamed, John Wanyungu, Dr. Davies Kimanga, Mohammed Abbass

Kenya: Country profile

- **Area:** 580,370 sq km (224,081 sq miles)
- **Population:** Approx. 38.6 million (awaiting 2009 census results)
- **HIV prevalence (KAIS, 2007):** Adult – 7.1%; Children- Unknown
 - Great geographical variation in distribution of HIV ranging from 1% to 15%
 - HIV prevalence among pregnant women age 15 – 49 years is 8.9%

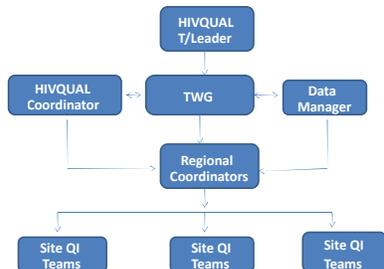
Country profile cont...

- **HIV Program as at December 2009**
 - Over 1,000 ART sites
 - More than 600,000 patients on care
 - More than 360,000 on ART
- **TB/HIV prevalence (co-infection):** Approx. 48.0% among new TB patients

Kenya country profile cont...

- **Year HIVQUAL Began:** Discussions with HIVQUAL Int. started in 2008; 1st meeting with partners and stakeholders held in May 2009
- **Scope of HIVQUAL:** (1. HIV - Adults, Paeds, PMTCT/FP, Exposed Infants; 2. Health System level indicators)
- **Number of facilities:** 36 sites, representing a mix of facilities, both public and private at all levels of health care

QM program Organogram



Program specific issues

- | | |
|--|--|
| <p>What are 3 things you want us to know about your program?</p> <ol style="list-style-type: none"> 1. Just started, very ambitious and well supported by partners 2. Program well distributed in all the regions in the country 3. Focusing on Health system indicators | <p>What are 3 things that you believe might impact negatively on the sustainability of your HQ program?</p> <ol style="list-style-type: none"> 1. Inadequate/high turnover of skilled human resource 2. Erratic supply of commodities (test kits, ARVs and OI drugs) 3. If the program is not mainstreamed in MoH planning/funding |
|--|--|

Progress

- 21 Client level indicators finalized (Adult – 9, Paeds – 7, PMCT/FP – 3 and Exposed Infants – 2)
- HIVQUAL Team put in place
- Site assessment conducted in one province (Nairobi), other provinces still pending
- Factsheet developed and shared
- Study tour to NYC for part of HIVQUAL team

Progress cont...

- Data abstraction tool developed and piloted, awaiting finalization
- Customization of HIVQUAL software to Kenyan indicators ongoing

Way forward/Program Growth

- Finalize Programming of Kenya HIVQUAL software – **Mid March 2010**
- Train site teams on data collection – **April 2010**
- Carry out data abstraction – **April/May 2010** (both clinical and HS indicators)

Way forward cont...

- Data analysis and report generation – **June 2010**
- Establish national baselines – **June 2010**
- Quality Improvement (QI) training – **July 2010**
- Identify and implement site specific QI projects – **July /December 2010**

Ahsanteni sana!

HIVQUAL/HEALTHQUAL International Leadership and Core team members

Country: **SWAZILAND**

Presenter: DR. VELEPHI OKELLO/THEMBIE DLAMINI

Leadership and Core team members: Thembi Dlamini, Dr. Sithembile Dlamini, Bhekie Lukhele, Nozipho Motsa, Nokuthula Maseko, Dr. Fabian Mwanymba, Dr. Augustin Ntilivamunda, Dr. Joris Vandelanotte

Country Data

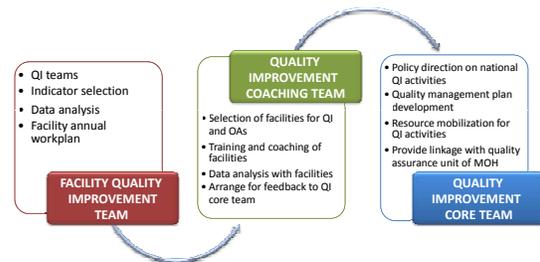


- Population – 1,019,000 (2007 census)
- HIV prevalence – 19%
- Prevalence in 15-49 yrs – 26%
- 79% of TB patients are HIV positive
- ~191,000 PLHIV
- ~15,000 are children <15yrs
- ~70,000 people in need of ART
- 50,000 people on ART

Program Facts

- Quality Improvement program initiated about 8 months ago
- Currently HIVQUAL – only for HIV interventions:
 - Pre-ART and ART (adults and children)
 - PMTCT
 - Early Infant Diagnosis (DBS collection)
 - TB/HIV co-infection
- 32 health facilities identified for Phase1 implementation
- OAs conducted in 30 health facilities
- OAs done with involvement of coaches (partners supporting facilities)
- Lowest score = 1
- Highest score = 35
- Average score = 17

QM program Organogram



Program specific issues

What are 3 things you want us to know about your program?

1. Inclusion of HIVDR EWIs as part of performance measurement
2. It is led by the MOH and aims at national coverage
3. There is collaboration with partners (ICAP, EGPAF, MSF, Baylor, URC) and other departments of MOH (Sexual and Reproductive Health, National TB Program)

What are 3 things that you believe will impact negatively on the sustainability of your HQ program?

1. Frequent staff rotations and transfers – need for repeat trainings
2. Inadequate commitment from health workers due to burn out caused by patient overload at the peripheral facilities
3. The buy-in from the senior management of MOH; restructuring taking place

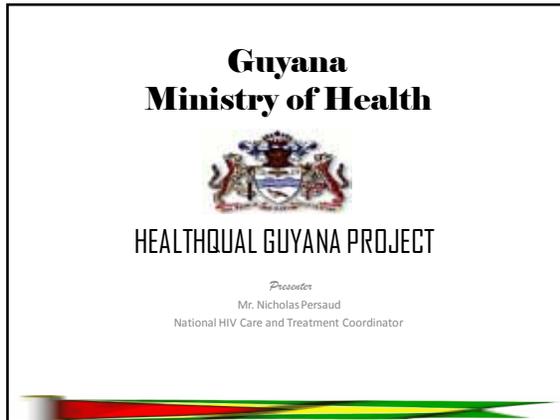
Way Forward

- Training of staff involved on performance measurement process; how to collect and where to collect the data
- Data extraction based on available data sources at the facility, e.g. electronic data base, ART and Pre-ART registers, and monthly reporting forms
- Set Baseline and target for each indicator; each facility to be assisted to set its own target
- On-site coaching by partners – application of PDSA cycle
- Collection of data at the 6th month and comparison with baseline; submission to National Quality Improvement Core Team
- National sharing meeting with all facilities represented; presentation by facilities selected by the Core team based on set criteria
- Facilities to be rewarded according to how much they have been able to improve and how innovative they have been



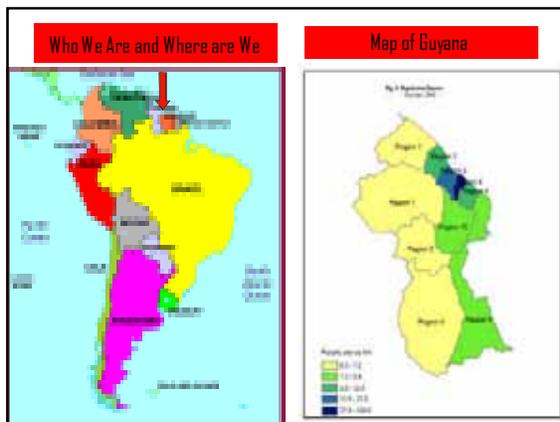
Program Growth

- 3 major goals for our program:
- Improve the quality of HIV service data at all levels of health care delivery
- Build the capacity of health facilities to conduct quality improvement activities in a sustainable manner
- Introduce consumer involvement at national and health facility level
- Establish QI activities as a basis for providing performance based incentives – part of MOH strategy



Leadership and Core Team Members

<p>Guyana National Support</p> <ul style="list-style-type: none"> • Dr Shanti Singh- NAPS/MOH • Dr Janice Woolford- MCH/MOH • Dr Jadunauth Raghunauth- NCTC/MOH • Dr Jeetendra Mohanlal-NTB/MOH • Ms Emily Cumberbatch-MCH/MOH • Mr. Nicholas Persaud-NAPS/MOH • Dr. Curtis LaFleur-CDC Guyana • Mr. Gregory Sills -CRS Guyana • Dr Andrea Lambert -FXB, Guyana • Ms Lisa Thompson -UNICEF Guyana • Mr. Paul Persaud -MIS/MOH 	<p>HIVQUAL International Support</p> <ul style="list-style-type: none"> • Dr Bruce Agins-HIVQUAL International • Dr Kathleen Clanon-HIVQUAL International • Ms Margaret Palumbo-HIVQUAL International • Ms Mahita Mishra-HIVQUAL International • Mr. Richard Birchard-HIVQUAL International
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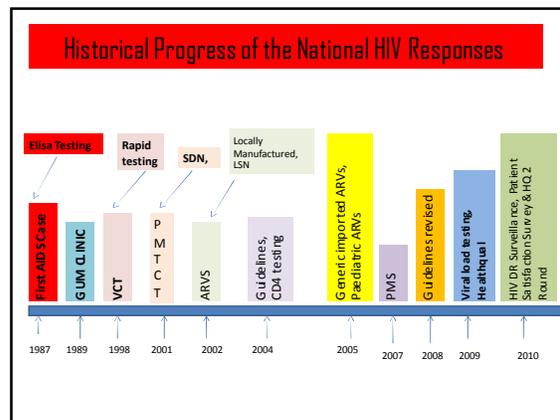


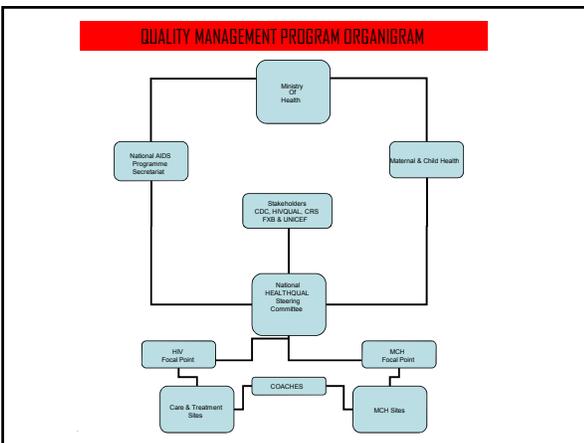
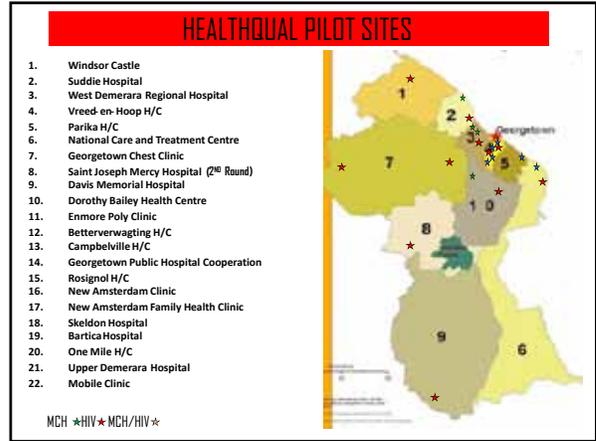
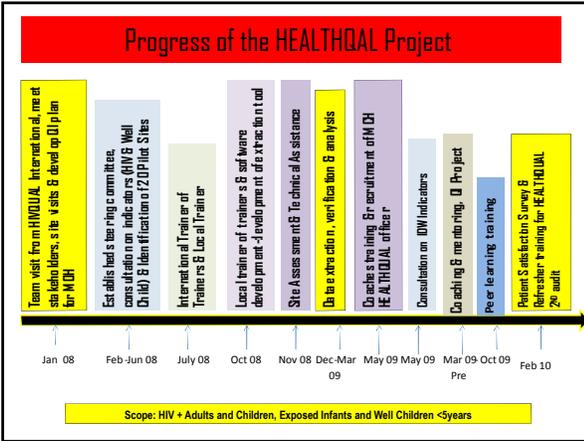
What You Should Know About Guyana

- Guyana has a population of approximately 751, 223 with a landmass of 215,000 square km extending along the north eastern coast of South America.
- We are known as the land of six (6) people
- Majority of the population (86%) is concentrated on the coastal areas with (70%) residing in rural community. Administratively we are divide into 10 regions.
- It is the only English speaking country in South America and along with Suriname are the only South American members of CARICOM.
- Guyana has one of the last remaining pristine rain forest in the world and is the first country to promote Low Carbon Development Strategy.

Epidemiological Profile

- Guyana's epidemic is considered a generalized epidemic.
- Adult HIV Prevalence at the end of 2009 estimated-1.8%
- At the end of 2008- a total of 9700 persons living with HIV (range of 7600 -12000)
- At the end of 2009-a total of 4050 actively enrolled in the national ART programme (2654 Adults & 178 Children on ART , IN Care 1121 Adult & 102 Children of which 9% are receiving Second Line)
- At the end of 2008- estimated that <500 new infections and that <500 AIDS related death would occur





Program Specific Issue PROCESS

- Guyana is the only country that is focusing on the care for both HIV Positive Adults and Children, Exposed Infants and Well Children (< 5 years of age)
- Leadership is provided and supported by the Ministry of Health through a multi stakeholder committee that guides implementation
- Integration of clinical care model contributes in assessing program quality holistically.
- Establish Quality Improvement teams at each sites
- Essential for identifying focal point within programmes and coaches at regional and site level (Sharing and promoting discussion of results)

Program Specific Issue OUTCOMES

- Attrition of skilled and trained staff have negatively influence programme effectiveness.
- Integration into regional structures is imperative for enhance coordination and support. (Promote Increase by In)
- Leadership from the Ministry of Health is the essential component for sustainability of programme.
- Resistance to integration of quality model at local level(Ownership)

Way Forward / Program Growth

- Utilized data from the recent completed patient satisfaction survey and HEALTHQUAL to analyze care holistically.
- Advocate for an established quality of care management programme with in the Ministry of Health.
- Promote program integration in regional authority structure. (Budgets and work plan)
- Expansion to MCH clinic (representative sample of all site providing well child care)



HIVQUAL-Haiti

Presenter: Joan Manuel Monserrate
(on behalf of the Haiti team)

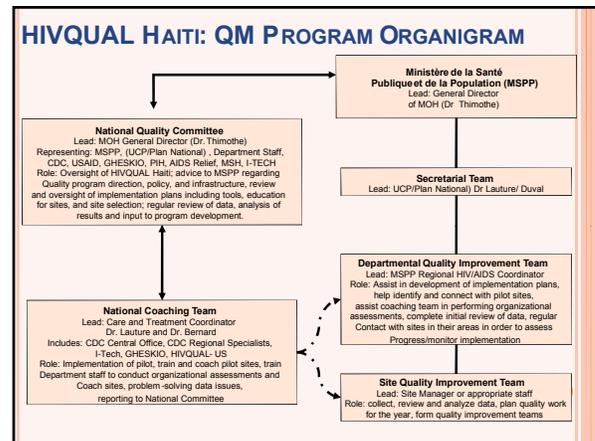
Leadership:
 Dr. Yves-Marie Bernard, Dr. Daniel Lauture,
 Dr. Gabriel Timothee, Ms. Nirva Duval, Ms. Micheline Louis
 Dr. Reginald Jean-Louis, Dr. Ronald Toussaint

US Staff:
 Joan M. Monserrate (Country Lead),
 Dr. Kathleen Clanon (Consultant)

COUNTRY FACTS :

Population	9,598,000
HIV Prevalence (adult and children)	250,000
Enrolled in care:	112,858
TB/ HIV Prevalence	Est. 23% of new TB patients are HIV+
Year Program began	September 2007
Scope of program	HIV, pediatrics, PMTCT
Number of facilities in program	47 (as of December, 2009)

Source: CDC Haiti 11.09



- PROGRAM SPECIFIC ISSUES**
- What are 3 things you want us to know about your program?**
1. Coordinated "National HIVQUAL Advisory Committee," including representation from all partner organizations
 2. Integration of HIVQUAL indicators into national Electronic Health Record (EHR) allows the entire patient population to be sampled
 3. National planning consciously targeted clinics in all 10 of Haiti's topographically diverse regions. As a result, there are HIVQUAL clinics operating under every department.
 4. Rapid scale-up- 47 of the 82 clinics offering HIV care/treatment participate in HIVQUAL-Haiti

- PROGRAM SPECIFIC ISSUES**
- What are 3 things that you believe will impact negatively on the sustainability of your HQ program?**
1. Backlogs of data entry into EMR on the clinic level
 2. Establishing information flow from clinic to clinic, and from clinics to departments and ultimately the MSPP level. Working to develop a centralized/standardized way of collecting project information and then sharing effective strategies between clinics
 3. Challenges in transfer of HIVQUAL program responsibility from MSPP to departments, while also engaging implementing partners actively throughout the transition process
 4. And, since Jan 12, 2010.....

NATURAL DISASTERS AND SUSTAINABLE CAPACITY BUILDING

❖ 2008 Hurricanes:

- August 2008: the first of three hurricanes and a tropical storm devastated Haiti's health care delivery infrastructure.
- Hôpital La Providence in Gonaives (a pilot site), was in one of the hardest-hit areas, suffering severe flooding and abandonment of the facility after Tropical Storm Hanna.
- The coastal city, saturated from rains due to Hurricanes Fay and Gustav, suffered flooding of up to 2 meters.
- Nearly 50,000 people were displaced from their homes into shelters, and more than 600 lives were lost



NATURAL DISASTERS AND SUSTAINABLE CAPACITY BUILDING

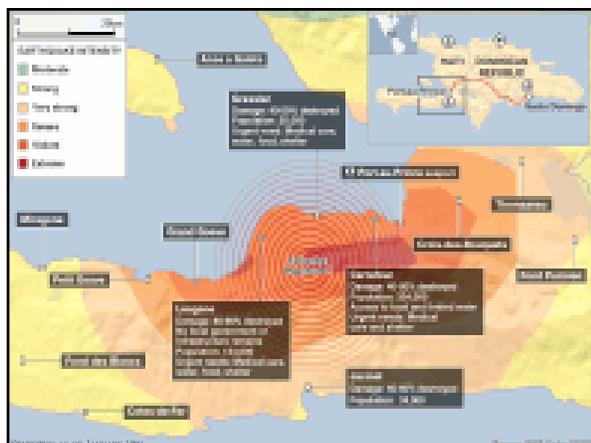
❖ 2010 Earthquake:

- January 12th 2010: an earthquake of magnitude 7.0 struck Haiti.
- Between 217,000 and 230,000 fatalities
- Estimated 300,000 injured and 1,000,000 homeless.
- Approximately 250,000 residences and 30,000 commercial buildings collapsed or were severely damaged.
- The earthquake caused major damage to Port-au-Prince, Jamel and other settlements in the region.

>Damage evaluation procedures/processes:

HIVQUAL-Haiti team will continue assessing sites, and as part of this work, will assess care facilities in other regions of the country that were indirectly affected by the influx of displaced patients. This team is charged with assisting these facilities to ensure that they can build the capacity to serve the increased number of patients.

>Effect on clinic level HIV/AIDS care



WAY FORWARD/PROGRAM GROWTH

1. Strengthen partner and departmental role in HIVQUAL program monitoring/coaching. In long term, transition these responsibilities from MSPP level to regional departments/partners w/ national oversight
2. Expansion of HIVQUAL to cover all of Haiti's HIV care sites
3. Expanded application of HIVQUAL model beyond HIV care, and farther into general health, pediatric, and PMTCT



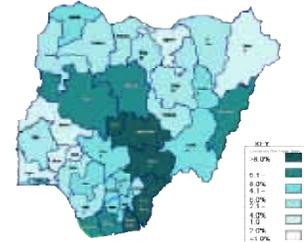
NHIVQUAL NIGERIA

Country: Nigeria
 Presenters: Ganiyu Jamiu, MD – Nigeria FMOH, Deborah Bako, MD – Nigeria FMOH; Ahmad Aliyu MD - CDC

Leadership and Core team members: Drs. W.I. Balami, Nasir S-Gwarzo, A. Azeez, Ganiyu Jamiu, Deborah Bako, Ahmad Aliyu, Anthony Okwosah

Program Facts

- Population: 149 Million; 8th most populous country in the world
- HIV prevalence (Adult) = 4.6%
- PLWHA = 3.95million
- 833,000 Persons are eligible for ARV
- 286,449 on ARV (September, 2009)
- New HIV infection = 384,000 in 2008
- HIV Death = 170,000/Annum
- TB/HIV prevalence: 19%



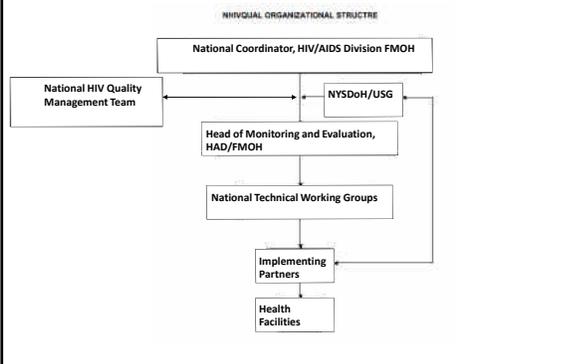
Other Demographics Contd.....

- General Age Structure: 0-14 years: 41.5%; 15-64 years: 55.5%; 65 years and over: 3%
- Sex structure: Males: Female = 51%: 49%
- Median Age = **Total**: 19 yrs **Male**: 18.9 yrs; **Female**: 19.1yrs
- Population Growth Rate = 2% (61)
- Birth rate = 37/1,000 population
- Total Fertility Rate = 5 children/woman

NHIVQUAL Program

- **Year Program Began**: June 2007
- **Scope**: Pilot project scope is HIV Adult care and Treatment, but will extend to Peds C&T, HCT and PMTCT
- **Number of facilities**: 17 Pilot sites, 23 expansion sites (Comprehensive = 269; PMTCT = 472; HCT = 737)

NHIVQUAL ORGANIZATIONAL STRUCTRE



Program specific issues

What are 3 things you want us to know about your program?

1. Successfully conducted a pilot program in 2008
2. Renewed MOH/partner interest .
3. Successful indicator alignment process with all partners for adult/peds/HCT/PMTCT

What are 3 things that you believe will impact negatively on the sustainability of your HQ program?

1. Complexity and size of country
2. Quality management infrastructure at Ministry not fully established yet
3. Competing priorities/workload of government personnel

Way forward/Program Growth

- Continued involvement of all stakeholders with the leadership of FGON
- Formation of National Quality Management Committee
- Moving NHIVQUAL beyond HIV/AIDS





Ministry of Health and Social Services
HIV Quality Management Program

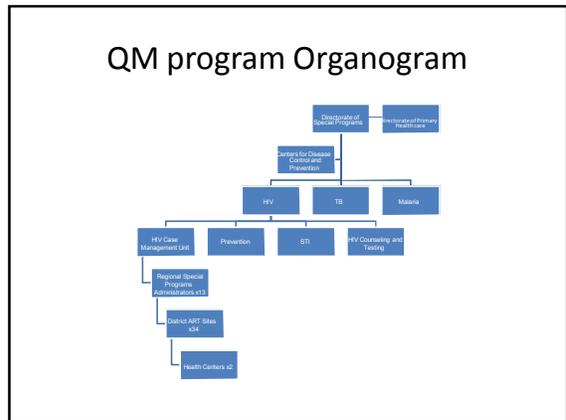
Ms Magdalena Nghatanga
 Acting Under-Secretary
 Ministry of Health and Social Services
 Namibia

Leadership and Core team members

- Dr. Ndapewa Hamunime: [Senior MO](#)
- Dr.Gram Mutandi: [Medical Officer-HIVQUAL](#)
- Ms Claudia Mbapaha: [QI Officer](#)
- Ms Maria Bock: [Chief Health Program Admin](#)
- Mr Salomo Natanel: [Senior HPA-ART](#)
- Ms Francina Tjituka: [Nursing Coordinator Case Managmt](#)
- Ms Naita Nghishekwa: [Program Pharmacist](#)
- Ms Wilhelmina Kafitha: [SHPA-Palliative Care](#)
- Ms Naemi Shoopala: [CDC Field Officer](#)

Namibia: Country Facts

- Population- **2million**
- HIV prevalence -**15,3% general adult population,17,8% among pregnant women 15-49**
- TB/HIV prevalence ~ **60% of TB patients have HIV**
- Other pertinent Demographics: Vast country, sparsely populated (one of the least dense in the world)
- Year Program Began:**2007 with 16 pilot sites**
- Scope (Adult **HIV only** expanding soon into peds and PMTCT)
- Number of facilities:**36**



<p>3 things we would want you to know about your program?</p> <ol style="list-style-type: none"> 1. Program has just been expanded to cover all district level ART sites in the country 2. All district level health facilities and some health centers have a functional electronic Patient Monitoring System and are staffed with a dedicated data clerk which makes it easier to create caselists 3. Currently Piloting the consumer involvement in quality improvement initiative 	<p>3 things that we believe will impact negatively on the sustainability of our HQ program?</p> <ol style="list-style-type: none"> 1. Staff shortage and turnover at facilities coupled with an anticipated increase in work load due to the lowering of the threshold for starting HAART CD4 <350 2. The current Global financial crisis with the anticipated flat lining or dwindling resources over the next few years and the changing priorities of funders
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Way forward/Program Growth

1. Roll out to **ALL** health facilities offering HIV Care in Namibia
2. Devolve technical capacity to district and lower levels to increase ownership
3. Adapt and integrate quality management program into other domains of the general health system beyond HIV/TB as part of broader Health Systems Strengthening

HIVQUAL Mozambique

Leadership Team

Dr. Abdul Mussa, National Director, Medical Assistance
 Dr. Marlene Manjate, Deputy National Director, Medical Assistance
 Dr. Ema Chuva, Chief of STI/HIV/AIDS Program, Ministry of Health
 Provincial Medical Chiefs

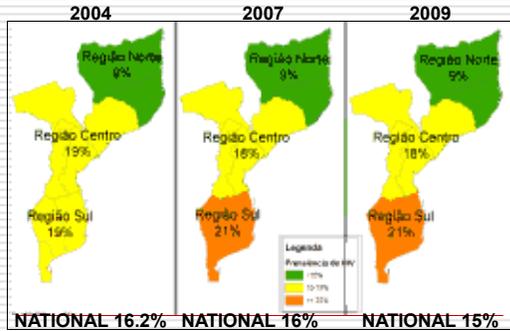
Dr. Mussa Calu, HIVQUAL Mozambique Project Coordinator
 Carlos De Sousa, HIVQUAL Mozambique, Data Manager
 Antoino Barros, HIVQUAL Mozambique, Northern Coordinator

Country representatives:
 Dr. Caria Mosse, Medical Chief, Tete Province
 Dr. Anastacia Lidimba, Director, Chiure Health Center, Cabo Delgado

Program Facts

- **Population:** 20 million
- **HIV prevalence:** Adult 15%
 - Children ≤ 5 years – 2.2%
 - Children 10-14 years – 0.6%
- During civil war migration to neighboring countries, after peace accords returned bringing HIV with them - 1993
- Southern region has highest prevalence at 21%;
- Northern region lowest prevalence at 9%;
- Southern region has high prevalence due to high urban population density (multiple concurrent partnerships) and frequent migration with South Africa for work in the mines;

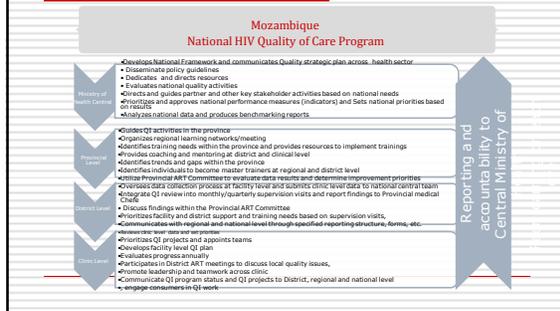
National and Regional HIV Prevalence Rates



Program Facts

- TB/HIV prevalence: 60%
- Illiteracy rate is roughly 60%
- HIVQUAL began in late 2006
 - Initially adult HIV only
 - Pediatrics and PMTCT beginning in 2010
- Currently 62 clinics with expansion planned to most clinics providing ART

QM program Organigram



Program specific issues

What are 3 things you want us to know about your program?

1. In 2009 Minister of Health declared all HIV care will be integrated into primary care to reduce stigma and assure care available at local level
2. Large "Day Hospitals" are being decentralized with patients referred back to primary health centers
3. Geographically HQ-Moz has been expanded to all 11 provinces (from 9)

What are 3 things that you believe will impact negatively on the sustainability of your HQ program?

1. High Turnover of MOH staff at clinic level resulting in lack of continuity of quality programs
2. Competing priorities at the clinic level and without constant supervision quality activities get put aside
3. Ministry vision to rapidly expand to all ART clinics is not matched by resources

Way forward/Program Goals

- ❑ Integration of HQ-Moz into national health system (plan underway)
 - ❑ Promotion of a culture of quality lead by the Minister of health and his desginees at provincial level
 - ❑ Increase the technical expertise in quality across the country and at all levels
-

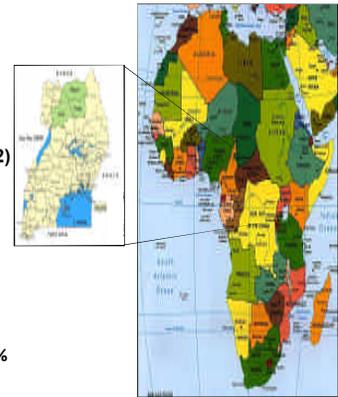
HIVQUAL- Uganda Leadership and Core Team

Presenter: **Kayita Godfrey, MD**

Leadership and Core Team members:
Kayita Godfrey , Ssendiwala Julius, Behumbize Prosper, Namale Alice, Matovu Charmaine & POs from MoH ACP & QA dept

Uganda Background

Population – **33m**
Per capita - **\$ 330**
Per capita (Health) - **9.6% (Abuja 15%)**
Life Expectancy – **49 (52)**
IMR – **75/1,000**
CMR – **137/1,000**
MMR – **435/100,000**
PHAs – **1.1m**
Adult Prev. – **6.4**
Children Prev. - **1.5**
(UHBS 2004/5)
HIV prev. in TB pts – **60%**
TB prev. in HIV pts – **12-25%**

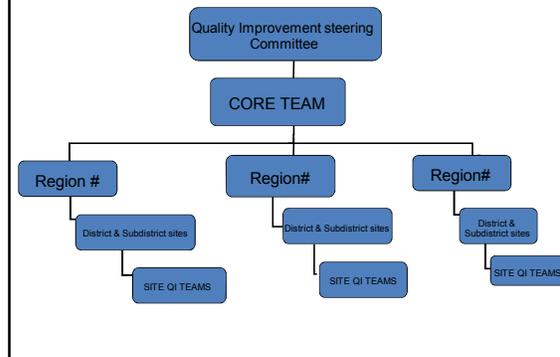


3-Mar-10

Program Facts

- Program Began
 - GoU engagement 2005
 - National Rollout 2006
- Scope:
 - HIV care& treatment (Adults & Peds)
 - PMTCT and HCT in early stages
- Coverage:
 - 127 facilities in 42/87 Districts, 12/14 Regions
- **HIVQUAL Mission**
 - Institutionalization of Quality improvement in national health care delivery systems

Quality of Care program



Program Strength

Strategies

1. Working within the existing national health structure
 - Tailoring the QI intervention to the existing facility infrastructure
 - Utilization of national patient monitoring system tools
 - Manual data reporting tool development
2. Leveraging partner resources for QI
3. Collaboration with other existing national QI programs like HCI for country wide coverage

Program Strength

Achievements

- Rapid scale up from 20 to 127 facilities
- Establishment of regional QI coordination
- Establishment of QI teams at facility level

Program Challenges

- Inadequate resources
- Government bureaucracy delays fund disbursements
- Facility HR challenges: Heavy work load, understaffing, high staff attrition, weak infrastructure
- Coordination of multiple QI approaches
- Integration within the national health sector plan

Way forward/Program Growth

- Full integration of QoC activities into the national health sector strategic plan
- Strengthen capacity of facilities and districts to analyze, utilize & report on performance to national team
- Advocacy for QI visibility

Mwebale Nyo



HIVQUAL International Leadership and Core team members

Country: Thailand
 Presenter: Dr. Pachara Sirivongrangson
Leadership and Core team members:
Ministry of Public Health:
 Dr. Somsak Aklasilp, Dr. Patchara Sirivongrangson, Dr. Raviwan Hansudewechakul
 Dr. Cheewanan Lertpiriyasawat and Dr. Benjawan Raluk

National Health Security Office:
 Dr. Sorakij Bhakeecheap
 Dr. Peeramon Ningsanond

Thailand MOPH-US.CDC Collaboration:
 Dr. Chitlada Utaipiboon, Dr. Rangsimma Lolekha, Suchin Chunwimaleung, Worawan Faikratok, Dr. Michelle McConnell

Country Facts: Thailand



- Thai population estimate (2007) # 64,000,000 people
- Male to female ratio: 1.1
- Avg. Births per Childbearing Woman (2005) = 1.63
- Life expectancy (2004)
 - Male: 69.7 years
 - Female: 74.4 years
- GNP per capita In Nominal (2006): \$3190
- Percent total literacy (2004): 93%

HIV/AIDS Epidemic in Thailand

• Adults living with HIV/AIDS*	610,000 cases
• Children living with HIV/AIDS*	14,000 cases
• HIV prevalence in pregnant women**	0.72%
• Estimated new HIV-infected people (2009)	12,000 cases
• Estimated new HIV-infected children (2008)	175-350 cases
(Transmission rate 3-6%***)	
• HIV prevalence in TB patients	15%

Source: * UNAIDS, 2008
 ** Division of Epidemiology, Thai MOPH 2008
 ***Thai national PMTCT evaluation 2008

Expansion of HIVQUAL-T in Thailand

HIVQUAL-T for adult care and treatment (2002-2003)

HIVQUAL-T pilot and expansion Additional pilot modules

Adult

- 12 hospitals (2004)
- 57 hospitals (2005)
- 63 hospitals (2006)
- 140 hospitals (2007)
- 835 hospitals (2008)

Pediatric

- 5 hospitals (2005-2007)
- 28 hospitals (2008)
- 42 hospitals (2009)
- Integrate with adult HIVQUAL-T (2010-14)

Additional pilot modules

- Adult day care centers (2005-2009)
- Voluntary counseling and testing (2006)
- STI service (2009)

Program specific issues

What are 3 things you want us to know about your program?

1. Policy advocacy to national program implementation
2. HIVQUAL-T implementation integrated with existing hospital accreditation program and public health network in Thailand
3. Pediatric HIVQUAL-T integrated with pediatric HIV care network for national expansion

What are 3 things that you believe will impact negatively on the sustainability of your HQ program?

1. Long term policy/technical/M&E support of Ministry of Public Health
2. Long term resources sharing from multiple agencies
3. Partnership involvement from multiple partners including hospitals, government and NGO, PLHA network at each level

Partner Collaboration in the National HIV Quality Improvement Program, Thailand 2010-2014

NHSO = National Health Security Office
 IHA = Institute of Hospital Accreditation
 MOPH = Ministry of Public Health

Way forward/Program Growth

- Ownership of HIV quality improvement program at hospital level and integration of HIV quality improvement program into routine system
- Strong partnership and networking in the HIV quality improvement program at each level
 - Technical support
 - Coaching
 - M&E
- Thailand has opportunity to share experiences and lesson learned of HIVQUAL implementation at the international level

Thank you for your attention



From Tuesday, February 23 through Thursday, February 25, participating countries presented on specific aspects of their national programs focused on performance measurement, quality improvement or quality management program infrastructure. Pages 20-41 includes issues discussed during country panel presentations, including specific lessons shared across countries.

This section is followed by each country panel presentation as delivered at the ACLN.

<p>Tuesday, February 23 Performance Measurement</p>	<p>Issues Discussed</p>
<p>Swaziland</p> <p>Year of engagement: 2009</p> <p>Dr. Velephi Okello, National ART Coordinator, Swaziland Ministry of Health discussed performance measurement strategies undertaken by the country's national AIDS Program</p>	<ul style="list-style-type: none"> • Swaziland uses the HIVQUAL indicators to establish a baseline: <ul style="list-style-type: none"> -Facilities are then given six months to implement improvement strategies -After this time, data is re-collected to assess improvement • Swaziland's Strategies to address the high prevalence of HIV: <ul style="list-style-type: none"> -Decentralization of services (E.g. Lab Transport Network: using donor funds to run cars to transport samples from clinics to larger facilities). <ul style="list-style-type: none"> -Question of sustainability <ul style="list-style-type: none"> -Gradual transition to budgeting at local government level -Use of local postal service to collect/transport labs (Uganda) -Doctors have designated days at certain lower level facilities -Challenge to decentralization: Retention of patients on ART -Task shifting <ul style="list-style-type: none"> -Nurses can prescribe ARTs, however task shifting needs policy support -Expert clients • Countries are at different levels in terms of their electronic monitoring systems <ul style="list-style-type: none"> -Facilities must use/optimize the system available to them -What is the best way to collect data? <ul style="list-style-type: none"> -External record abstraction - as used by EWI initiative (WHO) -Use of on-site facility staff - helps create ownership when integrating indicator measurement into self reporting BUT still imposes challenges (data clerks require high level training and clinicians should be involved in this process though their time is limited). -Strategies to improve/increase clinician ownership of performance measurement indicators -- real time entry by doctor and point of care entry. <ul style="list-style-type: none"> -Training of entire team (data clerk and doctor) for data abstraction (Namibia). <ul style="list-style-type: none"> -Clinician is encouraged to guide/validate/clear the process -NY: before data is submitted, the clinician has to validate data • Development of National Indicators associated with the QI program <ul style="list-style-type: none"> -Implementing partners at a round-table discussion -Compromise on integration • Need to develop consumer involvement
<p>Haiti</p> <p>Year of engagement: 2007</p> <p>Due to the earthquake, our colleagues from Haiti were notable absent from the ACLN. In their place, Joan Manuel Monserrate discussed the integration of performance indicators into the national web-based electronic medical record (EMR), a system developed by I-Tech and the CDC between 2007-2008.</p>	<ul style="list-style-type: none"> • Flexibility of the database/systems <ul style="list-style-type: none"> -Active I-TECH team works closely with the CDC allowing for adjustments for local IT capacity. -Some local changes can be made to the collection process. Further, ICAP can also quickly make changes. -Prompts can be integrated into the electronic system -Point of care entry - performance results were increased -Security of using a web-based system <ul style="list-style-type: none"> -All information is backed-up in Washington with I-TECH -For clinics unable to use a web-based system, paper records are available • Confidentiality <ul style="list-style-type: none"> -Using their confidential code number, patients on ART are able to provide this to clinicians (at tent hospitals) to gain access to their health record. This allows for continuity of care. • At the beginning of incorporating indicators into EHR, each clinic developed quality teams to work on quality and participate in national trainings. <ul style="list-style-type: none"> -Utilizing pre-existing department level M&E teams to help/train clinics -Work with supporting partners at the clinic level

<p>Kenya</p> <p>Year of engagement: 2008</p> <p>John Wanyungu, HIVQUAL Kenya Coordinator discussed indicator development for Kenya's national program, with emphasis on health systems strengthening.</p>	<ul style="list-style-type: none"> • Alignment of national requirements with system indicators and HIVQUAL indicators • Other country reps suggested the importance of including measures of pediatric care • While Kenya has highlighted broad topic areas of focus, they are still in the process of simplifying/clarifying these indicators • Need clinic-level involvement and support <ul style="list-style-type: none"> -Clinic staff must be equipped, actively involved, and able to both analyze and act on data for improvement • Kenya's approach: meet with multiple stakeholders for feedback on indicators <ul style="list-style-type: none"> -Involvement of ministry officials in this process
<p>Wednesday, February 24 Quality Improvement</p>	
<p>Nigeria</p> <p>Year of engagement: 2007</p> <p>Dr. Ahmad Aliyu of Nigeria provided an informative country presentation focused on an in-depth study of patient retention.</p>	<ul style="list-style-type: none"> • ART access and decentralization of ART services <ul style="list-style-type: none"> -Question about patient access to ART's: population of Nigeria vs. number of ART sites -Not sure that this is an issue, as there is wide coverage and Nigeria is decentralizing ART services to primary health care sites. The # of sites might rise. • Question about definition of lost to follow-up: should we use 3 months from the last visit? <ul style="list-style-type: none"> -The treatment program in Nigeria requires that patients receive appointments every 3 months; within the 3 month interval, patients are required to come in for monthly drug pick-up; prescription is written by the doctor for a 3-month period, but drug pick-up at the pharmacy occurs monthly.
<p>Uganda/Namibia</p> <p>Year of engagement: 2007/2005</p> <p>Uganda: Julius Ssendiwala of Uganda's Ministry of Health discussed his country's decentralized QI model, designed to build health systems infrastructure at both regional and district levels.</p> <p>Namibia: Dr. Gram Mutandi, Medical Officer, Namibia Ministry of Health provided an informative overview of promotion of quality improvement work through regional group activities.</p>	<ul style="list-style-type: none"> • Medical records and tracing patients <ul style="list-style-type: none"> -What do you do about patients who do not disclose to other people? -This is an issue of human rights and confidentiality, and only HCWs can have access to patient records. • Adoption of QI materials for local use <ul style="list-style-type: none"> -Nigeria: we adapted AI's QI materials to use as our own -Uganda: we look at materials developed in the US; borrowing in QI -This is an issue in which each country differs; there is no one set of materials for all • How will you monitor QI activity? <ul style="list-style-type: none"> -Uganda: facilities report to the districts, districts are required to report to the MOH. -We also established toll-free lines so facilities can call-in. • Are other countries using the training of trainers model? <ul style="list-style-type: none"> -There are a number of different trainings that are used at different phases of the prog. -Uganda: PM, QI, QM

Thursday, February 25 Quality Management Program		Issues Discussed
<p>Mozambique</p> <p>Year of engagement: 2006</p> <p>Dr. Mussa Calu, Project Manager for HIVQUAL Mozambique presented the MOH model for quality improvement in his country.</p>	<ul style="list-style-type: none"> • How do reports come through the team? <ul style="list-style-type: none"> -Health facility reports to provincial health directorate (compiles reports of all districts within the province); the reports are then sent to the national level where they are aggregated. • Clarification on difference between HIVQUAL and clinical mentorship <ul style="list-style-type: none"> -Both are QI activities: the aim of clinical mentoring is to refresh clinical education using HIVQUAL data to improve refreshing of clinical staff at the facility level. -Linkage of clinical mentoring and QI was a mandate from MOH. • Health facility QM team uses an existing structure - the ARV committee was already set up. <ul style="list-style-type: none"> -The committee looks at quality of service delivered, meets once per month or bimonthly and analyzes data at facility level for QI (e.g. use of pre-existing structure). 	
<p>Guyana</p> <p>Year of engagement: 2008</p> <p>Nicholas Persaud, National HIV Care and Treatment Coordinator provided an informative presentation on HEALTHQUAL Guyana and the integration of quality management into the national health infrastructure.</p>	<ul style="list-style-type: none"> • National Steering Committee (CDC, MCH-focal point, clinicians) • How often is feedback provided to sites? <ul style="list-style-type: none"> -Each implementing organization holds quarterly meetings and reports back to peers • Who pays for a specific quality coordinator? <ul style="list-style-type: none"> -All are at MOH level and measured every 6 months • What indicators were included in HEALTHQUAL and eligibility criteria? <ul style="list-style-type: none"> -Is well child only applicable under 5 years or are HIV+ children considered separately from well-child? Well child is less than 5 years. -Growth monitoring -With HIV, we look at all HIV+ children, not a sample • Implemented in clinics with well child and HIV <ul style="list-style-type: none"> -Only have 16 HIV sites, will expand to all MCH sites (next audit to add 15 MCH sites) • Benefits of a ministry driven program (site-level challenges can be taken back quickly) - QI integration into the MOH framework. 	

HIV M&E AND HIVQUAL

PREPARED BY DR. VELEPHI OKELLO

BACKGROUND ON M&E SYSTEM FOR ART

- ART services started in early 2004, at the National Referral Hospital (Mbabane Government Hospital)
- No data system in place at the hospital during the time
- Donors working through the principal recipient put pressure on MGH to introduce an electronic system:
 - To monitor the ARV drug stocks
 - To monitor adherence
 - To monitor response on ART
- This resulted in the establishment of an electronic system in 2004, that was unsustainable because there was no responsibility for the data analysis and use among the health care providers

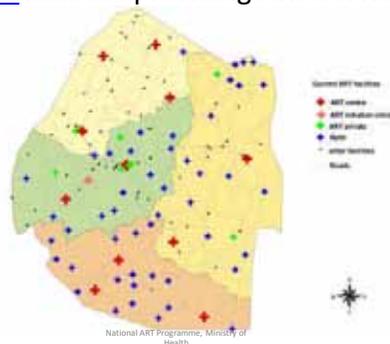
BACKGROUND ON M&E SYSTEM FOR ART

- In 2005, as the ART rollout progressed and more hospitals came on board, need for a sustainable system became stronger
- Decision to introduce registers, manual patient files and patient cards (like starting afresh!)
- Series of trainings of health workers on the recording of information took place
- Re-introduction of a simple database in 2006 and 2007 – EPI INFO
- Data clerks engaged to assist in data entry for busy facilities
- Unfortunately could not sustain the high numbers of patients on ART, resulting in a major crash!

EMR and RX Solution

- 2007 – newer and more comprehensive electronic patient and drug monitoring system put in place - EMR
- Initial focus was on the management of ARV drug stock at facility level – to limit stock out events that had become a common occurrence
- Currently system has been installed and is being used in all 14 ART initiation public sites and some private sites (see red and green crosses in the next figure)
- Patient monitoring in 50 primary health care clinics is paper-based – use of ART and Pre-ART Registers, Patient Health Card and Patient File (see blue crosses on next figure)

Health facilities providing ART Services



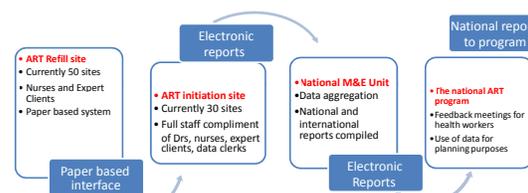
ART Decentralization and data flow

- ART services now being decentralized to primary health care clinics
- In order for accurate monitoring of patients, each hospital selects a number of clinics around it to support and then down refers patients to these clinics
- Ideally, patient files are kept at the clinic level and information is sent to the main hospital through a paper-based interface “the ART encounter form” and information is entered into the database

Data flow

- A team from the hospital will visit the clinics at least once a month to provide assessment for ART initiation and management of difficult patients
- Mentoring teams (Dr, Nurse, psychosocial worker) from supporting partners also visit some of the clinics on a more frequent basis to mentor nurses on ARV refills
- Data for ART not yet aggregated at clinic level – so no clinic report yet, only individual patient scripts are entered from a paper report

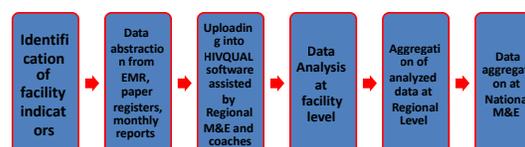
Data Flow



Integrating HIVQUAL into M&E system

- HIVQUAL indicators data abstraction to be done at facility level by the facility staff
- Analysis of indicators to be done by the facility staff assisted by the coaches
- A form will be filled with the relevant indicators analyzed
- Form to be entered into HIVQUAL software by Regional M&E staff – analysis for regional level
- Data from 4 regions to be aggregated at national M&E level
- At facilities with an electronic database, data will be imported into the HIVQUAL software and analysed at facility level → regional M&E → national M&E
- PMTCT and paediatric data to be aggregated as a paper based report at clinic level

Data Flow



Selected indicators for HIVQUAL

PMTCT

1. Proportion of pregnant women receiving counselling and testing at initial visit during a month
 - # of women who received and HIV test on initial visit
 - # of all pregnant women visiting the facility for the first time minus those with known HIV+ve status
2. Provision of more efficacious regimen to pregnant women
 - # of hiv+ women receiving AZT or HAART in a month
 - total # of all women who are HIV+ in a month
3. Proportion of all infants who are exclusively breast fed from 0-6 months
 - # of exclusively breast fed infants at 6 months of age during a specified month
 - all infants at 6 months of age seen in the clinic during the specified month

Selected indicators for HIVQUAL

- PAEDIATRIC HIV
1. Proportion of 6 weeks old infants who have DBS collected from them
 - # of infants from whom DBS was collected during the month
 - # of exposed infants who are 6 weeks old during their visit in the month
 2. Proportion of HIV exposed infants started on cotrimoxazole prophylaxis
 - # of exposed infants aged 6-8 weeks initiated on cotrimoxazole during the month
 - # of all exposed infants aged 6-8 weeks visiting the clinic during the month
 3. Proportion of infants enrolled in early antiretroviral treatment (EAT)
 - # of HIV infected infants < 12 months initiated on ART
 - # of HIV infected infants < 12 months visiting the clinic during the month

Selected indicators for HIVQUAL

PRE-ART AND ART

1. **Proportion of pre-ART clients who return for follow-up CD4 test**
 - # of pre-ART patients registered 6 months ago who have returned for their follow-up CD4 test
 - Total # of pre-ART patients registered 6 months ago
2. **Proportion of clients who keep their fixed appointment dates as follow-up within the specified month (HIVDR EW1)**
 - # of clients that turned up for their fixed appointment date during the month
 - total # of clients expected/booked on fixed appointment dates during the month
3. **Proportion of days with no ARV stock out during the month (HIVDR EW1)**
 - # of days with at least one ARV medication stock out during the month
 - total # of days in the month

TB SCREENING

1. **Proportion of HIV + clients who are screened for TB**
 - # of HIV + clients screened for TB during a specified month
 - total # of all HIV+ patients who visited the clinic during the month

CHALLENGES

- There is no uniform system for data collection, some electronic, others paper based
- The data system at clinic level is still at infancy stage and not yet well understood by all concerned
- PMTCT, ART and TB programs have different reporting mechanisms, and will have to come up with integrated reporting system
- Fear from program people that HIVQUAL introduces a vertical system of data analysis
- Implementing partners already having different plans for quality improvement and have committed funding to implement the activities – difficulty in stopping them

HIVQUAL Haiti
Integration of Performance
Indicators in
National Electronic Health Record

Joan Manuel Monserrate, MPH
On behalf of the Haiti team

Background

- Electronic Health Record system developed by I-TECH and CDC used in clinics throughout Haiti (2007 – 2008)
- The system — hybrid of electronic and paper forms designed to accommodate power supply and infrastructure challenges at some clinics

Rationale

- HIVQUAL program was being initiated at the same time as the EHR was being rolled out
- HIVQUAL Core Team members from CDC were common to both processes
- The Core Team determined that performance indicators should be programmed into EHR:
 - Reduce the burden of data collection
 - Assure easy access to reports at any point in time
 - In addition, data are collected for all patients, eliminating the need to generate a statistically representative samples
 - Allows central review of data and streamlines analysis process

Implementation/Process

- HIVQUAL roll out simultaneous to EHR roll out to all HIV care sites
- HIVQUAL team worked with CDC and ITECH to program quality indicators into system
- PIH sites did not participate in EHR roll out; they had a stand-alone data system.
- Clinics, supported by “Task Forces” had to enter backlog data to populate data base
- The web-based system allows for the collection of patient data from sites throughout Haiti; users with access clearance can view and print performance reports from any computer with internet access.

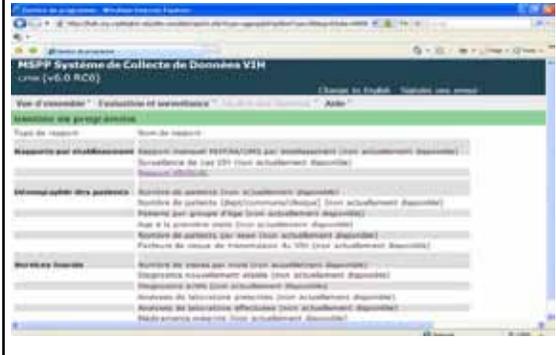
Implementation/Process

- Variation in process dependent on clinic infrastructure and resources:
 - Data entry either at a computer terminal at the point of care, or via paper form that is later entered into the electronic system by data entry personnel
 - Paper forms can also be used in the event of a power outage. In addition, some facilities have been equipped for local hosting of the EMR, given frequent outages in internet access
 - Data is uploaded to central system periodically
 - Clinics can produce reports at any point in time allowing for more frequent information that can be linked to quality improvement interventions

Results

- The system has helped to promote efficient record retrieval and a culture of documentation and measurement
- Increased performance monitoring has lead to reduction of backlog in data entry while also accounting for contingencies amidst the infrastructure challenges faced by many facilities
- After first round of data collection completed, the sites have started improvement projects and are continuously monitoring their performance – Example - Hôpital Le Providence in Gonaives was able to recover and contribute their data despite severe flooding

The web-based Haitian EHR system



The Haitian EHR system contains reports for all HIVQUAL performance indicators and other values



Challenges

- Distinction between M&E and Performance Measurement- both are strengthened by EHR
- Backlog of data into the EHR presented as added barrier to HIVQUAL implementation
- Issues with data integrity and validity were identified through EHR implementation that delayed start of QI projects
- Novelty of EHR and simultaneous performance reports made it harder to convince providers of the accuracy of performance data
- Multiple storms during implementation phase added to work load of data backlog task forces

Summary

- Integration of quality measures into existing EHR system may lead to a more sustainable program
- Reduction of data collection burden and ease of access to results reports helps motivate clinics to engage fully in QI activities and track their own progress

For more information on the Haitian EMR system, visit www.go2itech.org

Development of Health System (HS) Level Indicators.

By
John and Micah
Kenya

Outline of the presentation

- Rationale for Health System Level Indicators
- The Process of Developing System Level Indicators
- HS Indicators Chosen
- How Data will be Collected, Reported and Analyzed
- How the data will be used at National Level to Improve Care
- Anticipated Challenges

Rationale for System Level Indicators

- The environment within which health services are provided impacts on the quality of services
- Inadequate supply of public health commodities such as test kits and drugs may hamper provision of quality services
- Patient involvement in management of health services is likely to enhance quality of services
- Providers who are not well motivated may not offer quality services

The Process of Developing System Level Indicators

- First HIVQUAL meeting with stakeholders held in May 2009 – Need for system level indicators
- A group comprising mainly of MOH staff constituted to brainstorm on Health System (HS) level HIVQUAL indicators
- HS level indicators drafted during the meeting but not completed
- A follow up meeting held in Feb 2010 to re-look at and finalize the Health System indicators

The process cont...

- A lead person to spearhead implementation of the indicators identified
- Data on HS indicators to be collected in all the 36 HIVQUAL health facilities alongside other HIVQUAL clinical indicators
- Subsequent meetings planned to fine-tune the indicators and chart next steps – data collection training and abstraction

Indicators Chosen

- Availability of commodities (Test kits, ARVs, CTX and PEP guidelines)
- Health worker safety
- Patient involvement mechanism
- Application of the national Quality Management Standards (KQM)
- Staff satisfaction assessment

How Data will be Collected, Reported and Analyzed

- Through facility surveys involving record review and interviews with staff
- Surveys to be conducted semi-annually
- National teams to carry out surveys
- Analysis to be done centrally at the national level using HIVQUAL software
- Report to be submitted to Senior MOH officials and partners/stakeholders for action

How the data will be used at National Level to Improve Care

- To improve availability of key health commodities i.e. test kits, ARVs and CTX
- To enhance health worker safety through provision of PEP drugs and guidelines
- To ensure patient involvement in management of health care systems
- To ensure adherence to national quality management standards (KQM)
- To ensure staff satisfaction and motivation

Anticipated Challenges

- Influencing change in policy and practice based on results of data collected
- Collecting data primarily through record review in settings where record keeping is known to be weak
- Availability of resources to address gaps identified

Acknowledgement

- MoH Hqs, department of standards for actively participating in development of HSS indicators
- NASCOP especially the HIVQUAL Team Leader for overall coordination
- DRH for active participation
- CDC (K) for technical support
- HIVQUAL Int. especially Dr. Bruce for encouraging us to implement HS indicators

Ahsanteni Sana!

PATIENT RETENTION ON ART IN NIGERIA



OUTLINE

- Background
- Definition
- Contact tracking
- Relevant tools
- Improving LTFUs
- Issues
- Next steps

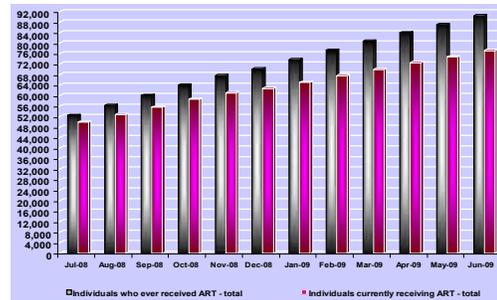


Background

- PEPFAR provides comprehensive care and treatment services at tertiary, secondary level of care.
- 269 sites are presently providing ART
- LTFU rate is 17 – 30%
- Death rate is 5 - 8%
- Retention of patients on ART is essential for a successful ART program



Individuals who ever received ART vs. Individuals currently receiving ART (CO level)



Getting the Definitions clear

- Stopped treatment?
- Loss-to-follow-up (LTFU)?
- Defaulting patients?
- Missed appointments?
- Transferred outs?



Definitions

- Loss to follow up = A registered ART patient who has not reported to ART service point for 3 months since his/her last visit
- **AND** not known if patient has died or transferred out or stopped treatment for documented medical/social reasons
 - Counted for reporting period in which the 3 months is reached
 - If patient turns up again, counted as **ART restart**
 - If traced later, data corrected as appropriate
- Missed appointment = A registered client or patient who has missed his scheduled appointment



LTFUs

- LTFUs rate varies among partners and the sites they support across Nigeria
- Lowest rate of LTFU is 4%
- Highest rate of LTFU is 38%



Patient Contact tracking Process

- All prospective ART clients undergo 3 sessions of adherence counselling to preclude ART clients from dropping out of the program (using Treatment-supporter's approach)
- Patients who miss appointment up to 7 days are tracked through phone calls by HF staffs or home visit by volunteer PLWHA support group members
- Tracking of patients not seen for 3 months and with no status update in ART register is done through site RFP, Adherence counsellor, site M&E and support groups
- Patients unsuccessfully tracked are known as lost to follow up while others with known outcomes e.g. death, stopped treatment are then documented
- The ART register is then updated by site M&E to reflect patients current status (Lost or dead)



Relevant Tools

National PMM/PME MIS forms/registers and other supportive tools

Patient Tracking tools

- SOP for Patient Contact tracking
- Pharmacy appointment diary
- Patient Contact tracking register
- ART Patient tracking monthly summary form

Patient Transfer tools

- Patient transfer form
- Patient transfer registers (Incoming and outgoing)

Patient Registers

- ART register
- EMR

Patient Referrals tools

- Referral directories
- Client referral form
- Referral register



ART PATIENT TRACKING MONTHLY SUMMARY FORM

Reporting Period: Month: _____ Year: _____

Site	Initial	Transfer	Transfer	Dead
Site Name				
ART Patient Tracking Monthly Summary Form				
This form is used to track the number of patients who are started on ART, transferred, and who die during the reporting period. It is used to generate reports for the national level and for the site. The form is filled out by the site M&E staff. The form is used to generate reports for the national level and for the site. The form is filled out by the site M&E staff.				
ART Patient Transfer Monthly Summary Form				
This form is used to track the number of patients who are transferred from one site to another during the reporting period. It is used to generate reports for the national level and for the site. The form is filled out by the site M&E staff. The form is used to generate reports for the national level and for the site. The form is filled out by the site M&E staff.				

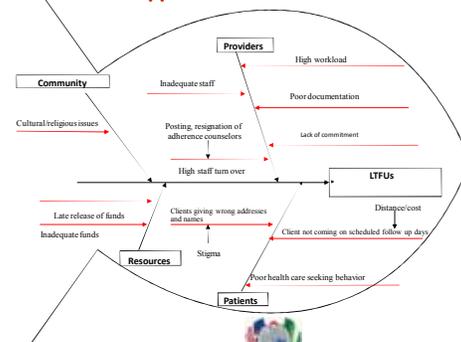


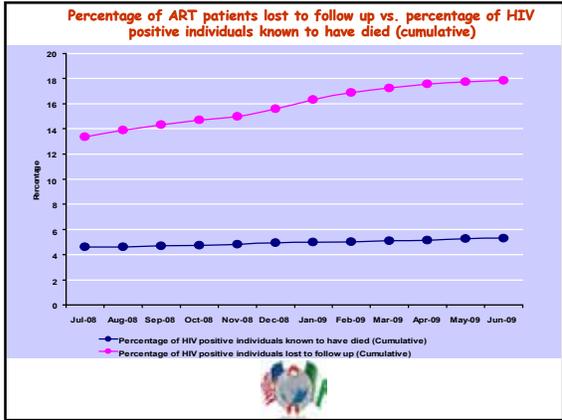
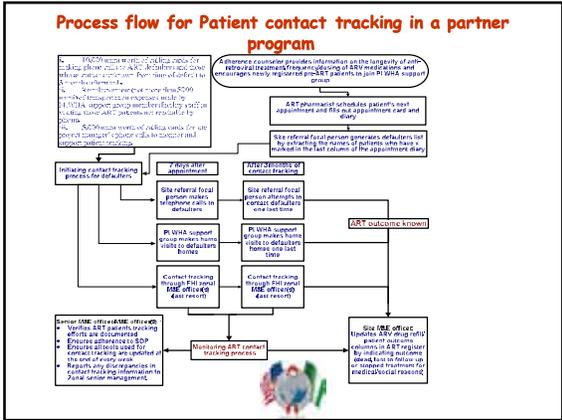
Improving LTFUs documentation

- As part of QA/QI process, partner programs engaged in:
 - root causes analysis using Fish bone method
 - monthly data analysis meeting at national level, state level to identify gaps and issues for follow up
 - the development of an SOP to standardize patient tracking process and improve reporting on LTFUs
 - Use of EMR to aid auto-generation of patient list for contact tracking



Fishbone analysis: root causes for missed appointment and LTFUs

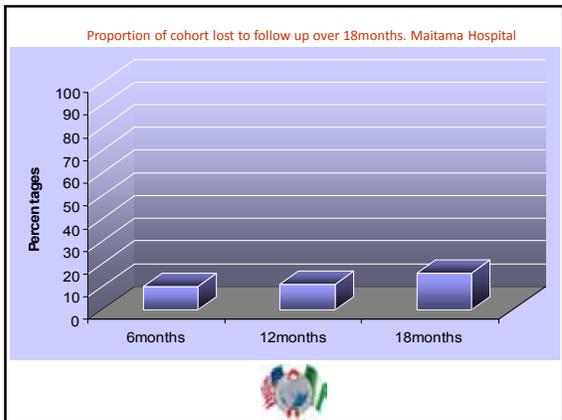




7 DAYS DEFAULTERS TRACKING LIST

Week: FEBRUARY 2009

ID	Name	Sex	Age	ART	ART START DATE	ADDRESS	TELEPHONE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20



- ### Issues
- Funds
 - Quality of record: incomplete address, few cell phone numbers, etc
 - Generation of list from pharmacy: motivation, workload, etc
 - Patient hostility
 - Involvement of support groups

- ### Next steps
- Decentralization of ART services (ARV refill at PHCs)
 - Strengthening Adherence counseling
 - Strict adherence to contact tracking SOPs so that defaulters are tracked early.
 - Improvement in the quality of documentation
 - Use of PLWHA support group members



Ministry of Health and Social Services
Promotion of QI Work Through Regional Group Activities
 The Namibia Experience

Dr. Gram Mutandi
 CDC/MOHSS





Objectives of Regional Quality Improvement Workshops

The RQI Workshops are designed for sites who have been trained in the basic principles of Quality Improvement (HIVQUAL) and have completed at least a baseline performance measurement exercise and has the following objectives:

1. To promote peer learning
2. To provide a forum for ongoing QI skill building
3. To provide benchmarking reports





Development and use of regional groups

- Namibia has managed to convene Regional Quality Improvement Workshops following each of the 4 rounds of data collections conducted to date in 16 pilot sites.
 - N.B. Next phase RQIs will mix old and new sites
- Participating sites grouped into clusters of 8-10 sites for the purposes of group learning networks
- Each facility is represented by a team of QI stakeholders e.g. MD, Nurse, Data Person, Program Officer etc
- Workshops conducted over a period of 2-3 days





Topics Covered During the Meetings

The workshops are organized in a format of a mix of facilitator led didactic presentations, facility group discussion with plenary feedback and plenary open discussions. The topics covered include:

- Review of Performance Data by sites
 - Each site presents its own performance data to the rest of the network
- Development of QI projects and sharing of best practice
 - Sites develop draft QI work plans which are then finalised once they return back to site
- Open forum for discussion on other topics covering QM and QI
- Quality program infrastructure discussed and Quality Management Action plans are developed/updated





Promotion of Peer Learning

- Presentation of QI projects by each facility promotes learning by participants
- Challenges and best practices are discussed and this offers a platform of spread of the best practices across the participating sites
- Examples of peer learning at RQI workshops:
 - The procedures to maximize the provision of IPT and Cotrimoxazole through an integrated service approach
 - Development and sharing of standard M&E tools for Food Security and Alcohol Screening





Group Peer learning in action






Motivation, Leadership and Stakeholder involvement



Team work, facility driven planning



It's all hands on!!!!



Innovative Quality Improvement in Action at Local level

Case of Katutura Health Centre



Ownership, Communication and Recognition
Facility Driven QI processes



The Namibia Unique Indicators

Quality of Care-Meeting the needs of those we serve : Thinking outside the box (Routine M&E)



Decentralized QI model

HIVQUAL - UGANDA

Country Information

- **Population:** 33,369,558 (July 2009, World Fact Book)
 - > Fertility Rate: 6.7 children per woman
 - > Infant Mortality Rate: 64.8 per thousand
 - > Life Expectancy: 52.7yrs
- **Annual per capita income:** \$420
- **HIV Prevalence:**
 - > 6.4% (2005 National HIV/AIDS Serobehavioral survey)
 - > 135,000 estimated new infections and 77,000 deaths in 2007
 - > Over 1.1 million infected
 - 480,000 are women
 - 130,000 are children under 15
- **Primary Modes of Transmission:**
 - > Sexual Transmission (81%)
 - > Mother to Child (18%)

HIV Service Delivery Environment

- Persistent high HIV Incidence
 - > Sexual (79%) MTCT (20)%
- Limited access to HIV/AIDS services
 - > Counseling and Testing
 - > Limited access to ART (60% of eligible)
- Health System Weakness:
 - > Human Resources,
 - > logistics and supply chain management,
 - > Infrastructure

HIVQUAL-U background

- Started in 2005 (planning)
- In 2006, rolled out to 20 pilot sites (facility model)
- In 2009 had covered 127 facilities
- 2009, developed a decentralized QI model based at district level

Decentralized QI Model

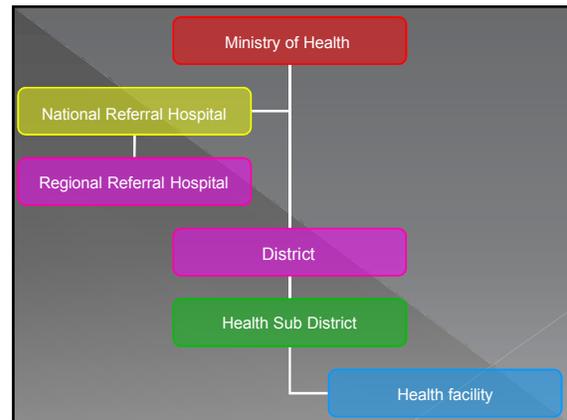
- **Goal**
To sustain and integrate quality improvement as a health systems model driven by the existing health infrastructure at both regional and district level.

District QI Model: Rationale

- Uganda operates decentralized system of governance
 - > Local Councils (district and sub county levels)
- Local Governments have;
 - > Political & legislative powers
 - > Jurisdiction over financial & human resources
- Currently 87 districts (97 districts by 01st July 2010)

National Health System

- ◉ Decentralized National health sector
 - > 2 national referral Hospitals
 - > 14 regional referral hospitals
 - > 100 general hospitals
 - > 166 health centre IVs
 - > 955 health centre IIIs
 - > 2,006 health centre IIs
 - > Village Health Teams



District QI Model: Implementation Strategy

- ◉ Engaging district leadership
 - > Coaching and mentoring
 - > Dissemination of the activity progress reports to the district leadership (administrative and technical leadership)
- ◉ Training of District Health Teams in QI

Training of District Health Teams

- ◉ Objectives
 - > Gain skills in quality management at district and sub district levels.
 - Understand the steps to implement QI:
 - Performance measurement,
 - Coaching and mentoring for QI in health care
 - Develop a coaching and mentoring plan for participating facilities in the district
 - > Understanding reporting routinely on quality improvement activities

Training structure

- ◉ Plenary - general training in Quality improvement and performance measurement
- ◉ Small groups - identifying system issues affecting the quality of services within the districts
- ◉ Skills building - Coaching and mentoring training

Reporting Mechanism

- ◉ District QI teams conduct bi-monthly coaching & mentoring sessions
- ◉ Teams report to district health office (DHO)
- ◉ HIVQUAL Core Team reviews progress with district teams
- ◉ QI report integrated within general district report

Progress

- ◉ Trained 57 district officers from 25 districts (October, 2009)
- ◉ Carried out one joint coaching and mentoring with the district teams
- ◉ District reports on QI submitted

Challenges

- ◉ Competing priorities at district
- ◉ Facilitation mechanism for the district teams
- ◉ Inadequate skills
 - Technical
 - Leadership and management
- ◉ Infrastructural challenges
 - Data and communication

Way Forward

- ◉ Intensify district engagement
 - > Support district develop implementation plans
 - > Integrating QI in district work plans
 - > Sub grant districts
 - > Continued capacity building of DHTs
- ◉ Joint Coaching and mentoring sessions
- ◉ Capacity building in leadership (partners)

Acknowledgement

- ◉ Health facility Managers
- ◉ District leadership
- ◉ MoH-Uganda
- ◉ CDC
- ◉ NYSDOH-AIDS Institute
- ◉ UNICEF
- ◉ WHO

MOH Model For Quality Improvement



All Country HIVQUAL Learning Network
22-26 February 2010
Johannesburg

MOH Model for Quality Management (QM)

- The Ministry of Health, under the direction of the National Directorate of Medical Assistance (DNAM), is the lead institution for QM for HIV Care and Treatment;
- The QM Team at DNAM guides all activities related to quality improvement to ensure they are consistent with MOH priorities and goals related to improving management and implementation of quality improvement (QI) activities;

2

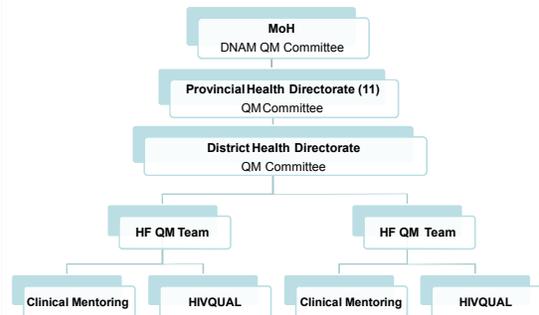
MOH Model for QM

- QM encompasses two main QI activities:
 - HIVQUAL (HQ)
 - Clinical Mentoring (CM)

HQ and CM activities are integrated within the National and Provincial QM Committees. While the HQ and CM activities are distinct and separate at the health facility level, the QM Committee is responsible for ensuring that potential linkages and opportunities between these two QI initiatives are maximized, mutually reinforcing, and synergistic.

3

MOH Model for Quality Management



4

MOH Model For QM

- The national MoH QM team is composed of:
 - Deputy National Director of DNAM
 - Director of the STIs/HIV/AIDS National Program
 - M&E Focal point of quality improvement
 - Members of the National Therapeutic committee.

5

National MoH QM Team Roles & Responsibilities

- To lead the QI activities;
- To identify the needs for QI in the country;
- To create and monitor the 11 provincial QM teams;
- To define and disseminate strategies, and standards of quality programs;
- To maintain a data base on QI activities;
- To monitor QI activities;
- To produce and disseminate national reports.

6

Provincial QM Teams

- The 11 provincial QM teams will be made up of the Provincial Medical Chief, the Provincial Planning & Cooperation Department Chief, the STIs/HIV/AIDS Provincial Manager, and their respective technical advisors

7

Provincial QM Team Roles & Responsibilities

- To lead the QI activities within the province;
- To define the teams for QI at the health facility level;
- To train health facility teams in data collection and data analysis for HQ;
- To install and manage a HQ data base at the provincial health directorate;
- To build the capacity of health facility teams in the implementation of QI activities (both HQ & CM);
- To supervise the QI (both HQ & CM) activities at the health facility level;
- To prepare the provincial report on QI activities to be sent to the Ministry of Health.

8

**Guyana
Ministry of Health**



HEALTHQUAL GUYANA PROJECT
Integrating Quality Management into National Health Infrastructure

Presented by
Mr. Nicholas Persaud
National HIV Care and Treatment Coordinator

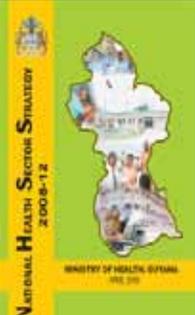
HEALTHQUAL Guyana

- Background information & Genesis
- Benefits to Guyana
- Challenges
- Lesson Learnt

HEALTHQUAL Guyana

Guyana's 2008-12 NHSS identified 4 goals guiding health sector development

- Equity in distribution of health knowledge, opportunities and services
- Consumer-oriented services: people focused and user friendly
- **High quality services (and good value for money)**
- Accountable providers and government
- Quality of care is therefore an integral part of the sector strategy!
- **Ensure universal access to quality diagnostic care treatment and support for all persons infected by HIV/AIDS including access to ARVs and quality home based care services**
(Guyana HIV/AIDS Strategy 2007-11)



HEALTHQUAL Guyana

- Began as a collaboration between Guyana's MOH, UNICEF, HIVQUAL Int'l and CDC Guyana
- Initial intent was HIVQUAL i.e HIV quality of care (adults and children)
- But.....MOH was particularly interested in applying HIVQUAL to deliver on sector wide improvement of quality of care
 - Including establishing a MOH's quality management programme
 - Quality of HIV care was initial test of health sector improvement of care
- Hence **Guyana HEALTHQUAL Project** was born
 - HIV & Well Child Care

Implementation

- HEALTHQUAL steering committee was established
 - ❖ Co-chaired by NAPS and MCH
 - ❖ Membership from supporting agencies such as UNICEF, CDC, FXB/UMDNJ and AIDS Relief
- Implementation coordinated initially by NAPS
 - ❖ Subsequently jointly after a MCH HEALTHQUAL field officer was recruited
- Indicators of HIV & WELL CHILD care were jointly developed
 - ❖ well child indicators- selection based on MCH guidelines
- Selection of clinic sites (3 types)
 - HIV
 - Well Child
 - Well Child and HIV -20 Pilot Sites *(Explore the level of care provided with the varying service safety).*

Advantages

- Several sites (6) with both ART and Well Child care provided **(Integration)**
 - ❖ In some cases by the same personnel *(Able to address quality of care holistically)*
- Well Child medical record are easily available and accessible.
- QI methodology was standardized, simple and easily diffusible.
- Many (6) well child sites provides PMTCT services
 - ❖ Lends to programme integration
- Utilization of MCH regional supervisors to support and guide implementation regionally
 - ❖ Facilitates coaching, mentoring and support for clinical sites,
 - ❖ able to integrate QI model at different facilities where project was not piloted.

Challenges

- Coordination: difficult for single coordinator to work with both HIV and Well Child sites
- Patient information was not always available in both patients records. (Well Child & HIV)
- Insufficient time for central coordinators to coach regional sites (Geographic demography)
- Inadequate human resources at site to effectively address quality of care issue. (e.g Two staff with a patient load of 55 daily)
- Promoting a culture of quality. (Ownership)
- High staff attrition

Lessons Learnt

- Important to recruit MCH HEALTHQUAL Officer to aid in coordination
- Essential for MCH regional supervisors be trained & equipped to support regional sites (for decentralization)
- During data entry separate clinics, if there are integrated (simplify analysis)
- Imperative for regular meeting /training to help promote peer learning through sharing of experiences and quality improvement ideas.
- Assess inventory of site to identified needs and gaps
- Use of extraction sheet important (helps verification, allow multiple persons to extract information to reduce time significantly)
- Need to have regional integration and participation to support sustainability and promote leadership.
- Quarterly feedback on progress most appropriate reporting methodology. (Adequate to measure progress)

Lessons Learnt

- Cause and Effect (fish bone) Diagram couple with brain storming is an effective method for exploring quality of care.
- A valuable medium for promoting culture of quality care
- An excellent tool for assessing sites performance and facilitate comparison among sites (Identify best practices and gaps)

Way Forward

- Expanding to additional fifteen (15) MCH clinics and one (1) reaming ART Site in second audit.
- Advocate support and leadership from regional authority
- Continued guidance and leadership from the Ministry of Health in overall program implementation.



Plenary presentations were offered each morning beginning on Tuesday, February 23 through Friday, February 26. The following is a list of plenary speakers, topics, and issues discussed as a result of each presentation. Complete presentations appear on pages 43-75. These plenary presentations are followed by slides for two optional evening workshops, "The Chronic Care Model" and "Facilitation Skills."

Dr. Richard Banda, Technical Officer for HIV Drug Resistance, WHO-AFRO
Collection of Early Warning Indicators for HIV Drug Resistance

Issues Discussed:

- Results from EWIs must be disseminated back to sites
- Use EWI in pediatric populations (Drug resistance is an emerging and dangerous problem with children)
- Feedback from Nigeria (Effective EWIs require strong coordination, standardization and M&E tools)
- Preliminary discussions on the coordination/integration of EWI and HIVQUAL
- Using EWI feedback to inform and enhance quality improvement work
- Comparing EWI reports across facilities and across countries (How can EWI reports be used at the national level)
- One of the long term goals of EWI work includes determining the predictive value of these indicators
- Coaching and mentoring is necessary to help understand and react to EWI results

Dr. Peeramon Ningsanond, Dr. Chitlada Utaipiboon, Dr. Rangsimma Lolekha - HIVQUAL-T
Strategic Ways for HIVQUAL-T: Sustainability in Thailand

Issues Discussed:

- Expansion (questions about expansion phase)
- Role of hospital accreditation programs in implementation of HIVQUAL and QM
- Composition of QI coaching teams
- Specialist care
- Transition to country ownership (budgeting)
- Benchmark setting
- Role of HIVQUAL in expansion of ART coverage

Dr. Tendesayi Kufa, Aurum Institute
A Public Health Approach to TB Elimination

Issues Discussed:

- Lack of coordination between TB and HIV services on a national level; on an operational level, most TB services have been decentralized to the communities (while HIV interventions have not been decentralized)
 - Scale-up of IPT in Botswana (e.g. mine workers and on-site clinic)
- Issue of minimizing time spent at facilities by TB patients (separate waiting areas and need for community buy-in)
- Argument for HIV/TB Integration of Services (HIV programs must take responsibility for IPT in overall wellness program)
 - Clinicians identify pre-ART HIV positive patients and begin regimen for IPT, which has benefits beyond TB prevention; patients with higher CD4 counts have a lower incidence of TB

Dr. Ndapewa Hamunime, HIV Case Management Unit, Namibia MoHSS
Update on the 3 I's from Namibia

Issues Discussed:

- Low IPT screening rates in Botswana: reflection of weakness in the M&E system
- TB Screening Techniques: M&E vs. HIVQUAL
- IPT coverage for PMTCT mothers
- Community Case Finding of TB
- Public health benefits of expansion of IPT coverage
- Multi-Drug Resistant TB (MDR)/ Secondary Drug Resistant TB (SDR)

Dr. Lisa Hirschhorn, JSI
Evaluation of Capacity Building Efforts: Lessons from the Development of the HQI Evaluation

Issues Discussed:

- Utilizing data-driven monitoring and evaluation to assess program capacity and sustainability
- Planned evaluations can reinforce the program by measuring if activities are accomplished, if goals are met, and to identify areas for additional strengthening.

WHO HIV Drug Resistance Prevention and Assessment Strategy



Dr Richard Banda
 Technical Officer, HIV Drug Resistance
 WHO – Inter-country Support Team

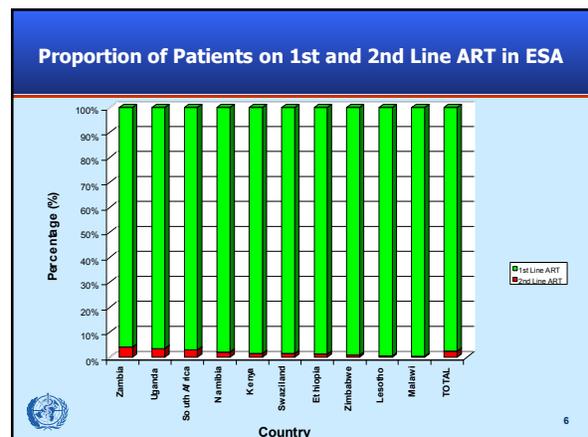
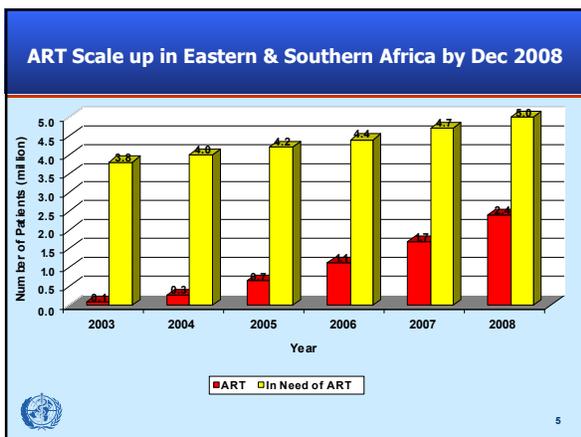
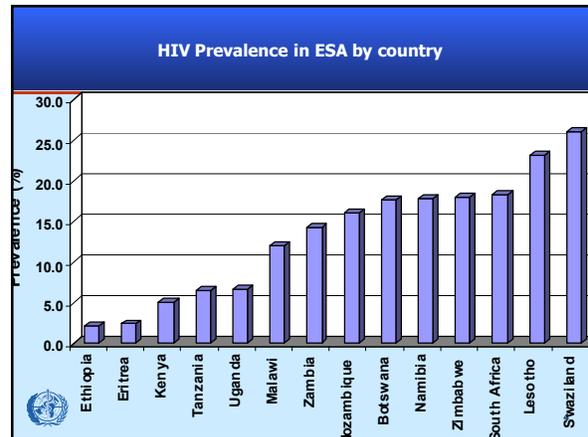


The HIV epidemic in ESA

- Estimated 14.9 million persons living with HIV in Eastern & Southern Africa (ESA)
- Southern Africa has 32% of all HIV infections in the world
- Generalized epidemic in most countries & a prevalence >15% (for Botswana, Lesotho, Mozambique, Namibia, South Africa, Swaziland, & Zimbabwe)
- Concentrated epidemics in the Island Countries
 - mainly in MARPs - IDUs, MSM, sex workers
- In general HIV epidemic stabilising in the region except for Mozambique



3



Impact of Scaling up

- While there is still a large unmet need for ART in the region
 - Cohort monitoring is critical for successful programme management
- Quality of health services likely to affect programme outcomes
 - Scale up efforts need to be accompanied by other infrastructure improvement e.g. human resources
- Emergence of drug resistance is inevitable
 - Advocacy & support in systematically implementing the global HIVDR Strategy important



7

A public health approach to HIVDR

- WHO recommends that countries develop a public health strategy
 - To assess and optimize ART programme performance related to HIVDR prevention
 - To assess emergence and transmission of HIVDR
 - To use results to minimize emergence & transmission of HIVDR
 - To provide useful information for policy makers at national, regional and global level
- Strategy should only be implemented if results will lead to programmatic action
 - Address systemic problems → prevent the "preventable" HIVDR



8

ART site goal

Goal: Maintain optimal quality of life for persons living with HIV for as long as possible

- Maintain patients successfully on 1st line ART
 - 1st line ART is simpler
 - Better adherence
 - Less expensive
- Manage ART programmes to minimize the emergence of drug resistance on first-line ART
 - Contributes to first objective and also to minimizing HIV transmission



9

Objectives of the WHO HIVDR Prevention & Assessment Strategy

National:

To provide data to inform ART programme to:

- minimize the preventable emergence of HIVDR
- maintain patients successfully on first-line ART as long as possible

National and Global:

- To provide data to guide population-based selection of ART regimens
- To provide data on programmatic factors related to HIVDR emergence and best practices to minimize it



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WHO HIVDR Prevention and Assessment Strategy

- Development of a national HIVDR Working Group
- Regular assessment of HIVDR "early warning" indicators from ART sites
- Surveys to monitor HIVDR prevention and associated factors
- Surveillance of HIVDR transmission
- HIVDR database
- Designation of a WHO-accredited HIVDR genotyping laboratory
- Review of and support for HIVDR prevention activities
- Preparation of annual HIVDR report and recommendations



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A. National HIVDR working group

- Formation of national HIVDR working group within the Ministry of Health
- WG is multidisciplinary (lab, clinical, epi)
- Integration of HIVDR strategy into country HIV prevention and care plan
- Collaborations with national and international partners at country level
- 5 year work plan and budget



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HIVDR Prevention Monitoring Surveys

- Prospectively monitor HIVDR prevention/emergence and associated factors in **cohorts of patients starting first line ART**
- Patients followed for **12 months** or until lost to follow-up, stop, switch
- Genotyping at baseline and 12 months or switch endpoint



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HIVDR Prevention Monitoring Survey Purposes

1. **To improve ART programme functioning for HIVDR prevention**, by identifying factors related to HIVDR prevention/emergence
2. To **maximize the long term effectiveness** of available regimens
3. To evaluate **HIVDR patterns** acquired with **failing first-line ART to support optimal regimen selection**



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Surveillance of transmitted HIVDR Purposes

*To evaluate levels of HIVDR to common first-line regimens in **recently infected populations***

A high level of HIVDR in recently infected persons may require:

- Change of first line regimens used for ART, PMTCT or PEP (or PrEP) for majority of patients
- Investigations as to reasons for suspected HIVDR transmission
- Consideration of baseline HIVDR testing for specific groups/settings



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Introduction to HIVDR Early Warning Indicators

- Specific ART programme factors can be associated with virological failure and emergence of HIVDR
- To minimize preventable HIVDR requires monitoring of indicators on ART program functioning
 - At all ART sites, or
 - At a representative subset of sites
- Excel abstraction and analysis tools developed by WHO for use in countries
- WHO recommends minimum targets for each indicator; but countries may select more stringent targets



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Introduction to HIVDR Early Warning Indicators

- Specific ART program factors are associated with the emergence of HIV drug resistance (HIVDR)
- Action to minimize preventable HIVDR requires monitoring of indicators on ART program functioning at ART sites
- WHO recommends the monitoring of HIVDR "early warning indicators" (EWI) from all ART sites
- HIVDR EWI are reported on a site by site basis
- WHO recommends minimum targets for each indicator; but countries may select more stringent targets
- HIVDR working group produces an annual summary and plan for HIVDR prevention



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WHO Recommended HIVDR EWIs

1. **Prescribing practices**
 - % of patients* starting ART prescribed an appropriate 1st-line regimen **Target: 100%**
2. **% lost to follow-up during the first 12 months of ART**
 - % of patients* lost to follow-up 12 months after initiating ART **Target: ≤ 20%**
3. **Patient retention on first-line ART**
 - % of patients initiating ART* during a specified time period who are on an appropriate **first-line ART regimen 12 months later** **Target: ≥ 70%**



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WHO Recommended HIVDR EWIs

4. On-time ARV Drug pick up

% of ART patients picking up prescribed ARV drugs on time
Target: $\geq 90\%$

5. ART appointment-keeping

% of ART patients attending all clinic appointments on-time
Target: $\geq 80\%$

6. Drug Supply Continuity

– % of months during a year with no antiretroviral drug stock outages

Target: : 100%



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EWI Data Abstraction

- A set of instruments to be used for data abstraction at ART site level
- Tools available in two formats:
 - Paper or manual abstraction version
 - electronic abstraction version
- EWI are assessed by abstracting a specific set of data from medical and/or pharmacy records at each ART site.



Abstraction Instruction manual available

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Data for EWI 1

- Abstraction eligibility date is pre-determined by WG
 - E.g. from 1 January 2009
- Sample size for each ART site is pre-determined by WG



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EWI Sampling strategy for each site

Patients starting ART in the year/or receiving ART during the year	Number to be sampled
1-75	All
76-110	75
111-199	100
200-299	130
300-2500	180
>2500	Consult WHO



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What data to abstract from the records for EWI 1a

- Records should provide these Variables
 - Patient ID
 - ART Cohort Register
 - ART initiation date at the site
 - ART regimen initially prescribed/picked up
 - Patient ART Card/Pharmacy record



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do not include patients if transferred in on ART

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EWI 1a

- **Numerator:** number of patients initiating ART at the site who are prescribed, or who initially pick up from the pharmacy, an appropriate first-line ART regimen.
- **Denominator:** number of patients initiating ART at the site (full sample size) on or after the abstraction eligibility date



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National selection of HIVDR EWI

- Monitor only EWI that can be extracted from existing routine patient /pharmacy information systems
- Countries evaluate which EWI can be captured from current HIV care/ART patient medical records (manual or electronic) or pharmacy records
- Planners should visit sites to observe which information is reliably recorded in site records, rather than assuming that all sites follow guidelines and training materials
- Data abstractors should be trained to abstract the required information in a standard format from paper records



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Planning HIVDR EWI Data Abstraction

- Initially EWI abstraction may become a medical/pharmacy records quality assurance exercise.
 - Identifying problems and taking action to rectify them contributes indirectly to HIV drug resistance prevention.
- Paediatric and adult indicators are monitored separately
- ART site profile data supports interpretation of results
 - Also site profiles evaluate many HIVDR prevention factors at a site level
- Validation of abstraction and of data is crucial



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Involve everyone



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Partial example: HIVDR EWI at representative ART sites, Country X

Site	Months with no ARV drug stockouts Target = 12	% appropriate Initial ART Regimen Prescriptions Target = 100%	% lost to follow up at 12 months Target = <=20%	% on ART keeping all clinical appointments on time Target = >=80%	% on ART picking up all ART drugs on time Target =>90%
1	12	75/75 (100%)	3/75 (04%)	182/ 209 (87%)	184/ 192 (96%)
2	10	130/ 130 (100%)	16/130 (12%)	342/402 (85%)	176/ 220 (80%)
3	9	140/180 (78%)	58/180 (32%)	122/ 244 (50%)	144/ 206 (70%)
4	12	100/ 100 (100%)	10/ 100 (10%)	891/ 993 (90%)	483/ 508 (95%)
	12	208/210 (99%)	45/210 (45%)	753/ 1506 (50%)	829/1202 (69%)



HIVDR EWI Summary Report example

Early Warning Indicator (EWI)	EWI Target for all sites (Time period)	number of sites meeting EWI target (% of sites meeting target) N=154 ART sites
Months with no ARV drug stock-outs	100%	165/175 (94.2%)
% appropriate initial ART regimen prescriptions	100%	151/175 (86.2%)
% starting first line ART lost to follow up at 12 months of ART	≤20%	145/175 (82.8%)
% on ART attending all clinical consultations within 7 days of scheduled appointment	≥80%	165/175 (94.1%)
% on ART picking up all ART drugs before previously dispensed drugs ran out	≥90%	108/175 (61.7%)

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ART Site profiles assist in interpretation of EWI results

- Catchment area and population groups served; services provided at clinic
- Number of patients started on ART in the past 12 months
- List of first-line ARV drugs and second-line drugs routinely prescribed at site
- Provider/patient ratio
- Training level and ongoing training for persons who start patients on ART
- Procedures for monitoring, reporting, and acting on drug shortages
- Procedures for following up patients who do not return to clinic for ART appointments (write "None" if no procedures)
- Type of adherence support provided (describe type of support, staffing)



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General Discussion of EWI Results (examples)

- EWI results should be first of all evaluated to assess quality of medical/pharmacy records
- EWI results should be critically evaluated to identify sites that have problems meeting targets for indicators,
 - Similarities among sites should be explored and evaluated for example
- Barriers to continuity of care should explored for each ART sites (costs, transport, clinic and pharmacy hours)



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General Discussion of EWI Results (examples)

- EWI results may be used to support evidence-based recommendations for in-depth surveys, programmatic changes or requests for additional support at ART site and/or ART programme level
- Were there justifiable reasons for "inappropriate" prescriptions? (From medical record search or site interviews)



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Review of and support for HIVDR prevention activities

- Standard prescribing practices, guidelines for ART and PMTCT, appropriate ART eligibility definitions in place, training for clinicians
- Support for and monitoring of adherence
- Removal of barriers to continuous access to care
- Resources and personnel for follow-up of ART patients
- Adequate and continuous drug supplies; monitoring at site and regional levels of drug supply shortages
- Ongoing quality assurance for drugs (not only initial QA)
- Standard ART patient records to facilitate ART patient and cohort monitoring
- Prevention programs to reduce HIV transmission from persons in treatment



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EWI Progress

- 12 countries implementing at least 2 elements of the HIVDR strategy
- Partners include CDC/PEFPAR, UN Agencies,
- Main Sources of funding:
 - Gates Foundation
 - GFTAM
 - Spanish Government
 - MoHs



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Level of implementation of the HIVDR strategy					
Country	HIVDR WS	EWI	Prevention surveys	HIVDR-Threshold surveys	
Botswana	✓	✓		✓	
Ethiopia	✓	✓	✓	✓	
Kenya	✓		✓	✓	
Malawi	✓	✓		✓	
Mozambique	✓	✓	✓	✓	
Namibia	✓	✓	✓	✓	
South Africa	✓			✓	
Swaziland	✓	✓	✓	✓	
Tanzania	✓	✓		✓	
Uganda	✓	✓		✓	
Zambia	✓	✓	✓	✓	
Zimbabwe	✓	✓	✓	✓	



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Challenges

- Multiple ART record systems in different countries require different abstraction plans, different training
 - More progress (Malawi, Zambia, Ethiopia) in persuading donors and NGOs to adopt national record system
- ART medical records often incomplete or inadequate
- Abstraction validation not always performed correctly
- ART program managers at the centre are frequently convinced that medical records are complete and accurate
- Despite emphasis on evaluation of reasons for not meeting targets and provision of additional support, some WG still censure sites not meeting targets



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National HIVDR report

- Summary of HIVDR strategy elements implemented in the country
- Reviewing the data annually to draw lessons, make recommendations to improve public health practice



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Conclusions

- Need to explore Areas of synergies
- Need to catalyze coordination of the EWIs and HIVQual initiatives to ensure linkages & efficient use of resources
- Both EWI & QI programmes have the goal of programme performance improvement
- Both EWI & QI are a minimum resource strategy
- Use of routinely available systems



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Thank You



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Strategic Ways for HIVQUAL -T Sustainability in Thailand



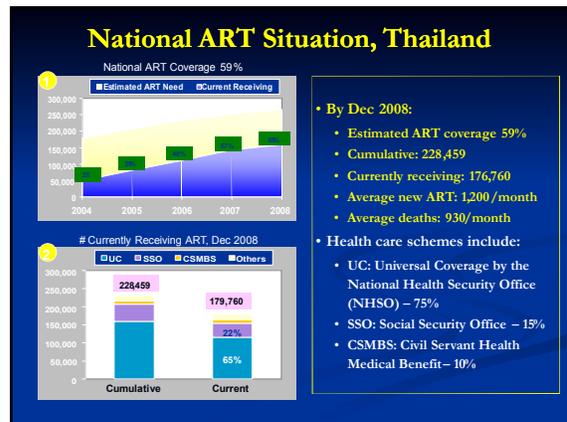
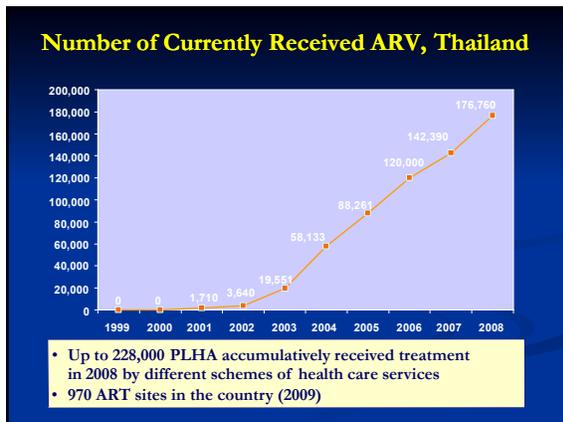
Infrastructure
The First All-Country Learning Network (ACLN)
Johannesburg, South Africa
22-26 February 2010






Overview of Talks

- ART Program in Thailand
- How does the HIVQUAL implement in Thailand?
- Sustainability strategies



Thailand HIVQUAL Implementation






Why did Thailand need HIVQUAL ?

- Disease burdens : magnitudes, mortality & morbidity, transmission and complication etc.
- Standardized and harmonized treatment and care services
- Self monitoring and Benchmarking among the facilities
- Attaching with Hospital Accreditation process for streamlining quality of care in HIV/AIDS

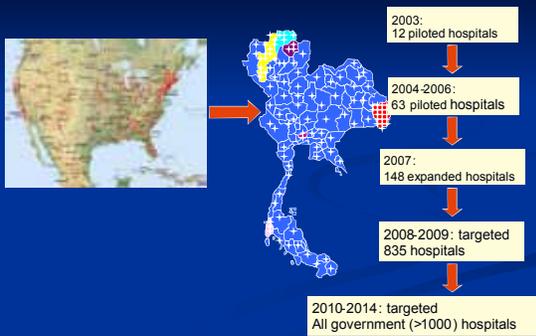
HIVQUAL-T Project

- Initiative for performance measurement (PM) and quality improvement (QI) in Thai HIV clinic based upon the US National HIVQUAL Project model
- The model is based upon 3 conceptual pillars
 - 1) HIVQUAL-T software for performance measurement
 - 2) Quality improvement projects
 - 3) Infrastructure building
- Integrated as cyclical process of repeated measurement and improvement

How Thailand implement HIVQUAL T?

- Phase 1 piloting 2003 -2005
- Phase 2 scaling up and expansion 2006 – 2007
- Phase 3 national system development 2008 – 2009
- Phase 4 integration to national programs 2010 - 2014

HIVQUAL-T model implementation



2003-2005 Piloting

- Collaboration among GAP, Bureau of AIDS/STI/TB (BATS) MOPH, and ODPC region 10 (Northern part of the country) to implement HIVQUAL-T model in small scale
- Technical assistance by New York State Department of Health AIDS Institute, USA
 - Developed HIVQUAL-T software
 - Mentoring



2006 Scaling up

- Training of Trainers (ToT) of HIVQUAL-T concept and software
 - Regional Office of Disease Prevention and Control (ODPC)
 - Provincial coordinators:
 - Hospitals



2007- 2008 Expansion

- Engage more collaborators:
 - National Health Security Office (NHSO) and Institute for Hospital Accreditation (IHA)
- Expansion by NHSO budget
 - Training new sites
 - Regional/provincial group learning
 - Monitoring and Evaluation

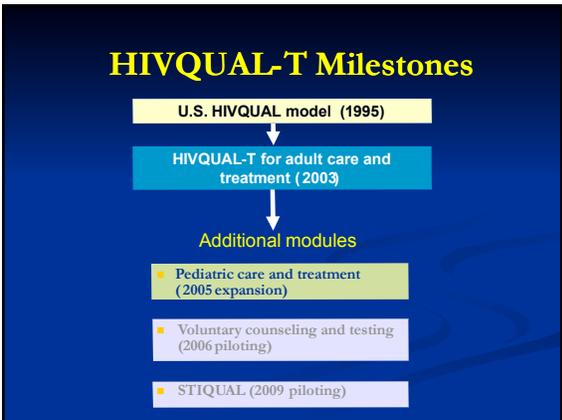


2008-2009 National System Development

- Integration to the National ARV Program (NAP)
 - Define HIVQUAL-T model as a required quality component of NAP
 - Budget planning under NAP of quality improvement projects

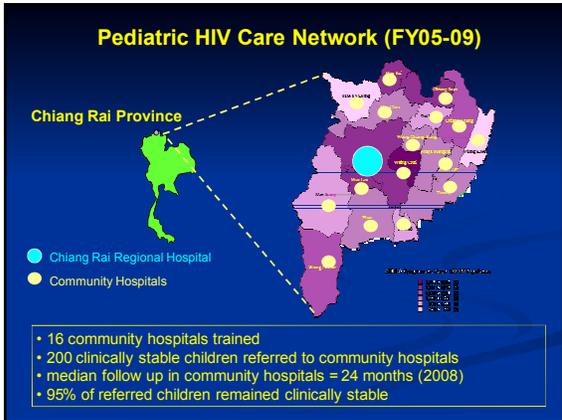
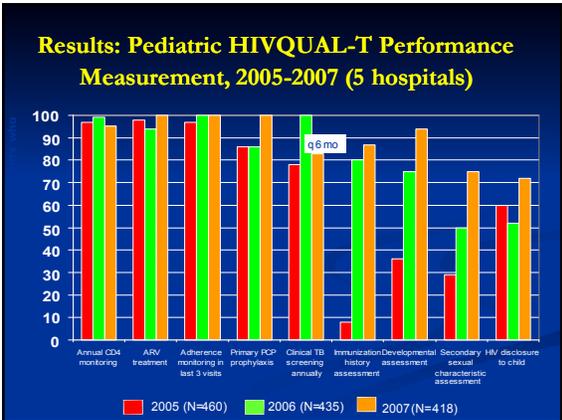
2008-2009 National System Development

- HIVQUAL-T program management under BATS
 - Coordination among BATS, ODPC regional office, GAP/TUC, and NHSO
 - Revision adult HIVQUAL-T indicators, Software (V 5.0), and chart abstract form
 - National QI consultant team was initiated
 - Conducting organization assessment for quality management in hospital level
 - Benchmarking of performance measure from HIVQUAL-T database
 - Development of website for communication among stakeholders

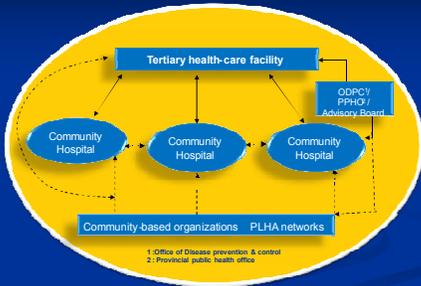


Pediatric HIVQUAL-T Implementation, 2005-2007 (5 pilot hospitals)

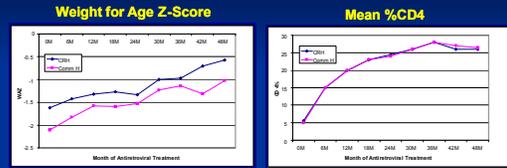
Bamrasnaradura National Institute of Infectious Diseases
Chiang Rai Regional Hospital
Sappasitthipasong Hospital, Ubon Ratchathani
Siriraj Hospital
Queen Sirikit National Institute of Child Health



Community-Based Pediatric HIV Treatment and Care Network



48 months Clinical Outcomes: Tertiary vs. Community Care



WFA CRH vs. Community
 0 M, P = 0.001
 24 M, P = 0.09

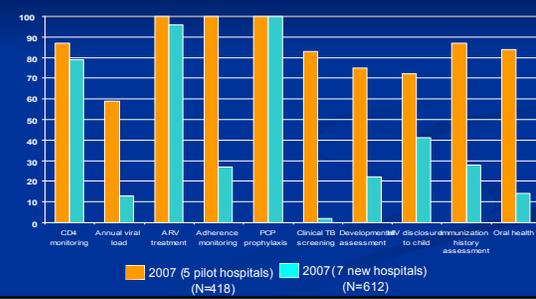
Same trend in CD4 gained

Pediatric HIVQUAL-T and Pediatric HIV Network Expansion, 2005-2008

Participating regional/provincial hospitals	
2005-2008	2008
Siriraj	Udonthani
QSNICH	Nakornsrithammarat
Bamrasnaradura	Surin
Chiang Rai	Kanchanaburee
Ubolratchathane	Hadyai
	Nakornsawan
	Chacheungsao

■ Pediatric HIVQUAL+ ped network hospitals in 2005-2008
■ Pediatric HIVQUAL hospitals in 2005-2008
■ Expanded Pediatric HIVQUAL+ ped network hospitals in 2008 "Children ART network: CAN"

Results: Compare Median Pediatric HIVQUAL-T Performance Measurement of 5 Pilot Hospitals with 7 New Hospitals, 2007

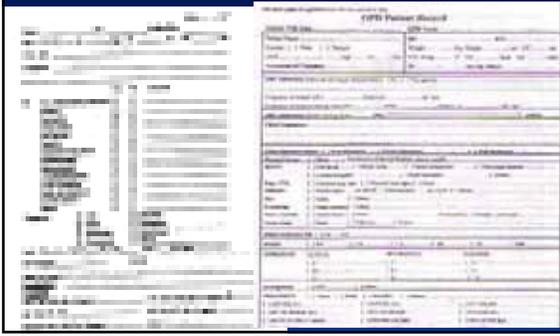


QI Topics of 13 Hospitals in 2008

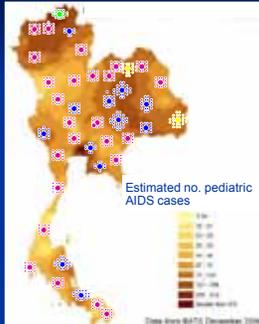
QI topics	Number of hospitals
Immunization history assessment	6
VL monitoring	5
TB screening	5
Oral health assessment	4
CD4 monitoring	3
ARV adherence assessment	3
Development assessment	3
2 nd sexual characteristics assessment	3
Sex education	3
HIV disclosure to child	2

Median number of QI topics/hospital = 3 topics (range 1-8 topics/hospital)

Medical Record Form Revision



Direction Forwards: Expansion of the Pediatric HIV Care Network and Pediatric HIVQUAL

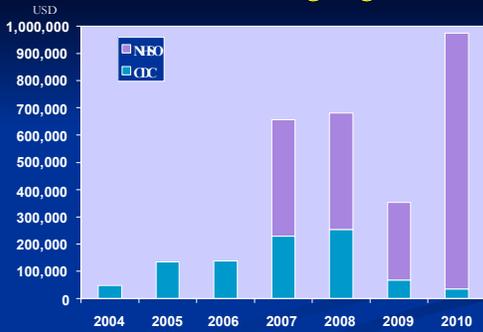


- Chiang Rai province– USG supported model site (beg. 2003)
- Udon provinces- USG expanded sites (beg. 2006)
- Global Fund supported sites (2007-2011)
- Royal Thai Government supported sites (2010-2014) (all 76 voluntary provinces)

2010-2014 National Quality Improvement of HIV treatment and care

- The 5 years proposal was developed and approved financial support from NHSO Board
- Program management by BATS and technical working groups
 - Supervision by the National QI of HIV treatment and care Steering Committee
- Integration QI of adult and pediatric treatment care including Children ARV Network (CAN) model

HIVQUAL-T Budgeting



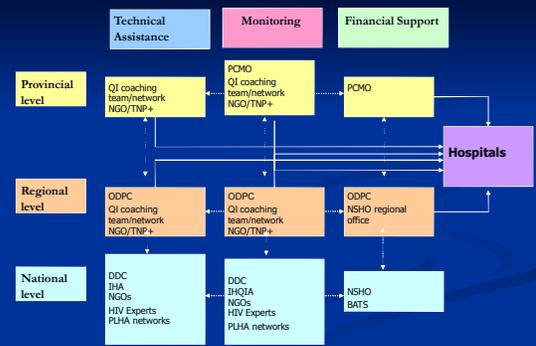
Sustainability Strategies

1. Partnership/Networking

- National level
 - Ministry, DDC
 - National health Security Office (NHSO)
 - CDC
 - PLHA network and NGO AIDS
 - Institute for Hospital Accreditation (IHA)
- Regional level
 - Regional ODCP and NHSO
 - PLHA network
 - QI coaching team
- Provincial level
 - Provincial health office
 - PLHA network
 - QI coaching team
- Hospital level
 - Health care providers
 - PLHA Volunteers
 - HA surveyor



Linkage of HIV treatment and Care Network



2. Coordination among Providers/Program manager

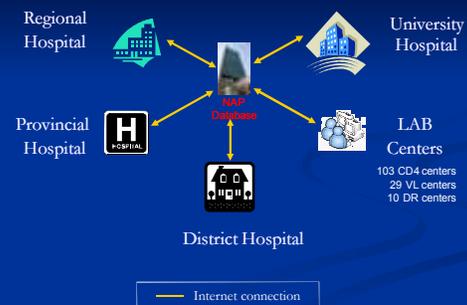
- Regional/provincial Group learning
 - Training and sharing best practices
 - Cases conferences
 - Data analysis
- Website communication

www.cqihiv.com

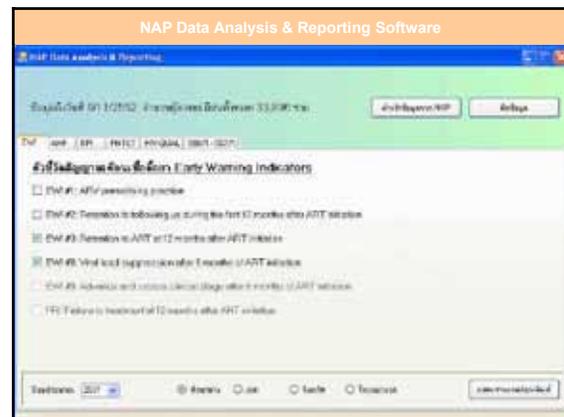
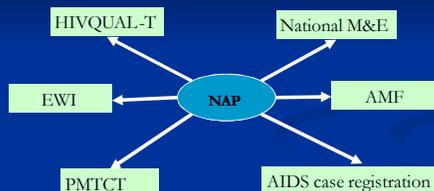
3. Integration with National Programs

- HIV/AIDS information system
 - National ART Program (NAP)
- Quality Improvement system
 - Institute of Hospital Accreditation

NAP data Networking



Linkage of HIV/AIDS information System and NAP database



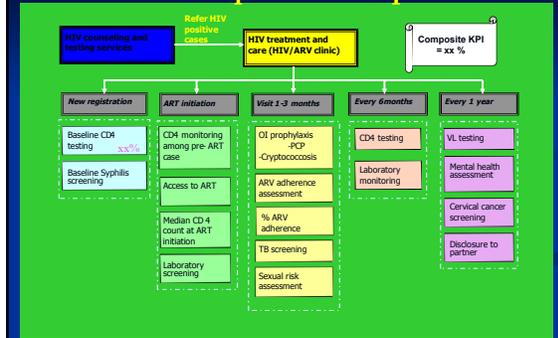
HIVQUAL-T and HA

- HA is main stream of quality improvement of health services in the country
 - Does not apply the quality assurance (QA) but accredited by assessment CQI of services
- HIVQUAL-T integrate with HA by establishment connection and development common tools for QI communication
 - Be used by HA surveyor and QI coaching team for QI activities in facility level
 - Venue stream mapping (VSM), and Composite key performance indicators (KPI) of HIV treatment and care

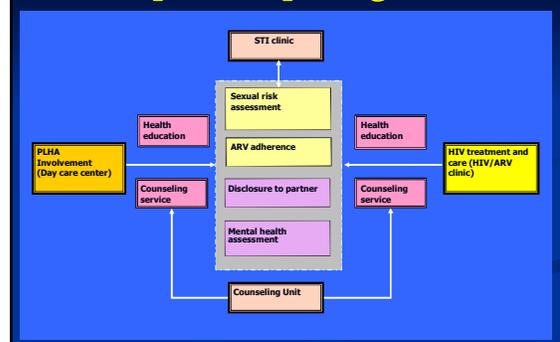
Composite KPI

Indicators	Weight	Coverage	Total score
Baseline CD4 testing	3	67	201
Baseline Syphilis screening	1	45	45
CD4 monitoring among pre-ART case	3	57	171
Access to ART	3	79	237
Laboratory screening	2	55	165
PCP prophylaxis	3	89	267
Cryptococcal prophylaxis	3	91	273
Cervical cancer screening	2	67	134
TB screening	3	91	273
VL testing	2	65	148
ARV adherence assessment	3	95	246
CD4 monitoring	3	75	225
Chemistry and hematology Laboratory monitoring	2	59	108
Mental health assessment	1	44	44
Disclosure to partner	1	63	63
Sexual risk assessment	1	61	61
Composite KPI		2561/36 = 71.1%	

VSM: Output from HIVQUAL-T Software per each Hospital



Example of Exploring Services



Acknowledgement

- Bureau of AIDS, TB and STI, Thailand Ministry of Public Health
- HIVQUAL-T and CAN Pilot Hospitals
- Thailand Institute of Hospital Accreditation
- National Health Security Office
- Thailand MOPH – U.S. CDC Collaboration
- New York State Dept of Health AIDS Institute
- Health Resources and Services Administration, HHS
- Centers for Disease Control and Prevention

Public Health Approach to TB Control

25th February 2010

Tendesayi Kufa, MBChB, MPH



Outline of presentation

- Global Stop TB plan and MDGs
- Epidemiology of TB
- What is required to control
 - Framework for TB control
 - Improving case detection and cure
 - The three I's
 - Other strategies
- TB elimination
- Conclusions



WHO Stop TB Strategy- Six Key Elements

- Pursue quality DOTS expansion and enhancement, improving case-finding and cure.
- Address TB/HIV, MDR-TB and the needs of the poor and vulnerable populations (children, prisoners)
- Contribute to health system strengthening based on primary health care



WHO Stop TB Strategy- Six Key Elements

- Involve all care providers to ensure adherence to the International Standards of TB Care.
- Engage people with TB and affected communities to demand, and contribute to, effective care.
- Enable and promote research for the development of new drugs, diagnostics and vaccines.

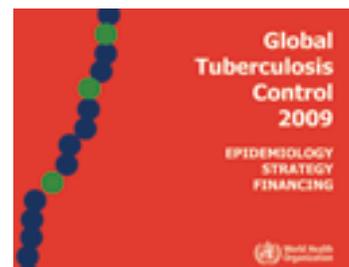


Millennium Development Goals Goal 6

- Targets :
 - Detect 70% of new smear+ cases by 2005
 - Successfully treat 85% of new smear+ cases by 2005
 - Halve TB prevalence between 1990 and 2015
 - Halve TB death rate between 1990 and 2015
 - Begin to decrease TB incidence by 2015
 - TB eliminated as a global health problem by 2050



Epidemiology of TB



Global epidemiology of TB

- In 2007:
 - 9.27 million new cases
 - 80% occurred in the 22 high burden countries
 - 15% were HIV infected (compared to 79% in SSA)
 - Incidence decreasing everywhere else except Eastern Europe
 - 13.7 million prevalent cases in 2007
 - 1.3 million deaths
 - 0.5 MDR TB cases

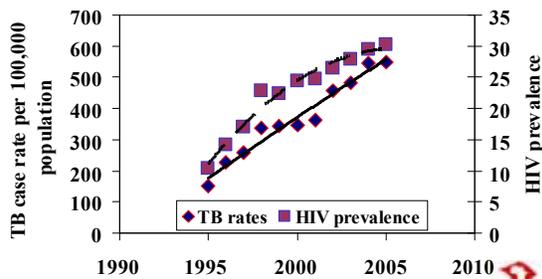


Epidemiology of TB in South Africa

- SA has one of the worst TB epidemics in the world!
 - In 2007, ranked 5th in terms of the number of incident cases
 - Ranked 4th in terms of number of MDR TB patients
 - Most number of HIV positive TB patients in the world
 - TB/HIV co-infection rates 40- 80% depending on settings
 - XDR TB
 - Largely HIV associated
 - Very high mortality



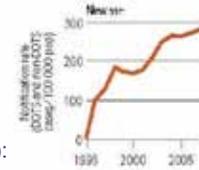
TB and HIV prevalence in SA



Epidemiology of TB in South Africa

Per 100,000 pop / yr

- Prevalence: 692 (384)
- TB incidence: 948 (↓)
- Mortality: 230 (39)
- Case detection rate (all cases): 62% (70%)
- Case detection for ss+ : 78%
- Cure rate: 63% (85%)



What is required to control TB

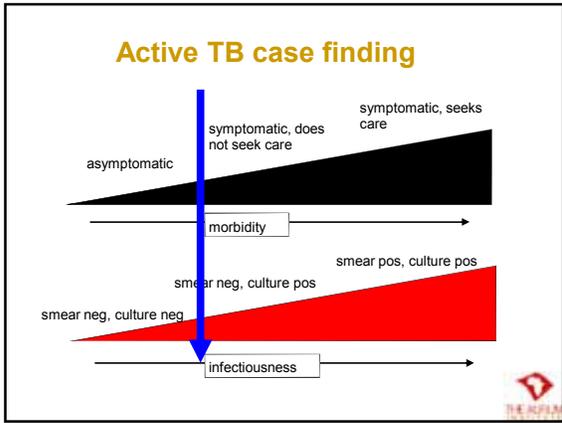
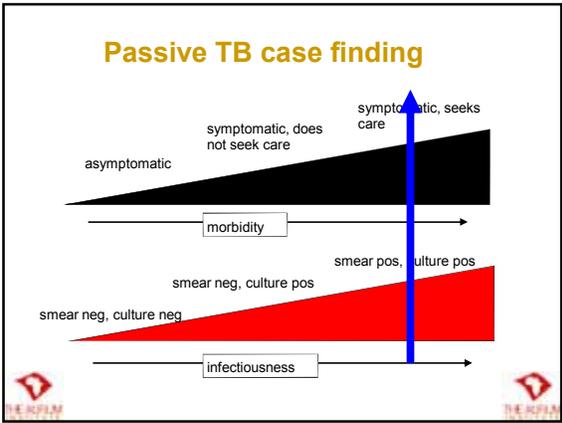
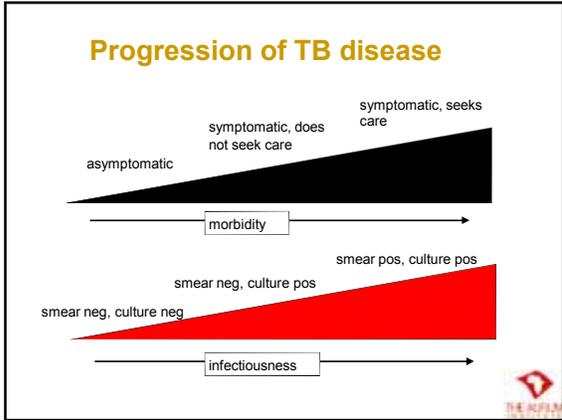
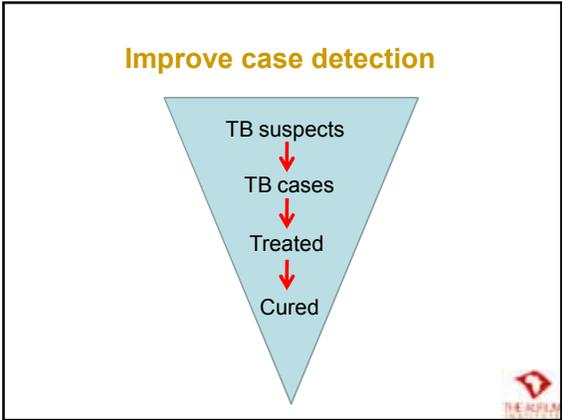
Back to basics



Framework for TB control

Pre-primary prevention (↓ susceptibility)	↑Living conditions, ↑ Nutrition, ↓HIV infections, ↑ HAART ↑ TB Infection control
Primary (↓ incidence of infection & disease)	Vaccines (pre-exposure vaccines)
Secondary (↓ prevalence of infection)	ICF, IPT Post exposure vaccines
Tertiary (↓ morbidity & mortality)	Early detection & treatment (DOTS) Treatment for MDR/XDR





- ### Active case finding: purpose
- At community or facility level: detecting TB cases earlier → reduced TB transmission →
 - improved TB control in communities
 - Improved infection control in health care facilities
 - Individual level: detect TB cases earlier with less extensive disease
 - Improved treatment outcomes
 - Improved survival
 - Reduced post treatment morbidity

- ### Active TB case finding
- Tools**
- TB symptom screening
 - CXRs [(Radiological screening programs RSP)]
 - Sputum microscopy and culture
- Models**
- Contact tracing
 - Door to door enquiry
 - Community mobilization and outreach
 - Educating school children
 - Direct access to TB labs
-

Mortality among TB cases by method of detection



(Churchyard GJ. 34th World Conference, IUATLD. 2003)

TB symptom screening

- Different algorithms used
- Most commonly done
- Screens vary – most validated ones include
 - Cough > 2/3 weeks
 - Fever (>2 weeks)
 - Night sweats (severe, > 2 weeks)
 - Unintentional weight loss (>10%)
- Sensitivity high, specificity low



Chest X-rays

- Less availability in low income settings
- Difficult to interpret especially with HIV co-infection
- Lower sensitivity than symptoms, ? Improved specificity

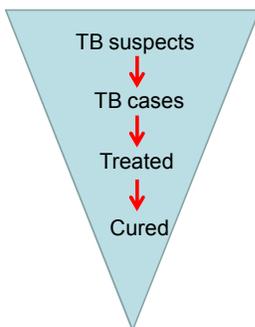


Sputum examination

- Sputum smear
 - Low cost and available in most settings
 - Poor sensitivity (20- 40%). Can be improved with induction using hypertonic saline nebulisation
 - High specificity
- Sputum culture
 - Expensive, less available
 - Better sensitivity compared to sputums
 - Long turn-around times with solid media cultures
 - Liquid culture may lead to increased NTM detection



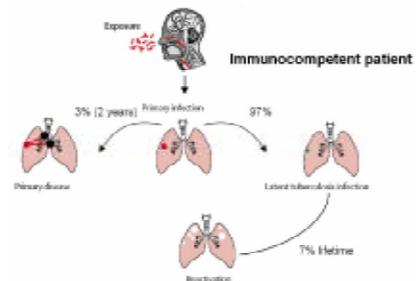
Improve cure



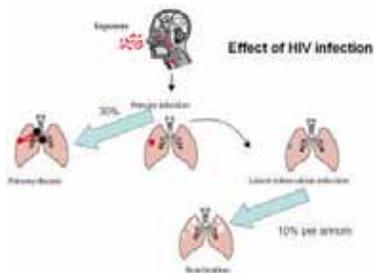
- Requires strengthening
 - Health systems
 - Management capacity
 - Laboratory services
 - Continuity of care
 - HR capacity
 - Protection of HCWs
- Also need new
 - Diagnostics
 - Drugs → shorter regimens



TB and HIV



TB and HIV



TB and HIV

- HIV may increase the risk of infection following exposure to TB bacteria
- HIV increases the risk of progression to primary disease following infection
- HIV increase risk of reactivation of latent TB infection to active disease
- TB is the most common opportunistic infection and leading cause of death amongst PLWHA

TB and HIV

- HIV increases risk of smear negative, extra pulmonary and disseminated TB making the diagnosis of TB more difficult
 - there are high rates of undiagnosed TB among the HIV infected 5- 28 % in in VCT and ART clinics, 2-4% in workplaces
- HIV infected individuals have ~ 20 fold greater risk of developing TB
- TB increases the rate of HIV multiplication
- TB accelerates progression of HIV related immunosuppression making HIV disease worse

TB and HIV

- DOTS alone cannot contain TB in settings with high HIV prevalence
- Strategies to deal with joint burden of TB and HIV are needed

TB/HIV collaborative activities

Reduce burden (illness and death) of HIV among people with TB	Reduce burden (illness and death) of TB among HIV infected
<i>HIV counseling and testing for people with TB</i>	<i>Intensified case finding</i>
<i>Cotrimoxazole prophylaxis for those with TB and HIV</i>	<i>Infection control</i>
<i>ART for those with TB and HIV</i>	<i>Isoniazid preventive therapy</i>

Intensified case finding

- Systematic screening for signs and symptoms of TB among the HIV positive individuals, followed by prompt diagnosis and treatment of TB if found.
- The goal is to reduce prolonged illness (morbidity) and death (mortality) from TB through early detection and treatment.
- Precursor of the other two I's (Infection control and Isoniazid preventive therapy)

Intensified Case Finding

- Symptom screen for all HIV positive individuals for TB at every contact using (needs to be documented)
- Do chest X-ray, smear microscopy and culture for TB suspects
- Do chest x-rays for the asymptomatic
 - at starting antiretroviral therapy
 - Starting IPT
 - once a year

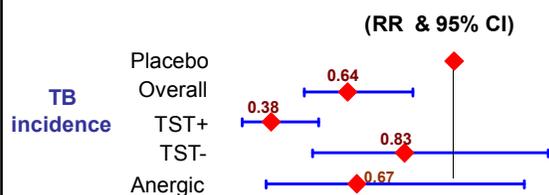


Isoniazid Preventive Therapy

- Refers to use of isoniazid monotherapy to treat latent TB infection
- IPT reduced the risk of developing TB by 33–67% (WHO 2008).
- Duration of protective effective ~18 months in places where re-infection rates is high but up to 48 months
- Recommended where prevalence of latent TB is greater than 30 percent in general population



Efficacy of primary isoniazid TB preventive therapy



(Woldehanna S. Cochrane infectious disease group. 2004)



IPT pre ART: TB incidence (SA)

	Incidence /100py	IRR (95% CI)
Neither	7.1	1.0
ART	4.6	0.36 (0.25-0.51)
IPT	5.2	0.87 (0.53-1.36)
ART/IPT	1.1	0.11 (0.02-0.78)

(JE Gloub, AIDS. 2008;23: 631-636)



TB infection control (IC)

- A combination measures aimed at reducing the risk of TB transmission in settings or places where people with HIV congregate
- These settings include HIV clinics, VCT clinics, primary care clinics, prisons and hospitals



Why TB infection control?

- High levels of undiagnosed TB in health care settings and other congregate settings
 - In communities 1-2% (Wood et al).
 - In VCT and ART clinics 8-27% (Mohammed et al.)
 - In mines (workplaces) 2-4% (Day et al)
- Occupational health issue for HCWs



Reducing TB transmission in congregate settings

The hierarchy of TB Infection Control :

1. Managerial control measures
2. Administrative control measures
3. Environmental control measures
4. Personal respiratory protection



Managerial controls

- These measures provide the framework for the implementation of TB infection control at facility level.



Managerial controls

- These include:
 - Development of facility specific **TB infection control plans**
 - Advocacy communication and social mobilization around TB infection control for patients, staff and visitors
 - Monitoring and evaluation of TB infection control activities
 - Participation in TB infection control research



Administrative controls

- **1st priority**
- Have the greatest impact on preventing TB transmission within facilities
- Aim is to prevent the production of droplet nuclei by identifying, investigating and treating suspects/cases
- Include:
 - 5 steps of patient management for prevention of TB
 - Measures to protect health care workers



Administrative controls

- Include:
 - Screening for TB symptoms and triaging
 - Educating on cough hygiene
 - Separating infectious patients
 - Minimising time spent in health care facilities
 - Minimising TB diagnostic delays
 - Providing prevention and care interventions for workers
 - Training of health care workers on TB infection control



Environmental controls

- 2nd line of defense
- Added to facility management & administrative control measures
- Reduces infection by
 - Dilution
 - Removal of droplet nuclei
- Include :
 - Ventilation (natural and mechanical)
 - Filtration
 - Ultraviolet germicidal irradiation



Personal respiratory protection

- Third line of defense.
- To be used when other work practices and environmental controls are in place
- Involves the use of face masks and respirators

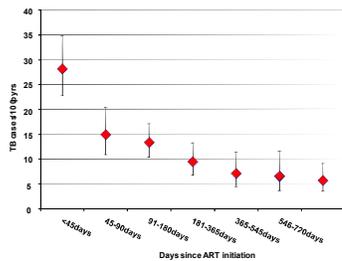


Personal respiratory protection

- Most appropriate for short term protection against high risk exposures:
 - Sputum collection
 - Contact with a known infectious TB case
 - Contact with high index suspect cases
 - Laboratory staff handling sputum of TB suspects/known infectious cases
- Cover the wearers nose and mouth
- Airtight seal around the edge



HAART:TB incidence in HIV-infected platinum miners



(Charalambous S. *Int J Tuberc Lung Dis.* 2008;12:supplement 2:S146)

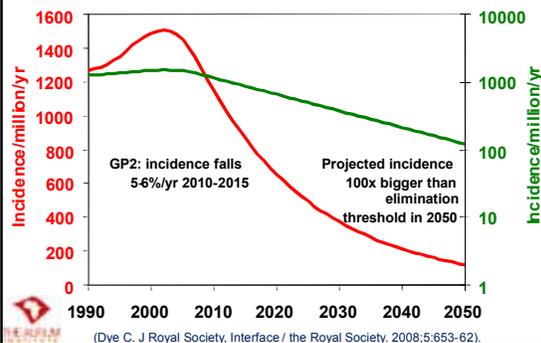


TB elimination

- Target incidence for elimination is 1/ 1 000 000 population
- To achieve elimination need;
 - Detect and diagnose all infectious (sputum-positive) cases in the community;
 - Cure all cases;
 - Detect and treat all infected tuberculosis contacts;
 - Prevent the emergence of multidrug-resistant tuberculosis



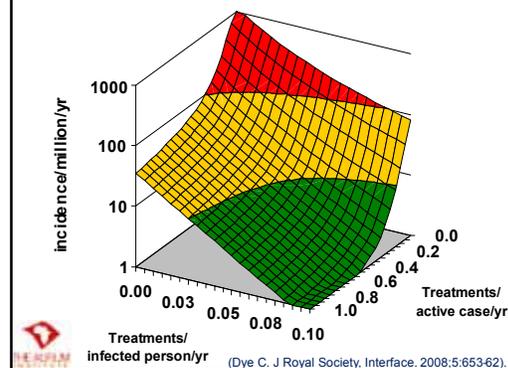
TB: elimination by 2050?



(Dye C. *J Royal Society, Interface / the Royal Society.* 2008;5:653-62)

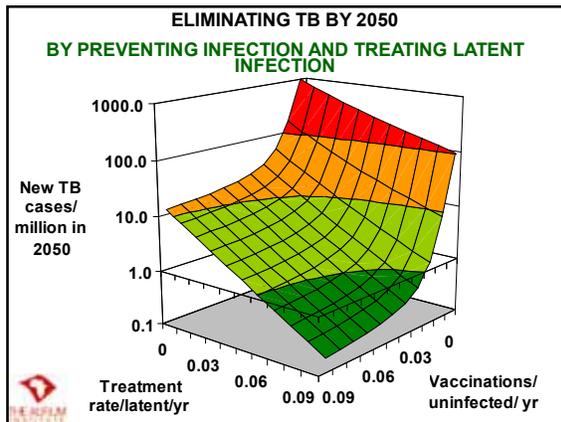


ELIMINATING TB BY 2050 BY TREATING ACTIVE DISEASE AND LATENT INFECTION



(Dye C. *J Royal Society, Interface.* 2008;5:653-62)





Conclusion

- Ensuring cure through a quality DOTS programme remains the cornerstone of TB control, but....
- We can't treat our way out of the epidemic.
- Need to scale up prevention with
 - intensified case finding
 - isoniazid preventive therapy & HAART
- Need new drugs, vaccines and diagnostics






Update on the 3 I's from Namibia

Dr. Ndapewa Hamunime
HIV Case Management Unit
Namibia Ministry of Health and Social Services



Background

- Population ~2.2 million
- Surface area of 82,416km²
- Sparsely populated: population density 2.2/km²
- 35 public hospitals, 34 health districts
- 10% of GRN budget spent on health
- No local training of doctors, pharmacists, laboratory technologists
- 95% of drugs, supplies imported



2



Epidemiology: HIV/TB in Namibia (1)

- 2008 HIV ANC prevalence: 17.8%
- 204,000 estimated PLWHA
- 70,496 patients are on ART (Sept 2009)
- ART coverage is currently estimated at about 85%
- 141/338 public health facilities providing ART
- 78% of notified TB patients had an HIV result
- 34% of HIV positive TB patients were put on CPT in 2007
- Data for 2009 indicates a significant increase in both HIV testing rates and CPT rates among TB patients



Epidemiology: HIV/TB in Namibia (2)

- Case detection rate of new smear positive TB was 84% (2007)
- 2008: TB CNR 665/100,000 down from 722/100,000 (2007)
- 59% of TB patients are co-infected with HIV
- Treatment success in new smear positive cases was 83% (2007 cohort)
- 268 patients placed on 2nd line TB medicines by end of 2008 (201 MDR TB, 20 XDR TB)



Tackling the “Three Is” in Namibia

- TB/HIV technical working group has been established, meets monthly and is chaired on rotational basis by the HIV and TB divisions.
- TB/HIV incorporated into both TB and HIV policies, guidelines and strategic plans.
- Good links have been established between TB clinics and ARV clinics in most facilities.
- An Infection Control Officer has been appointed



Intensified TB Case Finding

- TB screening in all ART facilities is being intensified to find undiagnosed TB cases among people living with HIV through:
 - Symptom screening for TB using a screening tool and client education on TB done at each clinic visit.
 - Full TB investigations carried out if client is symptomatic.
 - Those patient who have TB are referred to TB hospital for treatment of both TB and HIV.

Way forward



- Enhance IC both for facilities managing TB and those managing HIV infected patients through education, renovation, engineering and personal protection
- Operationalise fully infection control guidelines
- Continue with implementation of HIVQUAL
- Continue with strategies for 3Is
- Strengthen the recording and reporting system for the 3Is through revision of M&E tools.
- Maintain the stewardship role of TB/HIV TWG.

Thank You!



Evaluation of Capacity Building Efforts: Lessons from the development of the HQI Evaluation

Lisa Hirschhorn, MD MPH
JSI Research and Training
Feb 2010



What is Monitoring and Evaluation

- Structured approach to assess program effectiveness
 - What is being done, how it is being done and is it making a difference
- Provides link between
 - input (resources),
 - activities
 - outputs (products/systems)
 - outcomes
 - impact (changes)



The terms

- Used variably depending on model of M&E chosen
- **Input:** resources put into a program
- **Activities:** What is happening
- **Output: How well is the program working?**
 - # sites given support
 - Usually quantifiable

Ex. Site coaching and mentoring:
develop training/mentoring materials
=>coach/mentor team => team does coaching



Outcomes

- **Outcomes:** changes you expect to occur as a result of activities/outputs
 - Represent the results of outputs
 - Generally within scope of program control/influence
 - Can be short, intermediate or long term
 - Capacity, program development, quality-related activities

Train in performance measurement =>do the PM
=>institute QI projects to address identified gaps

- Can look at site, regional or national level



Impacts

- Longer term effect of program you hope will occur
- Usually involve other factors in addition to your work
 - Improved quality of care
 - Sustainable National HIV Quality Program



Monitoring vs Evaluation

- **Monitoring :** routine tracking of information about a program and its intended outcomes
 - Regular systematic review of data at planned intervals
 - Happens much more often than evaluation
 - Ideally uses routine data collection systems
 - Focus on
 - Process: Has implementation started? What is being done, who is it reaching?
 - Short term outcomes: changes which are expected soon and which can change more quickly over time
 - Not focused on determining the association between the intervention and any changes seen



Monitoring vs Reporting

- Good monitoring ensures that the data are reviewed to understand where things are not going well to drive program improvement
 - Feedback loop
 - Focus on inputs, activities, outputs and shorter term outcomes
- In practice, monitoring is often more like reporting
 - Emphasis is on submission rather than utilization



Evaluation

- Assessment of change in targeted results and analysis of inputs and activities to determine contribution of the program to these results/outcomes.
 - Ex. Establishment of ART program => use of HAART, do you see decrease in mortality
- Done less frequently than monitoring and focused on big picture
- Methodology is often more complex
 - Ex. linkage between training, change in capacity and change in quality



Why do Evaluation

- Maximize effectiveness of programs and resources utilized with data-driven approach
- Understand if the planned activities, outcomes and impacts are being seen and explore why/why not
- Study linkage between activities and the changes observed
- Identify barriers to success which need to be addressed and facilitators which can be strengthened (Interim evaluation)
- Provide information critical to all stakeholders/levels (provider, site, program, national and international) for decision making, resources allocation, and next steps
 - Expansion, replication



Interim/Formative Evaluation

- Designed to provide insight into progress to achieving interim goals
 - Process evaluation of activities implemented and facilitators and challenges
 - Provide **feedback** on areas of identified challenges for implementation and recommendations for strengthening (**internal QI**)
 - Trend evaluation of any early changes in outcomes and impact
 - Can use initial findings for summative evaluation design and approaches to adapt as needed



Summative Evaluation

- Evaluation of the program focused on the outcomes, impacts and look at association between them and the program
 - quasi experimental (Before/after, step-wedge)
 - Modelling to link activities, short term and longer term effects
 - ex. Training => increase capacity => PM => QI activities
- Includes more focus on capacity building as the main goal



HQI Evaluation

- Focus on the work of HIVQUAL International-supported activities, outcomes and impacts at the National and Site levels
 - Included strong focus on capacity
- Interim/formative evaluation: completed spring 2009



Steps taken in designing an Evaluation Methodology and Framework

- Understand and fully define the goals and objectives
 - need to know what you want to measure
- Identify the critical areas of expected outputs and outcomes and impact
 - Frame the questions
- Understand the necessary steps which are needed to reach these goals
 - Inputs, activities, outputs, outcomes



Steps in designing the Evaluation Methodology and Framework

- Determine how are the effects to be judged?
 - did expected change occur (adequacy)
 - measure against set performance goal or standard
 - Ex. All sites will do a QI project based on PM data in first year
 - Did the program have an impact beyond other external forces (plausibility)
 - Evidence that it is plausible that changes were due (at least) in part to the activities
 - Ex. sites which developed more QM capacity did more QI projects than sites which did not
- Design to ensure that the evaluation is useful to strengthen the work of the program



Next step: Logic Model

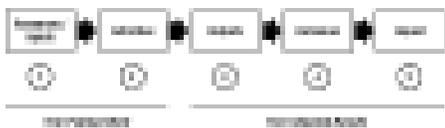
- Framework is used to develop and implement the evaluation
- Provides a “map” describing the sequence of events from inputs through activities and outputs to achieve the program’s targeted results
- Provided the linkage between the inputs and activities and the targeted changes



The Efficient Flow of the Logic Model

The WHO Logic Model Definition

Identify a logic model, determine what resources you need, and how you will measure success, identify the knowledge you need to measure, and integrate the model into your existing monitoring and evaluation system.



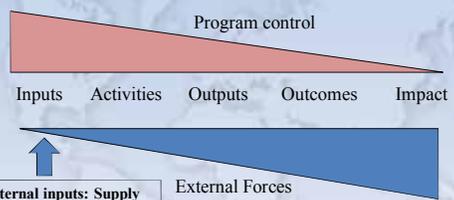
W.K. Kellogg Foundation Logic Model Development Guide
<http://www.wkkf.org/Pubs/Tools/Evaluation/Pub3669.pdf>



HQI Logic model



Why not just measure QOC?



- Measuring success solely through the impact ignore the many external factors which can change the impact
- Particularly difficult in technical assistance and capacity building efforts
- Attributing change in impact in the absence of a control is also difficult



Why not just QOC

- Goal is to build capacity to measure and work to improve quality and quality structure
- Many externalities can present increase in QOC beyond the control of the project scope
 - National stockouts
 - Natural disasters
- Therefore priority to measure the outcomes
 - Capacity, PM, QI projects



What about Capacity and Sustainability

- Building capacity at the national and site level is a core component of HQI-US goals
- **Capacity** is important for “improving performance in the health sector, and is thought to play an important role in *sustaining adequate* performance over time”¹
- **Sustainability** was viewed as the ability to continue work in the future (future capacity) and adapt and expand as needed
 - Requires capacity, ownership, leadership, and commitment

1. Lafond A, Brown L. A Guide to M and E of capacity Building Interventions in the Health Sector in Developing countries . MEASURE Evaluation Series No 7. 2003



Measuring Capacity

- Few standard indicators exist for measuring capacity¹
- Evaluation focused on 2 main components
 - **process** of capacity change
 - how capacity building took place
 - capacity as an **outcome**
 - Did the capacity building activities improve capacity
- Focus on site and national level and designed with input provided of the Evaluation Advisory Committee
 - Organizational assessments
 - qualitative interviews designed to capture identified areas
- Also explored capacity as an **intermediate step toward improved performance (site level only)**

1. Lafond A, Brown L. A Guide to M and E of capacity Building Interventions in the Health Sector in Developing countries . MEASURE Evaluation Series No 7. 2003



Indicators for Capacity within the Context of HQI

- Site
 - Ability to measure performance
 - PM
 - Ability to work to improve quality
 - QI projects
 - Increased organizational structure to support QI now and in the future
 - OA, other measures of site QM
 - Evidence of ownership and leadership



Indicators for Capacity within the Context of HQI goals

- National
 - Ability to measure performance uniformly across sites
 - National system of PM
 - Increased knowledge, engagement, ownership and leadership in QM
 - Role and support for scale-up
 - Engagement in and support for key building blocks of national QM program
 - PM system, QI support, organizational structure, adaptation and expansion as needed



Indicators for Sustainability within the Context of HQI goals

- Measuring Sustainability is even more difficult
 - Leadership, future commitment
 - Continuation despite change in staff
 - Structure, culture
 - Plan and infrastructure to support expansion
 - Explore others which may include
 - integration with other existing quality-related activities
 - Harmonization with M and E activities
 - Integration into the national plans and strategies
 - Plans for expansion/integration into other areas (health systems strengthening) beyond HIV



What are potential Data Sources for Evaluation

- Define how you would measure the activities, outputs outcomes and impacts
 - Qualitative
 - Quantitative
- Ask what data is being collected and what new data needs to be collected
 - Where are data planned to be collected
 - Which data are available
 - What are potential modifiers we need to capture and which can we capture
 - Size, sector, model of care, information system
- Do you need a system for data management



Examples of Data sources and types: HQI example

- Quantitative:
 - Performance measurement
 - How often, indicators collected, round, results
 - Organizational assessments
 - QI Projects
 - Areas of focus, timing, frequency
 - Site factors (modifiers)
 - Size, sector, location, information systems, wave



Analyses: Quantitative

- Evaluated PM and QI activities
 - Which sites are measuring
 - Which indicators are being measured
 - Are PM activities being changed in response to the results
 - How are data being used to develop QI projects
 - How does performance of a QI project relate to results of future measurements
- Site Capacity Building and Measurement
 - Are OAs being done? What changes are being seen
 - Are they helpful to the sites/country
 - Explore relationship of site factors with change in OA
 - Qualitatively explore relationship between site support activities and change in capacity
- Modeling:
 - Explored the relationship between changes in site capacity, QI activities and quality of care
 - Explored the relationship between site factors and change in capacity (OA), PM activities, and QI activities



Analyses: Qualitative

- Key informant interviews to measure capacity and change in capacity (staff, site and national)
 - Relationship with HQI supported activities
 - Facilitators and barriers
- Similarities and differences of implementation and facilitators and challenges in the countries evaluated



Analyses: Mixed methods

- Qualitative interviews of key informants and sites combined with quantitative data
 - What was the relationship between observed program outputs and outcomes and qualitative measures of capacity
 - Further explored facilitators and barriers associated with achieving the program goals



What was NOT the primary focus

- Change in QOC as a direct measure of the effectiveness of the HQI activities
 - Unable to control for external factors (positive and negative)
 - Focus on capacity as the primary goal through the technical assistance provided
 - Able to do adequacy analyses (were changes seen) and explore plausibility and impact of external factors
- Sustainability of a National HIV Quality Program as a dichotomous impact (yes/no)
 - Focus on changes capacity (overtime), ownership, leadership, future commitment
 - Effectiveness of the country program



Some Evaluation Findings

- HQI had completed a number of core activities central to achieving the program goals of building capacity at a national and site level to measure and improve quality.
- Initial evidence of capacity development was also found at the 3 main levels of anticipated outcomes:
 - national, team in country and sites




National Level

Activities	Outcomes
<ul style="list-style-type: none"> Developed partnership with CDC in each country to assist HQI in fully engaging MOH Establishment of a team and program in country within the MOH Provision of training on quality to key stakeholders in the MOH Coordination with the MOH in development of core indicators and uniform approach to PM <ul style="list-style-type: none"> – Reflect MOH priorities Selection of pilot sites Start-up of regional workshops (some countries) 	<ul style="list-style-type: none"> Development of national HIV quality effort Growing/Strong national ownership and support of the HQI program Increased knowledge and interest of MOH staff in the PM results Change in MOH culture to increase integration of quality into national HIV care and treatment efforts. Work to expand HQI activities nationally <ul style="list-style-type: none"> – Work to expand local capacity to support HQI activities Expansion beyond pilot sites




Team in-country Level

Activities	Outcomes
<ul style="list-style-type: none"> Establishment of a strong leader for the ICT Provision of initial and ongoing training and mentoring to team in country <ul style="list-style-type: none"> – Study tour, US lead visits and calls, coaching Establishment of strong team working within the MOH 	<ul style="list-style-type: none"> Team providing training and support to sites for PM, QI and establishing QM programs Running regional groups Team able to analyze data to develop plans, presentations Team providing Support around quality for MOH Active in plans for expansion




Site Level

Activities	Outcomes
<ul style="list-style-type: none"> HQI implemented at (most) of the pilot sites Site training and coaching on PM Implementation of adapted software in pilot and wave 2 sites Site training and coaching in QI Site support to develop QM programs Increasing activities to facilitate peer-to-peer learning 	<ul style="list-style-type: none"> Increase in culture to support quality at sites. Completion of multiple rounds of PM in initial sites with improvement in ability to do PM Utilization of the data to drive QI Development of elements of QM programs in many sites Evidence of shared lessons learned through peer-to-peer sharing Increased QM capacity




Capacity

- Improvement in site capacity
 - OAs, activities
- Strengthening of national program
 - Scale-up
 - From Pilot to expansion sites
 - Regional activities
 - Growing/Strong ownership, commitment and leadership from MOH
 - Discussion/movement to integrate QI concepts and activities into national infrastructure
- Also see improvement in some of the performance measurement indicators in each country




Facilitating Factors

- HQI approach to introducing HQI
 - Responsive to differences between countries and willingness to adapt the approach to address country-specific needs
 - Emphasis on dialogue and adaptation
 - Strong HQI core team representing a range of skills and knowledge which they effectively transferred
- National support and national prioritization of ensuring the quality of care being delivered




Facilitating Factors

- Commitment and support from USG
- Prioritization of capacity to support site, and national capacity in PM and QI
- HQI focus on training many people at national, department and site level
- Strong focus on providing ongoing mentoring and coaching beyond didactic training
- Strong NGO networks also committed to quality




Challenges

- Distances and challenges in travel between sites
- Expansion to new sites and new areas of HIV prevention, care and treatment
 - How to provide support for larger number of sites
 - How to track progress and needs at larger number of sites
- Staff turnover at sites
- Human resources and patient load at sites
 - Competing priorities




Challenges

- Balancing establishment of a national QM program while addressing other challenges faced in the scale-up of HIV services
- System challenges across sites
 - ex. access to laboratories that can routinely conduct CD4 counts)
- Harmonizing with M and E efforts and other quality efforts (QA)
- How to streamline HQI data management to ensure capacity for ongoing internal HQI program M and E and CQI




Conclusions

- Planned evaluations integrated into the ongoing work can provide feedback for program strengthening
 - Include process evaluation to ensure information is available to be used for internal improvement
- Evaluation can be designed to use routinely collected data as much as possible to decrease data collection burden, supplemented by less frequent data gathering to include both quantitative and qualitative sources




Conclusions

- Incorporation of a rigorous but realistic evaluation allows the program to
 - measure if activities are being done,
 - Understand if goals are being met
 - identify areas for further strengthening
 - Internal use of data for program QI
 - Identify areas which represent good and promising practices for expansion and replication
- Measuring change capacity is feasible as a primary goal but requires some innovation requires clear definitions of how to measure and what




Many Thanks




The Chronic Care Model

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 HEALTHQUAL International
 All Country Learning Network
 February 2010

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Evolution of Chronic Care

1980 2010

Disease Care

- ◆ Acute
- ◆ Reactive
- ◆ Focus on dx/rx
- ◆ Customized care
- ◆ Medical
- ◆ MD role central

Health Care

- ◆ Chronic
- ◆ Proactive
- ◆ Focus on behavior
- ◆ Standardized care
- ◆ Practical
- ◆ Patient role central

Kathleen Clanon, MD 2007

2

Tyranny of the Urgent

What doesn't get done when we do **disease care** instead of **health care**?

3

Preventive care quality

- **Over 4000 patient visits by 138 U.S. family physicians**
- **Patients were up to date on**
 - 55% of routine screening tests
 - 24% of immunizations
 - 9% of health behavior counseling

Stange et al. Prev Med 2000;31:167

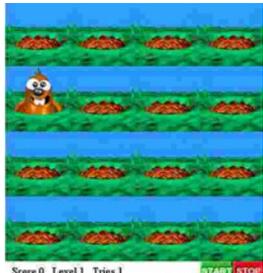
The reality of the usual doctor visit..

- Only 37% of patients in one study were adequately informed about medications they were taking
- 50% of patients leave office visit not understanding what the doctor said
- Study of 1000 physician visits, the patient did not participate in decisions 91% of the time.

Roter and Hall. Ann Rev Public Health 1989;10:163. Braddock et al. JAMA 1999;282;2313.

How does this compare with your experience?

Problem: Quality Whack-a-Mole Solution: System Change



Score 0 Level 1 Tries 1 START STOP

“Improvements in care cannot be achieved by further stressing current systems of care. The current systems cannot do the job. **Trying harder will not work.**”

IOM 2001: Crossing the Quality Chasm

7

Genesis of the CCM: Why Research Results and Real Life Don't Match

- Rushed **practitioners not following established practice guidelines**
“The gap between knowing and doing.”
- Lack of **care coordination**
- Lack of **active follow-up** to ensure the best outcomes
- **Patients not trained** to manage their own illnesses successfully

Wagner, E.H. (1998). Chronic disease management: What will it take to improve care for chronic illness? *Effective Clinical Practice*, 1, 2-4

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History of the Chronic Care Model

Developing the Model

- Improving Chronic Illness Care Program, MacColl Institute for Healthcare Innovation, Seattle.
- RWJF Chronic Illness Meeting

Developing a Change Strategy

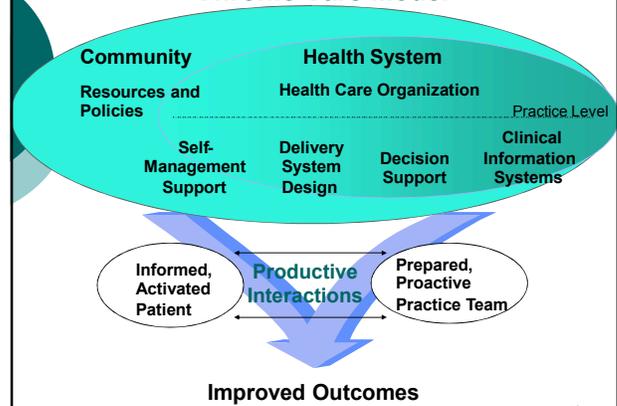
- IHI Breakthrough Series, Dallas 1999

Disseminating the Practice

- Model applied with diabetes, geriatrics, asthma, CHF, CVD, HIV/AIDS, and depression in >500 health care organizations via collaboratives.

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Chronic Care Model



10

Domains of the CCM

- **Self-management Support**
Patient sets goals and is in charge of care.
Education focuses on problem-solving skills.
Peer mentoring and support.
Adherence and prevention programs.
- **Community Involvement**
Form partnerships with community orgs.
Address stigma and myths.
- **Delivery System Design**
Planned and group visits.
Case management.
Panel Management.
Team care.

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Domains of the CCM

- **Decision Support (Provider Knowledge and Behavior)**
Embed guidelines into forms, orders, notes, etc in daily care.
Share guidelines with patients, case managers.
- **Clinical Information System**
Provide “cure” reminders of care for providers and pts.
Feed aggregate data into CQI system.
Share appropriate info between partner orgs.
- **Health Care Organization**
Encourage open handling of errors.
Support improvement at all levels of the org.
Set and monitor goals in chronic care outcomes for the organization.

Does Use of the CCM Improve Outcomes?

- It's a model, not a single intervention.
- Meta-analysis of 112 studies of four chronic illnesses: asthma, CHF, Type II DM, and depression.
- "Interventions with at least one CCM element had consistently beneficial effects on clinical outcomes and processes of care across all conditions studied."

Tsai, A.C. et al "A meta-analysis of interventions to improve care for chronic illnesses." *AJ Managed Care* 8/05

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Evaluating Individual Domains of the CCM

- 19/20 interventions using a **self-management** component improved a process or outcome measure
- Multiple studies demonstrate use of **registry** to identify at-risk patients and encourage proactive engagement results in improved outcomes in DM, HTN
- 20/22 studies looking at **decision support** care reminders (cuing) also demonstrated effective in improving processes and some outcomes

Lorig, K.R. 2001. *Medical Care*, 39(11),1217-1223.
Bodenheimer, T. (2002b). Improving primary care for patients with chronic illness: The Chronic Care Model, Part 2. *JAMA*, 288 (15), 1909-1914

CCM in Action

Delivery System Design
Decision Support
and
Patient Self-Management

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Delivery System Design: Enhancing Patient Understanding and Self-Care Skills

- Team care and "Team-lets"
- Planned visits
- Group visits
- Panel Management

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"Teamlets": Enhancing patient understanding and skills by changing the messenger

- MD and non-professional staff (social workers, aides, etc) see patients together.
- Aide meets with pts pre-, during-, and/or post- the clinician visit.
- Advantages are:
 - Patients connect with staff differently than with M.D., ask different questions
 - Efficient: MD time reserved for activities only they can do.
 - Staff like it!

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Teamlet Example

In the post-visit, aide asks:

- "Is there anything you would like to talk about that you didn't have a chance to say?"
- Closing the loop
- Do they agree with physician advice?
- Goal-setting/making action plans
- Answering questions (may need to go back to physician to clarify)
- Help patients navigate system, especially pharmacy and lab

Planned Visits: Keeping Health Promotion Tasks on the Agenda

- "Huddle" of staff begins each session to review each patient
- Responsibility to remember care tasks is shared.
- List of what the pt needs is on the front of the chart with overdue items flagged.



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Group Visits: Harnessing Peer Learning for Patients



- **NOT a support group.**
- Medical visits, scheduled for 1-2.5 hours.
- 3-6 patients scheduled.
- Clinician, case managers, adherence educators, benefits advisers all present.
- Starts with education, group questions. Focus on problem-solving, prevention and HCM.
- Providers pull pts out for brief one-on-ones as group session continues.

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Panel Management: Making Care Proactive and "Closing the Loop"

- Population-based, data-driven approach to care improvement, esp. chronic disease
- Team-based
- Requires registry function
- Unlinks the "recipe"/protocol aspects of chronic care from any doctor visits

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Details

- Registry should contain entire population with the disease of interest
- Regular (monthly) review of registry report by whole team
- Staff use systematic **selection criteria** and **standing orders** to "work the report"
 - Red flags: overdue visits or labs
 - Clinically worrisome: last CD4 falling or weight low
 - Proactive care: who is doing well and just needs labs and a phone call....
- Combinations of "red flag" and proactive selection criteria are good, to maximize efficiency of care

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Sample HIV Registry

	Name	Gender	Age	Adherence Provider	Last Visit	CD4 (last CD4)	Weight (last visit)	CD4 (last CD4)	Last Lab Order	Last Lab Result
Patient A										
Patient B										
Patient C										
Patient D										
Patient E										
Patient F										
Patient G										
Patient H										
Patient I										
Patient J										

Patient Self-Management: Equipping Patients with Skills

- "Patients with chronic conditions self-manage their illness. This fact is inescapable. Each day, patients decide what they are going to eat, whether they will exercise, and to what extent they will consume prescribed medications."

Bodenheimer, et al 2002
JAMA 288(19); 2470

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Traditional Patient Education vs. Self-Management Education

	Traditional Patient Education	Self-Management Education
Content Taught	Disease-specific information and technical skills	Problem-solving skills
Theoretical construct underlying the education	Knowledge leads to behavior change and better outcomes	Support in practicing new behaviors leads to improved clinical outcomes
Educator	Health professional	Health professional or peer leader and other patients in the group

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What Do Patients Need to Know?

26

- ### Content of a Self-Management Curriculum
-
- Goal-setting and problem-solving strategies
 - Health literacy and disease-specific knowledge
 - Navigating the health care system
 - Understanding the relationship between laboratory results and physical health
 - Managing negative emotions
- 27

- ### Content of a Self-Management Curriculum (cont.)
-
- Finding and building networks of social support
 - Strategies to increase medication adherence
 - Cognitive techniques for symptom management
 - Communicating effectively with your health care provider
 - Nutrition and exercise
 - Risk-reduction strategies
- 28

Action Plan (Example)

1. Goals: *Something you WANT to do:*

2. Describe:
How: _____ **Where:** _____
What: _____ **Frequency:** _____
When: _____

3. Barriers: _____

4. Plans to overcome barriers:

5. Conviction ___ & Confidence __ ratings (0-10)

6. Follow-up: _____

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Action Plan (Example)

1. Goals: *Something you WANT to do:*
Begin Exercising _____

2. Describe:
How: Walking **Where:** Around the block
What: 2 times **Frequency:** 4x/wk
When: After dinner

3. Barriers: Have to clean up; bad weather

4. Plans to overcome barriers:
Ask kids to help; get rain gear

5. Conviction 8 & Confidence 7 ratings (0-10)

6. Follow-up: Next visit: 2 months

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Supporting Patient Self-Management

- **You might say:**
 - "How confident are you that you can take all your HIV medication this month?"
 - "What might get in the way?"
 - "Anything else?"
 - "What might help you to overcome.. (barrier)?"
 - "What has helped in the past?"
 - "What else?"
 - "What or who might help you this month?"
- "Here is what others have done..."

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Resources

Website:

- www.improvingchroniccare.org

Contact:

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Facilitation Skills

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STATE OF NEW YORK DEPARTMENT OF HEALTH National Quality Center (NQC)

Learning Objectives: You will learn about...

- Understand the importance of facilitation when planning and designing group activities
- Explore the necessary skills needed for effective facilitators and apply them during the session
- Understand the roles and responsibilities of facilitators
- Learn how to balance and increase participation of groups
- Prevent and manage challenging behavior when facilitation group activities

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Brainstorming

What are behaviors of successful facilitators that you have experienced?

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Facilitation

- Fa·cil·i·ta·tion (noun) - 'To make easy or easier' (Oxford Coloured Dictionary, Thesaurus, 1996)
- 'When a group is masterfully facilitated people say, "We did it ourselves!"'

"The art of facilitation is the art of assisting discovery"
Mark Van Doren

4 National Quality Center (NQC)

Facilitation

- Aim of group facilitation: to establish and maintain an environment within learning is created and common goals are achieved
- When do add a facilitator: *'low certainty + low agreement = facilitated meeting?'*
- A good facilitator requires knowledge and skills in group process, conflict management, communication styles and learning theories

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Tips from the Trade - Before you get started?

- 'Get at least half of the work done in advance'
- Try to avoid designing to suit yourself based on your own assumptions and preferred working/learning style
- Within 10min, get all participants to talk
- Choose a decision-making method before you need it
- Know the group expectations
- Be aware of environmental factors, individuals and group dynamics (e.g., projection, transference, groupthink)
- Reach out to 'special' participants
- Be aware of your own biases

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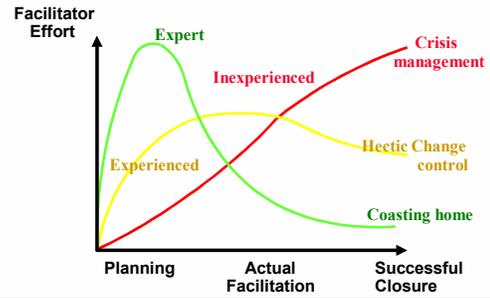
Key Facilitator Skills

- **Planning Skills** - plan ahead and anticipate challenges
- **Diagnostic Skills** – ‘read’ verbal/non-verbal clues of the group, understand team dynamics and recognize barriers to team effectiveness
- **Intervention Skills**– understand when (or when not) to ask questions, offer feedback, provide problem solving methods , push for outcomes, ensure involvement or wrap up
- **Goal-getting Skills**– keep the outcome of the group in mind
- **Evaluative Skills** – formally assess group outcome

7

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Facilitator Planning Skills



8

National Quality Center [NQC]

Tips from the Trade - How to get started?

- ‘Love the audience, and they will respect you!’
- Before the event begins introduce yourself to people as they arrive – making a special effort to find out their names
- Make sure that you run an ice breaker that involves introductions/names
- Once people are seated write down their names in order of where they are sat- during idle moments test yourself
- Use people’s names as much as you can early on – it’s ok to get it wrong the first time but not after that
- Maximum learning requires maximum participation

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National Quality Center [NQC]



10

National Quality Center [NQC]

Roles

Facilitator	Manager	Content Expert
Facilitates	Directs	Presents information
Invested in process	Invested in outcome	Invested in providing content expertise
Asks questions	Provides solutions	Provides the right answers
Guides to solutions	Solves problems	Assists in problem solving
Challenges the team to meet groups goals	Sets the goals and requires the team to meet them	Aids the team to achieve the team goals
Helps the team “graduate” and become self-sufficient	Has long-term relationship with team	Works with team when expertise is needed

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National Quality Center [NQC]

Key Roles

Facilitator:

- Process focused
- Objective & impartial
- No vested interest
- Remains neutral
- No input on content
- Not in decision making
- Monitors team interactions

Leader:

- Result focused
- Active team member
- A vested interest
- Voice opinions/ideas
- Provides input
- Part of decision making
- Represents the team
- Gets resources

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National Quality Center [NQC]

Facilitator/Leader: Tips when they are one...

- Discuss with the group the differences: be authentic
- Tell people when you are in one role or another
- Be clear which role you are in when decisions or choices are being made
- Make conscious choices about which role you need to play and when to play it
- Other ideas?

13

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Tips from the Trade - What facilitator should I be?

- Be positive, supportive and approachable; often compliment the group
- Always be respectful and don't take sides; be calm in time of emotion...
- Cope with uncertainty and allow disagreement; remove distractions and be aware of groupthink
- Actively listen – summarize/paraphrase; 'do not make assumptions, challenge them'
- Use language familiar with the group
- Observe non verbal communications; think about pace
- Be clear about your role
- Don't talk to much; 'facilitate NOT participate'

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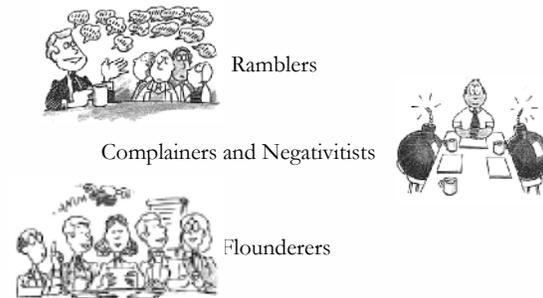
Types of Participants



15

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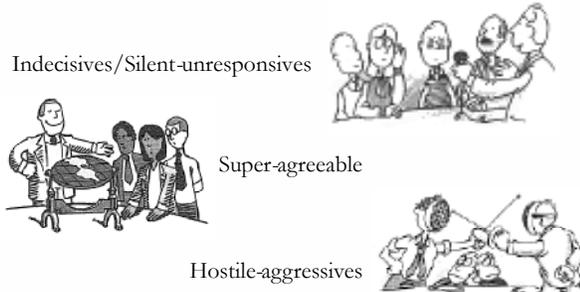
Personality Types of Participants



16

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Personality Types of 'Willing' Participants



17

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The Role of "Traffic Cop"

Specific words and phrases useful in directing traffic:

- **Observing** "There seems to be concern about..."
- **Clarifying** "What I hear you saying is..."
- **Focusing** "Getting back to the agenda..."
- **Stimulating** "What ideas can we come up with...?"
- **Balancing** "Does anyone else have another viewpoint?"
- **Summarizing** "To review the key points we've heard today..."



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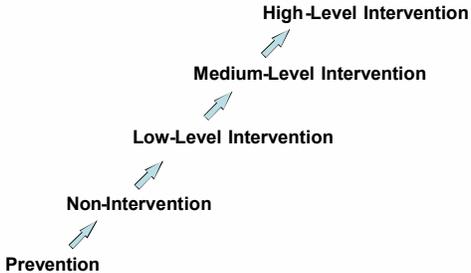
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Dealing With Difficult Behaviors



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Intervention Strategies



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Tips from the Trade – Dealing with conflicts?

- Prevention before intervention
- Maintain your neutral position
- Help the group be mindful of its ground rules
- Intervene immediately if members launch into personal attacks
- Let group members know they have been heard by paraphrasing and summarizing the points of view being expressed
- Check in often with group members to make sure they feel they have been heard correctly and feel understood
- Work with the group to expand participants' understanding of one another's viewpoints
- Help the group decide whether and how to deal with the issue

21 National Quality Center [NQC]

Group Exercise

Small Group Exercise – 10min:

- Identify group facilitator
- Brainstorm how to overcome challenges based on assigned scenarios – ‘What If’ handout
- Summarize strategies and report back to the larger group
- Provide constructive feedback to facilitator (2min)

22 National Quality Center [NQC]

Resources

Networks

- Mid-Atlantic Facilitators Network: <http://www.Mid-AtlanticFacilitators.net/>
- Midwest Facilitators Network: <http://www.midwest-facilitators.net/>
- Facilitator Development Network: <http://www.FacilitatorDevelopment.net/>
- Worldwide Network of IAF-Certified Professional Facilitators <http://www.Facilitator4hire.com/>
- Facilitators Network Singapore: <http://www.fns.sg/> & <http://fnsingapore.blogspot.com/>
- Australasian Facilitators' Network <http://www.facilitators.net.au/>

23 National Quality Center [NQC]

References

- **Ingrid Bens** (Author); *Facilitating with Ease!*; Jossey-Bass ; ISBN 0-7879-7729-2 (New & Revised Feb 2005)
- Sam Kaner with Lenny Lind, Catherine Toldi, Sarah Fisk and Duane Berger (Authors); *Facilitator's Guide to Participatory Decision-Making*; Jossey-Bass, 2007; ISBN 0-7879-8266-9
- Thomas Kayser; *Mining Group Gold*; McGraw Hill - 1995.
- Ron Kraybill (Author); *Structuring Dialogue: Cool Tools for Hot Topics*; *Riverhouse Express*(2005)
- Stuart Daily (Author); *The New Complete Facilitator*, Howick Associates 2002. ISBN 0-9646972-1-1
- Ron Kraybill (Author); *Group Facilitation: Skills to Facilitate Meetings and Training Exercises to Learn Them*; *Riverhouse Express*(2005)
- Sandor Schuman (Editor); *The IAF Handbook of Group Facilitation: Best Practices from the Leading Organization in Facilitation*; Jossey-Bass, 2005. ISBN 0-7879-2160-X
- Sandor Schuman (Editor); *Creating a Culture of Collaboration*; Jossey-Bass, 2006. ISBN 0-7879-8116-8
- Roger Schwarz (Author); *The Skilled Facilitator*; Jossey-Bass ; ISBN 0-7879-4723-2 (New & Revised July 2002)
- Josef W. Seifert (Author); *Visualization - Presentation - Moderation; A Practical Guide to successful presentation and Facilitation of Business Processes*; WILEY, 2nd Edition 2002
- Laura Spencer (Author); *Winning Through Participation*; - 1989.
- Salas, Tillmann, McKee (Authors); *Visualization in Participatory Programms*. Southbound, in association with UNICEF Dhaka, ISBN 978-983-0054-45-3

24 National Quality Center [NQC]

Richard Birchard, MS, Deputy Administrative Director, introduced ACLN participants to Open Space. This methodology was quickly embraced by the group, and embodied the breadth and depth of interests and ideas representative of each participant's experience, knowledge and intellectual pursuits.

What is Open Space?

- Open Space is not rocket science.
- A self-organizing method to facilitate participant-driven learning sessions.
- No pre-planned agenda. The session topics are developed by the participants and reflect what is important to them.
- Open space is not optional space.

The 4 principles of Open Space:

- The participants who come are the right people.
- Whatever happens is the only thing that could have happened.
- When it starts is the right time.
- When it's over, it's over.

The 1 law of Open Space:

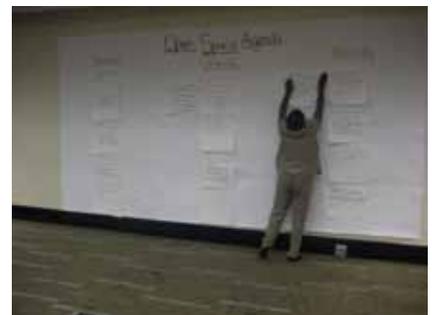
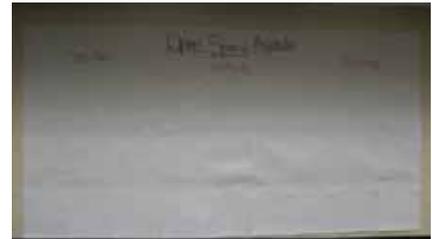
- The law of two feet = go to where you can contribute and be engaged the most.

Developing the Agenda:

1. Participants choose topics for sessions that they will facilitate and own.
2. Topics with facilitators' names are posted on the agenda wall.
3. The facilitators schedule the agenda with days and times for each session.
4. Participants sign up for sessions.
5. Facilitators review/revise the schedule.
6. New sessions can be added at any time.

The Theme:

- Whatever helps you do the work and grow the program.



The following pages (89-113) include session titles and notes taken during each open space session (transcribed by a dedicated staff person). To capture the development, progression and achievements of each group, notes appear virtually as they were when originally transcribed.

Session Title: How Do Non-Clinical Services Contribute to QI in Clinical Settings (1 hour)

Facilitators: Dr. Micah (Kenya) and Dr. Chitlada (Thailand)

Notes:

This discussion focused on 6 areas of interest proposed by participants: 1) Sharing of experiences involving PLWHA in health care service delivery; 2) Consumer involvement at different levels and in different programs; 3) How consumers can contribute to remain motivated and engaged in QI; 4) How to minimize conflicting roles/boundaries between consumers and providers; 5) How to change negative attitudes of health care providers toward consumers; and 6) Mechanisms to encourage consumers to disclose their HIV status.

Country Examples of consumer Involvement

Uganda: Discordant partners volunteer in clinics, and with a bit of training can provide some HIV service delivery and fill human resource gaps. All patients use suggestion boxes, not just PLWHA, involving consumers at all levels in policy discussions. Global fund decision-making - consumers have to be involved. Expert patients at health facilities are trained to support facilities in data extraction.

Botswana: PLWHA involved in national policy level guidelines review. It is not always easy to harmonize competing personal agendas. A NGO for PLWHA monitors policy to prevent conflict between policy and human results.

Swaziland: At the community level, PLWHA raise issues at facility level health committee meetings to senior nurses, which are brought to regional supervisors and management teams. The WHO and UNAIDS require consumer involvement at highest level of HIV/AIDS policy decision-making.

Thailand: PLWHA are involved at all levels. Special model in Thailand and Indonesia (ex: Harm Reduction methodology to protect patients - government cannot fund, but allows NGOs to provide support at community level). PLWHA network sits at national level to support GIPA principles. Senior citizen volunteers assist with chronic disease.

Nigeria – NGO network of PLWHA – involved at national, state and local, and facility levels (patient tracking, but not involved in QIC). They are involved in policy and guidelines review.

Mozambique: Bi-monthly meetings, PLWHA come to share results about HIV health care service delivery, only involved at health facility level.

Namibia: Involve consumers in HIVQUAL Country initiative.

1. Participants want to share experiences involving PLWHA in health care service delivery at facility level, and consider elements of linking up with community/village level.
 - May need to define terminology which may be different from country to country
 - Consumer could be defined as PLWHA, patient groups, clients, affected family members or community members
 - Disclosure – at individual or community level
 - Involvement: Passive – patient tracking/small groups vs. Active - Involved in decision-making, clear roles/tasks.
 - Someone could participate in a meeting vs. actual care – what level do they participate (low or high levels)
2. Share different ways how consumers are involved in different programs in various countries?
 - **Nigeria** – Satisfaction surveys
3. How consumers can contribute to remain motivated and engaged in QI?
 - **Botswana** - Village Health Workers and others involved in community-based care – transport allowance was given by government to assist in motivating which cannot be sustained. Need to sensitize HCWs and change their attitudes/ behaviors
 - **Namibia** – PLWHA partners will meet 2-3 times per year to provide ideas/recommendations on HIV QI – sustain motivation.
 - **Kenya** – no provision for funding in community initiatives, they understand from the beginning that there is no motivation/incentives.
 - **Swaziland** - PLWHA get allowance from NGOs to access health care at facility- level
 - **Uganda** - Providing training and orientation, certificates
 - **Mozambique** – include in social marketing immunization campaigns, PLWHA receive a small incentive. Also provide

food basket, mosquito nets, and sometimes transportation.

4. How to minimize conflicting roles/boundaries between consumers and providers

- **Botswana** – hospital advisory committee at facility level to minimize conflict (represents consumers who are not staff, providing recommendations on how to improve services).

5. How do we change negative attitudes of health care providers toward consumers

Need to remain responsive to the needs of HCWs; address psycho-social and environmental factors of HCWs (working hours, respect for community beliefs, facility infrastructure issues); sensitizing workers to cultural issues; marketing services and lack of service charter; lack of professional competency; low remuneration; customer service.

- **Namibia** – minimize conflict and improve services. We cannot say that services have been improved without having consumers involved as partners to evaluate services. This is part of QI. PLWHA are gradually more involved, and we have to listen.
- **Kenya** – conflict management. Also advocacy vs. involvement in QI. Government has the capacity to outlaw patient groups.
- **Uganda** - PLWHA conflicts were at higher levels - consumers who want to be providers, but didn't have expertise. Train PLWHA on technical skills to manage programs.
- **Swaziland** - PLWHA chair person who may not be supportive of ideas.

6. Mechanisms to encourage consumers to disclose their HIV status.

- **Kenya** - need a sustainable approach, with incentives like food to encourage disclosure. NGOs are coming on-board (micro-financing).
- **Thailand** - Counseling and training to teenagers and couples.
- **Swaziland** – promoting couple C&T. In treatment and care, encourage disclosure to spouse. Tuesday is family day where all members are encouraged to attend clinic.
- **Uganda** – campaigns and home based testing by peers.
- **Botswana** – national policy encourages sharing of status among couples. If unwilling to disclose, health worker has responsibility to disclose.
- **Nigeria** - passing workplace policies, media creating awareness to reduce stigma. Teaching people how to sustain. Educating people that just because someone doesn't look like they have HIV/AIDS, they still may.

Session Title: Data Management**Facilitators:** Julius Ssendiwalwa (Uganda), Sithembile Dlamini (Swaziland)**Notes:**

- **Goals**
 - o Interested in sustainability on site with regard to transition
 - o How to manage the data to use as a tool/information for improvement in facilities
 - o Sharing best practices on data collection
 - o Harmonization/integration of HIVQUAL data into national M&E systems
 - o How to utilize data on national, sub-national levels

- Best practices for data collection from Uganda
 - o Uganda teams go to site to verify specific indicators at specific sites but not broadly → at other coaching/training visits, emphasize that data is not used for criticism, but provided for you to use constructively.
 - o Uganda reports do not benchmark regionally or nationally in feedback from reports → want to emphasize that any improvement, however small, is a success; and provide this type of information at learning networks.
 - Input on Uganda's reporting practices: should provide benchmark as reference point to determine which facilities are doing well → If certain indicators aren't performing well against national averages, it is easier to identify those indicators as areas for improvement.
 - o In Uganda, M&E teams train clinicians to promote involvement → if clinicians are engaged, they are more likely to utilize data.
 - Clinic size matters: sometimes a health center has only one data clerk who is not that active in HIV data and more interested in other areas.
 - o Question: are smaller clinics still big enough to form quality teams?
 - o Answer: If there is at least 1 or 2 dedicated nurses, and 1 clinician, it is enough for a quality team. In instances where clinic staff is insufficient, quality teams meet at district level.

- Converting data into QI resource
- At some clinics, even when central team sends reports back, clinic never utilized data 4 months later → how does central team remedy this?
 - o Regular peer learning and information sharing
 - o Select facility based indicators → staff invest b/c of ownership
- How do you utilize data telling you scores of a certain indicator are sub-par in a certain region?
- Uganda experience/suggestions:
 - o Produce reports that demonstrate relative need nationally → affect policy on national level with reporting
- Other suggestions:
 - o After first round data collection, QI training teaching teams how to identify causes of low scores
 - o Kenya: look at data on regional, then district level → identify causes of low scores within the district, then organize regional meeting and present information/share ideas/causes. District level reports to national level, province can see everything in district.
 - Input: Consistent communication is critical when using data to identify causes of poor performance → clinics get defensive when you only communicate in response to weak performance.
- Question: How are implementing partners involved in data flow from clinic level to national level?
 - o Implementing partners generally behind ministry M&E programs and working to harmonize data collection.
 - o Input: at some point, partner needs access to the data in context of broad performance, may have to request this data from national level office, not necessarily direct access.

Session Title: Disclosure for HIV-Infected Children

Facilitators: Dr. Rangsim Lolekha, Dr. Rawiwan Hansudewechakul (Thailand)

Notes:

Participants identified five goals for this session: 1) pinpoint a mechanism for pediatric disclosure, 2) determine at what age and 3) through what means to inform children of their HIV status, 4) identify the benefits of disclosure, and 5) consider the side-effects/reactions to disclosure.

Various methods were discussed to address these goals, with an emphasis on sharing experiences from participants' country programs. The absence of WHO guidelines on pediatric disclosure prompted a discussion on development of such guidelines, and consideration of steps forward. The group discussed a wide range of topics impacting pediatric disclosure including: stigma; lack of national/international guidelines/experience; age at disclosure (school age vs. older/younger) and cognitive capacity/neurological development; need for psychosocial and other support; disclosure tools/mechanisms; environmental impact on sexual behaviors and impact of media; and definition of disclosure, i.e. partial disclosure vs. full disclosure, including HIV education, treatment and care processes. Participants discussed how definitions of disclosure may vary. In Thailand, partial disclosure informs children they are sick and incorporates storytelling without mention of HIV, whereas full disclosure informs children of their status. (The American Association of Pediatrics recommends thinking of disclosure once children are school age (6-7 years)).

The discussion concluded with a few follow-up questions: 1) Do parents need to be present during disclosure? (Consensus = yes); 2) Need for depression screening? 3) What should we expect in terms of reaction from children?

Kenya: Children are tested at 6 weeks, 12 months and 18 months. Test results are shared with the mother (disclosure to parents is another topic for conversation).

Namibia: There is a notable problem with disclosure to children. As children age, their caretakers are reluctant to inform them of their HIV status. A tool has been used from Botswana, including a catalog with pictures and ways to talk about HIV. In Botswana they talk to children slowly at each visit until they reach disclosure; these catalogs are in English, but some children cannot speak English.

Uganda: Disclosure helps with adherence. If parents have had issues with disclosure, the pediatric clinics will assist parents in disclosing to children (although uncertainty in what tool may be used).

Mozambique: Shares Namibia's challenges. Children begin asking about the medications they are taking, but the country has no regulations/guidelines about when and how to disclose. Often, psychologists are involved in disclosure. What age is optimal to disclose to children and what is psychologically appropriate?

Thailand: Currently developing guidelines and tools for pediatric disclosure (to be translated into English). Begin at 7 years, more info at 10 years and full disclosure at 12 years.

Thai study: Children studied were asked: Who is the best person to tell you? Health personnel or family? 8/10 chose family and 2/10 chose nurse. In Bangkok, half wanted family to disclose, half wanted health care worker to disclose

Criteria:

- Emphasis on individual choice – it is up to the child
 - Age >7 years old, no severe medical problems, no severe mental retardation, no severe depression
 - In northern (rural) Thailand, children preferred disclosure by topic
 - In Bangkok, when caretakers disclose, there is some misunderstanding by children. Sometimes the HCW needs to repeat the disclosure session again. It is up to the family if the health provider discloses only to the children, or if the provider discloses to child and family.
- Thailand: 5 steps to disclosure
- 1. Hospital preparation
 - 2. Preparation day and 1 ½ hour home visit
 - 3. Starting ARV day
 - If the child is older than 12, we try to have the nurse do disclosure, if younger than 12 - try to have caretaker do disclosure
 - We tell children, "Today we will talk about your health. It will take about 15-30 minutes. Everything that we are going to talk about is secret."
 1. About Infection Status
 2. Differences between HIV and AIDS
 3. Taking care of health and prevention of transmission
 4. Importance of drug adherence
 5. Keeping the secret
 6. Risky behavior: 3 don'ts
 7. Route of transmission/ Having a boyfriend or girlfriend
 8. Ending
 9. Q&A
 10. Looking forward to the Future
 - 4. Early follow-up (home visit)
 - 5. Long-term follow-up
 - Post disclosure follow up

Session Title: Health Systems Strengthening For Quality Improvement

Facilitators: Dr. Sirengo (Kenya) and Dr. Mutandi (Namibia)

Notes:

Beginning Thoughts:

What would you like to achieve/take back to your program?

- How can quality improvement (not quality assurance) be used at the health system level?
- What quality issues need/can be addressed at the health system level?
- What role does the facility play in improving health systems?
- Clarify if the group is trying to use QI to strengthen health systems or look at how health systems affect QI.

Definition of health system:

CDC definition of health system: a set of activities within a health system

- Health policy
- Mobilization of resources
- Mobilization of Human resources

Definition of health system strengthening:

- Arrangement/mix of resources and materials for the delivery of health services
 - Human, material, and financial components

Components of health systems (establishing a common understanding):

- **Identified components:** service delivery, human resource, governance/ leadership, commodities, finance, and health information systems
- While these components are further analyzed in the notes below, it is recognized by the group that improvement/aspects of care within other systems can improve quality of patient health care and outcomes.
- **Service delivery (structures/mechanisms for delivery of health)**
 - Accessibility
 - Decentralization
 - Communication and delivery networks
 - Transportation
 - Distance of service from target population (geographic)
 - Affordability (cost)
 - Availability
 - Hours of operation
 - Scope of service/range of services available (comprehensive/integrated services which may be looked at in further detail with regards to quality, and the debate if comprehensive services are available and/or necessary at all levels.
 - Acceptability
 - Competency of service delivery (topic may belong under human resources)
 - Appropriateness/relevance of sources
 - Mix of preventative/curative/ and promotive services
 - Country Specific Experiences:
 - **Nigeria:** Due to low population density, services are not readily available to everyone. To address this challenge, Nigeria has begun implementing outreach services and procuring vehicles. With these resources, register teams go into the community to distribute ART drugs and refill prescriptions for various diseases. For those who do not need referral, free drugs are given in outreach services. In Nigeria, the government is currently approving free medical services for people over 60, HIV+ patients, and TB patients (implemented last month).
 - **QI Theme:** Free service delivery for priority services and populations. This method requires resources/funding.
 - **Nigeria:** Nigeria has also found that a process of decentralization has helped extend services. Primary health care centers (offering counseling/testing) are linked to the country's general hospitals for ARTs/STIs.
 - **Kenya:** Kenya has extended their counseling and testing program through conducting home-based testing.
 - **QI Theme:** Community outreach

- **Human Resource**

- Common issues with human resources include: high staff turnover, attrition, understaffing, burn-outs, lack of training and re-training, and attitude.
- Participants would like to hear feedback from Thailand on their strategies for addressing human resource challenges. (Participants noticed challenges listed by Thailand did not include staff/clinician issues).
- Caring for care-givers is necessary and may be a topic to consider for QI work.
- Participants ask “How do we **motivate** our health care providers to provide the service?”
 - Improvement of working conditions/climate
 - Provision of incentives/allowances/remuneration
 - Super salary for some workers can lead to discouragement
 - Scenario (whereby certain HCWs are paid by implementing partners)
 - Staff recruitment/hiring process
 - Empowerment of providers through...
 - Capacity building
 - Staff participation/involvement in many processes
 - Staff appraisal
 - Promotion
 - Correct placement/utilization of staff
 - Program Ownership
- **Question:** At the facility level (our level) “What can we do at our own level that will affect the quality of services?”
 - Training/**re-training** is extremely important.
 - Facility leaders/quality-minded staff can identify/organize trainings
 - Incentives/certification can be used for a motivation tool
 - Mentoring and coaching of staff seems very useful
 - Appropriate distribution of staff
 - Team Approach
 - Requiring a pre-service curriculum
 - Use quality data to encourage program **ownership**
 - Increased performance data can lead to ownership of the program
- **Country Specific Experiences:**
 - **Rwanda** utilizes a performance-based financing incentive for teams/facilities (not individuals) across the board
 - **QI Theme:** Encourage and support high quality work through group achievement
 - Representatives from **Namibia** shared the challenges in not having enough trained staff as there is not a medical school in the country. Namibia has addressed this challenge through outside recruitment of staff, schooling of clinicians in other countries, and the recruitment of lay people. Lay people (passing grade 12) assist in testing/counseling services.
 - **QI Theme:** Community Outreach and Task Shifting
 - Addressing staff burn-out: Some countries have implemented a staff wellness programs to address this issue.

- **Governance/leadership**

- Support and approval from the government and ministry of health/structures is imperative
- Need to develop sustainability
 - Sustainability can be increased through the integration of quality programs into existing systems (fits within programs already established)
 - Institutionalization of quality and melding with the health sector infrastructure
 - Calling it one name (quality of care)
- Bottom-Up and Top-Down approaches need to be considered
- Leadership/opinion-maker Support and Buy-In

- Example from Kenya: Kenya introduce the male circumcision program by first going to the opinion leaders and establishing buy-in
 - Develop an advocacy tool for promotion of QI within the government
 - Packaging of the program to ensure policy maker and facility buy-in
 - Integration into Strategic plans
 - Three “one’s” principal
 - Build capacity of civil society to know what is quality and to demand quality
 - **Theme:** Consumer involvement
 - Demand a **Clear, Consistent, and Persistent** message from the government
 - Accountability and transparency and equity
- **Health Financing**
 - Advocacy for financing
 - Use consumer bodies
 - Use donors (put conditions to include MOH assistance)
 - PEPFAR has a time limit
 - Global advocacy: Reduce price of pharmaceutical commodities
 - **QI process** can put pressure upward: they make it clear what they lack in terms of resources and can feed it up
 - At a meeting in Haiti, quality indicator data was presented and donors were forced to ‘own’ and take responsibility for these results. Sites showed that they were doing their part and encouraged the funders to do their part.
 - Private sector needs to take a larger role in health care delivery
 - Private partnership
 - Combination of funding sources
 - Strengthen the collection/use of resources where applicable
 - Governments need to strengthen social health/service financing/insurance to cover vulnerable populations
 - Increase revenue collection where applicable
 - Insurance Debate: User fees can cause problems in populations most at risk
 - Contribution of private companies back to the country
 - Have money for social services (charity)
(government priorities and resource allocation)
 - Issues with reliance on donors
 - Role of the government and role of the provider
 - Should donors hold country’s government responsible
 - **Theme:** Health accountability
 - Experience with SWAPs
 - Donors pool funding and the government uses this directly
 - If you rely solely on donors, may pull out
 - For those who run HIV programs, showing the cost/benefit analysis of HIV care and the program’s reliance on external funding. This strategy may help with advocating for local government support.
- **Commodities**
 - Having a single supply chain is key/ central procurement
 - Pool procurement and distribution
 - Regional system sends from central commodity store
 - Central store and inventory
 - Coordinating body to procure/organize these commodities
 - Providers not knowing when to order drugs (supply according to order)
 - Education of providers/ HCW
 - Need a tracking system and factoring known consumption rate
 - System can be electronic (free software)
 - Need well-trained staff

- Stick to WHO guidelines or country guidelines
- Supervision and inventory management
- Problems with stock-outs
 - Central role: quantification, procurement, and distribution
 - Health facility: order on time
 - Need to report of utilization/quantification
 - “pull” system as opposed to “push” system
 - Auditing/Using pharmacy
 - Technicians reporting
 - Commodity tools
 - Can help in indicators for retention
 - Sticking to guidelines
 - Pharmacy/service delivery data for quality improvement
- **HMIS: Health Management Information Services**
 - Participants support the consolidation of information services
 - GIGO (garbage in garbage out) is a saying used to describe use of information systems
 - Issues surrounding HMIS:
 - Delivery
 - Information Sharing
 - Computer based systems versus manual systems
 - Procurement of equipment
 - Reporting of information when people are at different levels/locations
 - Hard to have time to enter manual data
 - Limitations/challenges:
 - Lack of training in IT
 - Too many tools
 - Low utilization of information and data
 - Manual medical record
 - Lack of feedback from HMIS
 - Balancing patient care with completion of HMIS mandated forms
 - Reliability/accuracy of data
 - Flexibility of systems (to instill indicators specific to their environment)
 - Poor maintenance of equipment
 - Poor IT support for facilities
 - Record keeping /management
 - Quality Improvement Strategies linked to HMIS
 - 3 “one’s” principal
 - 1 implementation framework
 - 1 national coordinating body
 - 1 M&E system
 - Adequate training
 - Develop local IT solutions
 - MIS department in ministry should be a stakeholder
 - Local level capacity. Incorporate clinician feedback in forms and completion of HMIS materials.
 - Consolidate/integrate information as a package
 - Use to train facilities
 - The clinic/facility should develop a monitoring maintenance and placement plan
 - Ongoing evaluation and feedback
 - Facility ownership of this data

Session Title: Strategies for Retention of Patients in Care

Facilitators: Dr. Kimanga and Dr. Calu

Notes:

Discussion on Definitions of Retention:

- Keeping/maintaining patients under care and treatment within the HIV programs
- Reducing the number of patients lost-to-follow up
- Regular access of services by patients as appropriate
- Patients who are alive and are on ART
 - Debatable- involves patients who are also not on HIV
- Measurement put in place to maintain person under care and treatment

Justification/Importance of Addressing Retention:

- Reducing the number of patients lost to follow-up
- Need to know how many people are accessing treatment
 - Retention as an indirect marker of service quality
- Allows for monitoring the progress of patients and identification of problems and allows for interventions
- Helps to achieve desired clinical outcomes (maintenance of patients on first line ARTs)
 - Reduce/delay the emergence of drug resistance
 - Directly related to health outcomes (morbidity/mortality) and decreased TB
- Relationship between retention and adherence
 - If clients do not keep the appointments, adherence is expected to be low
- Retention is an indicator in ARV programs
- Cost effective
 - Know the number of patients within the clinic (helps with budget)
 - Second line regimens are more expensive
 - Not sure how to address cost effectiveness (in terms of quality)
- Client satisfaction within the facility and/or health care workers is linked to retention of patients
- Retention may potentially lead to less HIV transmission and the utilization of safer-sex practices
- Swaziland example:
 - The longer patients stay, the more likely they are maintained
 - most likely to be lost-to-follow-up in the first six months (Swaziland)

Factors/Challenges/Perspectives to Patient Retention linked to quality of care:

Adverse drug effects	Staff motivation	Facility hours
Client satisfaction	Staff attitude	Space
Clinic location	Lack of knowledge	Infrastructure
Stigma/Disclosure	Ethics/Professionalism	Patient flow
Sociocultural		Waiting Time
Feeling Better	Ratio of HCW/patients	
Misconception/Lack of understanding		Lack of integrative services
	Staff retention	
	Staff Shortages	
		Stock-outs

- Challenges to monitoring if patients are retained

Strategies to Address Retention:

- Strategies may be targeted to the patient, the HCWs, and/or the system
- Strategies were divided into four main categories: education, tracking/monitoring, consumer involvement, and coordination
- Effective patient counseling and follow-up
- Bringing services to clients (community outreach)
 - Decentralization of services
- Free ARTs (free medication) requires funding
- Botswana: peer buddy system (have information on both) assist in adherence and attendance
 - Help keep patient adherent
- Building capacity
 - Staff trainings
- Sites streamline patient flow at local site
 - Could create a QI project
- Consumer Involvement: Client satisfaction as a component of HEALTHQUAL/HIVQUAL
- Consistent high quality care: Patient Ownership
 - Make consumers owners of their own health
 - Feedback mechanism between consumer and provider
 - Share with clients the standard of care---empowerment
- Task shifting
- Strengthening psychosocial support groups
 - Have own coordinator and offices (Nigeria)
- Call the contact number provided by the patient before they leave the client (Nigeria)
 - Innovative patient tracking systems
- How update contact information?
 - Linkage to support groups
- Every time a patient comes in they get their contact information and neighboring information (chose them)
- Involvement of consumers in teams
- **Family care model**-helps to retain patients
 - Part of treatment support
 - Start with the child-visit the whole family (with consent)
 - Helps with disclosure
- **Integration/coordination of services**
 - Kenya-PMTCT “one-stop-shop model” or have developed effective linkages
- Coordination of partners
- How do you measure clients who have left but are retained in another system?
 - Transfer in-and-out log
 - Strategies may be slightly different
 - Effort on creating a unique health identifier
 - Confidentiality issues have been discussed
- Record transfer
 - Training all workers on how to transfer
 - Ensure transfer out and transfer in
 - HCW will help obtain the information (phone) and regional teams
- Patient passport-regimen they are on
 - How tied to patient retention?
- System retention versus facility level retention
- Lost-to-follow up

- Must have tried all means to find the patient
 - (accurate contact information)
 - (Patient tracking)
- Examples of integration of services
 - HIV testing to ARV care
 - When there are stand alone sites-stigma may be attached
 - Genre of services within one area (promote as a wellness center)
- Mozambique: Uses Decentralization
 - Patients in main hospital were lost
 - Patients moved to peripheral hospital
 - Stigma and disclosure issues
 - **Decentralization tips**
 - Discuss the pros and cons with the patients
 - Make sure services are available, make sure they provide consent
 - Aiming to monitor from hospital to smaller clinic
 - Can change the service area (saw an increase in retention)
 - Depends on how refer and geographic issues
- Ensure retention for PMTCT services
 - Standardized registers (transfer-in and outs)
 - Integration
 - Moving from AZT to HAART
- Patient education
- Drugs available in program that patients can adhere to
- Provider satisfaction survey
- How will this discussion inform your quality management programs?
 - **Individual level, process level, structural level**
- Most patients lost within the first six months
 - Majority had passed away

Session Title: Improving Quality of Care- Cervical Cancer Screening & HEP B Screening, Liver Function Tests (LFT) and Body Mass Index (BMI)

Facilitators: Dr. Raghunauth

Notes:

3 Key Issues

(1) Should countries include the following in HIVQUAL measures:

- Cervical Cancer Screening (CCS)
- LFT
- Hep B
- BMI

(2) There is the challenge of fiscal resources and there may be cheaper alternatives or techniques (VIA for CCS)

(3) There is the challenge of routinely monitoring HIVQUAL measures and how many measures can a country monitor at a given time

I. Discussion Points

A. Background and Context

- a. Many of these measures (CCS, LFT, Hep B and BMI) are now looked at in HIVQUAL-US
- b. Mozambique (in Zambesia area) recently introduced screening for cervical cancer as a pilot. The pilot started with training of health staff. The current challenge is the cost of the machine needed to conduct Pap tests.
- c. Currently, CCS, LFT and Hep B screening are required in Guyana but they are not included in the HIVQUAL measures. Inclusion of these measures would improve the quality of services. BMI was also recently added as a variable that providers need to monitor.
- d. Should these four items (CCS, Hep B, BMI and LFT) be included in HIVQUAL measures?

B. Cervical Cancer Screening -- Country Guidelines and Context

- a. Guyana found Pap tests to be very expensive and switched to visual inspection with acetic acid (vinegar) [VIA] for women b/w the ages of 20-60 (though take all patients). If patient has more than 75% lesion than patient is sent to LEAP for excision of affected cells. Patients with HIV have smaller lesions. Those who have large lesions are HIV positive and not on ART have larger lesions. How do you relate this to Quality Management → Should this be included as part of monitoring for HIV positive women through HIVQUAL?
- b. Mozambique currently has 8 key variables (e.g. CD4) that it monitors. The country does not monitor drugs, alcohol and STIs. Also, the country has started to develop PMTCT indicators.
- c. In Thailand, Cervical Cancer Screening can not be taken care of by ART clinic. The country strategy is to link to OB/GYN. Thailand has the resources to conduct Pap smears. In contrast to Pap smears, VIA requires intensive training of providers. However, Pap just requires enough providers who can read the tests and Thailand has enough providers.
- d. In Guyana, 22% of the AmeriIndian population has cervical cancer. So, now there is a push with support from JHPIEGO who is training in VIA to screen population and to provide vaccines to young girls.
- e. In Thailand, 15% of HIV patients have an abnormal pap. Country guidelines are to undertake cervical cancer screening at least once per year

C. Liver Function Tests (LFT)

- a. Mozambique -- Based on guidelines, if LFT is abnormal, then provider will perform Hep B test
- b. This may depend on country and its resources to undertake screening
- c. MZ – notes those at risks for those who give blood donations

D. HEP B

- a. Nigeria routinely conducts Hep B screening and South Africa may too.
- b. KY – lab guidelines require routine assessment but WHO guidelines now do not recommend that. We have task shifting and now ART provision has been decentralized. Screening is not possible. Will leave out Hep B. Don't have Hep B prevalence studies in Kenya. Need to first conduct more studies
- c. Group decided not to recommend having Hep B in HIVQUAL measures. This is better as a country specific decision.
- d. WHO guidelines now require that Hep B is in the initial work up for those who are infected with HIV. But, some countries have a challenge with stock outs of tests. Those co-infected with HIV and Hep B should automatically be placed on ARVs b/c it treats both based on these new guidelines

E. BMI

- a. BMI would be good measure to include but should be a country decision. It would help to monitor chronic disease and lends itself to moving beyond HIVQUAL to HEALTHQUAL
- b. CD4 or other measure may be more useful in monitoring patient status/health

G. Other Discussion

- a. What are the implications of adding these measures to HIVQUAL measures?
- b. There is limit to the number of measures we include; how do we determine or prioritize indicators – at a country level.
- c. As we move to HEALTHQUAL, we should consider including these to improve reproductive and women's health – may be good for the transition from HIVQUAL to HEALTHQUAL.
- d. It's a good idea but in Mozambique we are already struggling to monitor HIVQUAL. May take time to include these indicators

II. OUTCOMES of Session

- a. Group found that decisions are complex and dependent on country specific resources (both financial and human resources). The group did not agree to include Hep B screening, LFT or BMI in HIVQUAL/HEALTHQUAL measures. Some measures like BMI, however, would be helpful for some countries and help address chronic diseases
- b. Representatives from the five countries that participated would like to recommend that Cervical Cancer Screening is included in the HIVQUAL/HEALTHQUAL measures going forward

Session Title: Pediatric ARV Adherence

Facilitators: Dr. Rangsimma Lolekha (Thailand)

Notes:

Goals:

1. Identify barriers that lead to poor adherence
2. How to improve pediatric adherence
 - Innovative, practical ways
 - Contribute tools
3. How to assess pediatric ART adherence

Discussion:

1. Identify barriers that lead to poor adherence
 - More complex than adults, involves caregivers in the process as well
 - Increased resistance, increased second drug line use
 - Low rate of pediatric enrollment due to poor adherence
 - Poor counseling to initiate ARV adherence
 - Pediatric doses- hard
 - Loss parents, vulnerable group
 - Stigma to the mother
 - Poverty, some children live far and there is no time to take children for follow up
 - Food- no food
 - Transportation to hospitals
 - Old/elderly caregivers, do not have good knowledge about dosing
 - They may be illiterate, their memory is poor, may have poor eye sight
 - Side effects of ARV's is a barrier for adherence, and then they just stop
 - Thailand- an example of an adolescent who let herself die because she has low self-esteem, she never told her girlfriend that she had HIV so she did not take medication
 - Adolescents: high hormone levels, low self-esteem
 - Disclosure- an issue, child cannot take medication in front of their friends
 - It comes with stigma
 - Issue of caretakers- children have to rely on their caretakers, if they do not have caretakers they cannot take medicines
 - Insecurity of adult providers in giving pediatric care
 - Hospital teams- need training
 - Children need to have a good relationship with their provider, so you know if children are telling the truth about whether or not they are taking their ARV's
2. How to improve pediatric adherence: what are the practical ways to improve pediatric adherence/ Interventions used to improve pediatric adherence in your countries:
 - Kenya: fixed drug combination (FDC), simplified regimen
 - Namibia: outreach transportation to take medicines to people that cannot go to get the medicines
 - One of the programs is long distance transportation; the team goes out to hard to reach places to give medications; varies from place to place; some go once a month, some go twice a month→ mobile outreach clinic
 - Outreach- helps to limit barriers of poverty
 - Side effects- maybe we need to engage more energy in communication
 - Namibia: all of the hospitals are providing ART with larger health centers, but there are many smaller centers that are not providing ARV, they give outreach to other smaller clinics;
 - Any interventions to reduce barriers associated with caretakers:
 - (Namibia): Fixed combination (we got from the Clinton Foundation) it makes it easier for the old people to give, it was hard for older people to measure the syrups
 - (Namibia): Give a calendar with pictures
 - (Thailand): In Chiang Rai, we ask the caregivers to come together for a day; before we end we make sure everyone understands; they have time to talk amongst themselves, which helps alleviate forgetfulness
 - 4 topics are covered:
 - 1. Natural course of the disease
 - 2. How to disclose
 - 3. Side effect of medicine
 - 4. Adherence
 - (Namibia): Do you always have separate pediatric facilities
 - On provincial level, there are separate pediatric and adult care

- At community level, one provider cares for both adults and children
- We invite doctors to come to regional hospitals to train as a team for one day, and re-invite them in 6 months
- In Chiang Rai, they provide a calendar with stickers for providers to fill out with children
- Home visits after ARV initiation, caretakers misunderstand how to dispense drugs to children
 - Many patients, the idea of home visits is good, but insufficient personnel to do home visits/transport
 - In Swaziland, we try to make frequent visits so we know if children are adhering; if it is shown that children are adhering for 3 months, we can transfer them to a local center
 - In Thailand, we always find a lot of mistakes (7 in 11)
- Mistakes tend to happen with the syrups, especially if you have confusion; esp. the elderly are giving monotherapy (finish one bottle of syrup at a time)
- After 10 kg, I switch to tablets (Thailand)
- PEPFAR program provides syrups
- Pediatric dosing- varies by WHO body surface area and bands, it is not dependant on weight
- Buddy system- someone who can support child; buddy for infected and uninfected; buddy may be someone in the family or someone they can confide in; buddy goes to classes to learn about HIV
- How do you tell them they have made a mistake?
 - You can tell with home visits
- We enforced bringing in of the buddy; we found that mistakes in dosing occurred when patients came in by themselves
- We need to track if they missed a dose or not
- Experience using beepers, phone calls, messages
 - We want them to be responsible, so facility is not involved in reminding them; we ask them to use a radio if they do not have a watch, a cell phone (if they have one), or use a bus time because they come at a pretty regular time
 - Can you use PEPFAR money to buy a watch or alarm clock?
 - Thailand: we provide watches/alarms
 - In some programs, they are given cell phone and they receive a text message (but message cannot “disclose” to others)
 - Who is responsible for sending text messages?
 - Guyana:
 - Have phone company send message to general population- 7:00AM and 7:00PM- Have you taken your medications?
 - Have social worker (they do this in DC) send text
- Thailand- we try to catch
 - We look at their pillbox (labeled by days of the week, for two weeks), diary ; Before child leaves, they have to fill their own pillbox
- Namibia: prepares medicines in a lunch box, they go somewhere in the mornings where they eat and take their medications in the presence of provider

Problem	Intervention
Complex Regimen of Pediatric Dosing	- Help them prepare the medicines before the clinic (pill box and sashes); - Use color coding with liquid syrups (instead of amounts- ie- 5 mL) - Use pediatric fixed dosing combination (FDC)
Transportation and Poverty	-Mobile clinic, expand to community hospital
Caregiver knowledge of Side Effects	Increase knowledge of caregivers through pre-ART counseling
Caregiver knowledge of Adherence	Increase knowledge of caregivers through pre-ART counseling
Lack of skills/ confidence treating pediatric patients (from medicine team)	Hands-on training experience
Issues surrounding elderly caretakers: forgetfulness, poor eyesight, poor hearing	Color coding (for liquid syrups), use of visual aids (pill box), calendar, alarm clocks, text messages
Issues surrounding adolescent care: low self-esteem, high hormone levels/ poor adherence	- Use of visual aids (pill box), calendar, alarm clocks, text messages - Adolescent camp - Buddy system

3. Adherence Improvement

- How do you handle children who don't have caretakers (ie- if parent died)?
- About 30% have aunt/uncles look after them, 10% in foster home, 20% cared for by grandparents
- A lot of mistakes with liquid, afraid of overdosing
 - Instead of giving measures in mL, say "fill to the yellow line"; color code measuring cups; it is better than giving amounts
- Thailand- 5 step model for starting ARV:
 - Clinical Screening for ART initiation and family preparation for treatment
- Do you have issues with home visits, going to homes where the whole family may not know?
 - Depends on region of the country; in the city, it is more difficult, confidentiality is very important; in the rural area, confidentiality is less of an issue in rural areas
 - There may be differences within your country- you may have one pediatric indicator
 - In Papua New Guinea, they had no pre-ARV training; varies from country to country
- Experience dealing with adolescents:
 - Doing drugs, low self-esteem, getting pregnant; stopping their medicines, there are some hard cases (10% die at Chiang Rai after they start medications)
 - (Thailand): Prevention with Positives with youth- give them knowledge about ARV treatment, self-esteem, we hope to have results last year;
 - Invite adolescents to camp; before they are transferred from pediatric to medicine department, they go to camp for a few days, takes about 6 months to transfer
 - Transfer care to adult at 18 yrs old; (we tried to do it at 15, and this was too young)
 - Pediatric society of Thailand defines 15 at end of pediatric care, so 15-18 lost to care

How does this pertain to quality management/ quality improvement?

- In Namibia, we do not have pediatric indicators, but we will consider these issues (adherence, etc)
 - Some of the reasons we have not started pediatrics yet is because of some of these issues
 - There is hesitation to start; in Namibia, we do not have many pediatricians (this is true across a lot of Africa), a lot of adult doctors do not feel confident working with children; it is more than pediatrics- you need a whole team that can look after children

Session Title: Information Technology and QI

Facilitators: Mohamed Abass (Kenya)

Notes:

- 1) How do we enhance sharing of QI best practices at international level
 - a. Overarching international organization, i.e. WHO to pick best practices and disseminate
 - b. IT and QI forum/network (website) facilitating information among HQ-I countries
 - c. Template for how to share best practice information, which information to include
 - d. Define mission, infrastructure, and management of forum → using existing HIVQUAL website as starting point (chat rooms for communication)
 - i. Each country has its own HQ-I website linked to main HIVQUAL site → facilitate information sharing of current characteristics/practices of each country's program
 - ii. Varying levels of permission from read-only to admin so that there is ownership of content in-country
- 2) Which technology should be utilized to achieve sharing of best practices across international program?
 - a. Teleconferences, video conference, webx to present powerpoints real-time, HIVQUAL website, e-training (especially for updating software), Implementing update, GIS
 - b. Upload notes, adding video to website such that international conferences may be viewed from the web
 - c. Strengthening capacity at clinic level for utilizing this technology for peer exchange
 - i. (Kenya) Currently, if clinics want to upload external information they need to have proximity to server with permission → find way to give them back their information
 - ii. Necessary for each site to have a server? More important than this is higher bandwidth at central level such that one server can serve entire country
- 3) How we apply latest in IT to improve QI, how to simplify/streamline communication of information
 - a. Strengthening EMR system to achieve better healthcare outcomes
 - b. Technology that is both provider and client friendly; eases provider implementation of care and client comprehension of care
 - c. Prompts correct regimens of care/treatment
 - d. Facilitates completion of data collection

Open Space Topic: Integration of QI into other Systems/Programs

Facilitator: Mr. Tim Chadborn

Notes:

Organization of Discussion:

1. Choose Questions to Address.
2. For each question, discuss:
 - **Experiences**
 - **Advantages**
 - **Disadvantages**
 - **Recommendations**

Questions to Address:

1. **Program:** Can QI visits and program visits be integrated?
- **Example from Guyana:** Guyana teams hold a single integrated QI visit and program visit
 - Visit Team: Representative for programs (M&E, ARV, PMTCT, PED, TB) and for quality improvement
 - Other colleagues mainly focus on individual patient quality (M&E)
 - Use a checklist to monitor the quality of the data (M&E)-verification of data collection process and tools
 - Send this checklist to the program director
 - Share findings
 - Hold meeting with facility staff for QI (Quality of Care and M&E)
- **Example from Namibia:** Namibia representatives have found difficulty integrating supervision visits and QI coaching.
 - Debate: Can a support/supervision visit (Audit) be combined with a coaching/mentoring visit (QI)?
 - QI might be targeting one specific area while a full supervision visit may require a broad report of the entire agency.
 - May depend on organization of supervision services and the level of the facility
- **Example from Rwanda:** This model has been proposed but has not yet been field tested
 - The Rwandan government has suggested a two-part tool: Supervisory Visit and a QI tool
 - Reduce the burden of multiple visits and increase coordination across programs
- **Advantages:**
 - Cost Efficient (travel and human resources)
 - Good communication
 - Reduce burden of on-site visits by multiple programs
 - Increase the coordination across programs
 - (Provides a holistic picture on what is occurring at the clinic level)
 - Knowledge of program guidelines
- **Disadvantages:**
 - Visit may have different objectives (Audit and QI)
 - May be seen as a QA/data audit
 - Time required is longer for QI than for a site audit
- **Recommendations:**
 - Integrated Team: team may need to have more than one officer (collaboration)
 - Attend site on same day but members should be from different program areas
 - M&E/ data quality-needs to be familiar with program guidelines
 - Program Person (ARV/PMTCT)
 - Decision maker/manager
 - QI Coach

- Involve facilities staff
- Consider the **approach being taken**

2. Meetings: Can QI be added to the agenda of pre-existing district committee meetings?

- Do people have separate meetings? Or are they connected?
 - E.g. At the national level-separate
 - E.g. At the hospital/health facility level-together held on a monthly basis
 - Regional level?
- Thinking of levels (regional, provincial-where facilities join)
- Sensitization is important at the district/regional levels
 - Strategy (useful in pre-implementation)
 - begin by putting quality on the agenda
 - to gain ownership/buy-in/partnership
 - Once program is established:
 - A separate QI meeting for the sites can be held
 - The chart above is an example of one type of infrastructure necessary to improve quality (infrastructure of quality discussions depends on the country setting)
 - For higher level meetings, invite the QI team members/representatives
 - Challenges in Botswana
 - If site only has three clinicians, how can they attend?
 - Weekends
 - In Mozambique: Clinical ART committee meeting
 - Do clinical problem solving
 - TARV Composition: Clinical officer, doctor, pharmacist, medical chefes, lab, data person (Multidisciplinary committee)
 - One member from facility team attends provincial-level and to national level meetings (doctor +another)
 - Do not have a separate meeting for quality improvement
 - At the district level, QI is not as stressed
 - Integrated QI meetings at the district level
- Pros
 - Integration with district/clinical level
 - Efficient (not a separate time for multiple meetings)
 - Not taking people away from other responsibilities
 - QI is being discussed among people with political power
- Cons
 - QI may lack prominence/focus at the district or higher levels, if QI is integrated into other meetings
 - Insufficient time
 - Acquiring appropriate staff to advocate for QI

Questions that were not addressed:

3. M&E: How can quality performance data collection be integrated with routine M&E?

- Integration of measuring systems
 - Depends on partner capability

4. QI within other departments could integrate the QI model. (Expansion into other areas)

- May not be integration?

5. Integration of HIVQUAL model with other quality improvement strategies

Session Title: Effects of Health Care Worker Attitudes on Service Delivery

Facilitators: Ms. Thandie Phindela (Botswana), Dr. Martin Sirengo (Kenya)

Notes:

- Definition:
 - Perceptions of clients on quality of service
 - Perception of clients pertaining to service provided, which could be positive or negative
 - Do we need to define this, or can we look at the effects on health care providers
 - If all my issues (as a client) are met, I will go home happy
 - The views of our clients/customers/consumers about the health service providers in terms of accessibility (including approachability) and quality of services
 - Client's perceptions of you as a health care provider
 - This impacts accessibility to services, and it also impacts on provision of quality services, that is why we need to address this
- Implications:
 - What are the implications of negative perceptions of clients
 - It is hard for us as providers to speak about the negative feelings of clients
 - We will just say what clients have told us
 - Negative (Client Perceptions of Providers):
 - Judgemental/ rude/ bossy
 - Looking down on patients
 - Impatient
 - Inhumane/ unethical
 - Not courteous
 - No involvement of patients
 - Lack of confidentiality
 - Poor listeners
 - Unempathetic/ not caring
 - You are supposed to empathize, not sympathize
 - Positive (Client Perceptions of Providers)
 - Very helpful
 - Informed
 - Caring
 - We're professional
 - Hard working
 - Causes for Negative Attitudes Amongst Health Care Workers:
 - Burnout
 - Workload/ understaffing
 - Personality
 - Lack of motivation
 - Lack of professionalism/ lack of CME (on ethics and professionalism)
 - In some countries, "political appointees" may not have received training in professionalism in medical school, due to exile or wars; when they return to the country, they lack training in professionalism
 - Low esteem
 - Not involved in planning on the ministry level
 - Hiring not based on merit
 - Poor induction/ orientation
 - Poor working conditions
 - Especially if you are working with poor infection control
 - Incompetence
 - Favoritism
 - Poor remuneration
 - Sociocultural factors:
 - In some places, only men can see male patients, women can see women patients
 - Effects
 - Poor access
 - Decreased retention
 - Increased defaulter
 - Poor outcomes
 - Poor adherence

- Increased HIV drug resistance
- Increased morbidity and mortality
- Litigation
- Little to no patient involvement: patients have no voice; patients are disempowered
- Low patient volume → decreased revenues
- Patient-Provider Conflict
- Public health implications: Increased defaulters → puts communities at risk of infectious diseases
- Poor state of the facility
- Job Loss
- Strategies: How to Enhance Positive Attitudes Amongst Staff
 - Continuing Medical Education (CME): to include management, leadership and ethics, public relations/ communication, not technical content
 - Mentorship and Coaching
 - Accountability and transparency
 - Performance based reward/ promotion
 - Model facilities/ centers
 - Patient's Charter/ Patient Bill of Rights
 - Customer Care Desk
 - Customer Satisfaction Surveys/ Suggestion Boxes
 - Community Advisory Board (hospital, or local level)
 - Patient Education
 - Balanced client-health care worker ratio
 - Operational research
 - Behavior change for health care workers
 - Wellness services for health care workers and counselor's supervision (i.e.- psychological services, days off)
 - Improve conditions of Service- insurance, salary, housing, etc.
- (Botswana) I think the interventions we have said are known, but why are there still issues around this in our countries?
- Way forward:
 - We need to make a purposeful effort to change
 - A lot of us have wellness programs in our countries, but how many are functional?
 - How do I go back and help Nigerian government change their attitudes?
 - If you are working on a Unit, come up with a workplan- have a team building exercise, address issue as a team
 - Make sure workers are protected (ie- Hepatitis vaccines)
- **Think big, start small and grow!**
- Review fishbone first
- Nominate someone to take the lead for change
- Involve everyone, including training institutes, professional bodies, health care workers, patients
 - Open a gym/ tennis courts for healthcare workers to use

Session Title: Training Models for QI

Facilitators: J.H. Mukendi Kazadi

Notes:

Objectives:

- Identify models and levels of training
- Identify those most suitable for QI
 - sustainability
 - transfer of knowledge and skills
 - effective improvement of the quality of care

Levels

1. National:

- Managers
- QI teams
- Policy makers

2. Regional/Provincial:

- QI team
- Program managers
- Technical leadership (senior district medical officers, health teams, leadership)
- Other stakeholders

3. Facility

- Site QI teams
- Facility staff
- Consumers
- Other providers (NGO)

Models

1. TOT

2. Centralized training
3. On-site mentoring/coaching model

National level:

- QI Core Team and Managers
 - TOT training
 - Didactic
 - Mentoring skills
 - Training skills
 - Managers
 - Didactic
 - Mentoring

Regional/Provincial:

- Framers (TOT and TA needed – same as national)
- Regional QI coaches and mentors – health teams (M&E)
- Other health team members
 - Didactic
 - M&E
 - Performance measurement skills

Site level:

- QI Team
- Didactic/M&E
 - Performance measurement
- Other providers
 - Same as QI team

Training Materials and Curriculum

1. Strong leadership support
2. Dedicated time (protected)
3. Incentives
4. Budget at all levels
5. M&E
6. Supportive education

Session Title: Transition of QI to Government Ownership

Facilitators: Julius Ssendiwala

Notes:

Goal 1: Government to take over all QI activities; integrate QI as national strategy

How to achieve goal 1:

- 1) Get buy-in from government officials through:
 - a. Advocacy, communication and leadership
 - b. Demonstration of cost effectiveness of HIV quality programs
- 2) Phased plan developed by partner and government with timelines
- 3) MOU's to define these issues (MOU between partner and gov)
 - a. MOU should define exit strategy in context of thorough program review → outline roles, responsibilities, and expectations thorough program
 - b. Conduct follow-up and periodic review
 - c. Communication between donors and government
 - d. Develop transition plan with timelines

Goal 2: Integration of QI activities into government structures/activities

How to achieve goal 2:

- 1) Establish QI teams on national, regional, and facility level.
- 2) Ongoing coaching and training
 - a. Pre-service training, in-service training
 - b. Revise position/job descriptions
 - c. Budgeting, strategic plan; budget line: Incremental scale up of government budget line for quality activities
 - d. Workplan resulting from communication between donors and government; QI becomes requirement for all plans
 - e. Preparation coaching and mentoring before exit

Goal 3: Capacity Building for Government in QI

How to achieve goal 3:

- 1) Ongoing coaching and mentoring

Session Title: Sustainability for Effective QI programs

Facilitators: Dr. Ganiyu and Dr. JH Mukendi Kazadi

Notes:

Outline

1. Definition
2. Goals
3. Requirements
4. Strategies

Definition

- Maintenance
- Able to go successfully a long way
- maintaining and continuing program after the expiry of the external funding mechanism
- a program becomes a permanent part of the community.

Goals

- to continue improving and maintaining the provision of quality care beyond external support

Requirements for Sustainability

- Technical capacity
- Finances (getting multiple sources of funding rather than one source of funding)
- Human resources
- Ownership
- Strategic planning
- Policy and support from the senior leadership at all levels
- Leadership
- Partnership (and buy in from many organizations in the country) and stakeholders
- Consumer

Strategy

- integration
- capacity building
 1. Training
 2. Infrastructure
- Partnership coordination
- Advocacy/Social marketing
- Institutionalization
 - a. Performance based management
- Incorporate QI in Annual Plan

Capacity Building

Training

1. Integration in pre-service
2. In Service training
3. local pool of master trainers
4. Continuing Education
5. Pre and Post training evaluation

Human Resource

- Recruitment
- Retention strategies
 - Motivation
 - Rewards and Compensation
 - Empowerment
 - Staff Development
 - Career Progression

Leadership

- Government Lead
- Competence
- Fostering leadership at all levels
- clear roles and responsibilities

Finance

- Accountability
- Transparency
- Cost effectiveness
- Budget Allocation
- (multiple) Resource Mobilization
- Public Private Partnership
- Efficient financial management systems

Advocacy and Social Marketing

- Advocacy Tools
 - Developing adequate, tailored messages for each stakeholder category
- Sensitization for demand

Institutionalization

- Building the culture of quality improvement
- Integration in existing structures

Partnership/Stakeholders

- Long term partnerships
- SWAP (Basket funding)
- Harmonization

The ACLN demonstrated the progress, innovation and persistent efforts underway in each implementing country to improve quality in unique national programs. HEALTHQUAL/HIVQUAL International will continue to support capacity-building activities, through coaching, mentoring and peer learning, focused on the ultimate goal of sustainability. To this effect, the ACLN concluded with an in-depth discussion focused on how to harness the momentum achieved during the week's events and advance the concepts of peer learning to bolster these goals.

Participants shared an interest in continued engagement through electronic communication via hivqual.org, country websites supported by national Ministries of Health, and the HEALTHQUAL Project Space.

Acknowledging the importance of person-to-person communication, the group discussed coordinating conference calls to better meet scheduling and time zone differences in various countries. Countries agreed to identify a point person and backup for these calls, and to establish a regular schedule (countries agreed to report back with optimal days and times).

Collaboration between countries was discussed at various levels:

- Peer to peer exchange at the ministry level
- Creation and use of an ACLN Participant Directory to facilitate ongoing communication
- Systematic plan for TA support beyond HIV service, with expansion into other public health areas of care
- Harmonization of reporting formats and indicator definitions towards (global) comparability, i.e. use of Project Space to share ideas
- Coordination of regional meetings among HQ implementing countries; creation of inter-program and international regional group model

All-Country participants agreed on the importance of generating original scholarship from within, particularly given the dearth of literature on quality improvement. The group recognized the difficulty in writing papers while simultaneously meeting current commitments on the ground; this is an area where HQI may be able to offer support in the process.

Consensus was strong in commitment to an annual ACLN (funding-dependent). Themes for future events may rotate based on feedback from each attending country.

Lessons Learned

Performance Measurement

- Technology/data categorized by wave
- Incorporation of HIVQUAL data collection into pre-existing system
- Effective use of PM data
- Interest in Uganda's reporting model

Quality Improvement

- Importance of pediatric HIV disclosure
- Strategies for retention at 3 levels: patients, health workers, and systems
- Sustainable strategies for retention
- Use of PM to inform QI - feedback loop from national level to clinic
- TA for countries interested in Uganda's reporting model
- QI committees
- Integration of QI into national strategy

National QMP

- Application of different approaches to implement a sustainable program
- Learning and understanding the challenges and practices of other countries to incorporate their experience into the planning process
- Importance of integrating the quality program at ministry level
- Sustainability
- Integration into national program
- Motivation by various committees in place in other countries
- Integration of QI program into government structure and budget
- Ownership and sustainability of program
- Integration of quality program at all levels:
 - National - budgeting
 - Regional - district strengthening
 - Clinic - transition from HIVQUAL to HEALTHQUAL
- Think Big, Start Small, Grow

Next Steps

- 1) Continue inter-country dialogue, and create inventory of interventions for improving patient retention
 - HQI to draft a document of topics -- in-country teams prioritize issues to advance this document
 - a. Moving forward, prioritize other topics for this same type of inventory
- 2) Create list of countries/individuals with certain programmatic strengths so that new programs can tap into more advanced programs as a resource for peer learning.

Follow up steps:

- a. Develop list of core topic areas and submit to all countries
- b. Country picks top three areas of expertise and forwards to HQI, and then identify appropriate team members in those areas
- c. Countries identify their focal person in that area

Conclusions

The ACLN provided a dynamic forum for the exchange of ideas and experiences, an opportunity with evident benefit for all participants to advance performance measurement, quality improvement and national quality program infrastructure. The goals of peer exchange were reinforced by the diversity of quality topics addressed and the many lessons shared to build sustainable quality programs at the ministry level and advance the transition to country ownership.

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