

Proceedings

Ethiopia - Guyana - Haiti - Kenya - Mozambique - Namibia - Nigeria - Papua New Guinea - Rwanda - South Africa - Swaziland - Thailand - Uganda - Vietnam - Zambia - Zimbabwe - Botswana - Inoza Mikorere - Mehorja de Qualidade - Amelyorasyon Kalite - Quality Improvement - Pattana Khunaparp - Uboreshaji wa Huduma - Kulifutukisa Lizinga - Tokafatso Boleng - Okusitula Omutindo - Inoza Mikorere - Mehorja de Qualidade - Amelyorasyon Kalite - Quality Improvement - Pattana Khunaparp - Uboreshaji wa Huduma - Kulifutukisa Lizinga - Tokafatso Boleng - Okusitula Omutindo

All-Country Learning Network

Kampala, Uganda

March 26-30, 2012

Speke Resort and Conference Center

2012

EXECUTIVE SUMMARY

May 2012

Dear Colleague,

The third All Country Learning Network - March 26-30, 2012, Kampala, Uganda - was attended by over 200 participants from 16 countries in Africa, Asia, South America, North America, the Caribbean and the South Pacific and included representatives from Ministries of Health, CDC country offices, CDC Atlanta, and the Health Resources and Services Administration HIV/AIDS Bureau.

The ACLN has become a catalyst for quality improvement spread through peer exchange, knowledge sharing and expert presentations focused on issues of critical importance in building sustainable national quality management programs.

This year's topic, use of performance data to set national improvement priorities, challenged us to reflect on our programmatic progress and way forward as a fundamental goal of HEALTHQUAL. The sharing of successes, implementation barriers and strategies to advance this work is guided by our common goals to achieve national quality frameworks that improve patient care and overall population health.

Plenary presentations targeted cross-cutting public health topics including QI implementation and diffusion, a partnership for HIV-free survival using the nutrition assessment, counseling and support (NACS) platform to support PMTCT, using QI to improve the postnatal continuum of PMTCT care through NACS, retention in care in global HIV/AIDS programs, health information technology and QI, TB infection control through QI, Thailand's transition from clinical care to a humanized healthcare model, and communities of practice to promote scale-up of national QI efforts.

As last year, Open Space sessions – a participant-driven and self-organizing model for group learning – generated diverse and highly relevant discussions on a wide-range of improvement topics. Some of these sessions included: data quality and validation, indicator development, health care worker motivation, development of non-HIV indicators for improvement, patient flow, retention, improving HIV quality of care for adolescents, QI coaching processes and data literacy among many others.

This year, for the first time, HEALTHQUAL also sponsored a full-day in-depth data workshop to build skills and knowledge in data analysis, interpretation, visualization and reporting.

As we watch the ACLN mature and expand, and as we welcome participation from new countries, I look forward to watching this community grow and accelerate learning in areas of interest and improvement.

I want to thank all participants and HEALTHQUAL staff for their unique contributions to this event, and acknowledge the truly remarkable work evident in each participating country. A special thanks to our colleagues in Uganda; we could not have achieved this success without your unwavering support and hospitality.

Best wishes,

Bruce Agins, MD, MPH

Director, HEALTHQUAL-International

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Opening and



2012 ACLN Participants



Country Presentations

Summary of Presentation

Title: Putting Improvements into Practice at a National Scale: It's Not Just About Diffusion

Speaker: Bruce Agins, MD, MPH

Overview of presentation:

Dr. Agins' opening plenary of the 2012 ACLN reviewed different approaches and models of effective implementation and diffusion of improvement efforts. The audience was encouraged to consider how to apply these models through planning and management at the national level. The overall aim of the presentation was to identify common elements associated with diffusion, spread, and implementation to drive large-scale improvement in a public health framework.

Diffusion of Innovation

- Everett Rogers: rural sociology
- Adopter characteristics of individuals
- Adoption curve is S-shaped

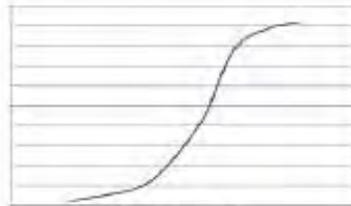
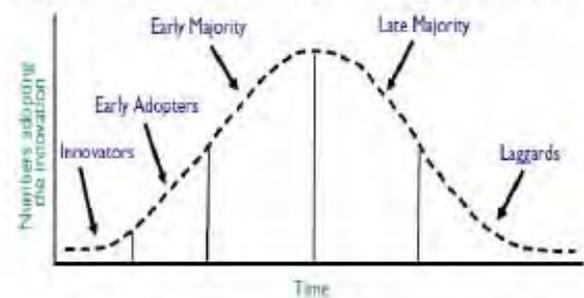
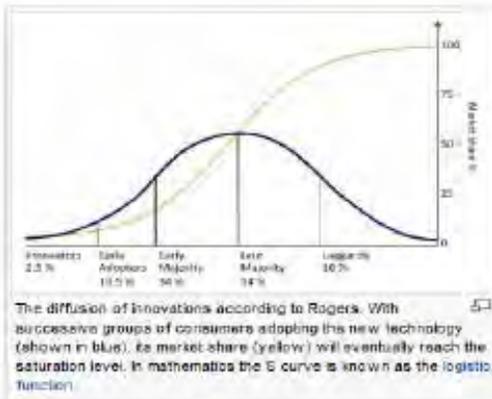


Figure 2: Diffusion of innovations and the categories of adopters



Source: Everett Rogers, Diffusion of Innovations

Revised 4th Edition, 2003, by Everett Rogers, © 2003. Adapted for Large print format of Wiley. All rights reserved. This article is published by the JGIM (JAMA) Core Curriculum Program, MD University, Baltimore, MD, USA.



Plsek 2003. Complexity and the Adoption of Innovation in Healthcare.



Correlates of Successful Spread (Rogers)

- Innovation needs to be better than status quo but also consistent with existing values and needs
- “The” intervention must be simple
- Success should be demonstrable on a small scale
- Communication channel must exist for spread to adopters; ideally change agents are homophilous
- Time is required for spread: spread may be discontinuous
- Structure of system will facilitate or impede diffusion
 - Spread is easier through integrated systems

Limitations of Classic Diffusion Theory and Research

- The S-curve is descriptive and lacks explanatory power about how and why people adopt innovations
- Assumes innovations are fixed and not modified or adapted
- Pro-innovation bias: challenge to study those that do not spread, those that spread from center
- Results in “blame” towards slow adopters
- Does not examine consequences of the changes made

EVOLUTION OF RESEARCH TRADITIONS FOCUSING ON INNOVATIONS IN ORGANIZATION AND MANAGEMENT LITERATURE (Greenhalgh)
ADOPTER CHARACTERISTICS OF INDIVIDUALS
STRUCTURAL DETERMINANTS OF INNOVATIVENESS
STUDIES OF ORGANIZATIONAL PROCESS CONTEXT AND CULTURE
INTERORGANIZATIONAL STUDIES OF NETWORKS AND INFLUENCES
KNOWLEDGE BASED THEORIES OF INNOVATION
NARRATIVE BASED THEORIES OF INNOVATION
SYSTEMS BASED THEORIES OF INNOVATIONS

CENTRALIZED VS DECENTRALIZED NETWORKS FOR SPREAD
From Greenhalgh, et. al. adapted from Rogers: *Diffusion of Innovations*.

Characteristic	Centralized Network	Decentralized Network
Nature of Spread	Planned and targeted (dissemination)	Unplanned, spontaneous (diffusion)
Degree of Centralization	High: decisions made by government administrators and subject matter experts	Low: wide sharing of power and control among members of diffusion system
Direction of Spread	Vertical dissemination from center to periphery and top	Horizontal diffusion through peer networks
Who decides what innovations to spread?	Experts, on the basis of formal, objective evaluation	Users, on the basis of informal, subjective evaluation
Driver for spread	Innovation centered; technology push	Problem centered; user pull
Extent of reinvention by individual users	Low	High

Evidence-based Medicine: Guidelines Implementation

- How to put scientific research findings into practice and get physicians to base decisions on evidence
- Often framed in metaphors of contagion but do not regard the "host" factors
- Assumes fixed and linear process of adoption with limited consideration of organizational systems or contextual variables

Network Theory

- Behavior is embedded in social relationships which drive adoption and diffusion
- Strength of *weak ties*
- Structural equivalence (homophily) promotes faster spread
- Threshold model still pertains (S-curve)
- Opinion leaders have strong influence by virtue of charisma and competence

Communication and Marketing

- COMMUNICATION
 - Involves a sender, a message and a recipient who acts upon information if *persuaded*
 - Areas of influence:
 - Source: credibility, likeability, power, quantity, demography (*by whom*)
 - Message: appeal, style, organization, quantity – "sticky" (*what*)
 - Communication channel: mass media/1:1; spoken/written: (*how and when*)
 - Receiver: demography, personality, attitudes/beliefs (*to whom*)
- MARKETING
 - Conceptualization as a product: message design
 - Adoption depends on market potential influenced by mass media & interpersonal communication
 - Leads to social marketing strategies and consideration of market segmentation
 - Diffusion can be thought of as a "market share"

Transition to Organizational Models

- The organizational process is socially constructed
- Consideration of structural determinants
- Organizational culture
- Address the process of innovation
- Role of interorganizational networks
- Leads to consideration of drivers and barriers and understanding of implementation failure

Knowledge Utilization

- Innovation centers around the construction of and transmission of knowledge between organizations
- Explicit vs. tacit knowledge
 - Explicit: codifiable, easily transmitted
 - Tacit: embedded, situational, "sticky", woven into situational contexts where generated, often attached to individual
- Social interaction important for both construction and transmission of knowledge
- Organizations are involved in "sense-making" and have an "absorptive capacity" for knowledge

Knowledge Utilization (2)

- Nonaka: Different processes needed within an organization depending on the kind of knowledge
 - Socialization needed for tacit to tacit
 - Internalization converts explicit to tacit
 - Combination allows for conversion of explicit to explicit
 - Externalization needed for tacit to explicit
- Learning Organization (Senge, others)
 - Knowledge is systematically captured and shared
 - Designated roles for knowledge workers who collect and transmit knowledge and knowledge managers who facilitate and plan these activities

Knowledge Utilization (3)

- Organizational Sense-making (Weick)
 - Framing of knowledge occurs through cognitive activities
 - Stakeholders have to understand and assimilate the new organizational framework and concepts triggered by the new knowledge or innovation
- Knowledge Management
 - Spans from a planned, controlled managerial initiative with formal infrastructure and management to a facilitative process through organizational sense-making

Narrative research Tradition

- Human purpose and meaning become the lenses for understanding phenomena, conveyed by *storytelling*
- Stories reveal the complexity of the process and celebrate while creating moral force for change
 - Humanization
 - Sense-making
 - Creative and adaptive while potentially subversive and innovative
- Events characterized through interplay of actions and contexts, inherently qualitative
- Appreciative inquiry; search for best stories, which when used systematically, shape organizational destiny

Complexity Theory

- Recognizes that organizations have multiple independent parts, dynamic relationships, patterns (not predictability) of behavior, adaptiveness, "meshwork of relationships"
- A *complex adaptive system* is defined as a "collection of individual agents who have the freedom to act in ways that are not always totally predictable and whose actions are interconnected such that one agent's actions changes the context for other agents"
- Individual creativity may spawn ideas that become innovations within an organization

Complexity Theory (2)

- Conversations between individuals is key to disseminate innovations; spread results from local, self-organizing interaction of actors and units (Fonseca)
 - Architecture: spatial congregation deliberately fostered
- Rational, planned, regulated approach works well when high certainty and high agreement are present (Plsek)

What does the field of quality improvement bring to the discussion?

- “Diffusion” becomes “spread”
- Large-scale change requires thinking about systems: changes in organization of care delivery, resources, workforce, technology, policy
- Rapid cycle feedback stimulates improvement

and

- Spread must be planned:
 - What are we trying to spread?
 - To whom do we want to spread it – and by when?
 - How will we spread it?

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What are we trying to spread?

- Must understand the nature of the intervention
- What is the optimal way to package it?
- What is the motivation of key stakeholders to spread it?

The nature of the intervention will determine how complex the strategy is...

To Whom Do We Want to Spread?

- Geography
- Number of clinics/hospitals/agencies
- Number of health professionals
- Number of patients
- Timeline for reaching full scale

How will we spread it? What factors will influence the spread process?

- Execution for system-level results
 - It is important to identify outcomes, but equally important to demarcate steps and processes since the sequencing can be critical to achieving the results

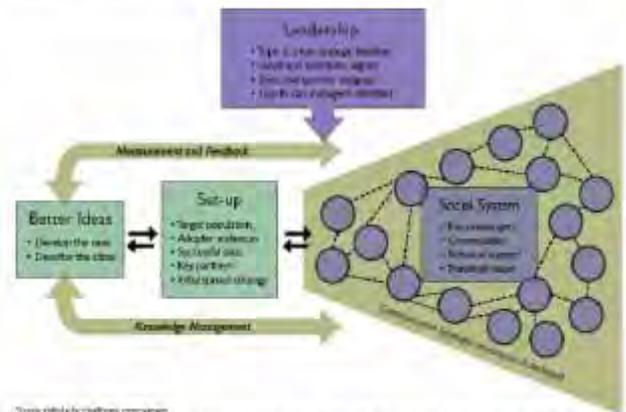
How will we spread it? What factors will influence the spread process?

- Social system: leaders, communication channels, champions, integration within the care system
- Framework for spread
- How will content be integrated into the process design?
 - Clear definition of the content: guidelines, standards, protocols
- Motivate individual adoption/behavior change:
 - Social Learning and Cognition models
 - Create tension and discontent with existing situation

How will we spread it?

- What factors will influence the spread process?
 - Factors influencing rate of spread: compatibility with existing context; simplicity, trialability; observability (from Rogers)
- Measurement system
 - Feedback is necessary to determine whether improvements are made and to encourage slower adopters
 - Positive deviance: uncover factors leading to success and use them
- Knowledge management system to support spread

Figure 1. Framework for spread



Source: Institute for Health Care Innovation. *Options for Large-scale Spread of Simple, High-impact Interventions*. Technical Report. Published by the USAID Health Care Improvement Project, Baltimore, MD: University Research Co., LLC (URC), 2010.

Various Approaches to Spread

- Natural diffusion (adoption of idea or intervention by members of social system in absence of formal dissemination)
- Executive mandates
- "Extension agents" where mobile HCWs or community leaders spread ideas and best practices: "coaching and mentoring"
- Emergency mobilization
- Affinity group (2-3 clinics recruited to develop model)
- Wave sequencing
- Collaborative (structure learning around shared aims, measures & goals)
- Virtual collaborative
- Campaigns

Wave Sequence

- Systematic approach to rapidly spread a large, nested system in which care is provided at multiple levels often in a hierarchical structure

Figure 1.0: Wave sequence spread



Massouh MR, Doobay H, and McCann C.J. 2010. *Options for Large-scale Spread of Simple, High-impact Interventions*. Technical Report. Published by the USAID Health Care Improvement Project, Baltimore, MD: University Research Co., LLC (URC).

Approaches to Spread: Collaboratives

- Most useful for spread among peers *within* the collaborative
- Senior leaders are responsible for spread back at the agency
- Not as successful for spreading within the organization
- Planning for sustainability is not built into the model!

QI Example: Preventing Post-Partum Hemorrhage In Niger: HCI/URC/USAID

- **Background:** Postpartum hemorrhage (PPH) is a leading cause of preventable maternal deaths. Active management of the third stage of labor (AMTSL) is a "high impact," evidence-based intervention that reduces postpartum hemorrhage by over 50%.
- WHO recommends that all women receive ASMTSL administered by a skilled caregiver.
- AMTSL:
 - Administer a "uterotonic" drug such as oxytocin immediately after birth to help the uterus contract.
 - Control the delivery of the placenta through careful traction on the umbilical cord while providing countertraction to the uterus
 - Massage the uterus externally during and after the delivery of the placenta.

Lessons learned from Spread: Tips (2)

- Shared learning opportunities to further improve models will accelerate spread over shorter time periods
 - Energize staff through TA-focused site visits
 - Role modeling and leadership are key
 - Homophily between spread agents and demonstrating early results help promote learning
- Leverage existing networks and identify partners to supply crucial resources to drive change at low cost
- Use many levers to stimulate change:
 - Positive incentives: recognition and rewards
 - Negative incentives: transparency, gentle chastizing

Sarah Fraser: Critique of Spread

- Beware “pilotitis” in which small numbers and extra funding do not necessarily portend *sustainability*
- Don’t stop at 20-25% (tipping point): improvement must be continuous
- Innovations are often not easily transferable between organizations
- Rogers’ adopter categories may lead to failure:
 - Laggards may be pragmatists who keep organizations going – “holding down the fort” while systems undergo alteration

Nolan’s Checklist for Spread (Organization-

focused) Nolan K, et al. *Using a Framework for Spread. Joint Commission Jnl on Quality and Safety* 2005. 31: 339-349.

Is improvement in this area a strategic priority for the organization?

Is there an executive responsible for spread of the improvement?

Is there a person or team in the leadership who will be involved in day-to-day spread activities?

Will leadership supply resources needed for success? (personnel; IT; tools)

Has the advantage of adopting the change been documented and communicated in an easily understood message to all potential adopters?

Is there a successful site that has implemented the change in a way that is scalable throughout the organization?

Are there credible messengers who can persuade potential adopters to implement the innovation?

Is there a clear plan to communicate the innovation throughout the organization and to assist different sites in making needed changes?

Sarah Fraser: NHS “Take home lessons”

- Organizational spread requires *adoption* of complex behaviors
- Requires small changes continuously as opposed to discontinuous dichotomous change
- Healthcare innovation focuses more on *ideas and behaviors* as opposed to *things*

Sarah Fraser: Critique of Spread

- “low hanging fruit” syndrome: approach might not apply to the entire population. *Try changes where the greatest impact can occur: not just the quick & easy*
- Avoid “spreading good practice” rather “*implement better ideas*” to avoid active to passive mindset: *everyone is viewed as active*

Institute for Clinical Systems Improvement

- Five models of spread (Mosser):
 - **Sales model:** champion visits other sites to describe and persuade
 - **Parallel play:** when all sites produce similar results academic skeptics can buy in more easily
 - **Central driver:** pilot sites with strong likelihood of success achieve results following which leadership mandates change
 - **Billboard model:** broadcasting of success
 - **Mass movement:** leaders approach all units through inspirational messages and mass communications
- From spread, *move on to changing organizational culture*

Adapted from Godwin et al., 2007, *The Science of Spread: How Innovations in Care Become the Norm*, California HealthCare Foundation.

Bodenheimer: Science of Spread Conclusions

- **Leadership:** top-level leaders must create an institutional culture ready to accept change and spearhead spread, requiring both authority and breadth of vision
- **Innovation champions:** Often create success by tireless effort but overreliance on them can create unrealistic expectations leading to failure.
- **Frontline caregivers:** Need to get their ideas, focus on contextualizing for their needs and overcome resistance.
- **Macrosystem vs. microsystem change:** strike a balance!

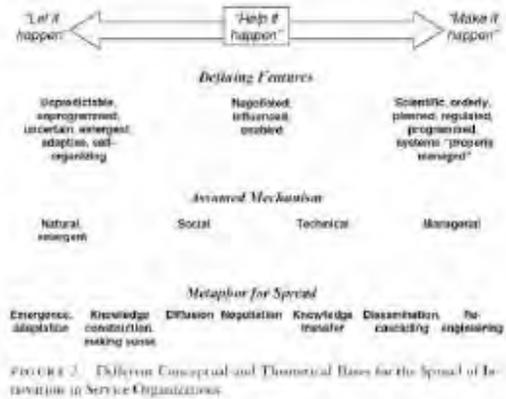


FIGURE 2. Different Conceptual and Theoretical Bases for the Spread of Innovation in Service Organizations.

Bringing it home: Implementation

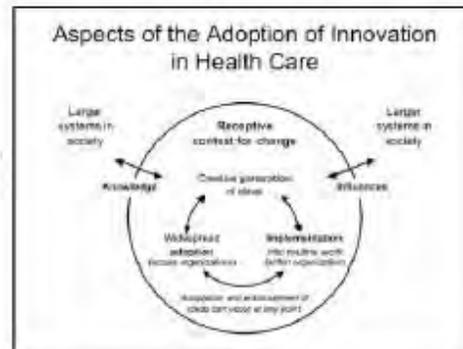
- **Implementation:** assimilating an innovation within a system
- Implementation literature similar to that on change management, organizational development, and QI
- Literature more often addresses role of the organization equally with the process of innovation, also recognizing impact of environmental factors
- Leadership and responsiveness to both buy-in and "just-in-time" training are key factors for success
- Leads to consideration of *institutionalization or sustainability or routinization*



FIGURE 2. Different Conceptual and Theoretical Bases for the Spread of Innovation in Service Organizations.

Implementation: The Whole Systems Approach

- **Greenhalgh:**
 - Dissemination of ideas is a lengthy, staged process in complex adaptive systems such as a network or a healthcare system
 - Prior predisposing activities & capacity building useful
 - Synchrony between external incentives/mandates and internal activity foster success
 - Long lead time for outcomes in a complex program
 - Concern: competition with other initiatives (may change with IT?)
- **Pisek:**
 - Organizational context will influence transferability



Pisek 2003. Complexity and the Adoption of Innovation in Healthcare.

Eight Points For Implementation in Networks: Implications for HEALTHQUAL Teams

- Coaching System ("extension system")
- Spread has to be planned and then managed
- Flexibility: adaptive response to environmental change and survives central level change [provincial and district]
- Involvement of users throughout process ("consensual development") in both prioritization and design (patients and providers)
- Sharing of resources and knowledge: "communication plan"
- Fostering networks between user organizations: *the power of peer learning*
- Recognition for innovators within networks
- Close spatial contact between external agents and clients:
 - *Get into the field!*

NATIONAL LEVEL

- | | |
|--|--|
| <ul style="list-style-type: none"> -Oversight of national QM program -Quality integrated into health sector strategic plan -Develops national quality indicators -Convenes key national stakeholders -Providers-Patients-Government -Harmonizes data systems -National toolkit and training curricula | <ul style="list-style-type: none"> -Sets expectations for improvement activities -Disseminates national benchmarking reports -Recognizes and rewards top performers -Oversees execution of national plan & workplan -Convenes national Quality TWG -National improvement campaigns to improve outcomes |
|--|--|
- Promotes communication of stories and share successes
 -Facilitates regional and local improvement activities

NATIONAL LEVEL

- | | |
|--|---|
| <ul style="list-style-type: none"> Oversight of national QM program Leads development of national quality plan Develops national quality indicators Convenes key national stakeholders (TWG) National toolkit and training curricula Harmonizes data systems Disseminates national benchmarking reports | <ul style="list-style-type: none"> Sets expectations for improvement activities Recognizes and rewards top performers Oversees execution of national workplan Promotes communication of stories and sharing of successful strategies Identifies interventions for spread and leads national improvement campaigns Facilitates regional/local improvement activities |
|--|---|

PROVINCE – REGION – DISTRICT LEVEL

- | | |
|---|--|
| <ul style="list-style-type: none"> Convenes providers for peer learning and sharing of QI experiences Define group priorities based on data and identified needs Recognizes and rewards top performers Sponsors QI training | <ul style="list-style-type: none"> implements quality management plan and workplan lead for QI identified who oversees coaching and TA Reviews regional data to establish local priorities for improvement Convenes regional stakeholders data review Coordinates regional Quality TWG |
|---|--|

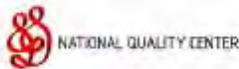
FACILITY LEVEL

- | | |
|--|--|
| <ul style="list-style-type: none"> Routine performance measurement Use of data for improvement Team-based QI projects Quality Plan | <ul style="list-style-type: none"> Staff involvement Quality committee or team meetings Leadership support Patient involvement |
|--|--|

Using both data and qualitative information we can refine this list by learning together as we implement ideas and change behaviors to improve quality through national programs.

Acknowledgements

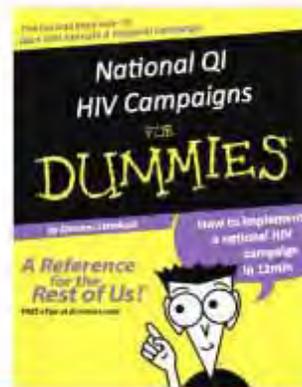
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- Institute for Healthcare Improvement



How to Implement a National Quality Improvement Campaign

March 27, 2012

Clemens Steinbock, MBA
 Director, National Quality Center
 Clemens@NationalQualityCenter.org



1 National Quality Center (NQC)

2 National Quality Center (NQC)

The first ever National Quality Improvement Campaign in HIV care should be... (Oct 2011)

- National reach based on voluntary enrollment by HIV providers
- Low cost; no extra funding for initiative
- Mostly virtual with local meetings organized by local participants
- Focus on improvement (less on measurement)
- National (and measurable) impact on a key aspect of HIV care; aligned with national priorities

3 National Quality Center (NQC)

Accomplishments of the U.S. Campaign to improve retention to HIV so far... (March 2012)

- 434 HIV providers in 218 cities across 45 states have joined the Campaign so far, caring for 441,267 people living with HIV (not unduplicated)
- Data for close to 120,000 HIV patients are self-reported every other month by participating providers
- Close to 50% of all federally funded HIV providers have signed up so far
- Largest voluntary QI initiative in the U.S. and the largest HIV performance measurement database

4 National Quality Center (NQC)

Retention Campaign Data – March 20, 2012

	Dec 11 / Feb 12 Mean Scores	Dec 11 / Feb 12 Patient Sample	Dec 11 / Feb 12 # of Providers
Gap Measure	15.97% / 16.00%	107,063 / 104,210	185 / 101
Visit Frequency Measure	62.56% / 67.08%	69,252 / 60,239	110 / 101
New Patient Measure	58.11% / 59.34%	7,249 / 4,863	174 / 162
Viral Suppression Measure	67.94% / 68.77%	113,324 / 120,034	174 / 162

5 National Quality Center (NQC)

HOW-TO GUIDE Tips for what to do even before you kick off the campaign...

- Select a focus for the campaign that will generate momentum among providers
- Aligns with national priorities and funders of HIV services
- Reach out to stakeholders (talk/talk/talk, listen/listen/listen...)
- Conduct online surveys and focus groups
- Conduct a literature search

6 National Quality Center (NQC)

HOW-TO GUIDE

Importance of branding and marketing...

- Develop a consistent branding approach; signal a fresh and exciting image (it pays off...)
- Consider creating a logo, website, marketing materials, slide templates, etc.
- Find simple ways to make your point, you may need some external help
- Be creative



1 in 5 do not know their HIV status
 2 in 5 have not seen an HIV primary care doctor
 3 in 5 don't regularly see their HIV doctor
 4 in 5 are not viral load suppressed

Adapted from Center for the Economics of Engagement in HIV Care and its Relevance to Test and Treat Strategies for Prevention of HIV Infection, (2010). (p. 10). (p. 10-11)



HOW-TO GUIDE

Increasing awareness about the campaign...

- Collect as many email addresses as you can in advance (or update what you have)
- Develop a strategic communication plan, including an email marketing plan (we used Contact Contact)
- Conduct weekly 'sneak previews' with interest groups to give them a personalized overview of campaign
- Include federal and other national leaders as stakeholders
- Openly share who has signed up on website
- Be creative and find ways to stand out (we developed a video...)



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National Quality Center (NQC)

HOW-TO GUIDE Expectations for pre-work by participants...

- During sign-up, gather as much contact information as possible and send out thank you email (we used Survey Monkey)
- Conduct an online needs assessment to learn more about participants
- Give out pre-work assignments to participants
- Ask each participant to participate in kick-off webinars; invite senior leaders, give overview of literature and available performance data
- Be clear with expectations for participating, and be flexible

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National Quality Center (NQC)

HOW-TO GUIDE Thoughts about collecting data...

- Develop a small but relevant number of measures; engage expert group to develop these measures
- Outline reporting expectations and provide support to participants (we used weekly, virtual Office Hours)
- Incorporate indicator definitions in existing electronic data systems to facilitate data reporting
- Develop online reporting system and allow for immediate benchmarking opportunities
- Provide individualized feedback

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National Quality Center (NQC)



16

National Quality Center (NQC)

HOW-TO GUIDE Ideas for activities for your campaign...

- Submissions of improvement updates by participants
- Recruitment of volunteer 'local quality champions' to facilitate meetings of local campaign participants
- Assignments of 'QI coaches' to each participating agency
- Journal Club with renowned researchers
- Monthly webinars with specific content areas
- Consumer engagement to create partnerships for alignment with consumer needs

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National Quality Center (NQC)

HOW-TO GUIDE Costs for a campaign...

- Webinar platforms - \$ [less than \$2,000]
- Office hours - \$ [less than \$500]
- Website - \$ [7,500]
- Local quality champions - \$ [less than \$750]
- Marketing and design efforts - \$\$ [\$15,000]
- Video - \$\$ [\$15,000]
- Consumer involvement strategies - \$ [\$5,000]
- QI coaches - \$\$\$ [\$20,000]
- Staffing resources - \$\$\$\$ [full-time person]

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National Quality Center (NQC)

HOW-TO GUIDE

Lessons learned for your campaign...

- Branding and messaging of campaign is important
- Planning, planning, planning...
- Alignment of QI topic with national priority is important
- Innovative and creative approaches to engage participants
- Flexible way to interpret participation

22

National Quality Center (NQC)

+care
IN



Clemens Steinbock –
cms18@health.state.ny.us

National Quality Center (NQC)
90 Church Street, 13th floor
New York, NY 10007
Phone 212-417-4730
incare@NationalQualityCenter.org

incareCampaign.org
youtube.com/incareCampaign

Connect. With patients.
Collaborate. With a community of learners.
Change. The course of HIV.

23

National Quality Center (NQC)

HEALTH RESOURCES AND SERVICES ADMINISTRATION
 HIV/AIDS Bureau
 Global HIV/AIDS Program

George Tidwell
 Project Officer, Quality Improvement Center



HRSA Global HIV/AIDS Program



HRSA Global HIV/AIDS Program
 20 Years of HIV/AIDS Experience in the US

- HRSA has and continues to develop, monitor, and strengthen HIV/AIDS programs serving the U.S. underserved population through the Ryan White HIV/AIDS Program
- HRSA has successfully worked with local governments (state and local levels) to ensure greater ownership and appropriate funding and monitoring
- HRSA has long engaged the community to ensure services tailored to their unique needs



HRSA Global HIV/AIDS Program
 HRSA Programs

- Bureau of Primary Health Care
- Bureau of Health Professions
- Maternal & Child Health Division
- HIV/AIDS Bureau
- Others

HRSA International HIV/AIDS Portfolio

Care and Treatment

Provider	No. of Countries
Catholic Relief Services	7 (see 10)
Harvard University	3 (see 3)

Capacity Building/Training

Grantee	Function	No. of Countries
International AIDS Education and Training Center, University of Washington (I-AETC)	Training Capacity building	14
Training Center, American International Health Alliance	Training partnership Monitoring/evaluation	11
Training Capacity Building Initiative, Columbia University	Training capacity building	5
Healthcare International	Quality management	11
Medical Education Partnership Initiative, Multiple Grantees	Medical education capacity building	10
New Partners Initiative, Multiple Grantees	Local partner capacity development	3



HRSA Global HIV/AIDS Program
 System Strengthening – Transition/Program Oversight

Clinical Assessment for System Strengthening (CLASS)

Managed by HRSA – Global HIV/AIDS Program

- Created for international use based on the Primary Care Assessment Tool (PCAT) model
- Assess the quality of services and care provided to patients
- Ensure that organizational systems, policies, and procedures are in place to accomplish program goals and objectives
- Assess the organization's capacity to provide the funded services and manage funding
- Identify program strengths and weaknesses and provide appropriate consultation to enhance their capacity to provide high quality, cost competitive health care and services
- Specifies areas of system strengthening to enable organizations to sustain their HIV service delivery, and
- Identifies model programs or program components that can be replicated in other communities or organizations



HRSA Global HIV/AIDS Program
System Strengthening – Training & Education

Medical Education Partnership Initiative (MEPI)

Grantees: Addis Ababa University, University of Botswana, Kilimanjaro Christian Medical Centre, and Stellenbosch University
Coordinating Center: George Washington University

Focus:

- Improve the quality of clinical education and clinical care;
- Enable graduating medical students to remain in their home country to practice, serve as faculty, and/or conduct research related to the implementation of PEPFAR and other public health priorities, and
- Enhance the recruitment and retention of qualified academic faculty through partnerships and research opportunities.



HRSA Global HIV/AIDS Program
System Strengthening – Training & Education

Nursing Education Partnership Initiative (NEPI)

Focus:

- Strengthen nursing education systems and support innovative retention strategies;
- Conduct countrywide assessments of nurse training capacity and select three to five nursing schools in each of the countries to receive funding and technical assistance to carry out interventions;
- Implementing partners are OGAC, HRSA, USAID, WHO, CHAI, Columbia University, IntraHealth/Capacity Plus, and Elma Philanthropies;
- Develop evidence-informed global policy guidance on transformative scale up nursing education.



HRSA Global HIV/AIDS Program

- PEPFAR II October 2008 through September 30, 2013
- HealthQual International Cooperative Agreement June 1, 2011 through May 31, 2015

HRSA Global HIV/AIDS Program

Cooperative Agreement

Substantial involvement between the grantor and grantee is expected to carry out the activities in such an agreement.



HRSA Global HIV/AIDS Program

Project Officer

Ensure the effective and proper use of federal program funds
Ensure that the grant is meeting the programmatic objectives
Provide technical oversight and monitoring through site visits, and reviewing reports
Assisting in programmatic challenges





Ministry of Health, Uganda
Measuring Care to Identify national Quality Improvement Priorities

Dr. Godfrey Kayita /Julius Ssendiwaia
STD/AIDS Control Program
MoH

2012 ALL Country Learning Network Meeting
Speke Resort & Conference Center, Kampala



Uganda Background 33m people

Pop. Growth Rate – 2.65%
Per capita – \$490
Per capita (Health) – \$12
(Abuja \$15)
Life Expectancy – 52.72
PLHIV – 1,200,000 (adults)
PLHIV – 100,000 (children)
Adult Prev. – 6.7 % (2011)
Children Prev. – 1.5%
TB/HIV prev. – 56%
HIV/TB prev. – 12%



Background

- Measures related to HIV care were developed and implemented by MoH and multiple implementing partners
- Indicators were based on national guidelines and priority areas
- Indicators reflected HCT, PMTCT, Adult & Pediatric ART
- Data showed improvements in key quality indicators across multiple setting and multiple partners

Opportunities Identified

- Although there was a clear set of national guidelines there was no one set of corresponding measures
- Confusion at district and facility level
- Inability to compare facilities, districts and regions due to different indicator definitions

Process

- QoC technical working group (Core Team) was expanded to assure representative group with technical knowledge
- QoC coordination committee expanded to include wider Health Sector representation to guide QI scale up
- Analyzed data and current indicators to identify similarities and inconsistencies
- Developed and finalized new indicators
- Received approval from MoH
- Disseminated final indicators to all stake holders

HIV QoC Indicators – HCT

- HIV Status Disclosure
- HIV test outcomes
- HIV Testing
- Couple Counseling and testing
- Human Resource training
- HMIS Reporting

HIV QoC Indicators – PMTCT

- Baby ARV prophylaxis
- ARVs- prophylaxis
- Effectiveness of PMTCT program
- Linkage into care- (Baby & mothers)

HIV QoC Indicators –Adult (≥15 yrs)

- ART Clinical outcomes
- Retention of ART patients in care
- Clinical improvement
- ART Initiation
- Adherence Assessment
- TB Assessment among HIV+

HIV QoC Indicators –Pediatric

- Continuity of care
- Monitoring HIV status
- Growth monitoring
- Cotrimoxazole Prophylaxis
- ART Access
- Adherence assessment
- TB screening & treatment

Active Patients

Adults	Pediatrics	PMTCT	HCT
Quality Indicators - HIV register - At least 10 years old - At least 2 clinical visits during the review period	Quality Indicators - HIV register - 0-14 years of age - At least 2 clinical visits during the review period	Quality Indicators - HIV register - Pregnancy women - At least 2 clinical visits during the review period	Quality Indicators - All patients enrolled in care - At least 2 clinical visits during the review period
Data Sources - ART Register - PMTCT Register - Patient case load	Data Sources - ART Register - PMTCT Register - Pediatric case load	Data Sources - PMTCT Register - HCT Register	Data Sources - HCT Register - HIV Register

Patient Information:

Unique Patient ID#	First Name	Last Name	D.O.B.	Gender

Sampling

- Sample size based on caseload to achieve precision of 90% CI + 8 %

Caseload	Sample Size
0-10	10
11-20	15
21-30	20
31-40	25
41-50	30
51-60	35
61-70	40
71-80	45
81-90	50
91-100	55
101-110	60
111-120	65
121-130	70
131-140	75
141-150	80
151-160	85
161-170	90
171-180	95
181-190	100
191-200	105
201-210	110
211-220	115
221-230	120
231-240	125
241-250	130
251-260	135
261-270	140
271-280	145
281-290	150
291-300	155
301-310	160
311-320	165
321-330	170
331-340	175
341-350	180
351-360	185
361-370	190
371-380	195
381-390	200
391-400	205
401-410	210
411-420	215
421-430	220
431-440	225
441-450	230
451-460	235
461-470	240
471-480	245
481-490	250
491-500	255
501-510	260
511-520	265
521-530	270
531-540	275
541-550	280
551-560	285
561-570	290
571-580	295
581-590	300
591-600	305
601-610	310
611-620	315
621-630	320
631-640	325
641-650	330
651-660	335
661-670	340
671-680	345
681-690	350
691-700	355
701-710	360
711-720	365
721-730	370
731-740	375
741-750	380
751-760	385
761-770	390
771-780	395
781-790	400
791-800	405
801-810	410
811-820	415
821-830	420
831-840	425
841-850	430
851-860	435
861-870	440
871-880	445
881-890	450
891-900	455
901-910	460
911-920	465
921-930	470
931-940	475
941-950	480
951-960	485
961-970	490
971-980	495
981-990	500
991-1000	505

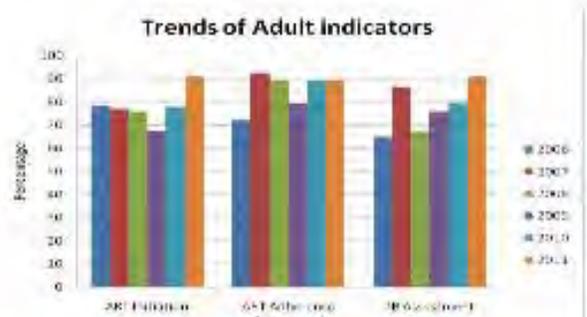
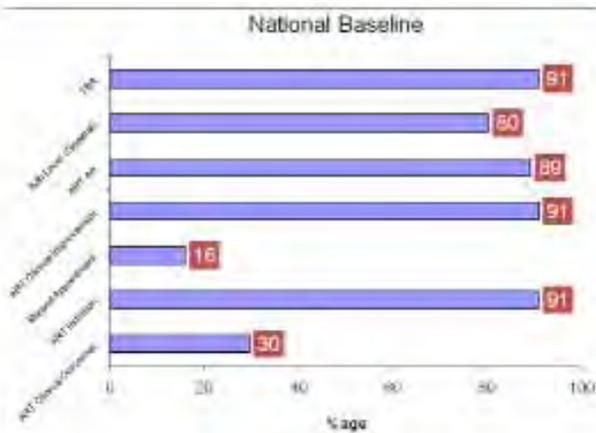
The HIVQoC Sample Size Chart indicates:

- The minimum number of records to be reviewed, and
- Replacement strategy

Adult

Review Period: 01/07/2011-31/12/2011

Region	Caseload	Sample Sites	
Eastern	71482	3833	44
Western	38283	2889	37
Northern	28605	1785	21
Central	48869	4154	27
National	187,239	12,661	129



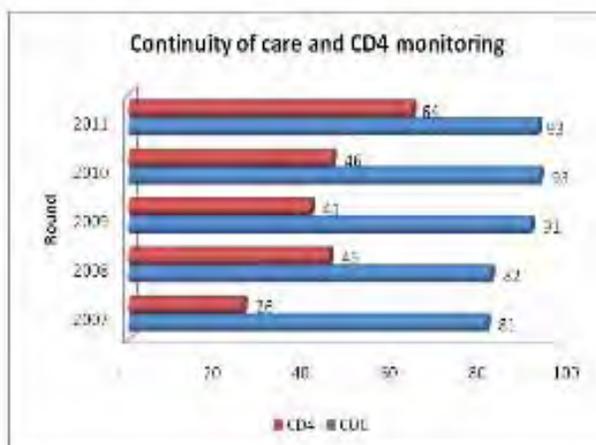
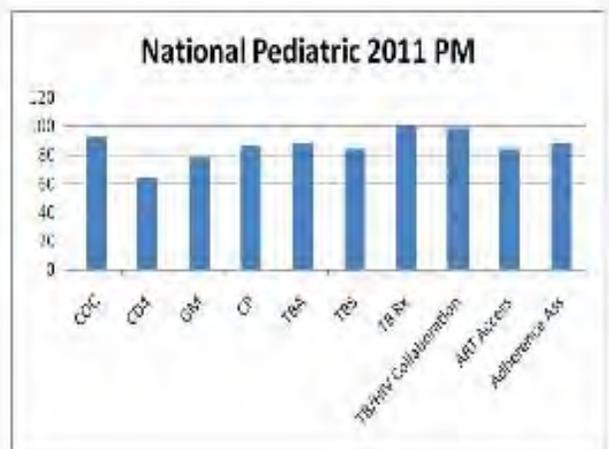
Indicators

Year	ART Initiation	ART Adherence Assessment	TB Assessment
2006	27,452	1,275	20
2007	35,797	1,696	27
2008	44,003	2,028	34
2009	52,795	2,503	39
2010	70,079	3,664	49
2011	87,259	4,951	59

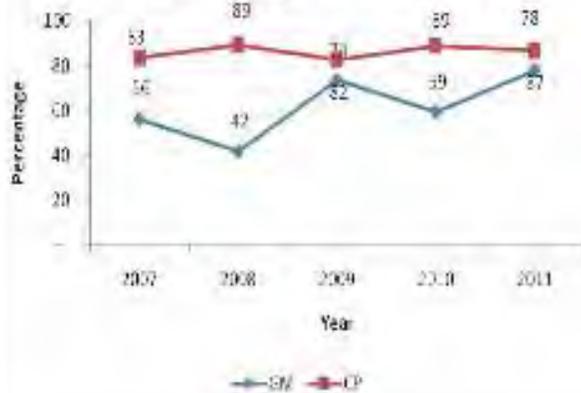
Pediatric

Review Period: 01/07/2011-31/12/2011

Region	Active patients	Sampled	Facilities
Eastern	7,008	1,932	43
Western	1,663	837	37
Northern	3,297	751	13
Central	8,185	4,643	24
National	20,247	8,231	117



Growth Monitoring and Cotrimoxazole



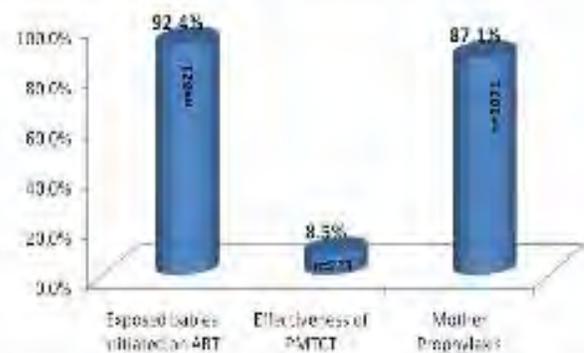
PMTCT

Level	No
II	1
III	23
IV	49
District NGO	3
Hospital	26
Regional Referral Hospital	6
Total	108

HIV QoC Indicators – PMTCT

- Baby ARV prophylaxis
- ARVs- prophylaxis
- Effectiveness of PMTCT program
- Linkage into care- (Baby & mothers)

Baseline PMTCT Indicators



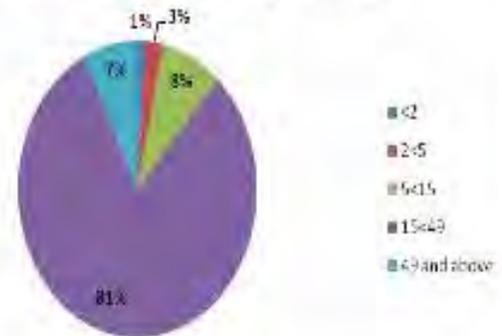
HIV Counseling and Testing

Level	No
III	16
IV	37
District NGO	4
Hospital	22
Regional Referral Hospital	3
Total	82

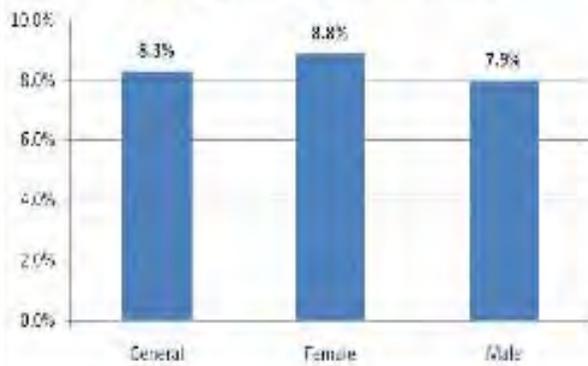
HIV QoC Indicators – HCT

- HIV Status Disclosure
- HIV test outcomes
- HIV Testing
- Couple Counseling and testing
- Human Resource training
- HMIS Reporting

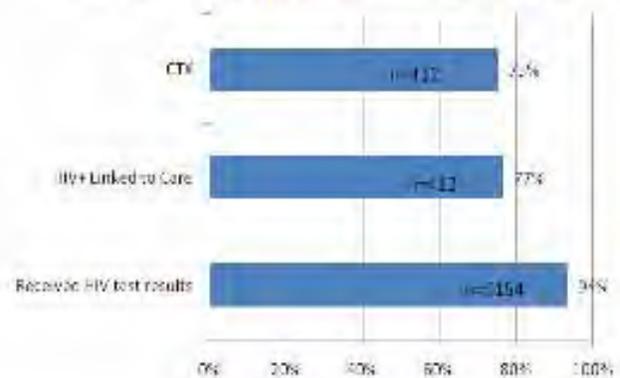
Clients Tested by Age Group



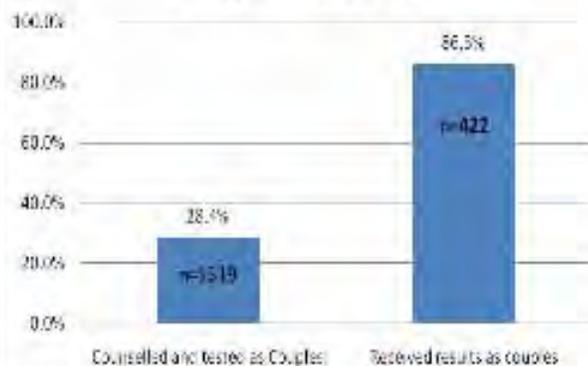
Facility based HIV Prevalence



HIV test outcomes and linkage to care



Couple Counseling



National Quality Improvement Priorities

- Missed appointment
- Adherence to ART
- Immunological Monitoring
- eMTCT
- Linkage of Mothers to care
- Couple Counseling
- Linkage in to Care of HIV+

Country Strategy

- Engagement of all Health sector stakeholders
- Coordination with MoH leadership
 - Core Teams at MoH HQ depts, Regional and District levels
 - Coordination Committee at MoH HQ
- National QI Framework, dissemination & implementation

National QI Conference



NQIF Launch



Conclusion

- Performance Measurement is critical in identifying quality improvement Needs & Priorities
- Peer Learning at various levels; E.g Held a National QI Conference (Theme; "Strengthening Leadership for QI")
- Utilization of a National QI Framework to address the identified Improvement Gaps is Key

Mwebale Nyo
Asante Sana





Republic of Namibia

PROJECT TITLE: FOOD SECURITY SCREENING

Country Profile

- Population: - ≈ 2.2 million
- HIV Epidemic in Namibia:
 - ANC HIV prevalence: 18.8% (2010)
 - Estimated PLWHA: 225,858 (2011)
 - Patients on ART: 104,531 (Dec 2011)
 - ART coverage: ≈ 84% at CD4 < 350



Background and Introduction

- Nutrition remains one of the major factors which determine the clinical outcome in HIV care.
- Food insecurity was identified as a significant challenge to care and treatment by consumers and baseline data
- Importance of proper nutrition management interventions :
 - Helps alleviate some of the side-effects
 - Helps maintain adequate food and nutrient intake
 - Improves adherence to treatment
- Therefore, nutritional counseling should be provided to all PLHIV.
- Appropriate referrals should be encouraged when HCW assess and find deserving clients with food insecurity.

Project Aim/Goal

To identify HIV patients with nutritional challenges and refer them for nutritional support or food services.

Food security indicator definitions (1)

Eligibility: All patients with at least 1 clinical visit during the past 6 months (adult only; age ≥15 years)

Part A

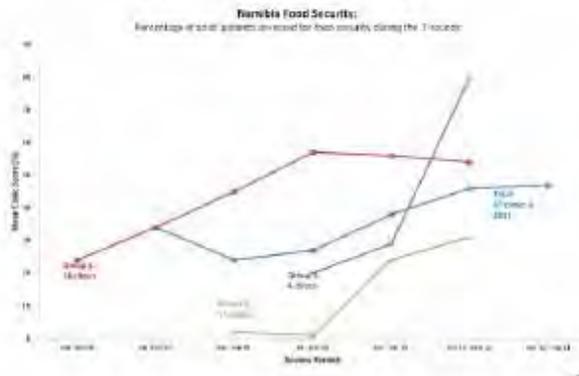
- **Numerator:** The number of patients assessed for nutrition or food security during the past 6 months
- **Denominator:** The number of patients with at least one visit during the past 6 months

Food security indicator definitions (2)

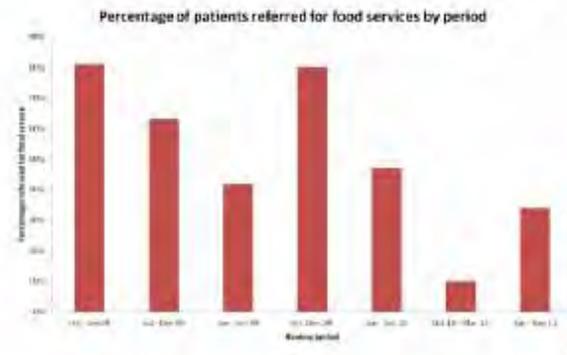
Part B

- **Numerator:** The number of patients identified with nutritional problems referred for nutritional support or food services.
- **Denominator:** The number of patients who screened for nutrition/food security and identified to have lack of sufficient food/nutrition.

Serial Performance Data



Clients referred for Food Support



Challenges/Causes

- Initially lack of food security screening tool in the HIV patient care booklet
- Poor documentation
- Lack of proper referral mechanism for patients identified with food security problems
- Lack of effective support groups to address food security
- Staff turnover with consequent high workload
- High national unemployed rate/poverty
- Alcohol abuse

Interventions (1)

To improve food security screening

- Training of HCWs on importance of the indicator/measurement
- Health education to patients/clients (specifically on alcohol abuse since it can affect food security negatively)
- Devise basic, simple food security screening tools
- Improve documentation system
- Reorganize patient flow in some sites to streamline food security assessment
- Identification of a focal person for assessing food security

Interventions (2)

To address food security

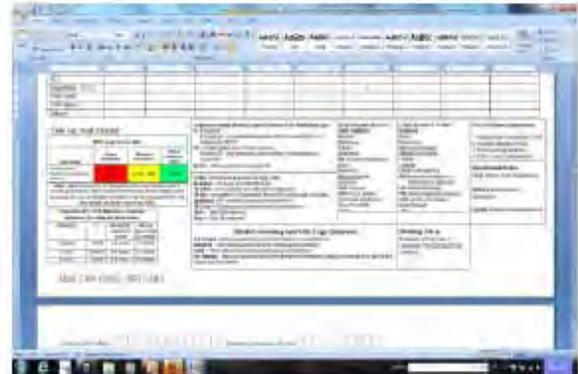
- Referrals, documentation/follow-up of patients needing food supplementation to other line ministries and NGOs
- Arrange with effective referral system
- Introduction of NACS (Nutritional Assessment Counseling and Support) programme Nationwide.
- Provision of food supplements from NGOs e.g. E-pap
- Work closely with social workers in assessing food security
- Initiation of nutrition gardens
- Soup kitchen corners (nutritional education)



Lessons Learned

- There is marked improvement in the food security indicator performance in most sites
 - This can be attributed to improved documentation and awareness on need to screen
 - Training of HCWs and clients/patients
 - Availability of nutritional support systems
- In most facilities food security screening and alcohol assessment are conducted together due to the close link
- QI program can help improve national M&E systems

Patient Care Booklet (Nutritional part)



Conclusions

- Proper nutrition management interventions can: help PLHIV maintain adequate food and nutrient intake; and improve adherence to the regimen
- Therefore, nutrition assessment, counseling and education should be provided to all clients enrolled in HIV care at each and every clinic visit

Way forward

- Community projects aimed at tackling food security to be identified
- Improving referral systems for patients identified with food insecurity issues
- Roll out of a revised HIV patient care booklet which incorporates food security screening and other indicators

Acknowledgements

- MoHSS
- PEPFAR (CDC NAMIBIA)
- Global Fund
- HEALTHQUAL International
- All participating sites
- Consumers
- ITECH-NAMIBIA

Thank you





Using Performance Data to Set National Improvement Priorities: Kenya Country Presentation

Authors: John, Maureen, Mary, Abass, Christine, Agatha and Evelyn.

ACLN, Kampala – Uganda
26th– 30th March 2012



Country Profile

- Population – 41,070,34
- Pop. Growth Rate – 2.462%
- Birth Rate – 33.54 births/Woman
- Life expectancy at birth – 59.48 years
- TFR – 4.19 children born/Woman
- HIV Prev. Adult – 6.3%
- PLHIV – 1.5 M; on ART - 538,983
- ART sites – 1,200



Background of HIVQUAL



- Kenya has been implementing HIVQUAL model of quality improvement since 2009
- Started with 15 sites but has expanded to 35 sites as at end of 2011
- 22 performance measurement indicators covering adults, pediatrics, pregnant women and exposed infants
- Have had two rounds of data collection in 15 group one sites and one round for the rest (20 sites)



Background cont...



- Main challenges identified during round one data collection included:
 - Lack of register to track HIV exposed infants (HEI) and HIV infected pregnant women enrolled in care
 - Information on HEI was captured in the mothers file
 - Although sites had diaries for booking patients, there was no mechanism in place to document patients who actually turned up for their clinic appointment



Background cont...



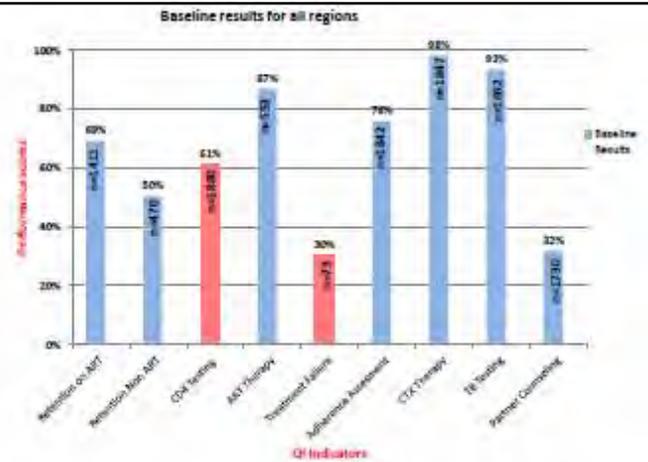
- Baseline data revealed low CD4 testing across all the sites
 - Lack of CD4 appointment system and a mechanism for tracking CD4 test results were identified as the main causes of the performance gap
- Some sites had difficulties identifying patients who may be failing on 1st line treatment and needed to be switched to 2nd line



Background cont...



- Round one data collection produced little information on exposed infants and pregnant women owing to challenges with documentation
- The results could therefore not be used at the national level; however, the experience revealed lack of a standardized medical record system across HIV clinics



Improvements in Medical Records Systems



Daily Activity Registers



- NASCOP introduced Daily Activity Registers (DAR) to document patients who attended clinic daily
- DAR has made it easy for clinic staff to know the number of active patients
- It is now possible to generate an accurate case list for data abstraction



HIV Exposed Infants Register and follow up cards



- In order to document follow up of HIV exposed infants (HEI) and determine the outcome of care, NASCOP introduced HIV exposed infants cohort registers and follow up cards
- HEI registers help clinic staff keep a record of all HIV exposed infants being followed up
- Follow up cards are used to document HIV care for HEI including HIV testing and growth monitoring
- Sites can now use HEI registers plus clinic follow up cards for data abstraction



Improving CD4 Testing



Improving CD4 Testing



- Changes that were introduced to improve CD4 testing included:
 - Appointment for patients due for CD4
 - Merging CD4 appointment dates with clinic dates
 - Tracking of CD4 testing by date and results
 - Introduction of provider reminders for patients who are due for CD4 testing



Improving CD4 Testing cont...



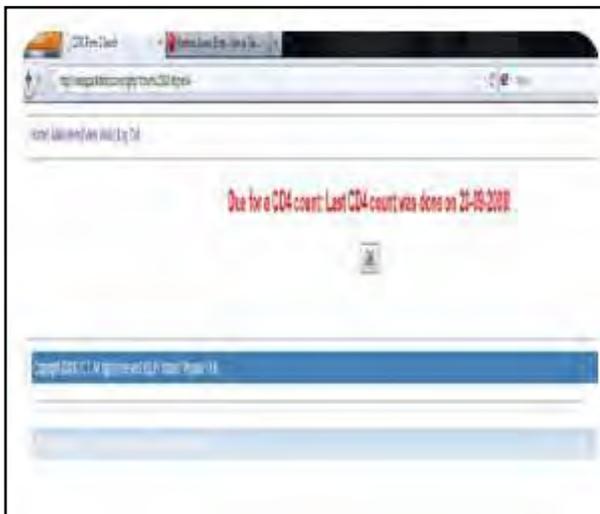
- Some of the changes that worked well for some sites have been standardized in all HIVQUAL implementing sites. These include:
 - having appointment system for patients who are due for CD4 testing
 - merging CD4 appointment dates with clinic dates
 - tracking of CD4 testing results by dates
- The same changes are being considered for national adaptation



Innovations for Improving CD4 Testing



Month	Day	Appointment	CD4 Test	Result
Jan	1			
Jan	2			
Jan	3			
Jan	4			
Jan	5			
Jan	6			
Jan	7			
Jan	8			
Jan	9			
Jan	10			
Jan	11			
Jan	12			
Jan	13			
Jan	14			
Jan	15			
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Jan	31			



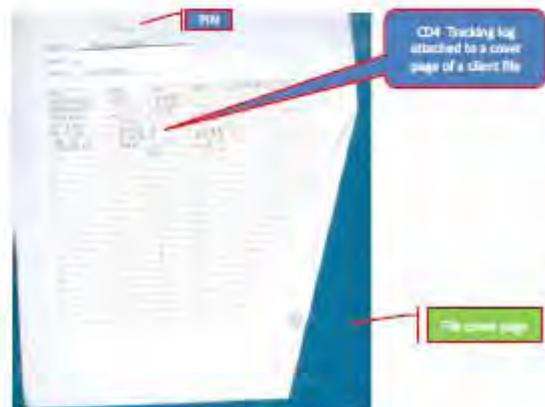
Improving Treatment Failure Detection



Treatment failure

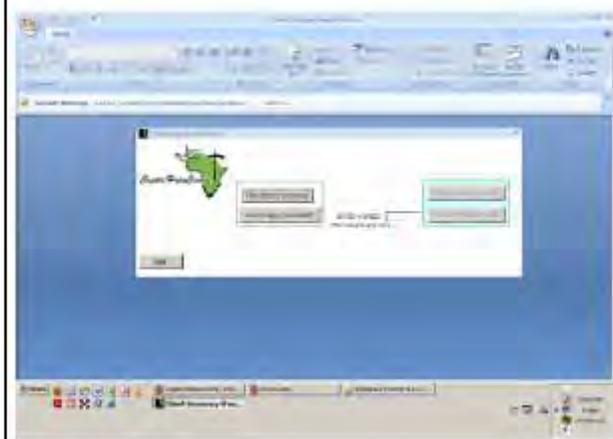


- Sites introduced mechanisms to help clinicians detect treatment failure early such as:
 - Tracking of CD4 results and body weight

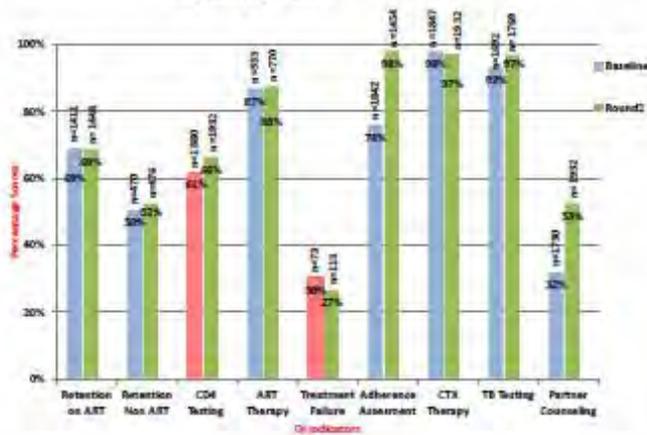


Treatment Failure cont...

- These changes have worked well in sites that picked on treatment failure as their QI project and have been standardized in all other HIVQUAL implementing sites
- The same changes are being considered for nationwide adaptation



All Regions Aggregate Results



Lessons Learnt



- Understanding clinic level systems through flow charting can help identify bottlenecks for quality improvement
- Simple changes in processes of care can result in improved quality of care
- Innovative strategies such as pop up messages in EMRs, yellow/red stickers for cases of interest help drive quality
- Team work and feedback at all levels is key to quality improvement – clinic, regional, national levels
- Quality improvement is feasible irrespective of the setting – paper based, EMRs, public, private facility, etc



Next steps



- Further scale up to other regions/counties
- Partner engagement to support quality program expansion
- Strengthen decentralized structures – regional coaches
- Upload HIVQUAL indicators onto different EMRs in the country to automate performance measurement
- Transition to HEALTHQUAL



Acknowledgement



1. MOH /NASCOP Kenya
2. CDC – Kenya
3. HEALTHQUAL Int.



HIV Quality Improvement Initiatives in Mozambique

HEALTHQUAL INTERNATIONAL: ACLN 2012
 Kampala, Uganda
 Dr. Musse Calu, MD
 Joseph Lara, MPH
 Dr. Isabel Pereira, MD MPH



HEALTHQUAL INTERNATIONAL: ACLN 2012

KEY HIV/AIDS INDICATORS

- HIV Prevalence (15-64)
 - 11.5%
- Estimated number of PLWHA
 - 1.4 Million
 - 396,330 Children (0-14)
 - 885,000 Women
 - 566,000 Men
- Urban prevalence significantly higher than rural prevalence
 - Urban 15.0%
 - Rural 8.2%

HIV Prevalence by Province

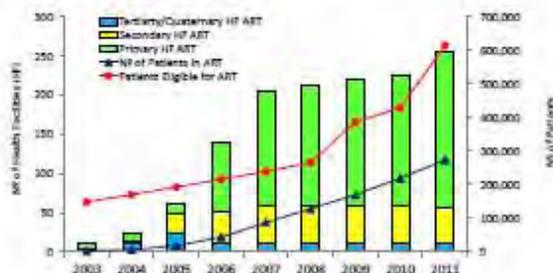


HIV Prevalence by Residence



HEALTHQUAL INTERNATIONAL: ACLN 2012

Rapid expansion of HIV/AIDS care and treatment services since 2003. Currently >270,000 eligible patients receiving ART at >260 MOH ART service delivery outlets



HEALTHQUAL INTERNATIONAL: ACLN 2012

Key Challenges to HIV/AIDS in Mozambique

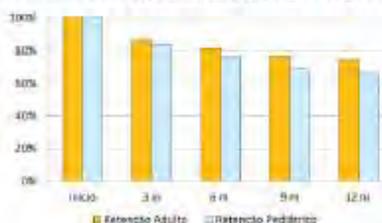
- High Risk Behavior
 - Multiple concurrent partnerships
 - Low rates of condom use
 - High mobility and migration among population
 - High rates of transactional sex
- Human Resource Shortage
 - 859 Medical Doctors (1 per 26,000 inhabitants)
 - 5,397 Nurses (1 per 4,000 inhabitants)
 - 2,461 Physicians Assistants (1 per 9,000 inhabitants)
- Inadequate Infrastructure
 - Shortage of laboratory equipment (CD4, biochemistry, PCR)
 - Continued reconstruction of HF network destroyed in Civil War
- Quality of HIV/AIDS Services
 - Missed opportunities to offer integrated package of services
 - High attrition among pre-ART and ART population



HEALTHQUAL INTERNATIONAL: ACLN 2012

Key Challenges to HIV/AIDS in Mozambique

- Loss to Follow-Up in pre-ART/ART Programs
 - 74% retention rate among ART Initiates at 12 months
 - Higher rates of LTFU found among pediatric and male ART population
 - Although no MOH system or study has examined pre-ART LTFU, attention among this population suspected to be very high



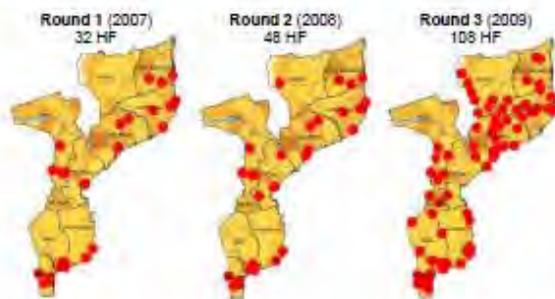
HEALTHQUAL INTERNATIONAL: ACLN 2012

History of HIVQUAL QI Strategy in Mozambique

- In order to assure the delivery of quality HIV/AIDS services and improve patient outcomes, the Mozambican MoH launched HIVQUAL QI strategy in October, 2006
- As conceived, HIVQUAL would:
 - Routinely define and collect QI indicators;
 - Analyze indicator performance and conduct root cause analysis at all levels of service delivery and program management
 - Operationalize QI plans designed and implemented primarily at the health facility level (with support from district, provincial and national level QI teams)
 - Compile data at the national level and use indicator results to define MoH priorities and to design new norms and interventions
- From 2007 to 2011, 3 HIVQUAL rounds conducted within a rapidly growing HIV/AIDS care and treatment program



Expansion of HIVQUAL QI Strategy in Mozambique



Approach to HIVQUAL implementation in Mozambique

- Organization of Data Collection and Analysis
 - Data collected at health facility by local staff (including clinicians and data clerks)
 - Data cleaning, analyses and report generation also conducted at HF level
 - Compilation of HF results conducted at the provincial level MoH offices
 - Compilation of HF and Provincial results conducted at central level MoH offices
 - Final reports validated and disseminated by the national STI-HIV/AIDS program
- Organization of Quality Improvement Activities
 - After data collection is completed, local staff identify priority indicators for improvement and conduct root cause analysis
 - Based on identified root causes, local staff generates and carries-out strategies and activities for quality improvement
 - Provincial meeting conducted among participating HIVQUAL HF's to discuss common challenges, best practices, and share experiences regarding Quality Improvement



Approach to HIVQUAL implementation in Mozambique

- Central-Level Role in QI Implementation
 - MoH STI-HIV/AIDS program responsible for data compilation and analysis and for identifying priority indicators for improvement
 - MoH presentation of HIVQUAL results and future priorities disseminated in national-level forums (conferences, national-level meetings)
 - Development of new strategies designed to address priority indicators and improve quality of services delivered



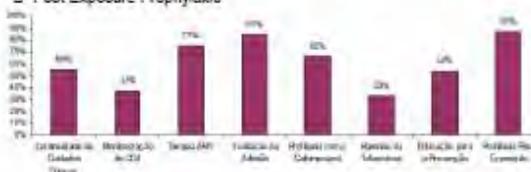
2010/2011 Reorganization of QI Structure within MoH

- Creation of a new "Humanization" Department within the National Directorate of Medical Assistance
- Former "ART Committee" management model eliminated in favor of a broader leadership model based on "Quality Management Committees"
- Quality Management Committees established at 4 Levels
 - National Quality Management Committee
 - Provincial Quality Management Committee
 - District Quality Management Committee
 - Health Facility Quality Management Committee
- MoH rebrands HIVQUAL as "CLINIQUAL" reflecting the desire to extend the QI strategy to other health programs such as pMTCT and Chronic Diseases



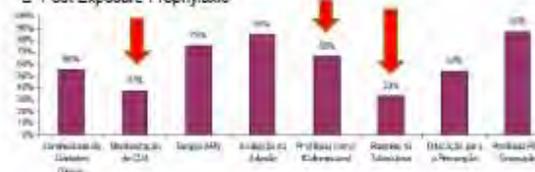
CLINIQUAL Results in Mozambique

- Primary Indicators Collected in Round 3
 - Clinical Consultation Follow-up
 - CD4 follow-up
 - Provision of ARV Therapy to Eligible Patients
 - Adherence Evaluation and Counseling
 - Provision of Cotrimoxazol Preventive Therapy
 - TB Screening
 - Education for Prevention of HIV Transmission
 - Post Exposure Prophylaxis



CLINIQUAL Results in Mozambique

- Primary Indicators Collected in Round 3
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 - Education for Prevention of HIV Transmission
 - Post Exposure Prophylaxis





HEALTHQUAL INTERNATIONAL: ACLN 2012

Use of Data at Central Level for Quality Improvement

- Example 1: Augmenting the CD4 Referral Network

Since the inception of HIV related QI in Mozambique in 2006, CD4 follow-up has always been one of the most preoccupying and under-performing indicators. However, as the greatest constraint has been lack of access to CD4 laboratory equipment, there have been difficulties in creating QI plans successful in addressing this issue. With results presented in Round 2 and 3, the Mozambique MoH began an aggressive plan to augment the CD4 laboratory referral network through the piloting and adoption of point of care CD4 technology (PIMA). Currently, Mozambique is in the process of distributing >100 PIMA machines with an additional order to be placed 2013.



HEALTHQUAL INTERNATIONAL: ACLN 2012

Use of Data at Central Level for Quality Improvement

- Example 2: Ensuring provision of CPT to eligible patients

Based on 2009 CLINIQUAL findings that only 66% of eligible adults in HIV Care and Treatment received CPT (Cotrimoxazol preventative treatment), a work group was formed in order to create a job aid instrument that clearly diagrams the CPT eligibility decision making steps. This tool has been rolled-out to all consultation rooms in 261 ART sites national-wide. Provincial and National level CLINIQUAL meetings after Round 3 also provided qualitative information suggesting that low CPT provision rates were due to lack of documentation in patient charts. This finding led to new M&E tools (currently being rolled out) that facilitate documentation of CPT provision.



HEALTHQUAL INTERNATIONAL: ACLN 2012

Use of Data at Central Level for Quality Improvement

- Example 3: Creating a Culture of QI in all MoH Programs

Based on improvement witnessed during the Quality Improvement cycle from 2007 – 2011, the Mozambican MoH extended CLINIQUAL beyond HIV Care and Treatment services applying the same methodologies and processes to the national pMTCT program. Further demonstrating the Mozambican commitment to CLINIQUAL-based QI strategies. In 2011, the Mozambican MoH created a new department of Quality Improvement and Humanization of Services within the National Medical Assistance Directorate. The creation of this new department effectively extended QI activities beyond HIV/AIDS, moving for the first time into other service areas such as infection control, MCH and laboratory services.



HEALTHQUAL INTERNATIONAL: ACLN 2012

The Future of QI in Mozambique

- Round 4 CLINIQUAL activities currently in final stage of being completed
 - 120 HF participating
 - Both Adult and Child performance Indicator reporting and QI interventions scheduled
 - Extension of CLINIQUAL methodology to pMTCT program
- Harmonization of partner/government QI approaches
 - MoH, USG and PEPFAR partners currently in the process of finalizing newly operationalized QI strategy that will create one unified approach
 - Strategy will link clinical mentoring program and routine supervision activities with QI implementation



HEALTHQUAL INTERNATIONAL: ACLN 2012

Challenges of QI in Mozambique

- High levels of staff turn-over
- Scaling QI within a growing HIV/AIDS care and treatment/pMTCT network
- Translating performance measurements into specific QI activities and approaches
- Creation of QI culture among Mozambican Ministry of Health staff
- Harmonization of QI approaches and performance measurement definitions among stakeholders



HEALTHQUAL INTERNATIONAL: ACLN 2012

OBRIGADO!
KANIMAMBO!
THANK YOU!



EMPOWERING MOH & HEALTH FACILITY STAFF TO IMPROVE & SUSTAIN HIV CLINICAL CARE QUALITY IN RWANDA

Alice Umuhongerwa, (BSc) ,Endris Mohammed Seid, (MD, MPH)
RBC/IHDPC/HIV Division

All Country Learning Network, Kampala, Uganda

March 27, 2012

Outline

- Country profile
- Track 1.0 transition in Rwanda
- RBC/IHDPC/HIV division QI program overview
- QI program strategies & implementation
- Selected results
- Conclusions
- Recommendations & Lessons Learned

Rwanda at a Glance

- Total Population: approx. 11 million
- HIV Prevalence: 3% (2010 DHS)
- Total on ART: 100,656 (> 94% of those in need)
- Total health facilities: 510
 - 412 PMTCT sites
 - 448 VCT sites
 - 396 ART sites



Track 1.0 Transition in Rwanda

- CDC-Rwanda began transitioning financial and technical responsibilities for HIV clinical services at 76 Health Facilities from international NGOs to MoH-Rwanda in 2010
 - All transitioned by February 2012
- Financial and clinical performance of transitioned sites monitored every 6 months
- MOH-Rwanda and HEALTHQUAL developed site-level QI program in March 2011 to help maintain the quality of clinical care

RBC/IHDPC/HIV Division QI Program Overview

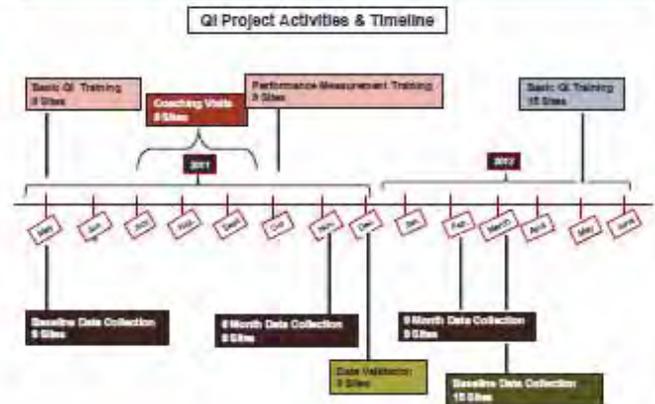
- Goals:
 - Improve and sustain quality of HIV/AIDS clinical services at health centers and district hospitals.
 - Build national capacity in quality management
 - Integrate QI in the existing clinical mentorship system
- QI team
 - Coordinates, monitors implementation
 - Selects sites for inclusion based on transition monitoring data & priorities of MoH
- Phased approach to implementation
 - 9 sites in first phase, 15 more to be added in May 2012

Program Strategies

- Basic QI & performance measurement training
- Collection of clinical performance data
- Validation of clinical performance data collected by site level staff
- Site-level prioritization, gap analysis & changes to improve care
- Coaching Visits
- Peer learning meetings

Coaching visits

- Onsite training to site level QI team members not trained during the offsite training
- Monthly & quarterly visits to facilitate implementation of QI activities through assessment of implementation status of QI projects
- Quarterly data validation exercises to ensure completeness & correctness of the report & support site utilization of performance data



Selected QI Clinical Indicators

- % infants born to HIV INFECTED mothers who are tested for HIV using DNA PCR at 6-8 weeks
- % HIV INFECTED pregnant women that receive ARV prophylaxis
- % lost to follow ups among patients in Pre-ART care who are enrolled into care 4-15 months prior to assessment period
- % ART patients still on treatment 12 months after initiation
- % patients on ART who receive CD4 control 6 months after being initiated on ART
- % patients who received ARVs for 12 out of 12 months

Examples of Site level Identified Gaps

- Appointment system for CD4 control, pharmacy pick up & clinical follow up not harmonized.
 - Patients may be given two or three appointments in the same month
- Provider & patient appointment reminder system inefficient
- Patient tracing is not done immediately
 - Almost one month after the patient misses her/his appointment
- Waiting time in some clinics is long
- Patient- level service satisfaction is not conducted

Examples of QI Interventions

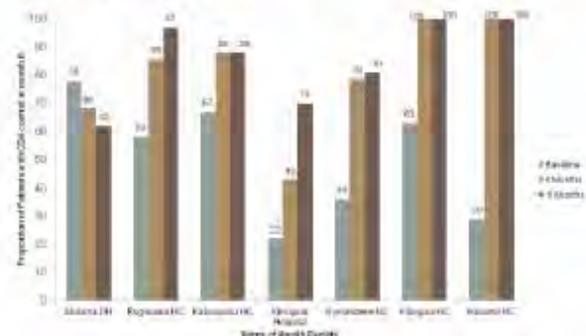
Site Level:

- Waiting time is reduced
- Patient with missed appointments called and/or visited 2 days after the date of appointment
- Solicited feedback from patients using suggestion boxes, FGDs & simple questionnaires
- Appointment system for CD4 control, clinical follow up and pharmacy harmonized

National Level:

- QI to be integrated in clinical mentorship guideline & program (process underway)

% ART Patients Received CD4 Control 6 months after ART Initiation



Conclusions

- QI program improves country capacity & ownership by supporting MOH staff & health workers to incorporate performance data, patient feedback and a system approach to improve quality of care
- The 6 month & 9 month follow up data show improved results on CD4 control indicator

Recommendations and Lessons Learned

- Sites need frequent follow-up & continued support to accelerate the implementation of QI programs
- Improvement goals can be achieved if sites are given the necessary technical support & time to implement
- Leadership is a key component to support site-level program ownership
- Patient feedback enhances improvement effort
- MoH-Rwanda
 - Scale-up QI to additional facilities
 - Develop district level pool of coaches, decentralization of program
 - Integrate QI into the existing clinical mentorship program – implementation of guideline

Acknowledgements

- MoH Rwanda
- RBC/HDPC/HIV Division
- HQ-I
- CDC-Rwanda
- The pilot sites
- ICAP
- IHV/UMB

Thank You
Murakoze
Merci



Thai National ART Program and Utilization for HIV/AIDS Program

HEALTHQUAL ACN III
 25-31 March, Kampala, Uganda

Sorakij Bhakeecheep, MD
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 National Health Security Office,
 THAILAND.

Fund management of HIV/AIDS and TB
 National Health Security Office

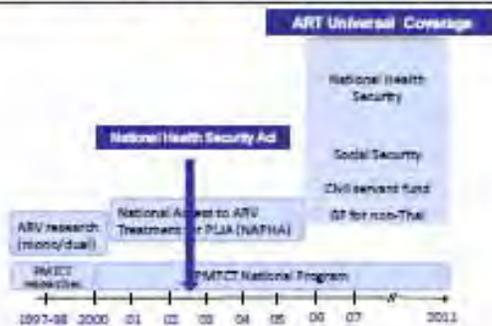


Topics

1. Background: Thailand national ART program and the existing monitoring system
2. Overview of national ART Information System
3. Utilization of national ART Information System for program planning and improvement
4. Integration of national ART Information System and HIVQUAL system



ART Program, Thailand



Number of PWHA Currently Receiving Antiretroviral Treatment (Exclude dead & drop out)



Data source: UNDASS and Health Sector response report



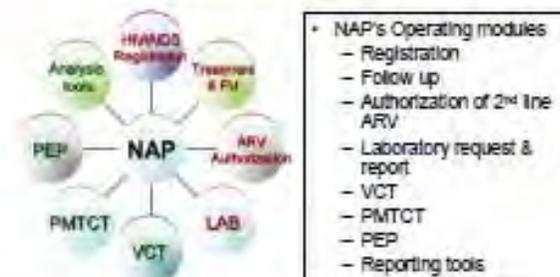
Overview of National ART Information System



Fund management of HIV/AIDS and TB
 National Health Security Office

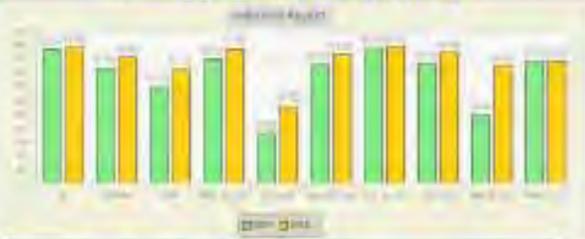


Module Function



Fund management of HIV/AIDS and TB
 National Health Security Office

HIVQUAL-T Indicators: Optional Co-morbidity Screening



2011 Data from 329 Hospitals

Case list	14,146	New Case	11,248
Sample	14,141	Sample_New	8,936

Fund management of HIV/AIDS and TB
National Health Security Office

HIVQUAL-T Indicators: Optional Health Promotion



2011 Data from 329 Hospitals

Case list	14,146	New Case	11,248
Sample	14,141	Sample_New	8,936

Fund management of HIV/AIDS and TB
National Health Security Office

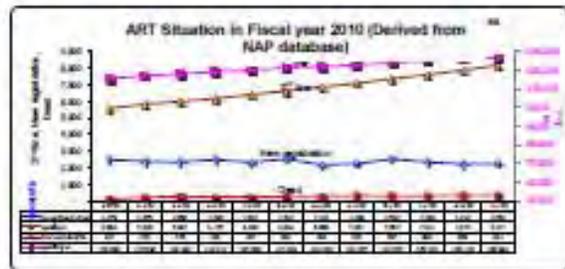


Example of Utilization of National ART Information System

Fund management of HIV/AIDS and TB
National Health Security Office



Monitoring ART registration

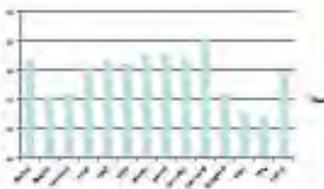


Fund management of HIV/AIDS and TB
National Health Security Office



Monitoring Viral load coverage

Region	Region Pop (2010)	People on ART	%
Region 1	25,778	14,990	58.2
Region 2	3,281	3,273	75.4
Region 3	4,259	3,255	76.4
Region 4	6,811	7,729	80.9
Region 5	13,488	8,520	63.3
Region 6	15,641	11,249	71.9
Region 7	6,381	7,136	82.0
Region 8	8,734	4,890	56.0
Region 9	8,822	7,245	81.1
Region 10	4,229	3,480	82.3
Region 11	9,238	7,114	76.9
Region 12	7,389	5,687	76.9
Region 13	15,817	7,486	47.3
Total	124,787	77,287	61.6

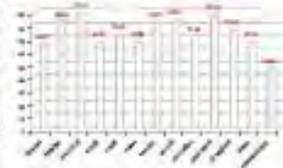


Note: People missed with the quarterly steps to be tested will be shown in orange. People with viral load coverage will be shown in green. People with viral load coverage will be shown in blue.

Fund management of HIV/AIDS and TB
National Health Security Office

Monitoring Drug resistance services

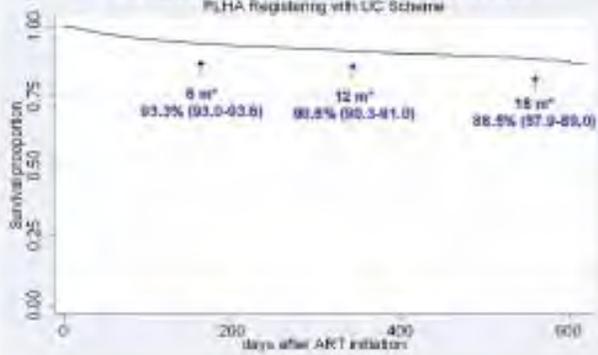
Region	VL>= 2,000	DR	Percent
Region 1	19	83	43.7
Region 2	10	81	81.0
Region 3	16	84	81.3
Region 4	15	83	83.7
Region 5	18	85	75.0
Region 6	47	47	47.0
Region 7	40	81	82.7
Region 8	44	90	67.7
Region 9	18	80	72.2
Region 10	14	87	85.7
Region 11	18	85	77.8
Region 12	15	84	81.7
Region 13	44	111	40.5
Total	328	1249	71.1



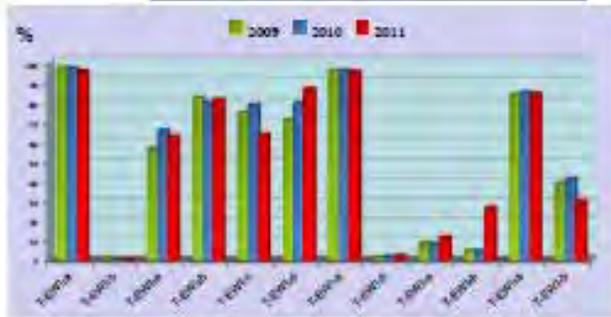
Fund management of HIV/AIDS and TB
National Health Security Office

Monitoring ART Outcome

Kaplan-Meier Estimated Survival Proportion
PzHA Registering with UC Scheme

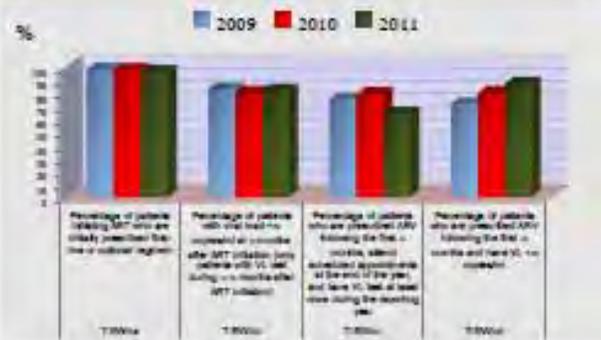


Generate Early Warning Indicators



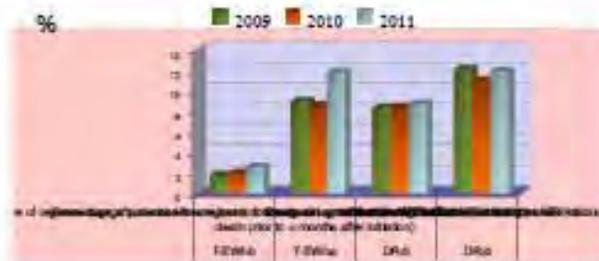
First management of HIV/AIDS and TB
National Health Security Office

Generate Early Warning Indicators



First management of HIV/AIDS and TB
National Health Security Office

Generate Early Warning Indicators



First management of HIV/AIDS and TB
National Health Security Office

Case Monitoring

Follow up report on patient treatment outcomes



National Health Security Office

Awareness of data

Awareness of data

- Competition results
- Work burden of providers
- Respect to patients

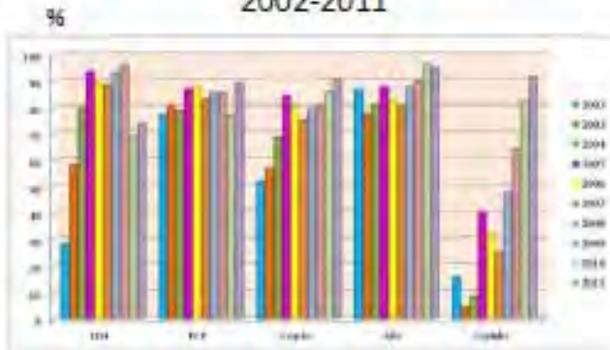
Fund management of HIV/AIDS and TB
National Health Security Office



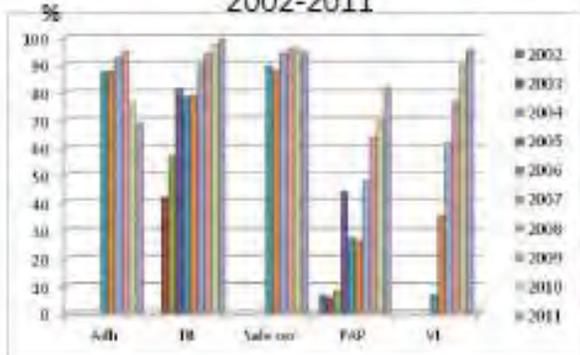
HIVQUAL measurement data from 2002-2011

Yr	No. Hospital	Caselist	Sample
2006	233	48,879	10,916
2007	651	93,639	35,448
2008	658	118,775	41,673
2009	701	138,844	48,624
2010	656	117,640	42,574
2011	529	104,186	53,071

HIVQUAL measurement data from 2002-2011



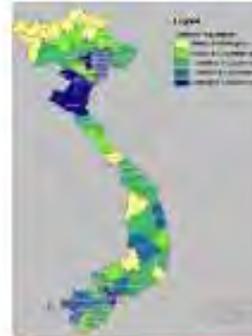
HIVQUAL measurement data from 2002-2011



HIVQUAL in Vietnam



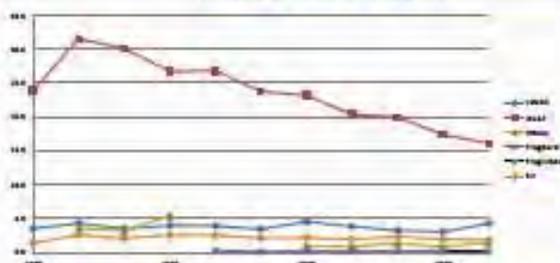
Country profile



- Population: ~ 87 million
- 63 provinces
 - 712 districts
 - >11,000 communes
- Lower middle-income status
- Strong central authority
- Concentrated epidemic; high geographic & population variation
- Est. ~250,000 infected; 16-38,000 new infections annually

HIVQUAL Care and Treatment Program

HIV Prevalence Among Various Groups 1994-2010



- Injection drug use is the dominant route of HIV transmission
- HIV prevalence in the general population is less than 0.5%

Source: Ministry of Health, Vietnam: National Central Surveillance Report 2010

HIVQUAL Care and Treatment Program

Care and Treatment Situation

- 314 outpatient clinics (OPCs) in 63 provinces
- 61,763 patients on active ART by Jan 2012
- QI was implemented by individual INGOs but lacked national coordination and leadership
- Recent National AIDS program and PEPFAR strategies emphasized quality improvement for C&T services
- PEPFAR/CDC introduced HIVQUAL to MOH in 2010



HIVQUAL Care and Treatment Program

HIVQUAL Vietnam Leadership

- MOH/Vietnam AIDS Administration (VAAC) leadership:
 - Unified various QI efforts in the country and formed national TWG
 - Assigned national level QI coordinator and PM officer as focal points for QI
 - Set up and led regular TWG meetings on HIVQUAL with participation of different partners
 - Collaborate with PEPFAR/CDC in providing guidelines and technical assistance for initiation of HIVQUAL in Vietnam

HIVQUAL Care and Treatment Program

HIVQUAL Vietnam Organization

- HIVQUAL TWG consists of stakeholders who come from 5 international organizations in addition to 4 government agencies/institutes.
 - VAAC (MOH), HCMC PAC (Provincial AIDS Committee), Hanoi School of Public Health (HSPH), Pasteur Institute (PI)
 - CDC, Global Fund (GF), WHO, FHI360, HAIVN
- Different organizations work together to achieve national goals of QI in an integrated national program that supports MOH.
 - Regular TWG meetings on selected topics, including indicator development
 - Group work to develop national QI work-plan, review progress and implement planned QI activities
 - Identify issues that need to be addressed and follow-up activities
- National subgroups of HIVQUAL TWG formed for data collection and curricula development

HIVQUAL Care and Treatment Program

HIVQUAL Vietnam Pilot Phase

- 11 clinics selected in 5 provinces (3 northern and 2 southern provinces) and supported by PEPFAR and Global Fund
- Pilot phase from April to September 2012
- Start with 10 clinical indicators



HIV/AIDS Care and Treatment Program

Performance Measurement (PM)

- Ten core QI indicators defined by care and treatment TWG and OPC staff
 - 3 pre-ART indicators, 4 ART indicators and 3 indicators for both
- Data abstraction tool developed
- MS Access application developed to:
 - Help with sampling
 - Document sample and sample size
 - Enter data
 - Standardize reporting for 10 core indicators
- Site-Level training in data collection and PM. TWG provides immediate on-site TA and feedback to sites, integrating data quality into the coaching process
- Data are used for site level quality improvement priority setting and planning

HIV/AIDS Care and Treatment Program

HIVQUAL software



HIV/AIDS Care and Treatment Program

Data Quality Issues and Solutions: Integrating Data Quality into Routine Performance Measurement

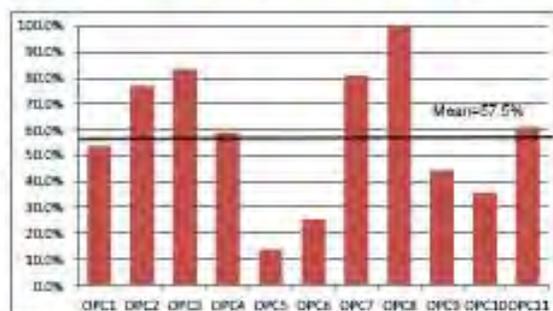
- **Sampling requires a list of registered "eligible" patients in the DPC**
 - DPC patient lists are in different formats require modification for standardization
 - Standardization allows easy updating of patient list for next round
- **Information feedback on routine data management and reports → data quality assurance (DQA) process**
 - Patient records management: missing patient records and differences in how records are completed
 - Data management minutes: recording of data quality issues for discussion with DPC and PAC staff
 - Data verification: Periodic cross-checking of report on selected indicators with abstraction forms

HIV/AIDS Care and Treatment Program

Results of 10 indicators: ART INITIATION

Indicators	n	Results	
		Mean	Percentile 25%-75%
Proportion of new patients registered for treatment during the assessment period were tested for CD4 for the first time within 15 days	227	65.7%	50%-88.8%
Proportion of qualified-ARV patients have not been initiated for ARV in last 6 months	250	11.4%	2.8%-18.2%
Proportion of patients started on ART within 30 days of clinical eligibility	259	57.5%	40%-78.8%
CD4 counts of patients at initiation of the ARV treatment	235		
CD4 <100	235	41.0%	29.2%-57.3%
CD4 100- <250	235	30.9%	
CD4 250- <350	235	20.8%	

Percent of patients started on ART within 30 days of clinical eligibility



HIV/AIDS Care and Treatment Program

Results of 10 indicators (cont')

Indicators	Results		
	n	Mean	Percentile 25%-75%
Proportion of patients not receiving the ARV came for regular medical re-checking	300	75.6%	67.9%-85.1%
Proportion of ARV patients came back the OPC for the medical visit as arranged at the last appointment	1170	94.8%	96.4%-99.5%
Proportion of ARV patients who are assessed for medication compliance in the last medical visit	1170	93.7%	91.0%-97.8%
Proportion of qualified patients were prescribed with CTX or DAPSONE at the last medical visit	685	52.4%	38.1%-66.0%
Proportion of patients screened for TB in the last medical visit	1470	50.9%	42.9%-67.5%
Proportion of patients are tested for CD4 at least once in last 6 months	1624	76.7%	75.7%-84.1%



HSPH & PI roles in HIVQUAL Vietnam

- Vietnamese government institutions trained in Vietnam Management and Leadership Training Program (VMLTP) and in QI (TQM), with management focus, since 2005
- **Current role of HSPH and PI:**
 - In 2011, participated in national HIVQUAL TWG to jointly develop curriculum and provide training in QI
 - In 2012, involved as members in the national coaching team
 - Disseminate and share experiences and outcomes of the HIVQUAL program
- **Long-term sustainability plan for HSPH and PI:**
 - Assume responsibility from international donors in providing QI coaching for provincial and facility levels
 - Integrate HIVQUAL into VMLTP curricula of HSPH for post-graduate students
 - Engage VMLTP alumni and trainers as coaches in the HIVQUAL training

HIV/AIDS Care and Treatment Program



Quality Improvement

- **QI Subgroup of national HIVQUAL TWG:**
 - Members: MOH/VAAC, CDC, FHI360, HAIVN and HSPH
 - Develop training curricula and coaching plan
- **QI training:**
 - Each clinic selects two indicators
 - Analyze causes of variation
 - Introduction of QM Infrastructure and reporting system
- **QI coaching:**
 - Assists provinces and clinics to develop facility work-plan to improve selected indicators
 - Provincial HIVQUAL plan covers QM, QI and PM

HIV/AIDS Care and Treatment Program



Quality Improvement: Coaching Plan

- To be implemented over next 2-3 years
- Local consultants and experts from international organizations who participate in national HIVQUAL TWG
- External TA from HEALTHQUAL and others
- Hanoi School of Public Health (HSPH) and Pasteur Institute (PI) work with national TWG to build capacity of provincial coaches

HIV/AIDS Care and Treatment Program



Peer Learning Plan

- 1. National Level**
 - Web-based network:
 - A portal for PM database and QI projects
 - Regularly updated every 6 months
 - A forum for QI implementers to discuss projects
 - QI bulletin postings
 - Annual peer-learning workshop
- 2. Provincial Level**
 - Quarterly QI meeting
 - Site visit exchange to well performing provinces
 - Storyboard, newsletter, bulletin,...

HIV/AIDS Care and Treatment Program

Technical working group meeting



MOH/VAAC meeting on HIVQUAL

Training in HIVQUAL for provinces



Meeting with district clinic

Thank you for your attention!





Ministry of Health, Zambia

QI Program in Zambia

Dr. Jubra Muyanga, QA/QI Medical Officer



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Presentation Flow

- Mission Statement
- QI Achievements
- Focus for 2012
- Data Flow Systems
- Epi Profile for Zambia's North Western Province

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Zambia's MOH Mission

"To provide equity of access to cost-effective, quality health care as close to the family as possible."

To achieve this, Zambia needs to embrace key elements of healthcare delivery, such as strong health systems and structures, and availability of necessary inputs.

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Zambia Country Profile

Area: 753 614 km²
Capital: Lusaka
Popn: 13million
Popn growth: 1.35
HIV Prev.: 14.3
IMR: 70
5 Mortality:110
MMR: 591



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QI Achievements

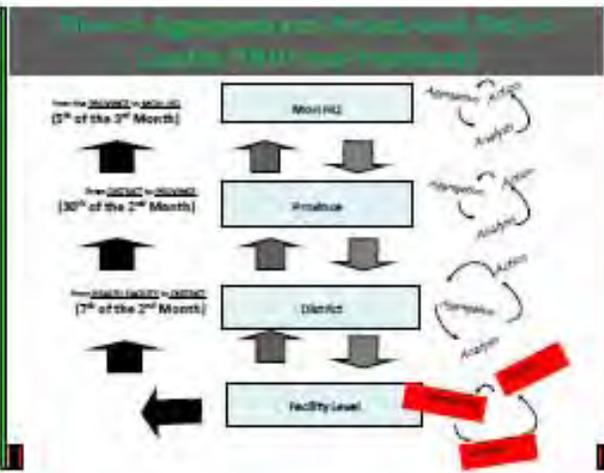
- 2005 Introduction of Performance Improvement Approach (PIA)
- Developed PIA training manuals
- Re-established QA/QI Unit at MOH
- Established National TWG led by MOH
- Developed QI Guidelines for Health Care Providers in Zambia

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Focus for 2012

- Roll out of PIA trainings nationally
- Disseminate QI Guidelines
- Incorporate QI into pre-service training curriculum
- Strengthen data utilization for QI of programs
- Monitor and evaluate QI activities
- Conduct Operations Research

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Epidemiology for Data Users (EDU)

- o This is a training program to train NAC, CSO and MOH staff to improve data quality, and to summarize and use routinely collected data for local decision-making
- o Since 2011, 89 provincial staff were trained, who then trained 175 district staff
- o 250 more staff will be trained in 2012, covering each district and province in the country
- o The Epidemiologic profile is the capstone for this training

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What is an Epidemiologic Profile?

- o A document that uses epidemiologic principles to characterize the status of a disease in a population and the services available to address it.
- o Involves extraction and summarization of data from key data sources for a defined:
 - Geographic region
 - Period of time
- o Provides analysis and interpretation of these data in text and figures
- o Produces a written report that concisely describes findings and provides recommendations
- o Helps to identify priority needs and emerging problems

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Data Sources Contributing to Epi. Profile



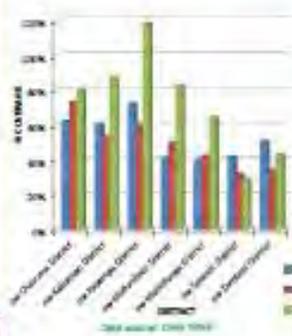
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Example of EPI Profile - North Western Province

- o Located 578 kms from Lusaka
- o Population = 837,055 (CSO, 2000)
- o 7 Districts
- o 154 Health Institutions (Dec., 2010)
- o Mineral rich: Copper, Uranium, Gold
- o Subsistence: Agric. & animal husbandry
- o Vast forests, heavy rains and rich soils

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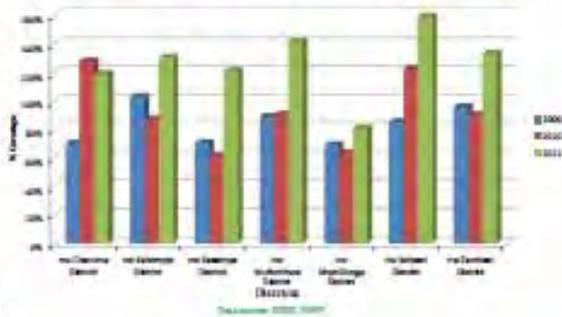
Institutional Deliveries 2009 - 2011



- o Highest district coverage= 73% (Chavuma 2010)
- o Lowest coverage= 32% (Solwezi 2010)
- o 2011 figures showed increased coverage in all districts except Solwezi District

Fully Immunized < 1yr 2009 – 2011

Coverage of Fully Immunized Children < 1 year 2009 – 2011



Conclusion

By integration of EDU, HMIS roll-up and QI interventions, Zambia will move towards building a comprehensive program to improve quality and use data for decision making.



“Perfect care may be a long way off, but much better care is within our grasp.”

HEALTHQUAL: A Quality Learning Program (2009 – 2011) Zambia Update

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Acknowledgements

- o **HEALTHQUAL International Team**
Dr. Bruce Agins
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- o **MOH QI Team**
Racheal Lungwebungu
- o **CDC Zambia**
Dr. Jonas Mwale
Dr. Melissa Marx
Dr. Bridget Mugisa

HEALTHQUAL: A Quality Learning Program (2009 – 2011) Zambia Update

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Presentation Outline

Using Early Warning Indicators to Improve HIV care & treatment services

Josephine, Joseph, Fabian, Lydia, John

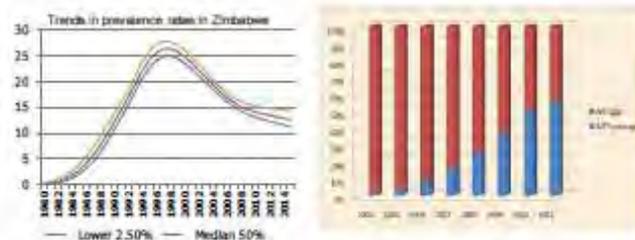
Kampala, Uganda

March, 2012

- Background
- National QA/QI perspective
- EWI protocol
- EWI survey results
- Challenges
- Next steps

Background

- By the end of 2009, about 1.1m Zimbabweans were living with HIV and AIDS (2009 HIV Estimates)
- Estimated prevalence of HIV is 13.6% (2009)
- 1,090 patients dying weekly due to AIDS
- A total of 411,000 patients on treatment (69%)
- 590 sites accredited as ART sites to date



QUALITY ASSURANCE: NATIONAL PERSPECTIVE

- Vision: highest possible level of health and quality of life for all citizens of Zimbabwe.
- Mission: provide..... equitable, accessible, and acceptable quality health services
- Established a department of Quality Assurance / Improvement (QA/QI) to coordinate the development and monitor performance of quality management systems.
- The context of QA / QI in the National Health strategy- Equity and Quality of the Health Services

Introduction to HIV DR Monitoring

- HIVDR Prevention and Assessment Strategy
 - 2008 – 2012 Strategic plan with all the elements
- Objectives of the strategy
 - To assess HIVDR emergence and transmission (HIV DR Monitoring Survey)
 - To assess ART program practices related to HIVDR prevention (EWI Survey)
 - To use results to minimize the emergence and transmission of HIVDR (HIV DR Threshold survey)

Introduction to HIVDR Early Warning Indicators

- Specific ART programme factors are known to be associated with the emergence of HIV drug resistance (HIVDR) during antiretroviral treatment (ART)
- Evidence-based actions to minimize preventable HIVDR requires monitoring of indicators at ART sites
- WHO recommends the monitoring of a feasible set of HIVDR "early warning indicators" (EWI) from all ART sites, or a nationally representative subset of sites



Goals for EWI survey

- Assess the quality of Zimbabwe ART program
- To generate recommendations on how ART program design might be strengthened so that the survival and quality of life of HIV-infected adults receiving ART can be improved.
- To assess the extent to which the Zimbabwe ART program is functioning to optimize prevention of HIVDR

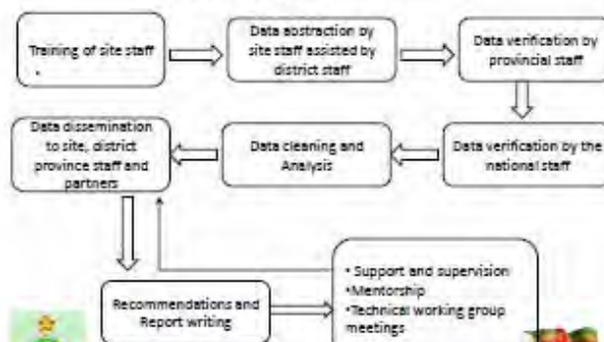


Design and Data Sources

- Retrospective cohort analysis of treatment outcomes
- Patient charts reviewed at selected health facilities,
- Clinic registers and logbooks,
- Interviews with senior health care workers at each site.



The Approach....



List of early warning indicators (EWI)

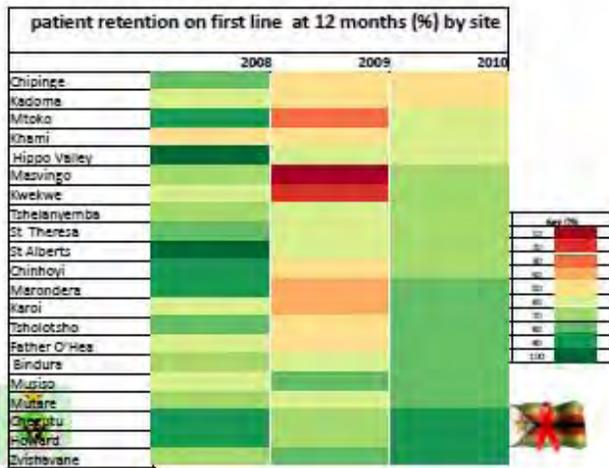
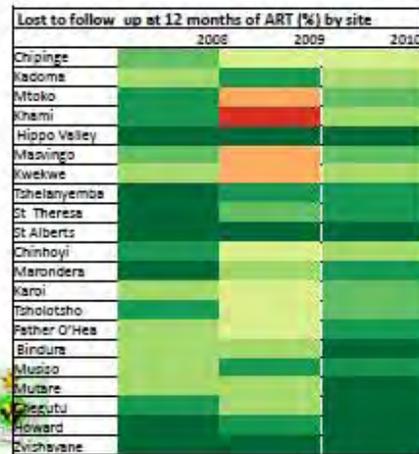
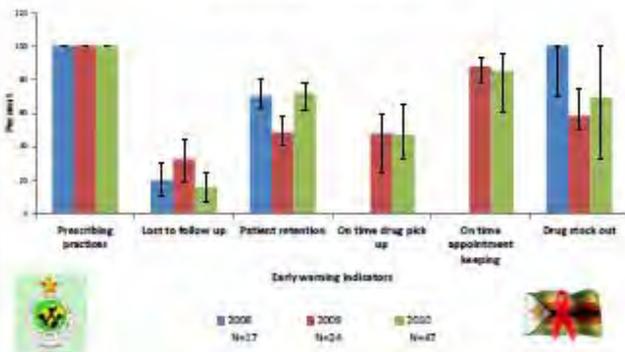
1. Prescribing practices
2. Lost to follow-up during the first 12 months of ART
3. Patient retention on first-line ART at 12 months
4. On-time ARV Drug pick up
5. ART appointment-keeping
6. ARV Drug Supply Continuity



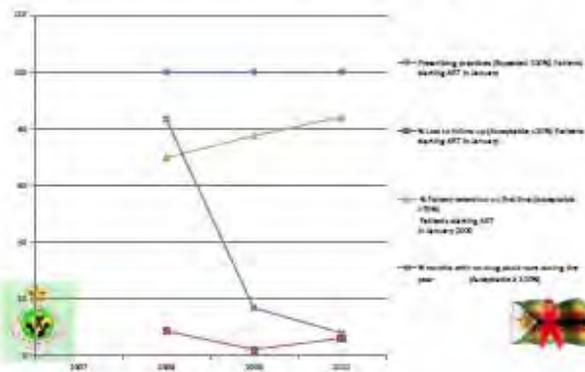
EWI Trends 2007-2010

Early Warning Indicator	EWI target for all sites	No. of sites that meet EWI target % of sites that meet target			
		2007 (N=17), %	2008 (N=40), %	2009 (N=24), %	2010 (N=47), %
EWI 1a	100%	63	92.5	96	97.9
EWI 2a	≤ 20%	70	52.5	33.3	61.7
EWI 3a	≥ 70%	53	35	45.8	55.3
EWI 4a	≥ 90%	NC	NC	0.0 (n=21)	4.7 (n=43)
EWI 5a	≥ 80%	NC	NC	60.0 (n=10)	61.4 (n=44)
EWI 6	100%	NC	70.0	22.2 (n=18)	37.5 (n=40)

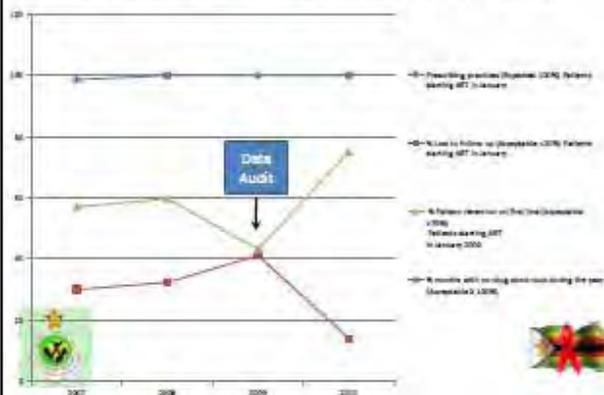
Early Warning Indicators Trends in Median Rates



Zvishavane District Hospital



Father O'Hea Mission Hospital



Example: Using Performance Data for Decision Making: Zimbabwe

Initial analysis of EWI data 2006/2007/2008

Indicator	Achieved Results (Mean and Range) %
Lost to follow up at 12 months	20 (0-38.6)
Retention on first line at 12 months	70 (47.3-93)
Months of Drug stock outs	86 (33.3-100)
Prescribing Practices	100



Decision: HIVDR Monitoring

- HIVDR prevention and assessment strategy
 - 2008-2012 Strategic plan developed
- Establishment of:
 - 3 pilot HIVDR monitoring survey sites
 - 12 HIVDR threshold survey sentinel sites
- Expansion of EWI sites
 - Increase of EWI indicators from 4 to 6



Preliminary results of HIVDR Survey

- 1166 HIV-naïve patients enrolled in the HIV Drug resistance monitoring protocol
- in Zimbabwe as of October 2009 to March 2010, of whom
- 865 (67.9%) were females. Mean age was 38.5 (SD±10.5) years.
- A HIVDR mutation was present in 74 (6.3%, 95% confidence interval (CI): 5.0-7.9) samples.
- HIVDR per drug class was 1.3% (CI: 0.7-2.1) for NRTI, 4.8% (CI: 3.6-6.1) for NNRTI, and 0.9% (CI: 0.4-1.6) for PI.
- Four samples had multiclass resistance to NRTI and NNRTI.
- The most common drug resistance mutations were K103N (2.5% [24/1166]), Y181C (1.2% [14/1166]), V106A/M (0.4% [5/1166]), K219E/N (0.3 [4/1166] and K101E (0.3 [4/1166]).



Decision: Viral load monitoring for patients on ART

- National recommendation: viral load monitoring for ART patients
- Decision to use National AIDS Trust Fund to procurement viral load machines
- 5 Central hospitals chosen as initial sites
- Plans to expand the service to provincial hospitals



HIVDR EWI Challenges

- Shortage of human resources and skills resulting in the need for continued training
- Poor record keeping at site level
 - M & E system is paper based
 - A number of tools are being used to track the same patient
- Poor quality (completeness, timeliness) of reports



The Future.....

- Increase the number of sites
 - Number of sites increased to 150 in 2012
 - Capacitate health information department at site, district and provincial level
- Site level capacity development through training, mentorship and support
- Aim is to integrate EWI into routine M & E system and implement at all ART sites





IMPACT OF HIVQUAL ACTIVITIES IN THE HAITIAN HEALTH SYSTEM

ACLN-KAMPALA 2012

Dr GABRIEL THIMOthe, MPH
 GENERAL DIRECTOR MOH



SUMMARY

- ▶ BACKGROUND
- ▶ THE M&E SYSTEM
- ▶ QI ACTIVITIES
 - ▶ HIVQUAL REPORT
 - ▶ COACHING ACTIVITIES
- ▶ OVERALL HEALTH SYSTEM DRIVEN BY HIVQUAL

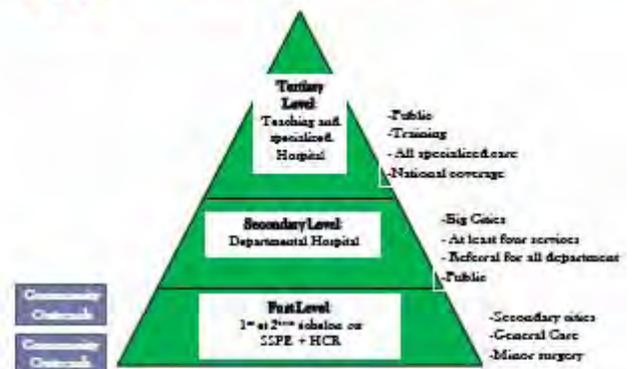
BACKGROUND

HAITI

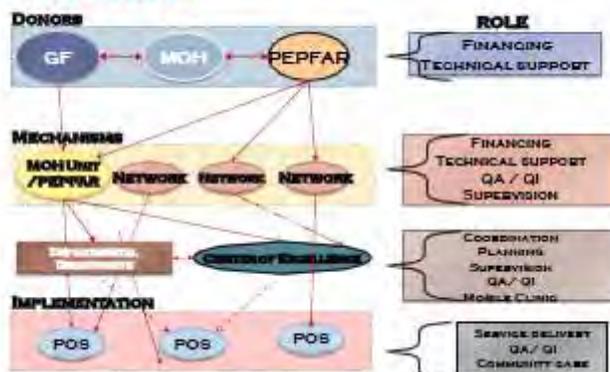
- ▶ Caribbean isle
- ▶ Area : 27.000 km²
- ▶ Population: 10.000.000
- ▶ Health facilities : 900
- ▶ HIV Prevalence : 2.2%
- ▶ PLWHA : 180.000
 (M: 40%, W: 60%)



HEALTH CARE DELIVERY SYSTEM IN HAITI



MANAGEMENT MODEL OF THE PROGRAM



M&E TOOLS FOR HIV PROGRAM

- ▶ Early in the program (2004-2005) we decided to build our M&E system on technology
- ▶ Two strong web-based electronic system financed by PEPFAR:
 - ▶ **MESI:** Monitoring Evaluation and Surveillance interface
 - ▶ **EMR:** Electronic Medical record

SNAPSHOT ON MESI AND EMR



- ▶ **MESI** www.mesi.ht: National M&E System. It contains aggregated report on HIV, TB, Family Planning, Epi Surveillance
- ▶ **iSante**: Electronic Health Record. It contains longitudinal data about all care received by patient in health facilities.

LIMIT OF THOSE SYSTEMS BEFORE HIVQUAL

- ▶ Mainly use for collecting and/or submitting data to donors
- ▶ Quality and completeness of these data were medium.
- ▶ The EMR was limited to HIV
- ▶ Lack of use of the data collected for decision making

HIVQUAL HAÏTI HISTORY



- ▶ In 2007, the MSFP adopted the HIVQUAL methodology as a national program for monitoring and improving systems of care delivery for persons living with HIV.
- ▶ Ten performance indicators to measure the quality of HIV services covering adult and pediatric care and treatment, and FMTCT were developed through a National Advisory Committee of PEPFAR partners and stakeholders convened by MSFP in late 2007.
- ▶ 19 HIV clinics were selected to begin HQ-HT, representing a mix of regions, clinic types and degree of support by partners.
- ▶ Data collection was expedited by the incorporation of the indicators into the EHR

HIVQUAL-HAÏTI ORGANIGRAM



COACHING ACTIVITIES

- ▶ Each region/department is assisted by one Coaching Team
- ▶ This Coaching Team is responsible to conduct the Organizational Assessment
- ▶ It is also responsible to conduct if needed Training on Quality Improvement Methodology at regional or clinic level each year
- ▶ Due to the EMR the Coaching Team can have quickly an idea of the progress of each clinic.
- ▶ The regional Coaching Team identifies the leaders to be rewarded to reinforce the culture of quality at the clinic level
- ▶ To date, 10 leaders at the clinic level have already attended at various international events on Quality Improvement

BENEFICENCE OF THE EMR

- ▶ Due to the EMR the Project Improvement Team in the clinics focuses more on Quality Improvement activities than to collect data
- ▶ With the EMR we can consider all the patients without sampling
- ▶ This last opportunity allow the National Level to use the HIVQUAL Report for performance purpose

SEMI ANNUAL HIVQUAL MEETING

- ▶ Each semester we organize an HIVQUAL meeting where the performance of clinic, department and National level are analyzed
- ▶ We organize also a contest between clinics on their selected project and the winner is eligible for international events
- ▶ Each project in the contest is submitted as abstract in all international Quality Improvement Conference
- ▶ As a result we submitted this year 14 abstracts in IHI, AFRAVIH and IAS Conference
- ▶ Finally this meeting allow the National level to set priorities

COMPARISON : MEAN GENERAL POPULATION BASELINE JUNE_08 VERSUS ROUND_7-JUNE 11



IMPLEMENTATION GAP IN ARV ENROLLMENT AS OF JUNE 2011

HIV Patients medically eligible for ARV by June 2011



TOTAL - 6688 Patients
 ● Non Enrolled in ARV
 ● Enrolled in ARV

CONSTRAINTS TO ARV ENROLLMENT/ SOLUTIONS BY NATIONAL LEVEL

LIMITATIONS	SOLUTIONS
<ul style="list-style-type: none"> •Stringent non medical requirements applied for ARV Eligibility <ul style="list-style-type: none"> •Adherence sessions •Buddy companion •Identification of patient house 	<ul style="list-style-type: none"> •Refresher training for psycho-social staff •Technical Assistance to "Selection Committee" •Focus on systems that get patients services
<ul style="list-style-type: none"> •Lack of implementation of current norms for initiation of Treatment 	<ul style="list-style-type: none"> •Increase awareness about groups that could be put on Rx without CD4
<ul style="list-style-type: none"> •Limitations with CD4 	<ul style="list-style-type: none"> •Progressive phasing out of current equipment- Roll out of Facscout - setting up of regional hubs. •Dedicate more man power at sites when manual system is in use
<ul style="list-style-type: none"> •Logistics of Drugs for site upgrade and launching of new sites 	<ul style="list-style-type: none"> •Better coordination between service implementers and SCMS for site upgrade and launching of new sites

CONSEQUENCES

- ▶ For FY12 the National Target for ARV Enrollment is 10,000 patients
- ▶ All Network will contribute depending of their number of eligible patients
- ▶ All ARV clinic in HIVQUAL are required to work on ARV Project Improvement this year.
- ▶ Each ARV clinic has a specified benchmark

NEXT STEPS

- ▶ As a result of the success of HIVQUAL Activities we are in process to implement a general patient chart integrated in the EMR which will allow to move to HEALTHQUAL
- ▶ A large set of Quality indicators regarding TB, Malaria, Maternal and Child Care will be followed to match the priorities of MOH
- ▶ A full integration of all M&E tools and the care services provided in the health facilities will allow the MOH to improve the quality of life of the population.

Swaziland Ministry of Health
National Quality Assurance Program
Presentation in ACLN conference in
Uganda 26th -30th March 2012

Presenter: Thulile Dlamini
Program Manager
Team Members: Dr Jabu Mivumila,
Sibongile Mndzubele, Gugu Masinga &
Thulile Dlamini

Presentation Outline

- Introduction/Back ground
- Programs Key milestone
- Challenges
- Future Plans
- Lessons Learned
- Conclusion

Background

- Quality Assurance Program was established by the Ministry in October 2006 by COHSASA in collaboration with SAHCD & introduced to stakeholders in 2007.
- QA program has evolved in phases.
- Simultaneous with the evolution in the national quality assurance program, different aspects of the Swaziland Ministry of Health included quality assurance in their units. Notable programs include:

Background (cont'd)

- The National Clinical Laboratory Services, which initiated WHO's Strengthening Laboratory Management towards Accreditation (SLMTA) program;
- The National TB Program, which initiated a health care improvement program in conjunction with University Research Corporation
- The National AIDS Program, which initiated the HIVQUAL program in conjunction with UNICEF and HEALTHQUAL International
- Male Circumcision Quality Assurance was established to ensure that Male Circumcision services are delivered according to the WHO standards.
- The Swaziland National Blood Transfusion Services
 - Have Quality Assurance in place that ensures high standards of blood and blood products quality. This includes functional machinery and address customer care.

Background

- Through the HIVQUAL project, a total of 30 facilities underwent Organizational Assessments and the concept of "coaching," in which regional MOH staff and partners support facilities on quality improvement exercises.
- The project also introduced the concept of quality improvement to Regional Health Management Teams, Regional Monitoring and Evaluation Officers and nurses

Key milestones

- Finalization of the QA Strategic plan
- Capacity building of Regional QA teams
- Selection criteria was developed (M&E officer, EHO, Clinic Supervisors, Pharmacists, & facilities QA focal persons).
- 1st phase training conducted & 2nd phase due 2nd -5th April 2012. QI Consultant facilitating.

Key Milestones.....

- QI projects selection by each region & implementation of the projects in progress.
- 1st Coaching & Mentoring of the QI projects conducted 20th – 24th February 2012 by NQA team.
- QA – conducting baseline assessments in 2 health centres & 2 specialized hospitals.
- 100% public hospitals & health centres – baseline conducted.

Key Milestone.....

- MOH developed the Essential Health Care Package, Essential Medicines List & Standard treatment guidelines documents. These enhanced the work of health quality
- Established link with M&E however, it needs to be strengthened.
- Expansion of the QA technical Working Group.

Future Plans

- Launching, Dissemination of QA standards & strategic plan documents.
- Orientation on the above documents.
- Training of the 1st RQA team & their Certification for continuous coaching and mentoring activities within regions.
- Strengthen and supporting regions to use the QI methodology in addressing existing gaps in all service areas and departments.

Key Milestones.....

- 21% clinics with quality improvement activities.
- Health Standards for hospitals and health centres finalized.
- QA Comprehensive tool developed- through harmonized existing tools and included standards & criterions.
- Established relationship with Corporate Partners to support Health Awards initiative.
- Conducted Health Awards for best performing health facilities, Regions & programs.

Lessons Learnt

- Health quality should be inbuilt within existing systems. This enhances its institutionalization.
- Health Facilities have a positive attitude towards quality improvement concept even those where Quality has not been introduced.
- Team work is the best strategy towards achieving positive results & involvement of all relevant stakeholders.
- Sharing and learning experiences are very essential.
- The Public's awareness on Quality issues is vital.
- Monitoring & Evaluation and feedback is very essential.
- Consistent supportive supervision, coaching and mentoring.

Future Plans.....

- Expand capacity building on quality to health care workers in health facilities.
- Conduct a Comparative study on Impact of Quality in the 3 levels of health care service delivery.
- Hold a Quality management Annual general meeting for reporting and sharing for all stakeholders.

Conclusion

- The Ministry of Health is engendered to incorporate quality improvement in all service areas in order to improve performance and service delivery at all levels and measure the performance regularly for sustenance. This will promote quality of life of the entire Swazi nation and reduce morbidity and mortality rate.
- The MOH appreciates that Quality is a systems intervention thus quality is for all facilities, units, departments, programs etc in health.

QUOTE

"Most of the important things in the world have been accomplished by people who have kept on trying when there seemed to be no hope at all"

- THANK YOU!
- SIYABONGA!

Plenary Presentations

Title: **Creating a Partnership for HIV-Free Survival:** *Using the NACS Platform to Support PMTCT*

Speaker: Amie Heap

Overview of presentation:

Amie Heap described the genesis of international integration of nutrition into HIV/AIDS programs through support from the WHO, PEPFAR and the World Health Organization. This support led to the implementation of Kenya's 'food by prescription' program for nutrition assessment, counseling and support (NACS) for people living with HIV and AIDS (PLWHA) in clinical care and treatment services. NACS is a platform for integrating nutrition into the continuum of care through nutrition care and support, HIV-free survival, economic strengthening and health system strengthening and it is employed on a clinic, community and national level. NACS has been implemented in Kenya and Malawi and is being implemented in 12 other countries. Amie Heap further discussed the partnership for HIV-free survival, a component of NACS that focuses on implementing the 2010 WHO infant feeding guidelines. She also highlighted the importance of using performance data in the NACS platform to assess the effectiveness of interventions, identify successful approaches, inform and improve program design and to report results to national governments and other partners.



Creating A Partnership for HIV-Free Survival Using the NACS Platform to Support PMTCT



Amie N. Heap
Nutrition Advisor, Office of HIV/AIDS, USAID
SI Liaison, Office of the Global Aids Coordinator



PMTCT Session – Part I

- Define and describe the NACS approach
- Provide an overview on of the Partnership for HIV-Free Survival
- Describe the project opportunities as they relate to quality improvement



Some Thoughts on QI and Nutrition...

"If you are not confused, you are not paying attention."

Tom Peters

"True genius resides in the capacity for evaluation of uncertain, hazardous, and conflicting information."

Winston Churchill

"We have an important opportunity to integrate nutrition into care, and we should get lost in the weeds."

Anonymous Colleague

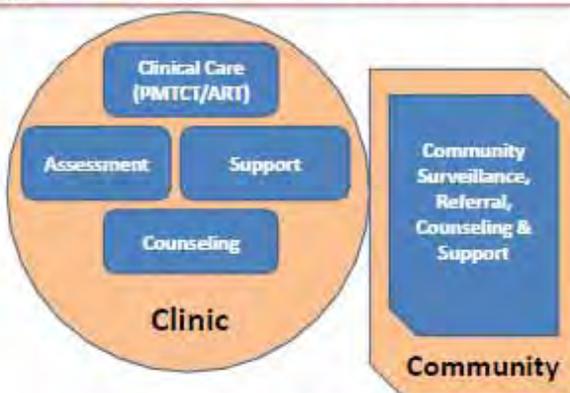


Genesis of Integrating Nutrition within HIV/AIDS Programs

- 2005: WHO Consultation on Nutrition & HIV/AIDS in Durban, South Africa calls for "the integration of nutrition into the essential package of care, treatment and support for people living with HIV/AIDS and efforts to prevent infection."
- 2005: Congress mandates PEPFAR to "develop and implement a strategy to address the nutritional requirements of those on antiretroviral therapy."
- 2006: The World Health Assembly passes a resolution calling on Member States "to develop evidence-based policies and programs on HIV/AIDS and nutrition."
- 2006: Kenya implements Food by Prescription as national program for nutrition assessment, counseling & support (NACS) for PLHIV in clinical care & treatment services.



NACS - Nutrition Assessment, Counseling & Support



Phased Implementation of NACS



GOAL: Improved health and quality of life

OBJECTIVE:
Improve infant survival



Partnership for HIV-Free Survival:
Supporting the elimination agenda via implementation of 2010 WHO Infant-feeding Guidelines

Partnership for HIV-Free Survival Plan

- Supported via Nutrition Acceleration funds at the HQ and country level
- Includes a consortium of technical partners (WHO, IHI, HCI, FANTA-3)
- Focus countries: Kenya, Lesotho, Mozambique, South Africa, Tanzania, and Uganda
- Open to other countries interested in participating
- Focus is on supporting the elimination agenda via implementation of postnatal nutrition and feeding support and ARVs
- *Opportunity to document best-practice, create learning network and inform national scale-up*



NACS and Performance Data



Inform Development of National Improvement Priorities



Title: Improving HIV-Free Survival of Infants Born to HIV-Infected Mothers: Using Quality Improvement to Improve the Postnatal Continuum of PMTCT Care Through NACS

Speaker: Dr. Nigel Rollins

Overview of presentation:

Dr. Nigel Rollins continued the discussion of HIV-free survival and emphasized the need to utilize quality improvement to ensure the effective implementation and successful outcomes of NACS. NACS and the partnership for HIV-free survival are contributing to the Elimination initiative in its focus on post-natal PMTCT care. The WHO 2010 guidelines on HIV and infant feeding recommend that all women with CD4 counts less than 350 be on ARV medications for life, and that countries pick a consistent national strategy for breastfeeding. The national strategy must either ensure that all HIV+ women who are breastfeeding be prescribed ARVs or ensure that HIV+ mothers of infants do not breastfeed and follow a formula feeding plan. In countries where formula feeding is linked to a high rate of infant death, the country should adopt the national strategy of promoting breastfeeding for infants born to HIV+ mothers and ensuring that all women breastfeeding are on ARVs to prevent transmission. This approach to infant feeding is designed to ensure the greatest chance of HIV-free survival for infants. Specifically, the HIV and infant feeding guidelines set forth a breastfeeding plan that requires HIV infected mothers to exclusively breastfeed for the first 6 months of life and continue breastfeeding with the addition of complementary food until 12 months of life. An important component to this guideline is that breastfeeding should only stop when a nutritionally adequate and safe diet can be provided to the infant.

After explaining the WHO 2010 HIV infant survival guidelines, Dr. Rollins elaborated on data supporting the strategies outlined in those guidelines. He provided evidence to demonstrate that ensuring ARV treatment in breastfeeding mothers is the most efficacious way of preventing postnatal mother to child transmission. Further, he outlined the dangers of formula feeding in a study that evaluated formula in South African PMTCT sites and found 63% of formula to be heavily contaminated with *E.coli*, 28% of formula to be diluted, and supply issues preventing consistent access to formula. Dr. Rollins then discussed implementation challenges and presented data from implementation sites to demonstrate that the complexity of PMTCT systems allows for many steps where a mother and infant can fall out of care. The difficulties in fulfilling each part of the multi-step PMTCT continuum decrease the efficacy of child survival interventions. Looking ahead, Dr. Rollins stressed the need to collect data on the scale-up of child survival interventions and the need to bring quality improvement into the partnership for HIV-free survival. Dr. Rollins noted that the next steps in this scale up process are to engage Ministries of Health, key agencies, and in-country partners and to integrate with national Elimination, nutrition and MNCH scale-up plans. He also highlighted the importance of a common framework for QI intervention and evaluation to adequately monitor the scale-up process.

Improving HIV-Free Survival of infants born to HIV-infected mothers

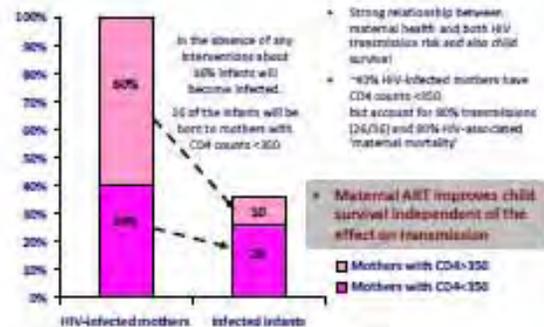
Using Quality Improvement to improve the postnatal continuum of PMTCT care through NACS

Nigel Rollins
Department of Maternal, Newborn, Child and Adolescent Health



- The WHO 2010 Guidelines on HIV and Infant Feeding, ART and PMTCT represent a major breakthrough;
- Little has been reported on the process of integrating and scaling up these interventions;
- Empiric evidence from well-designed and conducted and evaluated at scale would be a major contribution to guide future implementation and guidelines.

Maternal health and child outcomes



Mother and child survival in the context of HIV are inextricably linked

Pathophysiology

- 80% HIV-related maternal deaths are in women with CD4 counts < 350/ml
- 80% infants who become HIV-infected are born to mothers with CD4 counts < 350/ml
- Infants who are HIV infected are 17-30 times more likely to die
- When a mother with HIV dies, her children are at least 4 times more likely to die

Clinical interventions

- ART significantly improves CD4 counts, reduces maternal mortality and improves AIDS free survival
- Effective ARV prophylaxis and ART reduces peripartum transmission to less than 2%
- ARV interventions also significantly reduce postnatal transmission
- HIV-infected mothers can breastfeed infants with minimal risk of transmission and thereby improve HIV-free survival

Revised WHO Recommendations on the use of antiretroviral drugs for treating pregnant women and preventing HIV infection in infants (2010)

- Eligibility criteria for ART
 - CD4 count < 350, irrespective of clinical stage
 - Clinical stage 3 or 4, irrespective of CD4 count
- The 2010 recommendations ... provide two additional ARV options for women (not on ART) who breastfeed:
 - A) daily NVP for infants from birth until the end of the breastfeeding period.
 - B) continued regimen of triple ARV therapy to the mother until the end of the breastfeeding period.



National (or sub-national) health authorities should decide whether health services will principally counsel and support mothers known to be HIV-infected to:

- breastfeed and receive ARV interventions, **or**
- avoid all breastfeeding.

as the strategy that will most likely give infants the greatest chance of **HIV-free survival**

(Children of HIV-infected mothers remaining HIV uninfected and staying alive)



... in settings where national authorities decide to promote and support BF and ARVs ...

Which breastfeeding practices and for how long?

Mothers known to be HIV-infected (and whose infants are HIV uninfected or of unknown HIV status) should exclusively breastfeed their infants for the first 6 months of life, introducing appropriate complementary foods thereafter, and continue breastfeeding **for the first 12 months of life.**

Breastfeeding should then only stop once a nutritionally adequate and safe diet without breast milk can be provided.



HIV free survival

- Policy, interventions and programmes (including cost-effectiveness) should be judged on their ability to promote HIV free survival among all children and the health and survival of mothers ...
- ... and not just HIV transmissions averted

Why does WHO recommends that national authorities promote a single infant feeding strategy for all HIV-infected mothers and their infants?

- High quality evidence that ARVs very significantly reduces the risk of HIV transmission through breastfeeding
- Documented evidence of increased mortality when replacement feeds are given inappropriately in the context of HIV
- Even with good protocols and training, difficult to assure high quality counselling and support for all infant feeding practices
- Cost effective interventions are available that improve survival of mothers and infants and reduce transmission



Kesho Bora: All infants: HIV-free survival

RCT in Kenya, Burk. Faso and SA

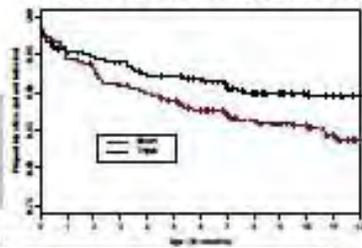
2 arms - AZT + 3TC + LPV/r + ZDV

• Delivery only (Short) then no BF

• End of BF + Simbina (Tbipr)

Log rank test p = 0.002 (stratified on centre and insertion to BF)

Plot HIV-free survival rates by 12 months of age (RCT, by study location)



	Short		Simbina		Relative Risk
	Events (n/N)	Rate (95% CI)	Events (n/N)	Rate (95% CI)	
0-12 months	11/100	2.7 (1.3, 4.6)	11/100	2.7 (1.3, 4.6)	0%
0-6 months	18/107	3.8 (2.1, 5.8)	26/106	6.2 (3.7, 8.6)	23%
6-12 months	93/97	6.8 (4.1, 11.3)	10/98	12.8 (6.7, 19.3)	24%
12 months	107/108	10.8 (7.7, 14.8)	107/107	18.8 (14.9, 23.3)	26%

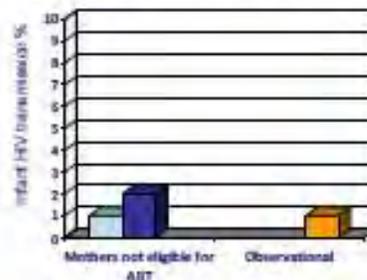
Mma bana study (Shapiro, AIDS 2009)

2 randomized arms and one observational

Mothers not eligible for ART received either: (co-trimoxazole/nucleoside and cotrimoxazole) for 6m

Abacavir/AZT/3TC or zidovudine/AZT/3TC while BF

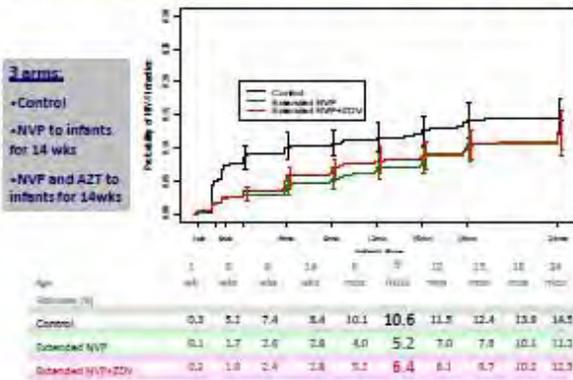
Mothers eligible for ART - outcomes observed



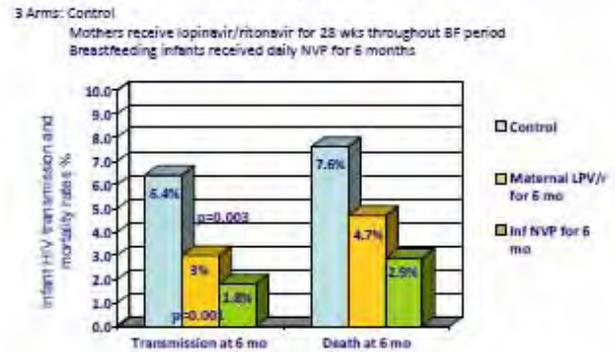
Viral suppression 792% all groups

- LPV/r + co-trimoxazole
- Abacavir/AZT/3TC
- Observational

Probability of HIV-1 Infection in Infants Uninfected at Birth by Treatment Arm: PEPI-Malawi



Breastfeeding, Antiretroviral and Nutrition (BAN) study (Chasefa, IAS 2009)



Breastfeeding, Mother-to-Child HIV Transmission, and Mortality Among Infants Born to HIV-Infected Women on Highly Active Antiretroviral Therapy in Rural Uganda

Ann Hens, MD, MPH, David Brown, MD, MPH, Eric Buwa, MD, PhD, Bob Denny, MD, PhD, G. Scott Gillies, RN, RM, Bernard Rousso, MChD, MPH, Robert Denny, MD, PhD, Samuel Alalika, PhD, Sandra Tappin, MD, MPH, and Jonathan Mwanza, MD, MPH

J Acquir Immune Defic Syndr. 2010;55(1):18-26

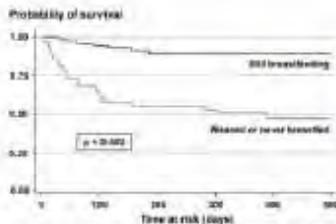


FIGURE 1. Kaplan-Meier estimates of infant survival in relation to breastfeeding status at the time of death.

Decreased survival among infants who stopped BF early or who were never BF.

AHR = 6.19; (95% CI 1.45-27.0, P = 0.015)

97% infants were tested at 6 wks - none infected.

Difference was independent of maternal health or if receiving ART

Replacement feeding in PMTCT sites

- Sample of milk collected from bottles (n=94) being offered to infants brought by mothers to PMTCT clinic follow-up visits

- 63% heavily contaminated with E.coli
- 28% diluted (based on protein concentration)

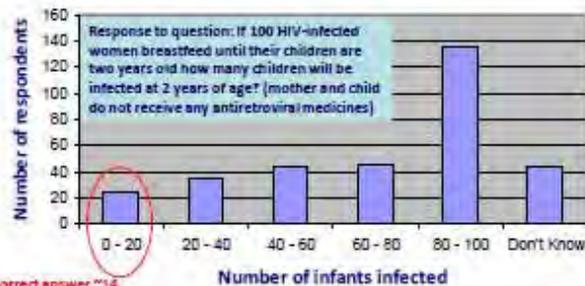
In spite of

- All mothers having completed 12 years of education
- 72% having fridges
- All received good counselling on IFP

- 15-20% mothers reported free FF being used for something other than index child
 - Sold
 - Exchanged
- 50-75% reported running out
 - Mainly because of clinic supply

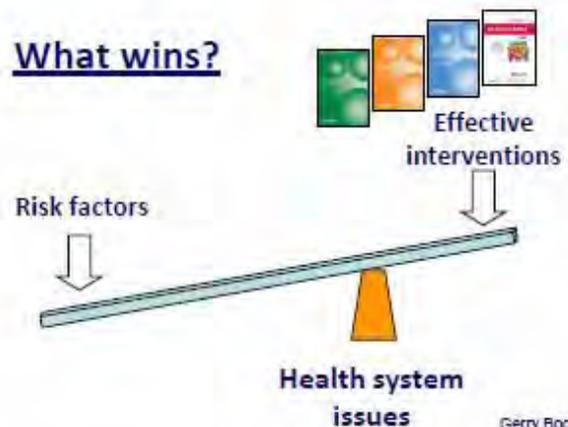
Reprinted from: Arch Paeds 2007

Knowledge of nurses and counsellors about risk of BF transmission



Chopra and Rollins, Arch. Dis. Child. 2008

What wins?



Gerry Boon

How does a mother decide whether or not to attend for care and how she feeds her child?

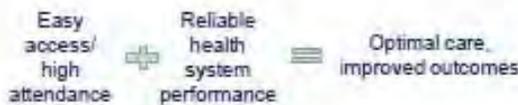
- If she considers that health services serve her interests and those of her child
- If benefits of attendance are not prejudiced by the way she is received by health staff
- If the sentiments of families and communities are favourable towards the health services



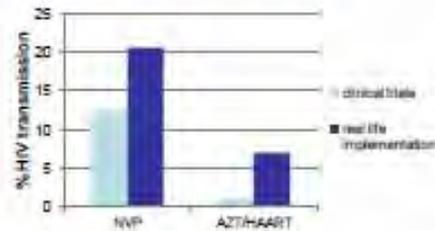
- While much is reported on implementing an intervention or package of interventions at scale, little is known about the process of scaling up, namely moving from delivery in one district to national coverage;
- Interventions aimed at reducing financial or physical barriers needs to consider questions of affordability, equity and sustainability at scale;
- Strategies taking health interventions to communities can increase the uptake and improve the quality of local services. Their impact on maternal, newborn and infant mortality has been promising though inconsistent, suggesting that each strategy will be context specific, and adaptation will be required to identify the most appropriate combination of approaches;
- Implementing focussed, or single interventions such as TB programmes or immunisations can be very successful. Integrated, comprehensive interventions such as those included in IMO are more complex to introduce and scale up;
- Knowledge and training need to be linked with establishing conditions that encourage health workers to change their practices - leadership, motivation, opportunity and accountability;
- Developing and implementing prototypes that can be rapidly adopted may be a useful concept to include in formal scale-up plans.



What will it take to provide effective PMTCT at a population level?



Gap between clinical trial and "real life" PMTCT implementation



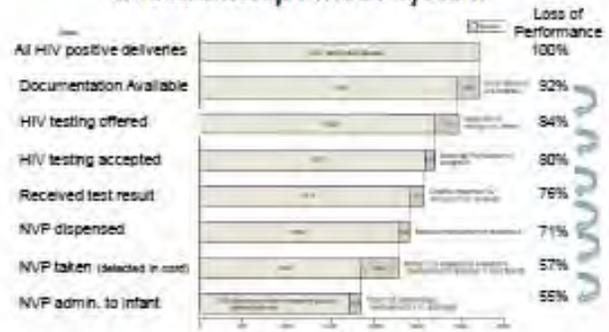
Rollins N, AIDS 21: 1341-1347 2007
Horwood 2010

The compounded effect of multiple losses in a multistep PMTCT system



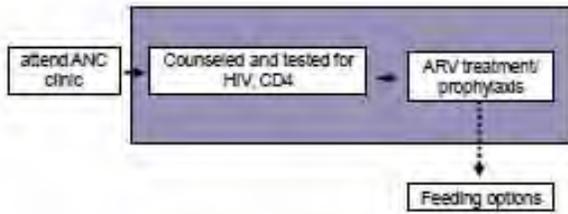
Stringer JAMA. 2010;304(3):293-302. 4 countries, 5 Africa, Zambia, Cote D'Ivoire, Cameroon. 2007-2008

The compounded effect of multiple losses in a multistep PMTCT system



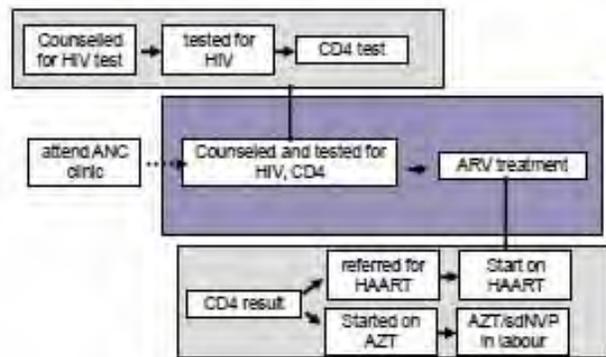
Stringer JAMA. 2010;304(3):293-302

PMTCT steps

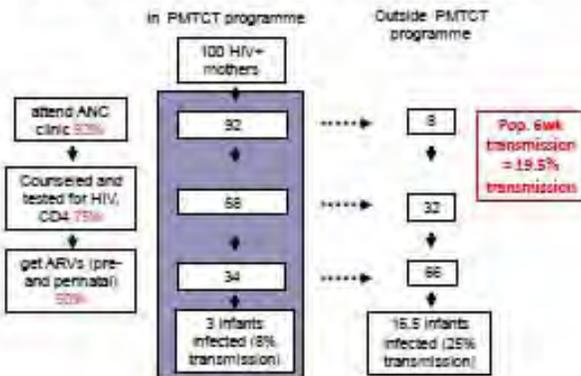


Barker, & Rollins

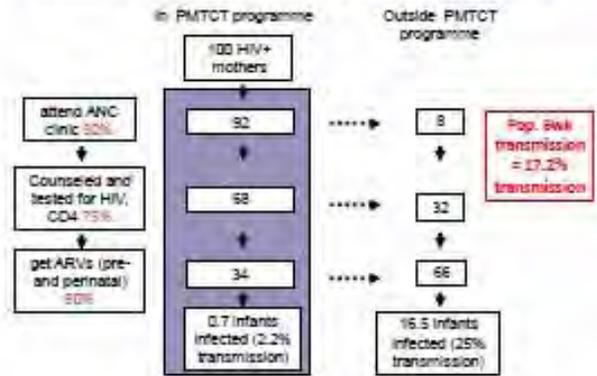
Added complexity of PMTCT



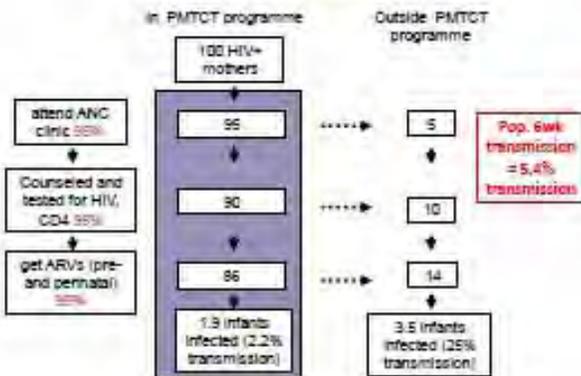
Impact of 2-tier prophylaxis (sdNVP, ART) based on reported system performance (KZN)



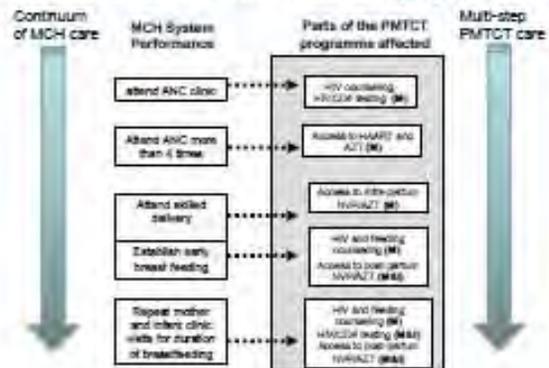
Impact of 2-tier prophylaxis (sdNVP/AZT, ART) based on reported system performance (KZN)



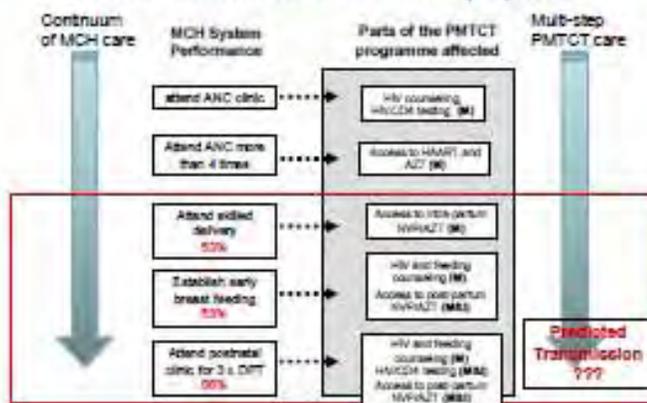
Impact of 2-tier prophylaxis (sdNVP/AZT, ART) at 95% system performance



Elimination of new HIV infections in children relies on the MNCH delivery system



Elimination of new HIV infections in children relies on the MNCH delivery system



IATT working group on child survival

- **Partnership for HIV free survival**
 - Focus on the postnatal continuum of PMTCT
 - Using QI
 - Commitment from several technical groups to support the effort
 - Intention to undertake an external evaluation

Eliminating new HIV infections among children and keeping their mothers alive



The HIV free survival partnership

- Significant contribution to the Elimination initiative and for improving delivery of other essential MNCH interventions
- Major opportunity to learn about how to provide effective PMTCT care throughout the postnatal continuum and thereafter share
- Opportunity to demonstrate the relevance of QI in improving maternal and child health in resource-limited settings

Immediate next steps

- Engage Ministries of Health, agencies, PEPFAR country offices that wish to participate and have resources available
- Identify and link with technical partners in country
- Integrate with national Elimination, nutrition and MNCH scale-up plans
- Agree a common QI frame for intervention
 - Identify relevant performance data for improvement
- Agree a common frame for evaluation

Title: Retention in Care in Global HIV/AIDS Programs: Measurement and Improvement

Speaker: Dr. Elvin Geng

Overview of presentation:

Dr. Elvin Geng from the University of San Francisco presented the global outlook of HIV/AIDS patient retention in resource-limited settings, providing an overview of current retention literature and on-going retention initiatives.

Technical definitions of patient retention are often based on a number of missed or made clinical visits during a specified review period. Dr. Geng and collaborators developed a conceptual framework for retention described by five main components: **recognition** and **prioritization** of health status by the patient, **access to** and **monitoring of** care by the health system and **shared investment** between the patient and health system. Absence of any of these components threatens patient retention.

In the current literature to-date, several studies focus on facility patient retention; however, there is a need to study the outcomes of those patients who are lost to follow-up and focus on patient retention in care. Different outcomes of loss to follow-up invoke different public health responses. The estimate from the literature is that 50% of patients who are lost to follow-up are in care, but the variation is great between different sites. Thus, there is a need to understand retention locally.

Barriers to retention include socio-structural, health care system and patient factors. Retention measurement systems may need to be improved before attempting to address causal factors for loss to follow-up. Once gaps in measurement processes have been filled, sampling methodology can be utilized to track a representative cohort of patients in a clinic. Using the sample, epidemiologic factors and specific, improvable problems within the systems and processes of health care delivery can be identified to guide program intervention and system improvements.

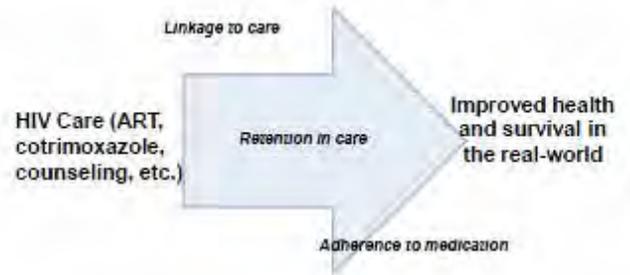
Dr. Geng ended with an overview of several on-going retention initiatives, which leveraged social capital to promote decentralization of health services and better utilization of health care infrastructure. Promising strategies were culturally and socially acceptable, generalizable in African settings and cost effective. Examples of current initiatives include organizing patient groups where individual members take turns retrieving ARV medications, utilizing community care coordinators to provide care and dispense medications to patients, and counseling healthy habits to both the patient and the patient's self-identified social network.

Retention in Care in Global HIV/AIDS Programs: Measurement and Improvement

All Country Learning Network, HealthQual
Kampala, Uganda March 25-30

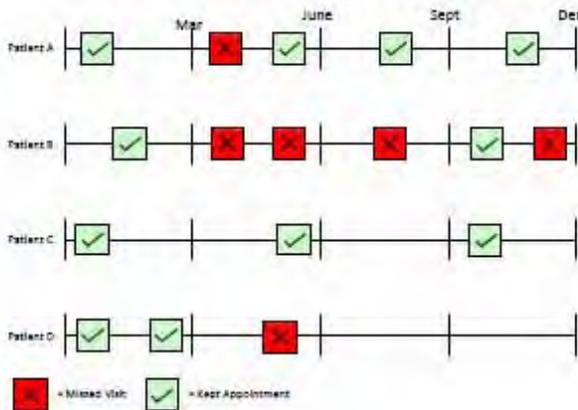
Elvin H Geng, MD MPH
Assistant Professor of Medicine
University of California, San Francisco

Retention in Care is the Basis of Effective HIV Care

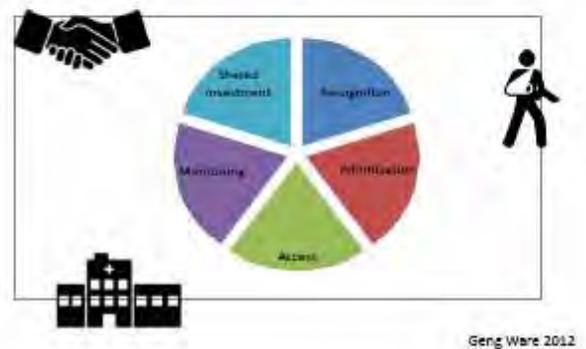


Operational Definitions of Retention

ADAPTED FROM MUGAVERO ET AL (2010) AIDS Patient Care and STDs 24: 607-614.



Retention: Conceptual Definition



Quality Improvement for Retention: Two Cycles

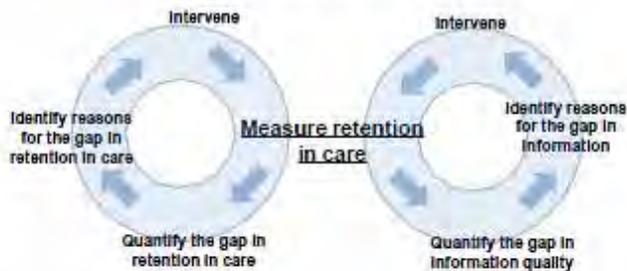
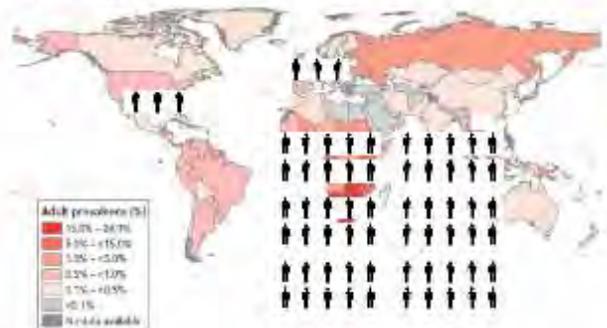


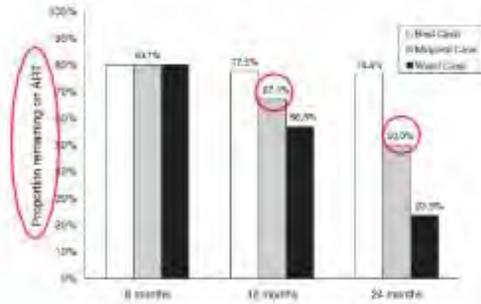
Figure 2.4
Global prevalence of HIV, 2009

Source: UNAIDS



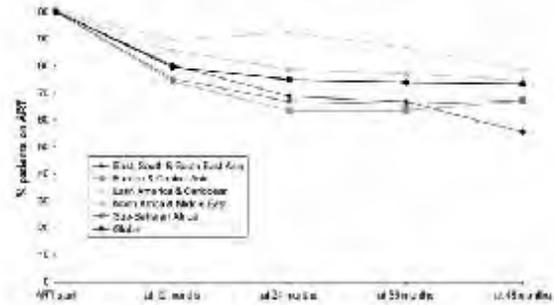
Patient Retention in Antiretroviral Therapy Programs in Sub-Saharan Africa: A Systematic Review

Sydney Knox^{1,2*}, Matthew R. Fox¹, Christopher J. Gill^{1,3}



Global Retention in Care

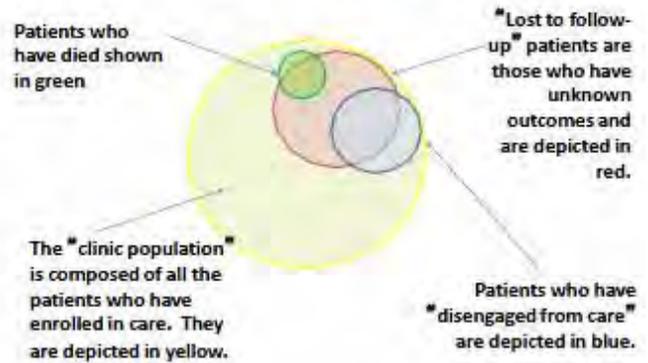
Tessie et al., UNAIDS Data in JAIDS 2011



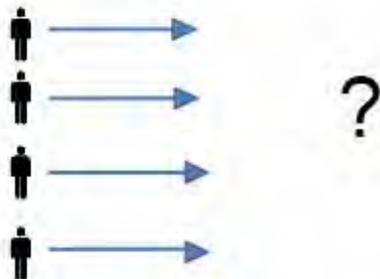
Assessment of Retention in Care

Is the global effort to deliver care and treatment for HIV a success or a failure?

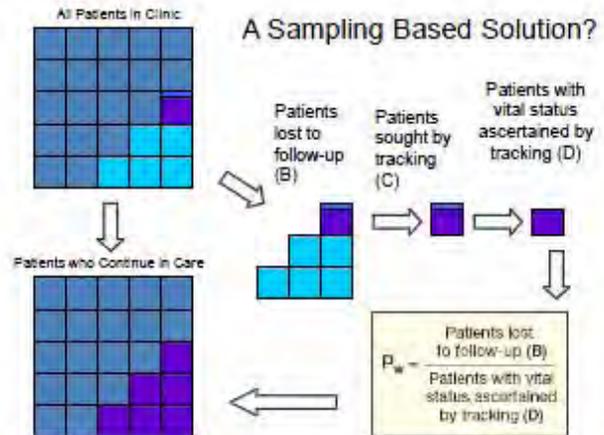
Wanting what is measured...



Loss to Follow-up is not an Outcome

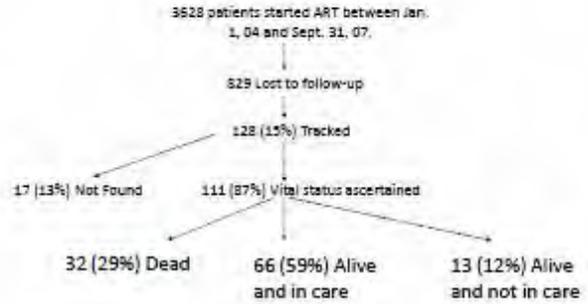


A Sampling Based Solution?

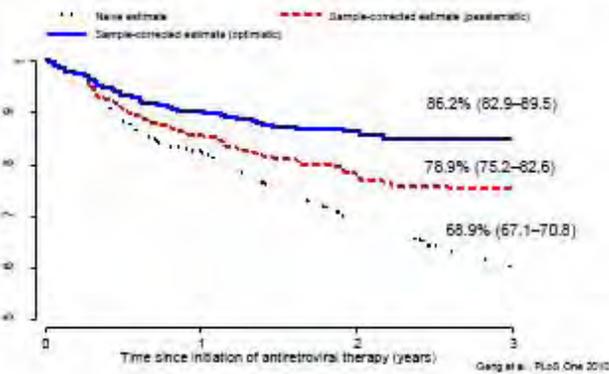


Tracking Study to Understand Retention in Care in Mbarara, Uganda

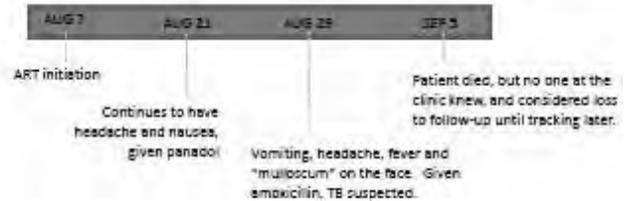
- Adults at Immune Suppression Syndrome Clinic in Mbarara, Uganda.
- Measurements from clinic database and "supplemental" tracking data in a sample lost of patients
- Sampled-weighted estimates of retention in care



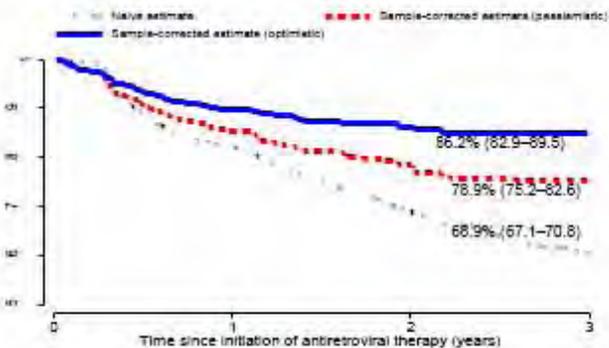
What we want...Retention *in Care*



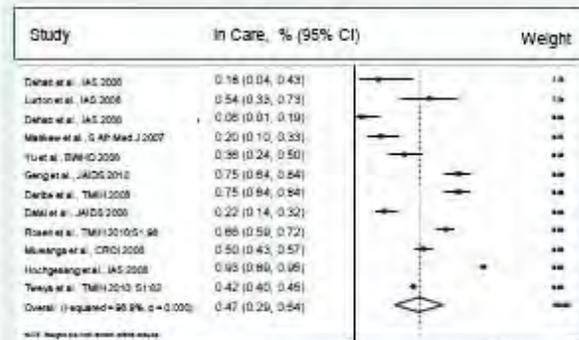
- 26 year old woman - CD4 of 27 /ul
- Completed counseling and ready to start ART
- Complains of headache and nausea
- Nevirapine and zidovudine/lamivudine



What we want... "Connection to Care"



Retention in Care among Patients LTFU in "Tracking" Studies



Assessing Retention in Care

- Improving information about retention in care can improve assessment of retention
- Careful interpretation of existing data
 - Patient retention vs. clinic retention
- "All Epidemiology is Local"
 - Loss to follow-up is high almost everywhere
 - but outcomes among the lost differ markedly
- Quality improvement campaigns can consider adopting the tracking a sample of lost patients

Barriers and Facilitators of Retention in Care



Socio-structural Factors: Social Capital

- Adherence is generally better in Africa than in North America – why?
- Ethnography: 414 qualitative interviews in Nigeria, Uganda and Tanzania of adults on ART for 6-12 months, treatment supporters and providers
- Semi-structured interviews:
 - Specific experiences of taking ART (e.g., "stories" of the most recent dose taken, most recent dose missed)
 - Clinic visits
 - Help received from treatment partners

Ware PLoS Medicine 2010

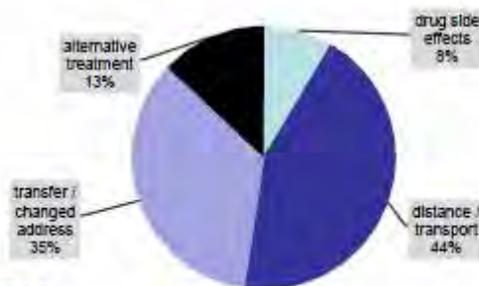
Explaining Adherence in Africa

- Prioritization of adherence to overcome economic obstacles
 - Resource scarcity requires patients to prioritize care
 - "Borrowing, begging and doing without"
- Prioritization explained by need to fulfill social relationships
 - "If he [patient] continues well, the work of caring for him will be over. If he continues well, I can visit him at the time I want. But if he is sick, I have to help him so he will be okay and everyone else can continue with their business. That's why I insist, 'my relative, don't ignore what they instruct you to do.'"
- In social science, the use of relationships to obtain benefits and achieve desired ends has been termed 'social capital.'

Ware PLoS Medicine 2010

Structural: Transportation

Rapamba, Malawi M 145 2012



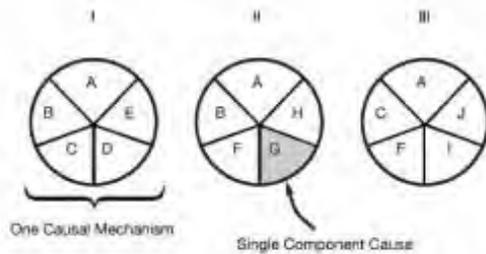
Implementing Antiretroviral Therapy in Rural Communities: The Lusikiski Model of Decentralized HIV/AIDS Care

Marie Perle, Robert Fox, Kenneth Bhatnagar and Eugene Kone

Outcome	Patients at baseline		Patients at the final visit		P
	No.	percentage (95% CI)	No.	percentage (95% CI)	
Median ART	146	100%	146	100%	
Continued on ART at 12 months	492	67.2 (62.4-71.9)	487	67.0 (62.2-71.8)	<.001
Lost to follow-up	160	21.9 (19.4-24.5)	159	22.0 (19.4-24.6)	<.001
Lost to follow-up at 12 months	11	1.5 (0.3-3.2)	11	1.5 (0.3-3.2)	<.001
Discontinued	115	15.8 (14.4-17.3)	111	15.3 (13.7-17.0)	<.001
Discontinued at 12 months	107	14.7 (13.3-16.2)	103	14.2 (12.7-15.7)	<.001
Discontinued	106	14.7 (13.2-16.2)	101	14.0 (12.5-15.5)	<.001
Discontinued at 12 months	100	13.8 (12.3-15.3)	97	13.5 (12.0-15.0)	<.001

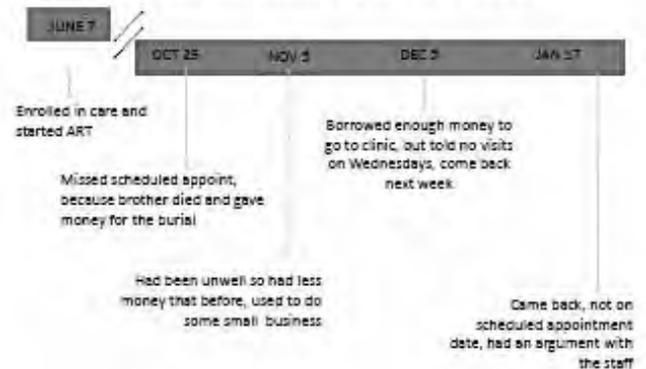
NOTE: Sample includes all patients who enrolled in the study between 2004 and June 2006 to receive antiretroviral therapy (ART) and who had completed at least 12 months of follow-up by July 2007.

Necessary Components to Sufficient Causes: From Determinants to an Explanation



Rothman and Greenland, Modern Epidemiology, 2008

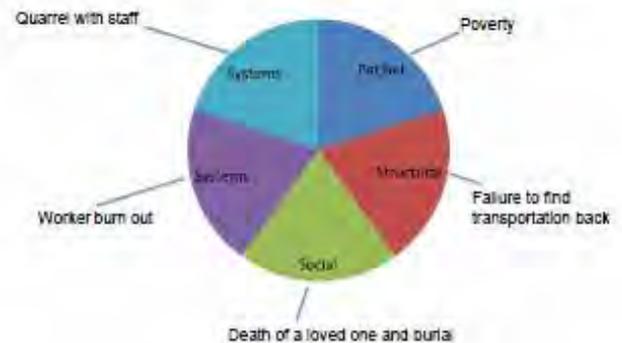
- 39 year old woman - CD4 of 287 /ul
- Businesswoman
- Husband died three years ago, has three children



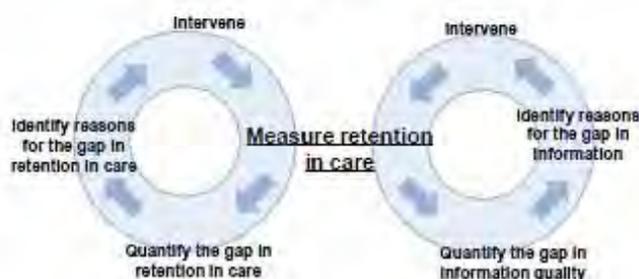
"At times you have missed your appointment date and when you come back, the doctor looks at you with such a bad eye that you even fear explaining more to her. She tells you "stop disturbing me, today is not your appointment date" and she stands and walks away leaving you there alone. At times I do not blame them, may be they are hungry or tired. If they could start providing lunch to the doctors at the clinic and have many doctors so that they do not have to be over worked, may be this would also help."

MSC 104 – Ware et al.

Explanatory Framework for Retention in Care



Site Experience from Kenya: Two Cycles



Public Health Data on Retention in Care

- Understand local retention in care problem
- Measure what you want...
- Sampling and tracking studies as an efficient QI strategy
- Epidemiologic factors and explanatory framework
- Identify problems in the health care delivery sector – the "domain" of public health

Strategies to improve retention

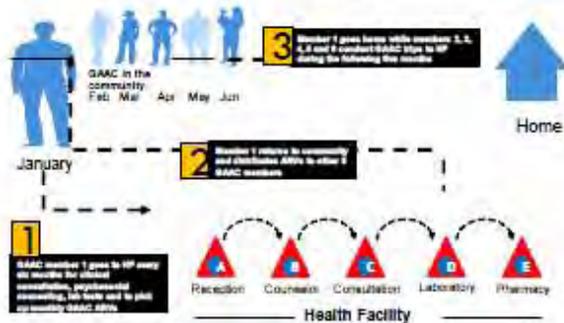
Characteristics of a promising retention in care interventions

- Cost effective
 - Case management used in North America
- Generalizable in the African setting
 - What resources can be used
 - Urban and rural
- Culturally and sociologically suitable
 - Social relationships
 - Responsive to context

IMPLEMENTATION AND OPERATIONAL RESEARCH, CLINICAL SCIENCE

Distribution of Antiretroviral Treatment Through Self-Forming Groups of Patients in Tete Province, Mozambique

Tos Durino, MD¹, Barbara Tefic, MPH¹, Marc Ross, MD, MS², Jacob Madico, MD, MS, PhD³

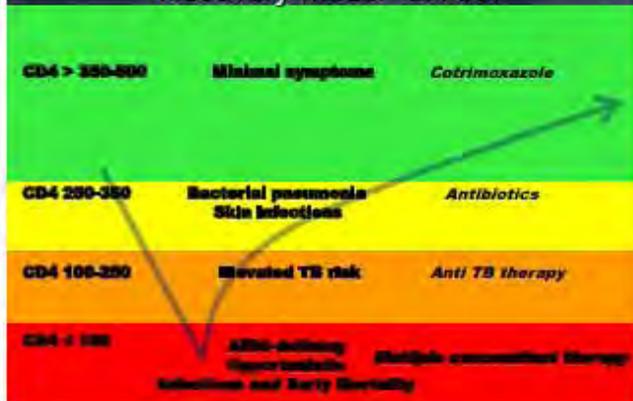


Journal of the International AIDS Society

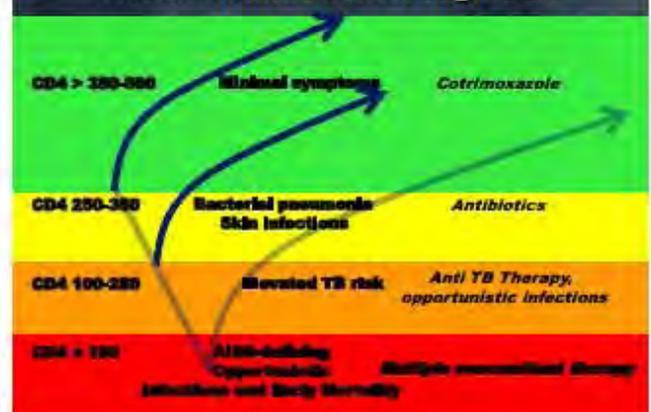
Research
A model for extending antiretroviral care beyond the rural health centre
 Sara E. Wringe-Kobayashi^{1,2}, Erika B. Boffo¹, Henry M. Fisher¹, Karim Vedadpour¹, Zamzamou P. Kembou¹, Lillian E. Paul¹, Yvona E. Jelic¹, Janet E. Cabore¹, William A. Hensley^{1,2} and Rebecca Kitumba^{1,2}

- Community Care Coordinators
- Health care provider shortage, overburdened clinics
- Lay community PLA, received a month of training, PDA with symptoms screen, closely supervised
- Stable patients were seen every three months in the clinic and received dispensed pills instead of monthly clinic visits
- A community health workers intervention:
 - health workers who share a relationship with their community (e.g., shared language, ethnicity, geography, race, or disease condition) and the absence of professional training.

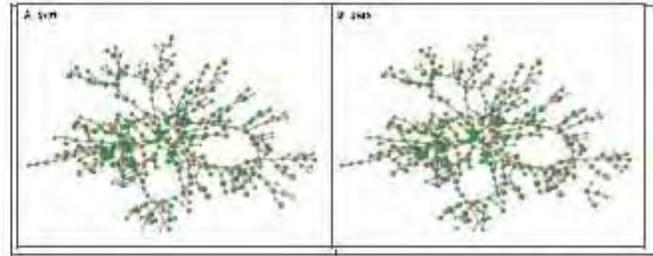
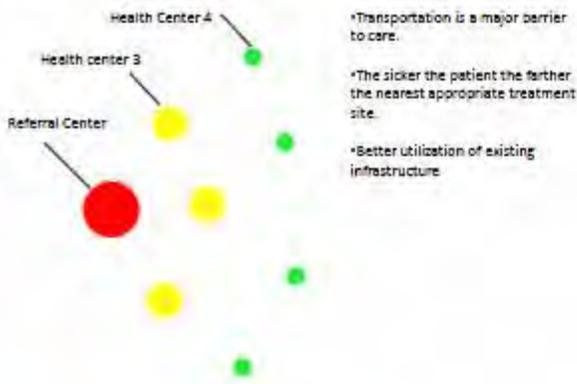
Retention and Early CD4 Treatment "Recovery Model" of ART



Retention and ART for High CD4



Treatment at High CD4 and Retention



The Spread of Obesity in a Large Social Network
Journal of the Royal Society Interface, 2009



Conclusions

- Patient retention vs. clinic retention
- Outcomes among non-retained and reasons for non-retention differ from site to site
- A sampling based approach to lost to follow-up can yield both the magnitude of retention in care and reasons for lapses
- Settings with "limited" material resources may be the ones with "replete" social capital



Thank you!

- San Francisco: Jeffrey N. Martin, Ingrid Bernheimer
- Kenya: Thomas Odeny, Dr. Elizabeth Bukusi
- Uganda: Mwebesa Bwana, Winnie Muyindike
- Boston: Norma Ware, David Bangsberg
- National Quality Center – Bruce Agins and HealthQual Team
- NIH
- IeDEA
- PEPFAR



Title: Health Information Technology (HIT) and Quality Improvement

Speaker: Andrew Hamilton, RN, MS

Overview of presentation:

Andrew Hamilton's plenary presentation focused on the use of electronic medical records (EMRs) and health information technology (HIT) to support quality improvement activities in areas including clinical decision support, electronic ordering/return of labs, medication prescribing, documentation, quality reporting and public health surveillance among others.

Mr. Hamilton has firsthand experience implementing an electronic medical record system at the Alliance of Chicago – a large network of community health centers. This application of health information technology has supported the development of a learning community among participating programs throughout the United States.

To optimize HIT adoption and implementation, Mr. Hamilton emphasized the need to develop a strong system-level vision and associated strategies to adequately support an advanced technical infrastructure, capacity building efforts, facilitate staff and leadership support, and funding. The responsibilities and implementation strategies at both the central level and the site level were delineated - highlighting HITs function at multiple levels from central management to individual knowledge management.

Mr. Hamilton went on to describe the potential for integration of HIT into quality programs, and cited clinic-level QI intervention categories including: point of care clinical reminders, use of data to support retention, and use of data to support public health program priorities. For example:

- development/sharing of monthly quality dashboards
- reminders to inform physicians when a particular patient was due for monitoring of CD4 or viral load
- capture of patient level data for follow-up and contact
- weekly extraction of influenza like illness symptoms to send to the health department for population-level surveillance

Andrew Hamilton closed by emphasizing that successful implementation and use of HIT requires attention to multiple variables beyond the system itself, including staff, processes, and technology selection – and can be a powerful tool to support clinical improvement.

HIT and Quality Improvement

Andrew Hamilton RN, MS



Overview

- Background/Overview of the Alliance of Chicago
- Overview of Health Information Technology (HIT)
- Describe the Phases of HIT Adoption
- Provide examples of use of HIT for Quality Improvement

OVERVIEW OF ALLIANCE OF CHICAGO

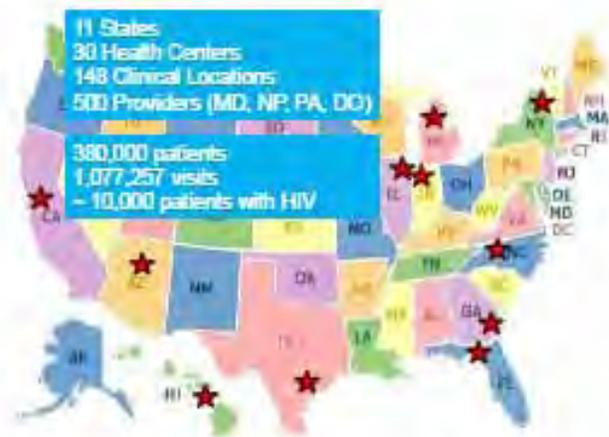


U.S. Community Health Centers

- Primary Care Health Care Organizations
 - Medical, Dental, Mental Health, Case Management
- One of every 19 people living in the U.S. rely on a Community Health Center for primary care
- Funded by US Department of Health & Human Services (HRSA)
- Uninsured and Underserved Populations
- Urban clinics serve special populations
- Rural clinics provide access points

Alliance Overview

- US Department of Health and Human Services funded (HRSA) network/collaborative of Community Health Centers
- Essentially a joint venture organizations with the desire and ability to work together on building some common infrastructure to improve service delivery and health status
- Dedication to quality and use of data to improve care
- Ability to access higher quality, efficiency and economy of scale
- Desire to ultimately share with others

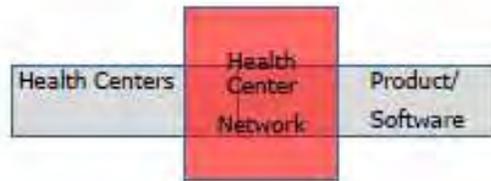


Alliance Programs

Electronic Medical Records & HIT Quality Improvement & Research Consulting & Technical Assistance Technology Innovations & Partnerships



Network Role in HIT Implementation and Support



Health Centers Working Independently



A Learning Community



OVERVIEW OF HIT

Examples of Technology in Health Care

- Databases/Electronic Registry Systems
- Personal Health Records/Smart Card Systems
- Electronic Medical Records Systems



Capabilities of EMRs

Basic

- a storage and retrieval system

VS

Advanced

- a sophisticated interactive database with computational & analytical capabilities



Examples of Full/Advanced EMRs

- Decision Support – Alerts/Prompts & Reminders
- Electronic ordering of labs and electronic return of results
- Electronic medication prescribing (eRx)
- Electronic notes or point of care clinical documentation
- Quality Reporting & Analytics (data visualization)
- Public Health Surveillance



STAGES OF HIT ADOPTION

Stages in EHRs Implementation



Assessment & Planning

Assessment:

- Develop a Strong/Clear vision
- Educate and engage Clinical leadership
- Examine Experience with patient registry systems and quality improvement
- Evaluate existing IT infrastructure for readiness

Plan to obtain:

- Advanced Technical Infrastructure
- Technical expertise
- Funding



Product Selection

Process

- Involve clinical & administrative leaders
- Develop a core set of requirements
- Conduct site visits of those practices using EMRs
- Create test scenarios to "try/test" the software

Selection Criteria:

- Robust and logical/intuitive functionality
- History of use with satisfied users
- Ability to customize clinical screens
- Centralized data structure & scheme
- Experience with quality reporting
- Stability of company



Implementation – IT Infrastructure

- Store data on a system in a secure/safe facility
- Redundant servers and essential IT equipment
- Tested and secure backup strategy
- Ability to access system in exam room
- Scalable for expansion



Implementation – Clinical Content

- Clinical Screens including alerts/prompts
- Views of longitudinal patient data
- Medication and Lab Order Lists for electronic ordering
- Patient Education Material
- Quality Improvement Reports & Analytics



Implementation – Clinical Content

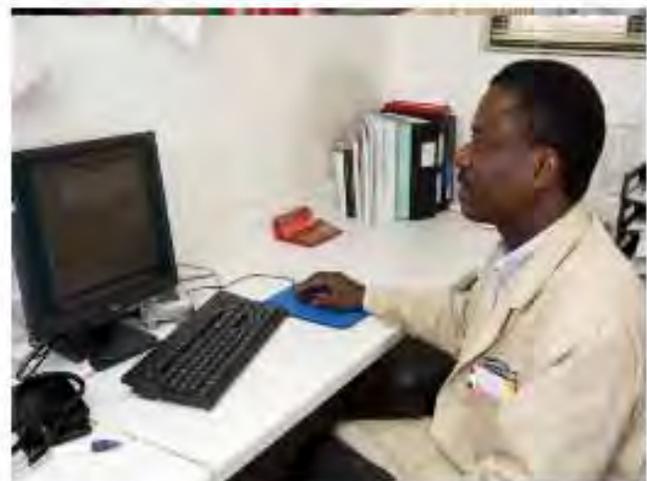
- Centrally manage, shared content
- Balance of Structured data and free text data
- Ease of data entry to encourage providers to capture needed information as part of care delivery
- Agreed upon protocols against which to benchmark care
- Content to include full spectrum of care (eg, medical care, mental health, case management, nutrition)



HIV Laboratory Data Monitoring



HIV Education and Self Management



Central Level Responsibilities

- Procure equipment/software/other resources
- Set up and maintain core IT architecture
- Develop core clinical content
- Develop operating policy and procedure
- Maintain expertise to provide initial and ongoing training/support
- Set up infrastructure for quality reporting and data gathering

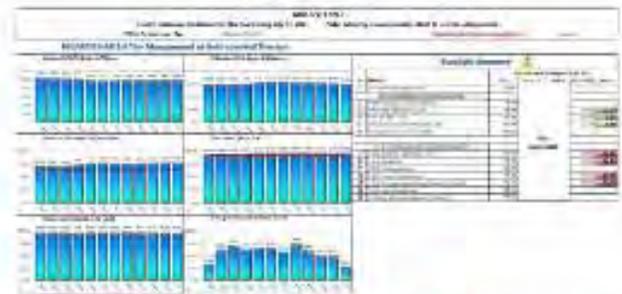


Site Level Implementation Strategy

- Workflow analysis and redesign
- Build site specific customizations
- Extensive training and education
 - Classroom
 - Go-live support (hand holding)
- “Big Bang” - full functionality of all providers at go live
- Incorporation of diffusion of knowledge “theory”
- Knowledge transfer approach (sustaining the change)



Monthly Quality Dashboard



Implementation – Reporting/Quality

- Clearly defined numerators and denominators that utilize data elements in the HIT system
- Reporting algorithms that incorporate appropriate inclusion and exclusion criteria
- Ensure direct access to data by health care facility staff
- Develop a process to validate the aggregate data
- Ensure process in place to “prove” to clinical staff that the data is accurate



USE OF HIT FOR QUALITY IMPROVEMENT



Link between Clinical Content & Quality Reporting (QI)



HIV Indicators

- Medical Visit
- CD4 Cell Count
- Pneumocystis Jiroveci Pneumonia (PCP) Prophylaxis
- Adolescent and Adult Patients With HIV/AIDS who are Prescribed Potent Antiretroviral Therapy
- HIV RNA Control for all patients on Potent Antiretroviral Therapy
- HIV RNA Control After Six Months of Potent Antiretroviral Therapy
- Tuberculosis (TB) Screening
- Sexually Transmitted Diseases-Chlamydia and Gonorrhea Screenings
- Hepatitis B Screening
- Hepatitis C Screening
- Influenza Immunization
- Pneumococcal Immunization
- Hepatitis B Vaccination
- Screening for Injection Drug Use
- Screening for High Risk Sexual Behaviors

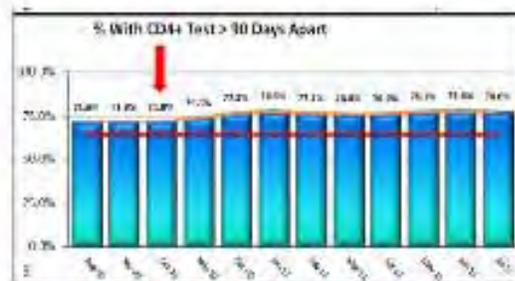
Three Basic Categories of QI Interventions

- Reminders and point of care
- Use data to support retention (after care)
- Use data for public health (population health)

Point of Care Reminder

TEST	PROTOCOL	LAST TEST	RECOMMENDATION
CD4 Cell	Every 3 Months		CD4 Cell in 30 days
TB test	Every 3 Months		TB test in 30 days

Results



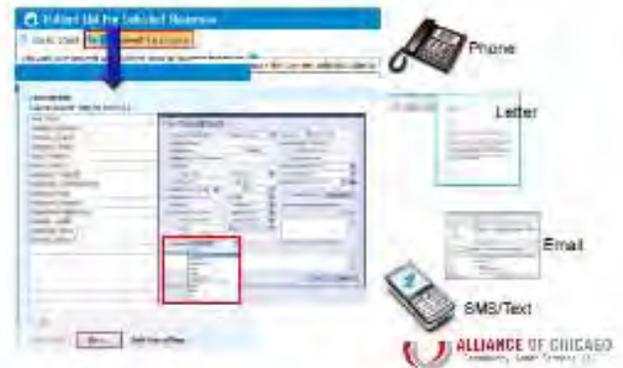
Retention in Care

Indicator	Status	Value	Threshold	Performance	Improvement
CD4- HIV-1 Suppression	🟢	100.0%	> 80.0%	-7	1
CD4- CD4 Count	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1
CD4- TB Disease (Last)	🟢	81.7%	> 70.0%	-4	1

Show Patient List



Contact Patients



Population Health

- On a weekly basis we extract influenza like illness symptoms from the EMR and send to the health department
 - Symptoms include:
- The data is compiled with data from other healthcare facilities in the City of Chicago
- Data from our outpatient facilities show spikes in influenza symptoms prior to other traditional surveillance systems



Influenza-like Illness Surveillance



Considerations

- Successful implementation and use of HIT is more than the system – it's requires people, process, & technology
- HIT expertise is an important element for success; but are currently in short supply
- Plan for expanded capacity and functionality
- Successful system use requires on-going training and coaching

THANK YOU



Title: Putting It All Together: TB Infection Control Through Quality Improvement

Speaker: Ginny Lipke, RN, MHA

Overview of presentation:

Ginny Lipke spoke about the continued need for integration of TB Infection Control (IC) and QI. Common elements associated with both TBIC and QI include measurement to improve care; enhanced communication, education and accountability; and strengthening of systems through process analysis. Ms. Lipke characterized TBIC and QI as parallel efforts characterized by good governance; improved care and safety; standards-oriented; with a focus on structure, process and outcomes of care; and transparency to stakeholders.

She described TBIC and QI as systems approaches to improve care, and stressed the need for harmonization and consistent implementation. Noted barriers to harmonization included the proprietary nature of differing models; different branding and terminology; different indicators and tools to measure outcomes; lack of communication between stakeholders; and need for knowledge management and sharing of strategies.

Ms. Lipke concluded with suggestions for harmonization of TBIC and QI, including increased internal program ownership; promotion of dialogue between infection control and QI staff on implementation of improvement models; cross-agency collaboration on key issues, such as screening and retention; and peer exchange through online resources, meetings, workshops and printed publications to reinforce development of an integrated national TBIC QI program.

Putting it all together : TB Infection Control through Quality Improvement



Ginny Lipke, CDC Atlanta
TB/HIV Team, HIV Care and Treatment Branch



Overview

- Background
- Definitions and common elements of TBIC and QI
- Tools and trainings that support implementation
- Action items as indications



Country-Specific TB Infection Control Guidelines

The TBIC Implementation Package

Risk assessment

TB Infection Control Information Sheet

Background information from the TB Register

1. Do you have a copy of the most recent National TB Annual Report? _____
2. Information on Section 7.8 (Results by population) of the Report on previous length of stay? _____
3. What is the number of TB cases in your facility by gender during the last year? _____
4. What is the number of TB in your facility by province compared to the national average? _____
5. How many TB cases were diagnosed in your facility last year? _____
6. How many cases required TB admission compared to last year? _____
7. How many TB cases were not diagnosed in your facility last year? _____
8. How many TB cases were diagnosed in your facility last year? _____
9. Do you have TB infection control data from your previous year? _____
10. Do you have TB infection control data from your previous year? _____

Background information from the Laboratory

11. What is the TB case notification rate? _____
12. How many TB cases were reported? _____
13. How many TB cases were reported to the TB register after 14 days of diagnosis? _____
14. Do you have TB infection control data from your previous year? _____

The Risk Analysis Tool

THE PROBLEM	POTENTIAL SOLUTIONS	SUPPORT/ RESOURCES	TIMELINE	PRIORITY LEVEL
Managerial				
No IC person designated	Administrator/ ICC to designate	ICC/Admin approval	Within 30 days	
Rising TB conversion rates, especially in the nursing and radiology areas	Enforce Cough Etiquette	ICC/Admin approval Educational materials	Within 30 days	
	Offer TB screening to HCWs	ICC/Admin approval Support of staff	Report to next ICC meeting Within 30 days	
	Offer annual TB IC education to	ICC/Admin support Educational	Within 90 days	

Keep this Window Open
STOP THE SPREAD OF TB

Keep this Door Open
STOP THE SPREAD OF TB

TB Infection Control in HIV Clinics and Out-Patient Settings: a Team Approach



Every Person Counts

- Objectives:**
 - 1. Establish a TB infection control team
 - 2. Assess the current TB infection control status
 - 3. Develop and implement a TB infection control plan
- Key Messages:**
 - 1. TB infection control is a team effort
 - 2. TB infection control is a continuous process
 - 3. TB infection control is a priority
- Implementation:**
 - 1. Develop a TB infection control plan
 - 2. Assess the current TB infection control status
 - 3. Develop and implement a TB infection control plan
- Monitoring and Evaluation:**
 - 1. Monitor the TB infection control plan
 - 2. Evaluate the TB infection control plan
 - 3. Report the TB infection control plan
- References:**
 - 1. World Health Organization. Tuberculosis: Guidelines for Infection Control. Geneva: WHO, 2004.
 - 2. Centers for Disease Control and Prevention. Tuberculosis Infection Control in Health-Care Settings. Atlanta: CDC, 2005.

So why does IC work best with QI?



"what gets measured gets done".

Dr. Margaret Chen,
Director General for WHO

Quality: A Definition

"the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge."

Institute of Medicine. 1990. Medicine: A Strategy for Quality Assurance, Vol. 1, ed. Kathleen Lohr. Washington, D.C.: National Academy Press

Infection Control: A Definition

- Collect, analyze, and interpret health data in order to track infection trends, plan appropriate interventions, measure success, and report relevant data to public health agencies
- Establish scientifically based infection prevention practices and collaborate with the healthcare team to assure implementation
- Work to prevent healthcare-associated infections (HAIs) in healthcare facilities by isolating sources of infections and limiting their transmission
- Educate healthcare personnel and the public about infectious diseases and how to limit their spread

The Association of Practitioners in Infection Control, www.apic.org

Infection Control: A definition

- sharing best practices for preventing, identifying, monitoring, and treating healthcare-associated infections, as well as the collection of meaningful data for internal improvement and public reporting.

The two disciplines

IC

- A discipline concerned with preventing healthcare-associated infection, a sub-discipline of **epidemiology**. It is an essential part of the infrastructure of health care. It employs the consistent use of certain measures to prevent transmission of disease.

QI

- QI involves reviews of the healthcare system and how care is delivered. It is aimed at improvement and efficiency within the structure, process and outcome using periodic sampling of selected indicators to monitor and improve health and eliminate waste and redundancy.

6 Aims for Quality Health Care

- **Safety:** avoid injury to patients.
- **Effectiveness:** evidence-based, have shown benefit
- **Patient-centered:** respectful of and responsive to individual patient preferences, needs, and values
- **Timeliness:** minimize patient waits and avoid harmful delays
- **Efficiency:** avoid waste
- **Equity:** not vary in quality because of patient gender, ethnicity, geographic location or socio-economic status

National Academy of Sciences. Crossing the Quality Chasm. 2001

3 Aims of Infection Control

- Protect the patient
- Protect the healthcare worker, visitors and others in the healthcare environment
- Accomplish the previous goals in a cost-effective manner whenever possible

Society for Healthcare Epidemiology of America (SHEA), 1998

Similarities of TBIC and QI

- Measurements are used to improve care and direct program
- Involves direct participation of staff in the facility
- Enhances communication, education and accountability
- Strengthens the healthcare system through process analysis

Similarities of TBIC and QI

- They are a form of good governance
- They can improve care and safety
- They can safeguard our high standards
- They can assess:
 - the structure of care
 - the process of care
 - the outcome of care
- They allow for transparency to all stakeholders

Barriers to Harmonizing TBIC and QI

- The proprietary nature of differing models may lead to competition, not collaboration
- Different branding and terminology can be confusing for stakeholders
- Different indicators, tools, and software to measure outcomes are burdensome
- Lack of communication between stakeholders
- Lack of knowledge by management and sharing of best practices

Detouring Evidence-based practice

- Avoid the "sacred cow"

Those practices blessed by time but not necessarily by science



Tools and Training

- Easy to use, with few steps
- Easy to incorporate into daily practice
- Easy to modify, if needed
- Ready access to results
- Provides documentation to share strategies and best practices

Suggestions for the Enhancement of TB IC and QI Harmonization

They can do this by:

- Taking ownership internally across program areas
- Supporting a regular dialogue between ICP's and QI on the application of QI models (country-level collaboratives or local working groups)
- Working together and sharing practices to address service quality and IC issues (IE. Screening of all coughing patients, Retention of TB patients in DOTs)
- Sharing best practices and ideas via multiple venues: workshops, websites, newsletters, meetings

How would a national QI program incorporate TBIC indicators?

Thanks!

Title: How HIVQUAL-T Is Moving Forward from Clinical Care to Humanized Health Care

Speaker: Sumet Ongwandee, MD, MS, MPH

Overview of presentation:

Dr. Sumet reviewed Thailand's approach to Humanized Health Care (HHC). HHC encompasses a compassionate approach to medicine. This model is the antithesis to many modern management systems characterized by "machine-like" work, fragmentation of roles, and reduced compassion within the workforce. Strategies to enact humanized health care include: (1) consideration of the whole patient (spirituality, humanity, peace, and aesthetics); (2) deep listening; (3) concern for social and cultural sensitivity; (4) engagement of a diverse group of stakeholders; (5) emphasis on community involvement.

In Thailand, HIVQUAL-T began in 2003. Initial focus was placed on construction of the systems for quality management, improvement, and performance measurement. After these components were established, the program shifted focus to QI training, coaching, and improving clinical care outcomes. Currently, HIVQUAL-T is working towards humanized health care and empowerment of health care workers and patients.

The program has also developed and will continue to investigate specific quantitative and qualitative measurement components to understand the impact of the HHC approach. Suggested quantitative measurements include a satisfactory rating scale and investigation on the impact of HIVQUAL indicators. Qualitative measurements may come from focus groups or group interviews.

"The process of changing life or illness perception is a huge challenge in modern medicine. Humanization needs its place in today's healthcare. We cannot improve quality without taking patients' life into consideration."
- Dr. Komatra Jungsatiensup

**How HIVQUAL-T
Moving Forward from
Clinical Care to
Humanized Health Care**

The ACLN III, Kampala, Uganda
25-31 March 2012

Sumet Ongwadee, MD MS MPH
Bureau of AIDS, TB and STI,
Department of Disease Control, MOPH Thailand

Outline of Talks

- What is Humanized Health Care (HCC)?
- Why we use HHC?
- How to HHC? Perspective of HHC through HIVQUAL-T
- How can we measure success of HHC?

**Humanized Health Care
or
Envisioning Compassionate
Medicine**

WHY WE USE HHC?

“Service machine”

- People working like a machine, less emotional
- Work is divided into fragment and lacks a linkage
- People is working with less thinking and functioning repeatedly

Modern Management system

What happens to Herbert?

“Reduce of Humanization”

- Human is becoming a tool, not a target of improvement
- Daily work is causing suffering
- People are harmed and, perhaps, do harm to others
- Gradual uprise of conflict and violence in an organization
- Good people eventually burn out and loss of enthusiasm

HOW TO HHC?

Humanized Health Care: Philosophy and Concept



Courtesy by Dr. Komatra Jungsatlersup

How to HHC

- Expand the definition of health
- Holistic care approach
- Deep listening
- Concern of social and culture sensitivity
- Build up a culture of voluntary mind
- Adjust management and administration system to facilitate learning

HIVQUAL-T Evolution



Engage more stakeholders/Counterparts



Humanized Health Care* Components

There are three principle components

1. Ability to see holistically
2. Ability to see as humanity
3. Ability to perceive their suffering

* Courtesy by Dr. Komatra Jungsatienusup

Ability to
see
Holistically



Not only HIV
but their life

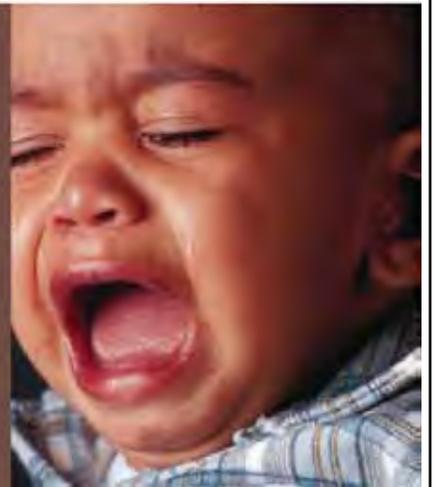
Chawang Crown Prince
Hospital

Ability to
see as
Humanity



*This thin girl has been taken care of by her aging grandparents.
Her mother works in another province.
She cannot eat much. The story of her life touches me so much,
and I visit her almost every week. I promise to take her to see her
mother if she gains more weight.*

Ability to
Perceive
their
Suffering



"I love my mother. Even though I have HIV, that's just the body sickness. I want to live on, I take care of my mother day and night at this time I don't have a job. My siblings don't care. My mother has little time left as she has cancer. If I can take away her pain, I will."



Can We Measure Success of HHC?



Measurements

- Quantitative
 - Satisfactory rating scale: Quality of life
 - High attainment of the HIVQUAL indicators
 - etc.
- Qualitative
 - Focus group or Group interview
 - etc.
- Touch happiness by your heart

Happiness & Warmness overflowed from health care staff and shared to patients



ARV reached out under great flooding situation in Thailand



62 hospitals affected, 8,630 cases living on ARV in flood areas, some of them still living in their home, some of them evacuate to temporary shelters, fortunately most of them were accessible to ARV, Tons of thank to local PLWHA network and health care staff



Story from La-ngoo Hospital

Quotation of HHC

- *The process of changing life or illness perception is a huge challenge in modern medicine. Humanization needs its place in today's healthcare.*
- *We cannot improve quality without taking patients' life into consideration.*

Dr. Komatra Jungsatiensup

THANK YOU FOR YOUR KIND ATTENTION



QUESTION & ANSWER

Communities of Practice: Transcending Boundaries to Improve Quality

Bruce D. Agins, MD MPH
Director, HEALTHQUAL International
ACLN III, Kampala

Acknowledgements

- Misha Baker
- Claire McCullough
- Laura Fitzpatrick
- Joshua Bardfield
- Richard Birchard
- Dr. Ake
- Dr. Voravud

What is a CoP? [not a COP!]

- "a group of people who share a concern, a set of problems or a passion about a topic, and who deepen their knowledge and expertise on an ongoing basis."
 - -Etienne Wenger, *Cultivating Communities of Practice*, 2002.
- Communities of practice have been implemented in the health sector in the 1990s, initially formed in the business and development sectors, most commonly in Canada and the UK.

A quick aside

- Etienne Wenger



- Jean Lave



Why bother with Communities of Practice?

- Through genesis of a social infrastructure, communities of practice have the potential to further **knowledge translation** and sustain collaborative efforts across traditional health care jurisdictions and disciplines.

Communities of Practice

- Typically, communities of practice are characterized by three characteristics:
 - A common domain
 - A shared practice
 - A community
- They offer an opportunity to develop an "ideal knowledge structure—a social structure that can assume responsibility for developing and sharing knowledge"

Is HEALTHQUAL a Community of Practice?

- Common **domain**: *the area of passion*
 - Improving care?
 - Patient involvement?
 - QI methods?
 - Data management for performance improvement?
 - Retention?
 - Integrating QI and infection prevention & control?
 - Adoption of EHRs?
 - Preventing transmission of HIV to infants?
 - Nutrition?

Is HEALTHQUAL a Community of Practice?

- **Practice**: represents the basic body of knowledge the group shares and builds to “deepen their knowledge and expertise” on a topic by learning from each other. More specifically, members learn from peers and through practice. (Bentley 2010)
- CoPs transmit tacit as well as explicit knowledge as social learning structures.
- Members develop the habit of consulting each other.

Lave J, Wenger E: Situated learning, legitimate peripheral participation New York, Cambridge UP 1991

Is HEALTHQUAL a Community of Practice?

Community is defined as a set of interpersonal relationships arising out of people's mutual engagement in learning through practice. Reciprocal ties of accountability, dependency, trust and communication develop.

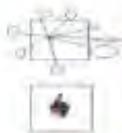
Bonds of connectivity, together with the community's negotiated meanings and shared expertise, provide the cohesion that lends a community of practice its identity and coherence over time. Ideally, the community of practice engenders a strong sense of identity and belonging across members, even those who do not interact regularly or face-to-face. (Bentley 2010)

Lave J, Wenger E: Situated learning, legitimate peripheral participation New York, Cambridge UP 1991

Why a CoP model?

- “Build more effective bridges between knowledge, policy and practice” (Hearn 2009)

Project Team vs CoP



- Deliverables
- Permanent members
- Dissolved once mission is complete



- Objectives determined by group
- Ongoing relationship and bonding
- Members may fluctuate

What is a Virtual community of Practice (vCoP)?

- **Virtual Platform**: relies upon available technology which can be an enabler or an enhancer.
- Initial or occasional face to face meeting allows for some familiarity and ease of virtual communication.

Benefits of a CoP

- Interrelationships in the CoP provide continuing education for providers through ready access to data, experiences and mentors;
- Through the dynamics of shared learning, health professionals become more reflective about their practice when they subject it to peer-based critical scrutiny
- Reflection on practice helps workers to contend with the changing medical, economic, political, and socio-cultural environment that affects their work.
(Parboosingh 2002)

Benefits (2)

- May improve sense of ownership of work
- Egalitarian, ideally
- Enhance job satisfaction

Experience in the health sector

- Improving surgical oncology practice in Canada (Fung-kee-Fung)
- Improving patient safety and quality in Canada (Alberta province)

Limitations

- No real published literature on the benefits of CoPs although value is recognized by participants where they can organize around content instead of management structures
- Control over agenda and content can lead to status quo and "clique" behavior
- Little known or studied about processes of CoPs

Debate and Variations

- Planned or spontaneous?
- A tool for developing social identify among peers defined by their commonality or a structure for knowledge management within an organization?
- Can CoPs survive without dedicated resources?
- Once the community migrates into improvement and beyond knowledge-sharing is it still a CoP?

Barriers and facilitators

- Waning interest
- Competing priorities
- Turnover of participants
- Perceived value
- Facilitation

Have international CoPs been implemented?

- International Center for Tropical Agriculture
 - 14 countries in Caribbean and Latin America

Extending Practice Improvement?

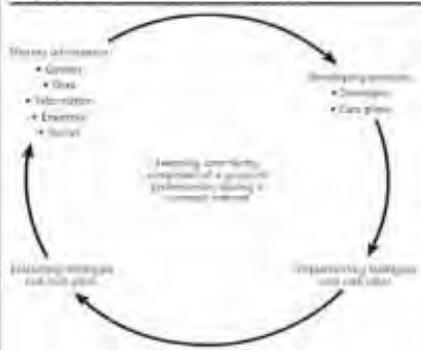
Relationships and Networking



FIGURE 1. The Role of Networking in Practice Improvement

From J. Ward, D. A. Koppelman, & G. R. Koppelman (2008). *Extending practice improvement: The role of networking*. *Journal of the American Medical Association*, 299, 1000-1001.

Figure 1. A communal and iterative strategy of care improvement within a community of practice.



Source: Boykin, et al. *Ann Fam Med* 2010;12(11):777-781. DOI:10.1197/ajfm.l1117

Knowledge Utilization

- Innovation centers around the construction of and transmission of knowledge between organizations
- Social interaction important for both construction and transmission of knowledge
- Learning Organization (Senge, others)
 - Knowledge is systematically captured and shared
 - Designated roles for knowledge workers who collect and transmit knowledge and knowledge managers who facilitate and plan these activities

How does a CoP relate to implementation?

- CoPs are a form of knowledge management where organizational memory, social capital, innovation, and knowledge transfer act as proxies for actual provider and organizational behaviors.



ACLN is a network through which we manage knowledge between ourselves. How can we leverage our collective knowledge sharing to spread knowledge further in countries and foster spread learning from our improvement work to further spread, disseminate, diffuse and implement?

Open Space



Open Space

HEALTHQUAL International
All-Country Learning Network
Kampala, Uganda
26 March, 2012



What is Open Space?

- o Open Space is simple.
- o A self-organizing method to facilitate participant-driven learning sessions.
- o No pre-planned agenda. The session topics are developed by the participants and reflect what is important to them.
- o Open Space ≠ Optional Space



The Principles of ACLN Open Space

- o The power of the sessions is sharing of the collective expertise of the group.
- o If it's a concern of yours, it's a concern of 10 others in the room.
- o Go to where you can contribute and be engaged the most.
- o It doesn't have to end here. Think about how could you keep the discussion going.



The Theme

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



Developing The Agenda

- 1 Participants suggest topics for sessions at the agenda table. Participants sign up for sessions during registration, lunch, and breaks on Monday and Tuesday.
- 2 The top 15-20 sessions will be scheduled for Wed or Thurs.
- 3 New sessions can be added at any time.



How to start

- o Go to your first session
- o Decide in the first 10-15 minutes who will be the facilitator(s), the flip chart note taker, and who will develop the report back with the facilitator(s)
- o Begin the lively discussion
- o Move to another session whenever you want to.
- o Other sessions will be added and announced



Report Back

- o Group Facilitator, Notetaker, and HEALTHQUAL Staff to complete Report Back Template
- o Components
 - Topic Title and Facilitator(s)
 - 3 Lessons Learned
 - 3 Outcomes
 - Does anyone in the session want to continue this discussion after the ACLN?
- o How?
 - How can HEALTHQUAL International help?
- o We will share the individual session report back with all participants on the ACLN material USBs

Issues Discussed**• Reasons for interest in data validity and quality**

- o Quality of facility-level data can be variable despite site-level performance measurement training and prepared training materials
- o Difficult for national quality manager to provide technical assistance at the facility-level (transportation, number of clinics, difficulty conducting TA over the phone)
- o Distrust/non-acceptance of performance measurement results by clinicians/service providers
 - Clearly demonstrating differences between data collection issues and quality of care issues
- o Additional challenges include: (1) high staff turnover of data manager staff; (2) time delay in data reporting and data validation; (3) service providers do not accept the data/take ownership; (4) number of indicators reported on; (5) systems to move data from facility to higher levels.

• What is quality data?

- o The group identified six components of quality data: (1) valid (clear definition of all data items), (2) reliable, (3) timely, (4) complete, (5) precise, (6) inclusion of a qualitative summary/narrative

• What is data validation?

- o Process to understand the quality of data
- o Important elements of data validation include: (1) understanding data source; (2) having clear definitions of measures; (3) comparison of reported data with actual records; (4) understanding sampling methodology

• What are the functional components associated with quality data?

- o Training of staff
- o Defining clear roles and responsibilities
- o Reporting guidelines
- o SOPs
- o Linkage of facility-level data with national level

Outcomes**• Data quality and validation strategies:**

- o Harmonize quality indicators across programs (as possible/applicable)
- o Performance measurement training and technical assistance
 - Provide multiple trainings on performance measurement and how to operationalize indicators
- o Recognize that indicator development is a process
 - Pilot indicators and have all stakeholders review and test associated tools
- o Ensure data managers have appropriate training in data analysis
- o Ensure all staff have appropriate performance measurement job aids and mentorship/supportive supervision following trainings
- o Review standing data collection tools are easy to use and collect accurate information
- o Compare quality performance measurement findings to other information systems
- o Develop strategies whereby sites are able to validate their own data (self-validation)
 - Have the facility/data manager review different variables/parameters on a monthly basis to validate if reported quality data reflects the facility's records. Rwanda uses this strategy.
 - Build in validation checks into electronic databases
 - Emphasize the importance of process indicators
 - Work toward real-time data validation
- o Technical Assistance
 - Leverage people closer to the clinics (within the region) to provide assistance in data quality
 - Peer learning

• Connect data managers throughout the region to provide TA to one another

- o Decentralize Data Quality Assessment
 - Create district-level capacity for performance measurement
- o Clearly define the levels of reporting and data aggregation
- o Incorporate the principles of quality improvement into the performance measurement process
 - Rely on periodic and systematic measurements and interventions in place to improve these findings.
- o Audit charts for patients who did not meet the indicator (failed indicator), to determine why did not get data (data collection error or quality error)

Issues Discussed

1. Definition of an Indicator
2. Characteristics and Types of an Indicator
3. Process for Developing an Indicator

Outcomes

1. An indicator is a statement/variable that measures performance and it can be quantitative or qualitative. If it's quantitative, it can be an absolute number or it can be expressed by a percentage (numerator / denominator).
2. The characteristics of an excellent indicator can be described by the acronym SMART. An indicator should be (S)pecific or reliable so that interpretations of the indicator are unambiguous allowing for comparability between different clinics and rounds. It should be (M)easurable or quantifiable given the data sources. It should be (A)chievable or realistic, allowing for improvement given the resources and setting limitations. It should be (R)elevant, answering the right question and addressing the aims of your program. Lastly, it should be (T)ime bound by specifying the review period.

Types of indicators include impact, outcome, output, process and input indicators.

3. General steps in developing an indicator: 1. Investigate the area of concern. 2. Brainstorm the objective of that area. 3. Develop an indicator to address the objective. 4. Refine indicator to meet SMART criteria.

Issues Discussed

1. Definitions: The group discussed how to define technical assistance, identifying components necessary for good technical assistance. These include: (1) expertise, (2) well-defined needs, (3) specific assistance, (4) resource facilitation, and (5) timely completion. Technical assistance can occur at any level of an organization. The main challenge identified is deliverables that do not meet the needs discussed.

The types of TA identified were grouped into major categories, including: (1) capacity building, (2) laboratory support, (3) advocacy, (4) document creation or review, (5) epidemiology service, (6) strategic information, and (7) data quality assessment.

2. Measures: The group then discussed the importance of evaluating the TA provided. The importance of ongoing reviews to measure relevance, sustainability, and efficiency of TA, and setting specific TA goals was discussed. Specific ways to measure performance include: (1) impact evaluation based on data, (2) pre- and post-tests, (3) direct observation or clinical judgment, (4) examining how documentation and standards of care change, and (5) implementation and sharing of practices.

3. Indicators: The group determined that indicators are difficult to develop, but must be developed on a specific case-by-case basis

4. Impact: The impact of TA can manifest in a number of different ways, including: (1) use of media, such as video, to publicize work, (2) data use to measure the quality of TA, (3) shared practices in other areas, including geographical and program areas, (4) publishing, and (5) appearing at regional or international conferences to share information.

Outcomes

1. Assessing the quality of TA is specific to the type of TA being provided.

2. Contracts or cooperative agreements should be very specific in terms of tasks and performance measures. Indicators that measure performance are very specific to the type of TA provided.

3. Measuring the impact of TA can be difficult, however it should be measured, it should be visible, and may include: publication, accreditation, spread of best practices, conference presentations or abstracts, adoption of guidelines, etc.

Issues Discussed

The discussion group identified the following issues affecting staff motivation: (1) salary; (2) burnout; (3) lack of incentives; (4) absence/lack of regional and ministry support; (5) performance measurement data not shared back to clinics; (6) lack of system for professional support/development; (7) data collection burden; (8) lack of ownership for additional quality improvement activities; (9) uncomfortable environment/poor facilities.

Outcomes

1. Strategies to engage and motivate health care workers
 - a. Promote quality work of clinics and staff
 - i. Hold national or regional forums to promote quality improvement (QI) and exchange strategies
 - ii. Provide awards to support the quality work of both clinics and staff
 - iii. Provide technical assistance to build staff confidence in quality improvement
 1. Support staff to analyze the data and share their story in writing
 - iv. Highlight quality improvement work (magazines/newsletter/booklet)
 - b. Development and implementation of staff appreciation strategies
 - i. Examples: retreat, "Staff of the Year", wellness center for HCWs, provision of lunch/snacks
 - c. Provide professional development/upward movement strategies
 - i. Build staff skills in technology
 - ii. Accreditation/curriculum for quality improvement training for staff
 1. Modular trainings with associated recognition involved
 - iii. Provide training opportunities for staff to allow for professional development/promotion
 - iv. Pre-service and in-service trainings
 - v. Provide/support mentorship opportunities
 - d. Task shifting and task sharing-using a team approach
 - i. Use of expert clients and outreach workers to share work
 - e. If possible, implement new technology (e.g. EMRs) and provide appropriate technical support for staff to gain ownership of these new systems to help best manage their work
2. Institutionalizing quality improvement-develop leadership at the Ministry of Health and government to ensure support for quality from national level
 - a. Priority shift at national level
 - i. Integration of quality into the MOH to build MOH and staff ownership of quality
 - ii. National level to support both in-service and pre-service trainings in quality
 - b. Avoid parallel/vertical quality structures
 - c. Allow for organization accreditation

Issues Discussed

1. Non-HIV Indicators
2. Measuring non-HIV Indicators
3. Challenges in implementing and integrating non-HIV indicators

Outcomes

1. Non-HIV Indicators
 - Non-HIV Clinical Indicators
 - o TB, Malaria, STIs, Growth indicators, Non-communicable disease indicators, e.g. hypertension and Diabetes
 - Non-HIV Non-Clinical Indicators
 - o Waiting time, post-surgery complications and infection, lab turnaround, supply stock, transport, provider ongoing education
2. Measuring non-HIV Indicators
 - TB
 - o Screen for cough, screen for sputum, ppd, chest x-ray
 - Malaria
 - o Track presence of malaria net in the home
 - STI
 - o VDRLs, gram stains, urinalysis, KOH prep, pap smears
 - Growth indicators
 - o Document height for weight in adults
 - o Document height for weight, weight for age, height for age and head circumference in children and be sure to chart these comparisons
 - Hypertension
 - o Blood pressure screening
3. Challenges in implementing and integrating non-HIV indicators
 - Methods of measuring non-HIV indicators are not established
 - Non-clinical indicators measurement parameters are difficult to define
 - o Waiting time is a specific example of a non-clinical indicator that is tough to define
 - i. There is a debate about whether waiting time should be measured from a patient's arrival at the clinic or from their scheduled appointment time.
 - Group members suggested that both measures be used because both have value
 - ii. It is predicted that the WHO upcoming guidelines will establish measurement of waiting time from patient arrival to health facility
 - Supply issue
 - o Some facilities do not have blood pressure cuffs or other necessary resources for screening
 - o Modifications to screening methods were suggested
 - i. In resource-limited settings, symptomatic STI screening can replace laboratory tests.
 - ii. Screening for cough is an effective method of TB screening and does not require extra resources
 - Difficult to transition from HIVQUAL to HEALTHQUAL
 - o There is a tension between HIV care workers and other types of health care workers since HIV care has become a national focus. HIV work receives more funding and support.

Issues Discussed

1. Patient Flow and quality issues in TB/HIV clinics

- Efficient patient flow in TB/HIV clinics may jeopardize quality of care.
 - o TB and TB/HIV patients should be segregated from HIV patients in clinic
 - o Facility limitations may not allow it
 - o Even where “waiting room” segregation is possible, complete segregation in the clinical facility may not be

2. The relationship between efficient patient flow, patient satisfaction, and quality of care.

- Poor patient flow is a leading cause of lengthy wait time
- Lengthy wait time is leading cause of patient dissatisfaction
- Patient dissatisfaction is a common cause of loss to follow-up

3. Organization of clinic space, scheduling, and allocation of staff efforts. Efficient organization of clinic space can dramatically improve patient flow. Flow can be further enhanced by strategically aligning staff efforts/functions with the particular flow demands of a given clinic, and by implementing staggered appointment scheduling.

Outcomes

1. A potential remedy to patient flow and quality issues in TB/HIV clinics is HIV-only clinic sessions. Participants suggested that resource limitations could preclude the possibility but they would explore feasibility further.

2. Patient flow mapping: Participants agreed on the critical importance of patient flow mapping as a first step toward improving patient flow and, consequently, quality of care.

3. Task shifting/rotating responsibilities. Participants recognized the potential for task shifting/rotating responsibilities to improve patient flow. For example, participants suggested that data clerks and triage nurses could serve as pharmacy assistants during down times in order to ensure that all prescriptions are pre-packaged.

Issues Discussed

1. Challenges to monitoring PMTCT Care
 - a. Difficult to retain HIV-exposed infants in postnatal care
 - b. Monitoring care across multiple programs/PMTCT cascade of services
 - i. Lack of common identification systems
 1. Difficult to identify unique clients across services
 - ii. Difficult to track longitudinal information
 - iii. Difficult to track information across home, public, and private sectors
 - c. Staff turnover and workload burden
 - d. Lack of electronic medical record systems
 - e. Shifting deliveries to primary care settings is not always accepted by the client
 - f. Male involvement in ANC

Outcomes

1. Solutions identified include:
 - a. Give each patient a unique identifier, either through an EMR or on a physical card.
 - i. Possible challenge: information stays with the patient/client
 - b. Child health passports. Issued in labor and delivery and carried with the child until 5 years of age. These capture HIV and PMTCT data.
 - c. A midwife case manager is responsible for monitoring PMTCT care at each facility.
 - d. Offering comprehensive care/one-stop shopping. Full HAART and lab tests are available where women are receiving care for their pregnancy.
 - e. Consumer involvement.
 - i. Use “mentor mothers,” or expert patients, to provide support and guidance to new patients
 - ii. Hold support groups that include children and families
 - f. Define male and community involvement in a specific, concrete way.
 - i. Encouraging couples’ testing, and not only in ANC, which is often not male-friendly.
 - g. Provide government health insurance for mothers to encourage them to come to the hospital or clinic for delivery
2. Identified/suggested quality indicators for PMTCT care:
 - a. Partner testing
 - b. ARV eligibility
 - c. Retention
 - d. PCR done at 6 weeks for exposed infant (measuring timeliness)
 - e. Feeding practices
 - f. ART prophylaxis for exposed infants
 - g. HIV testing of “unbooked” mothers in labor ward
 - h. Syphilis screening for mothers in ANC and L&D
 - i. Malaria prevention in ANC
 - j. CD4 monitoring
 - k. Hb levels
 - l. Family planning
 - m. Number of deliveries per health facility
 - n. Linkage to HIV care

Issues Discussed

- Size of facility and viability of tracking systems (computerized or manual) in place to document total number of patients in and out of care annually and associated entry points in and out of care. Some patients may change facilities (ex: switch to private or other public health facilities).
- Stigma
- Economic Factors
- Transferring facilities
- Rural settings of health care facility
- Documenting other health factors (weight loss/gain)
- No contact with facilities to address treatment failure
- Addressing, monitoring, and measuring Pre-ART patient follow-up activities

Outcomes

- Improved documentation and record keeping
 - Develop a tracking system (tracking/tracking registers) that can capture patients in and out of care across facilities (public and private) and the entry points.
- Follow-up on patients who possibly transferred
 - Call facility to follow-up on transferred patients to identify if they are engaged in care at another location
 - Use peer educators/expert patients to bring patients back into care
 - Reports back to facility on who he/she was able to engage via home visits to deliver ARVs and/or to facilitate re-entry into clinic. (emergency hotline available to schedule emergency care visits to facility). However, clinical assessment and counseling sessions are best ways to address adherence, more objective than getting feedback from patient. Approach has shown to facilitate higher community retention rates. Agents obtain ART from facility Pharmacy. The Pharmacy Management Information System tracks total number of clients in community and community ART distribution points (accountability mechanism is in place to determine who received and who did not receive ARTs).
 - Clients engaged in care at facility level are provided with options to access care at sites centrally located in community (closer to home/village).
 - Utilizing community counselors or peers that can address treatment failure and adherence (ex: CD4/VL testing, monitoring other health conditions, and other medications, etc).
 - Pre-empting self transfer: Mapping to determine where patients live, transferred out and where they are referred, and follow-up via calls to determine if those transferred out are receiving care.
 - Self-forming adherence groups (are cost effective/cheap, self-motivated, and reduce stigma). The group consists of 6 persons in communities who are stable. One community/peer is identified monthly for submitting documentation with patient identification number, name, age, treatment regimen, dates of appointments, and prescribing/medication distribution history and file is signed. Patients must be seen every 6 months.
 - Implement system to screen every six-months to check CD4 for pre-ART patients
 - Identify stable patients every 6 months and ask them where they want to receive care (in their village or in another location).
 - Using pre-ART patient support groups linked at facility to community (resources to convene support are provided by local government and NGOs)
 - People are confident about disclosing HIV status and talking about being on treatment. Government has integrated HIV into all health sectors.

Issues Discussed

1. Characteristics of high volume clinics
2. Challenges of QI in high volume facilities
3. Solutions to the challenges

Outcomes

1. Characteristics of high volume clinics included:
 - Understaffed
 - Busy because of high patient load
 - Documentation challenges due to high patient volume
2. Challenges of QI in high volume facilities:
 - Shortage of staff
 - Scheduling challenges
 - Patient preference for clinic
 - Lack of resources
3. Solutions to the challenges of QI in high volume clinics:
 - Strong clinical information system (EMR if possible)
 - Leadership buy-in and involvement
 - QI focal person needed in absence of committee
 - Consumer involvement
 - Task-shifting
 - Integrating QI roles in all job descriptions
 - Introduction of QI in pre-service training
 - Capacity building for staff and consumers
 - Incorporating QI into all supportive supervisions
 - Improve organization and appointment systems
 - Implementing quality management plan
 - Coaching and mentorship
 - Motivating staff through methods like positive reinforcement, feedback, and tea breaks.

Issues Discussed

1. Challenges faced in adolescent HIV care
2. Achievements in adolescent HIV care
3. Potential solutions to challenges faced
4. Prioritizing strategies for improving adolescent HIV care across countries

Outcomes

1. Challenges faced in adolescent HIV care

The group identified key challenges they have faced in caring for HIV+ adolescents.

1. Partner, public, parental disclosure to children	7. Staff training
2. Transmission/ risk behaviors	8. Social support for orphans and vulnerable children
3. Absence of WHO guidelines	9. Identifying source of infection
4. Developmental delays due to illness/treatment	10. Adolescent specific data collection and analysis
5. Transitioning from adolescent to adult care	11. Increasing public awareness and decreasing stigma
6. Reproductive health and sexuality	12. Adherence issues related to treatment fatigue and self weaning off medications

2. Achievements in adolescent HIV care

Representatives from various countries discussed their success stories in adolescent HIV care that begin to address some of the challenges identified.

1. Identification of unique populations that require distinct types of care (ped., adult and adolescent)	4. Adolescent friendly clinics
2. Establishment of peer groups and clubs to improve adherence and disclosure	5. Adolescent counseling and training
3. Development of national guidelines (with UNICEF)	6. International adolescent exchange

3. Potential solutions to challenges faced

<p>1. Partner disclosure and public disclosure</p> <ul style="list-style-type: none"> a. Testimonies and peer motivation for testing b. Utilizing drama and performance groups to address topics of disclosure c. Coaching and counseling to ensure self-preparedness and self-readiness 	<p>8. Staff training in adolescent care</p> <ul style="list-style-type: none"> a. Development of curriculum in-service training (with help from ITECH) b. Integration into pre-clinical training c. Development of job aides
<p>2. Parental disclosure to children</p> <ul style="list-style-type: none"> a. Allow for a system of emergency disclosure when necessary <p>3. Transmission and risk behaviors</p> <ul style="list-style-type: none"> a. Improve adherence to prevent transmission <p>4. Absence of WHO guidelines</p> <ul style="list-style-type: none"> a. Bring to attention of national political leaders so they can advocate for adolescent health 	<p>9. Social support for orphans and vulnerable children</p> <ul style="list-style-type: none"> a. Financial support for education b. Collaboration between national ministries c. Advocacy and collaboration with NGOs d. Linkage to services within clinic e. Obtain buy-in from the government to create a centralized database for resources
<p>5. Developmental delays due to illness and treatment</p> <ul style="list-style-type: none"> a. Allow patients to stay in adolescent clinic until a later age (into early 20s) and ensure they are prepared for transition to adult care 	<p>10. Identifying sources of infection</p> <ul style="list-style-type: none"> a. Data quality from PMTCT program and strong linkages from PMTCT program b. Operational research beyond routine data collection
<p>6. Transition from adolescent to adult</p> <ul style="list-style-type: none"> a. Periodic exposure to adult care providers at adolescent clinic b. Visits to adult clinic before transition c. Integration of pediatric, adolescent, adult services d. Pre-transition counseling 	<p>11. Adolescent specific data collection and analysis</p> <ul style="list-style-type: none"> a. Encourage collaboration by national HMIs b. Obtain initial data to begin discussion of need for adolescent specific data collection c. Utilize data and techniques from facilities with higher technologies like EMRs to improve all data collection processes
<p>7. Reproductive health and sexuality</p> <ul style="list-style-type: none"> a. Ensure there is access to condoms b. Inclusion of all stakeholders in messages to adolescents to ensure consistent advice (home, school, church, clinic) c. Rights based training in sexual health with emphasis on personal responsibility <ul style="list-style-type: none"> i. The World Population Foundation is an organization that has supported this adolescent training 	<p>12. Increasing public awareness and decreasing stigma</p> <ul style="list-style-type: none"> a. Improve data collection, analysis and interpretation for use in awareness campaigns b. Increase adolescent involvement in messaging c. Involve political leadership <p>13. Adherence issues related to treatment fatigue and self weaning off medications</p> <ul style="list-style-type: none"> a. Improve disclosure so that adolescents have ownership over their status and understand the importance of their medication b. Treatment education c. Continuous counseling (before adherence and treatment fatigue occurs and throughout)

4. Prioritizing strategies for improving adolescent HIV care across countries

The group discussed the tools they can share to strategize the process of improving adolescent HIV care.

1. Develop national guidelines and share guidelines amongst countries.
 - a. Past countries have had support from UNICEF
 - b. Namibia and Rwanda already have established adolescent HIV care guidelines
2. Share best practices across countries
3. Share partners who have helped with adolescent services so other countries can approach that partner.
 - a. Examples with UNICEF for national guidelines and World Population Foundation for training

Issues Discussed

1. Training of coaches at different levels
2. Tools for Coaching
3. Expectations at the site level from coaches.
4. Harmonization of QI coaching and clinical mentoring
5. Staff turnover

Outcomes

1. Different countries have different approaches to coaching, which depends on the structure of the existing health system and the resources available. For example, in Mozambique, three national level staff provide coaching to 5 provincial level staff. The provincial level coaches train district level coaches and district level coaches train individual sites. A coach from national level will participate in the training at the site level with the district coach. In Swaziland, HIVQUAL team trains regional level QI focal people who then train staff at the site level. Across most countries, coaches are trained in basic QI, coaching skills and data collection. All members of healthcare team can be coaches, not necessarily physicians; however, in some cases coaches with lower credentials may be hesitant to approach higher level clinic staff.
2. It is difficult to create a standardized tool because of site variation; however, basic tools may provide a systemized guide to make sure sites have basic QI infrastructure in place and an advanced tool could be used to address different components of QI.
3. Coaches should provide supportive supervision. Coaching should be done in a friendly manner and site visits should be scheduled at the convenience of the facility. In some countries, coaches train clinic staff in QI related activities only. In others, coaches integrate QI coaching into a comprehensive supervisory visit that includes all departments of a clinic, not just the HIV/AIDS department.
4. HIVQUAL shouldn't be vertical. Ideally, clinic staff should be trained on QI processes and clinical skills simultaneously. This would harmonize clinical mentoring and QI coaching to give clinic staff the skills necessary to both identify problems and address clinical skill-related gaps.
5. At site level, there should be a record of QI activities (diary). Frequent QI training for clinic staff should be available. Multiple members of clinic staff should be trained in crucial QI activities such as data collection so that QI activities can continue despite high staff turnover.

Issues Discussed

- Defining data literacy
 - o The group defined data literacy as how the facility and region understand the role of data in quality improvement at all levels of utilization
- Ultimate goal: data needs to be useful both to the clinician at point of care and at different aggregate levels (e.g. district, regional, national)
- Challenges of data literacy
 - o (1) Clinicians and data managers do not understand/find utility the data reporting system/importance; (2) separation between clinical management and data entry; (3) electronic data systems are not always found useful

Outcomes

- Strategies to improve data literacy
 - o Develop ownership of data quality
 - Provide a measurement and evaluation 101 training for data managers and clinic staff
 - In trainings, guidance materials, and job aides provide specific examples of how data quality affects decision making
 - Make the levels of data collection, aggregation, and analysis transparent and responsive to one another
 - o Peer coaching
 - Data quality evaluation results can be used to identify well performing facilities. Staff from these sites can help coach other sites within the region.
 - o Quality improvement education/trainings on data
 - A data quality education strategy was shared by Zambia. The country has developed and implemented a training for district-level staff on “Epidemiology for Data Users”. This training includes the following components:
 - Overview of epidemiology, data quality, measurement and evaluation, data systems in the country, how to summarize and display data, how to write reports
 - This training emphasizes the importance of looking at one’s own data
 - The training is currently being adapted for facility level staff
 - Zambia shared the importance of including a diverse group of stakeholders in the development of these materials. (e.g. representatives from MOH, NGOs, local university). The curriculum should be piloted and revised as appropriate.
 - o Include quality within roles and responsibilities of data managers, clinicians, and different members of the clinic staff
 - o Investigate strategies to include a data quality plan within the countries National Quality Management Program. Andrew Hamilton will provide resources to the group on different international examples.

Issues Discussed

1. Impact Evaluation Design. A general discussion of evaluation design was framed in terms of the following specific questions:

- What is the purpose and importance of evaluation of QI impact
- How is the impact of QI evaluated
- What is the core difference and relationship between impact and outcomes evaluation
 - o The causal chain: Inputs > Activities > Output > Outcome/Effect Impact
 - o How does outcomes evaluation roll-up to impact evaluation
- When should QI impact be evaluated
- What are the challenges and barriers to the evaluation of QI impact

2. Who is evaluating and who is evaluated:

- Who is evaluating
 - o Ministry of Health
 - o Funders
 - o Implementers
 - o Development partners
 - o Beneficiaries/consumers
 - o Consultants
- Who is being evaluated
 - o Depends on
 - Who is evaluating
 - What is being evaluated
 - The scope of the evaluation
 - o May include
 - Ministry of Health
 - Implementers
 - Facilities/sites

3. Challenges and barriers to impact evaluation. Limitations on QI utility of quantitative process improvement indicators: basic quantitative indicators for process improvements may not provide sufficient information to drive or contribute to actual QI impacts. Alone, quantitative data may not answer questions about why processes do or do not function effectively.

Outcomes

1. Qualitative experiential data must be used to fill “gaps” in quantitative impact analysis in order to inform QI.
2. None of the participants had actually been directly involved in conducting an impact evaluation prior to the session. At the session’s conclusion, virtually every participant expressed an interest in conducting one in the future.
3. QI may be integrated into many different aspects of a program and implemented across multiple programs. Assessing the impact of QI in isolation is consequently very challenging. HEALTHQUAL may wish to give some consideration to the issue and provide appropriate TA.

Issues Discussed

1. Setting up a national QMP: The necessary steps needed for setting up a national Quality Management Program were discussed. These include: (1) strong leadership commitment, (2) stakeholder consultation, (3) development of national QI policies, guidelines, and standards, (4) identification of focal persons, (5) development of Performance Measurement, (6) identification of priority areas, (7) development of indicators, (8) development of tools for data collection, analysis, and report generation, (9) trainings, and (10) a pilot program.

In addition to these steps, it is important to create linkages among different program areas, harmonizing processes, indicators, and priorities.

2. Implementation of a national QMP: When a QMP is launched, it is important to: (1) train implementers, (2) develop mentorship and coaching opportunities, (3) promote peer learning, (4) conduct performance measurement, and (5) seek patient involvement.

3. Sustainability of a national QMP: A sustainable national QMP requires: (1) ownership by institutions at all levels, (2) financial, human, and material resources, (3) a transition plan for vertical programs, (4) frequent M&E, and (5) effective documentation and communication.

Outcomes

1. When setting up a national QMP, it is necessary to have strong leadership commitment and national broad-based quality management framework based on key identified priorities.

2. Joint annual operational planning, monitoring and evaluation are integral to the implementation of a QMP.

3. There is a need for institutionalization on all levels of setting up a national QMP.

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