

# Strengthening Quality in Cambodia Health System to Achieve Universal Health Coverage

**Bruno Bouchet, MD, MPH,**  
**Director Health Systems Strengthening**  
*FHI 360, Washington DC office*

# Objectives

- **Map the QI interventions and their stakeholders**
- **Identify coordination mechanisms**
- **Share EQHA contributions to the integration of Continuous Quality Improvement (CQI)**

# Universal Health Coverage (UHC)

*“UHC means ensuring that **all people and communities** can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of **sufficient quality** to be effective, while also ensuring that the use of these services does not expose the user to **financial hardship**” (WHO)*

***Equitable Financial Access + Equitable Quality of Services = Improved Health***

# Latest Evidence on Improving Quality

## Delivering quality health services

### A global imperative for universal health coverage

**World Health Organization**

**WORLD BANK GROUP**

**OECD**

## HQSS

The Lancet Global Health Commission on High Quality Health Systems in the SDG Era

## The Lancet Global Health Commission

### High-quality health systems in the Sustainable Development Goals era: time for a revolution



Margaret E. Krak, Anna D. Gage, Catherine Arsamault, Kedy Jordan, Hannah H. Lefcic, Sunam Roder-DéWan, Olusoji Adyig, Pierre Barker, Bernadette Doelman, Svetlana V. Doubova, Mike English, Ezekiel Garcia-Elomri, Frederica Guanois, Oye Gurije, Lisa R. Hinchcliff, Lixin Jiang, Edward Kelley, Ephrem Tekle Lemanga, Jarker Lijedrand, Address Malata, Tanya Marchant, Malekha Precious Mafioso, John M. Meara, Manoj Mahanan, Youssoupha Ndiaye, Olaf Norheim, K. Srinadh Reddy, Alexander R. Kowe, Justina A. Salamoni, Gagyan Thapa, Nana A. Y. Twum-Dansie, Muhammad Patel

#### Executive summary

Although health outcomes have improved in low-income and middle-income countries (LMICs) in the past several decades, a new reality is at hand. Changing health needs, growing public expectations, and ambitious new health goals are raising the bar for health systems to produce better health outcomes and greater social value. But staying on current trajectory will not suffice to meet these demands. What is needed are high-quality health systems that optimise health care in each given context by consistently delivering care that improves or maintains health, by being valued and trusted by all people, and by responding to changing population needs. Quality should not be the purview of the elite or an aspiration for some distant future; it should be the DNA of all health systems. Furthermore, the human right to health is meaningless without good quality care because health systems cannot improve health without it.

We propose that health systems be judged primarily on their impacts, including better health and its equitable distribution; on the confidence of people in their health system; and on their economic benefit, and processes of care, consisting of competent care and positive user experience. The foundations of high-quality health systems include the population and their health needs and expectations, governance of the health sector and partnerships across sectors, platforms for care delivery, workforce numbers and skills, and tools and resources, from medicines to data. In addition to strong foundations, health systems need to develop the capacity to measure and use data to learn. High-quality health systems should be informed by four values: they are for people, and they are equitable, resilient, and efficient.

For this Commission, we examined the literature, analysed surveys, and did qualitative and quantitative research to evaluate the quality of care available to people in LMICs across a range of health needs included in the Sustainable Development Goals (SDGs). We explored the ethical dimensions of high-quality care in resource-constrained settings and reviewed available measures and improvement approaches. We reached five conclusions:

**The care that people receive is often inadequate, and poor-quality care is common across conditions and countries, with the most vulnerable populations faring the worst**  
Data from a range of countries and conditions show systematic deficits in quality of care. In LMICs, mothers

and children receive less than half of recommended clinical actions in a typical preventive or curative visit, less than half of suspected cases of tuberculosis are correctly managed, and fewer than one in ten people diagnosed with major depressive disorder receive minimally adequate treatment. Diagnoses are frequently incorrect for serious conditions, such as pneumonia, myocardial infarction, and newborn asphyxia. Care can be too slow for conditions that require timely action, reducing chances of survival. At the system level, we found major gaps in safety, prevention, integration, and continuity, reflected by poor patient retention and insufficient coordination across platforms of care. One in three people across LMICs cited negative experiences with their health system in the areas of attention, respect, communication, and length of visits (visits of 5 min are common); on the extreme end of these experiences were disrespectful treatment and abuse. Quality of care is worst for vulnerable groups, including the poor, the less educated, adolescents, those with stigmatised conditions, and those at the edges of health systems, such as people in prisons.

Universal health coverage (UHC) can be a starting point for improving the quality of health systems. Improving quality should be a core component of UHC initiatives, alongside expanding coverage and financial protection. Governments should start by establishing a national quality guarantee for health services, specifying the level of competence and user experience that people can expect. To ensure that all people will benefit from improved services, expansion should prioritise the poor and their health needs from the start. Progress on UHC should be measured through effective (quality-corrected) coverage.

#### High-quality health systems could save over 8 million lives each year in LMICs

More than 8 million people per year in LMICs die from conditions that should be treatable by the health system. In 2015 alone, these deaths resulted in US\$6 trillion in economic losses. Poor-quality care is now a bigger barrier to reducing mortality than insufficient access. 60% of deaths from conditions amenable to health care are due to poor-quality care, whereas the remaining deaths result from non-utilisation of the health system. High-quality health systems could prevent 2.5 million

Lancet Glob Health 2018

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Howard H Chan School of Public Health, Boston, MA, USA

(M E Krak MD, A D Gage MSc,

C Arsamault PhD, H H Chan PhD,

S Roder-DéWan MD, New York

University College of Global

Public Health, New York, NY,

USA (L Jiang MSc), The World

Bank, Washington, DC, USA

(O Adyig MD), Institute for

Healthcare Improvement,

Cambridge, MA, USA

(P Barker MD), WHO, Geneva,

Switzerland (B Doubova MD,

E Kelley MD), Mexican Institute of

Social Security, Mexico City,

Mexico (SV Doubova MD),

KEMRI-Wellcome Trust

Research Programme, Nairobi,

Kenya (M English MD), Institute

for Clinical Effectiveness and

Health Policy, Boston Area,

Argentina (J Garcia-Elomri MD),

Inter-American Development

Bank, Washington, DC, USA

(F Guanois PhD), WHO

Collaborating Centre for

Research and Training in

Mental Health, Neuroscience,

Drug and Alcohol Abuse,

University of Basel, Basel,

Nigeria (Prof D Gurije PhD),

Northwestern University

Feinberg School of Medicine,

Chicago, IL, USA

(Prof L Hinchcliff MD),

National Centre for

Cardiovascular Disease, Beijing,

China (J Jiang MD), Federal

Ministry of Health of Ethiopia,

Addis Ababa, Ethiopia

(J T Lemanga MD), Bill and

Melinda Gates Foundation,

Seattle, WA, USA

(J Lijedrand MD), Malawi

University of Science and

Technology, Limbe, Malawi

(Prof A Malata PhD), London

School of Hygiene & Tropical

Medicine, London, UK

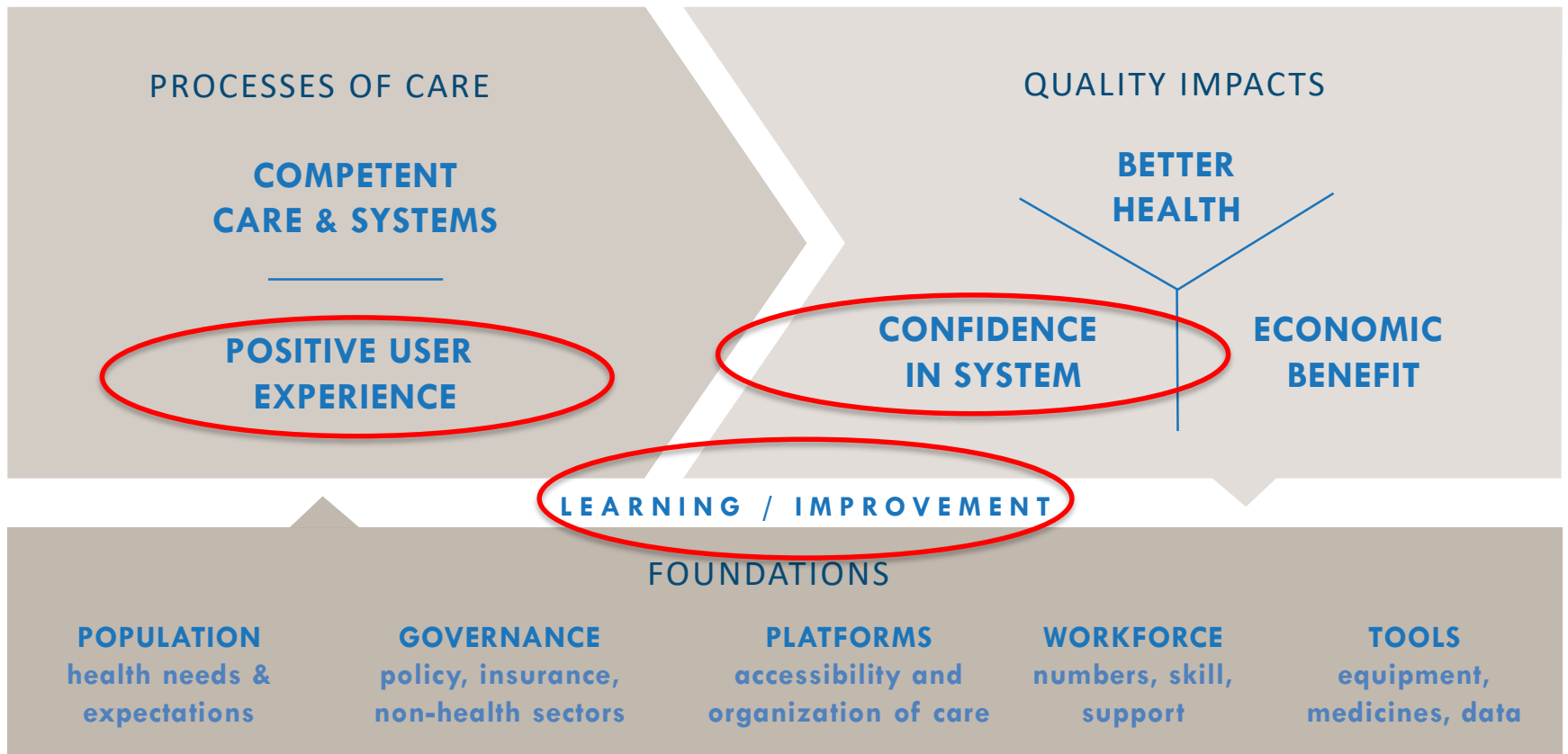
(T Marchant PhD), National

Department of Health of the

Republic of South Africa,

# HIGH QUALITY HEALTH SYSTEM FRAMEWORK

FOR PEOPLE



EQUITABLE

RESILIENT

EFFICIENT

# Which Combined Interventions are most Effective to Improve Health Worker Performance?

Rowe A et al., *Lancet* [VOLUME 6, ISSUE 11](#), PE1163-E1175, 2018



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# Typology of Quality Improvement Interventions

Level of the health system	Lever	Interventions
Macro (national government)	Population demand & empowerment	Participatory groups/community empowerment/education; community oversight/monitoring; consumers reporting; patients' rights charters.
	Governance & regulation	Licensing, certification, accreditation; strategic purchasing; accountability mechanisms; quality measures; waste reduction; setting standards; benchmarking; national QI policy; payment mechanisms.
	Service delivery	Quality-oriented service delivery design, including private sector, that organizes service delivery at each level against an explicit package of services, with clear referral decisions.
	Education	Quality-oriented pre-service training of health professionals; training in health system management, public health and QI;
	Incentives and finance	Non-financial incentives; performance-based incentives; recognition/rewards;
Meso (region, province, district)	Network of care	Learning collaboratives; task-shifting;
	System management	District system management and implementation tools; quality assessment; mortality reviews; checklists; protocols;
Micro (service delivery)	Health worker	In-service continuing education; supportive supervision; job-aids; checklists; guidelines; self-assessment; interpersonal communication skills;
	Facility	Improve infrastructure; ensure supplies; CQI teams; team-based and patient-centered care; integrated services; case management;

# How to assess the QI Interventions?

- 1. Does/do the mechanism(s) exist?**
  - Make sure its definition is clear and well understood
- 2. What is its stage of development?**
  - Ex: NQEM is being implemented
- 3. Is the mechanism working well?**
  - Mix of process and results measures
  - Hard to study/control the effects of other factors
- 4. Is it implemented at scale?**
  - Measure coverage
- 5. Is it sustainable?**
  - EX: QI is not a time-limited project, it's integrated in the health system



# Stakeholders of main QI Interventions and the need for coordination/collaboration

QI Interventions	Health System Stakeholders	Partners
Health Care Accreditation System	MOH (Hospital Service Department; QIWG)	USAID/EQHA, GIZ
Performance-Based Financing/NQEM	MOH (QAO of the Hospital Service Department; PHD, OD)	H-EQIP (World Bank, DFAT, KfW, KOICA); USAID/EQHA
Licensing/Relicensing private facilities	MOH (Hospital Service Department; Private Sector WG; One-Window Service)	WHO, USAID/EQHA, GIZ
Facility-based CQI activities	MOH (National programs, PHDs, ODs, RHs, HCs)	USAID/EQHA, GIZ
Supportive Supervision	MOH (National programs, PHDs, ODs, RHs, HCs)	WHO/Other partners
Competency-based pre-service training	MOH (HRDD, RTC, UHS)	USAID/EQHA, WB
Continuous professional development	MOH (National programs, health professional councils, NIPH)	USAID/EQHA, Health Private Associations
Strategic Purchasing	MEF (NSSF, HEF)	H-EQIP, GIZ, ILO

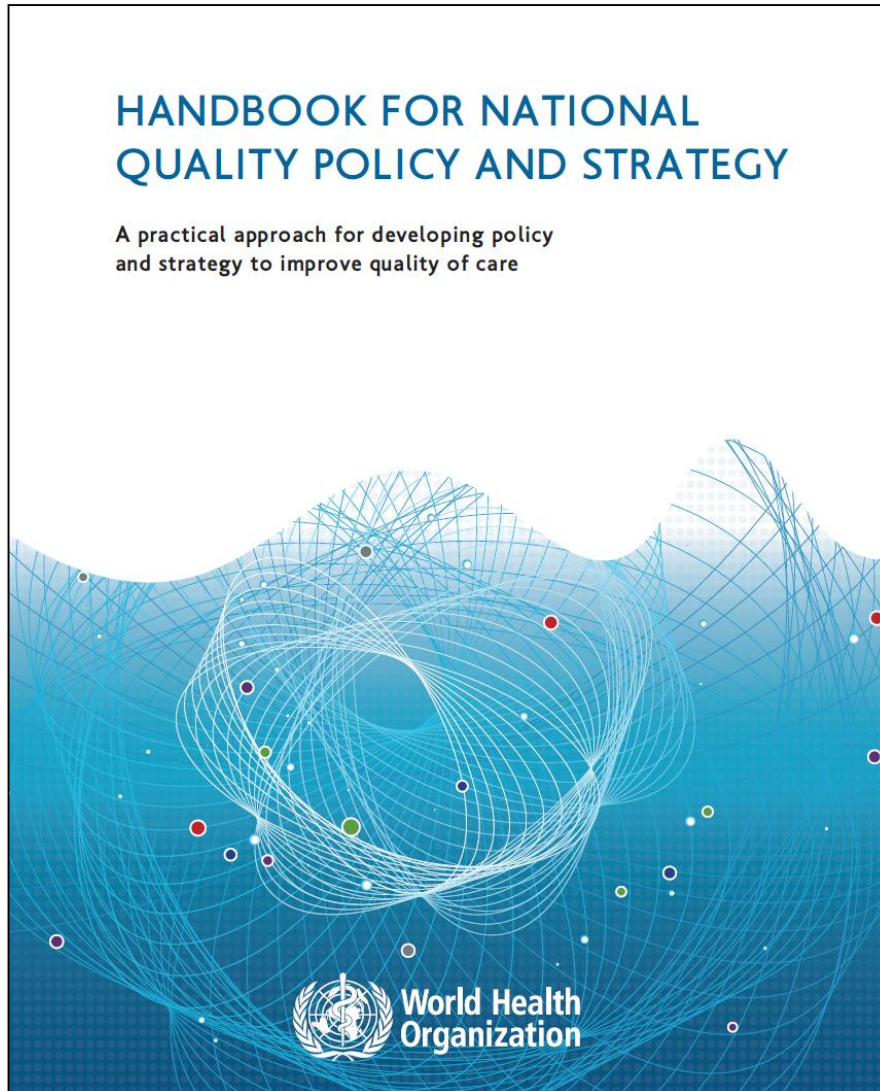
# **Main Recommendations for a QHS (Public & Private)**

- **Adjust measures of quality of services:**
  - **Focus on effective coverage indicators**
  - **Include patients' confidence in the health system and patient experience with care**
- **Support the integration of QI Collaboratives into the health system at scale based on results from the pilot provinces**
- **Maintain/reinforce collaboration of stakeholders on specific QI interventions to maximize synergies at all levels**
- **Prepare for the revision/update of the national QI policy based on lessons learned and latest evidence to achieve UHC**

# Effective coverage indicators measure quality of care

Coverage Measures	Effective Coverage Measures
Proportion of births attended by skilled health personnel	Proportion of vaginal births with active management of third stage of labor
Four or more visits to antenatal care (%)	Pregnant women receiving timely and adequate care—eg, first visit within 13 weeks gestation, care provides protection from tetanus; repeated blood pressure measurements; screening for syphilis, HIV [as appropriate], and diabetes; and counselling on risks, delivery planning, and immediate breastfeeding
People with HIV receiving antiretroviral therapy	People with HIV with viral suppression
Cervical cancer screening in women aged 30–49 years	Proportion women aged 30–49 years with cervical cancer screening with timely results and confirmed diagnosis as indicated
Children born without complications	Proportion of newborns weighed and breastfed within first hour of birth.
TB patients put under treatment	Proportion of all people with active tuberculosis who successfully complete treatment

# How to develop a national QI policy & strategy



## Main Elements of a QI Policy

- **National health goals and priorities**
- **Local definition of quality**
- **Stakeholder mapping and engagement**
- **Situational analysis: state of quality**
- **Governance and organizational structure for quality**
- **Improvement methods and interventions**
- **Health management information systems and data systems**
- **Quality indicators and core measures**

# EQHA Support to QI Interventions

Interventions	EQHA support to the Development of a Quality Health Systems in Cambodia
<b>Macro –Level Support</b>	<ul style="list-style-type: none"><li>• Technical support to the design of a hospital accreditation system, including standards development and surveyor capacity building</li><li>• Development of minimum standards for the licensing of private hospitals</li><li>• Private sector mapping</li><li>• Supports registration management system to professional councils</li><li>• Technical support to the revision of CPGs</li><li>• Competency-based training of pre-service education public and private institutions</li><li>• Facilitates development of new clinical vignettes for PBF mechanism.</li><li>• Digitalization of NQEM tools</li><li>• Development of continuous professional development systems with professional councils</li><li>• Patient satisfaction survey</li></ul>
<b>Meso-Level Support</b>	<ul style="list-style-type: none"><li>• Technical support to the design and implementation of QI Collaboratives including capacity building of coaches</li><li>• Quality assessment survey designed</li></ul>
<b>Micro-Level Support</b>	<ul style="list-style-type: none"><li>• QI training and exchange visits, involving patients and private sector</li><li>• Coaching of 52 CQI teams and learning sessions</li><li>• Updating the training on provider behavior change</li></ul>

# Recommendations to EQHA

- Develop capacity in implementing QI Collaboratives to integrate CQI in the health system:
  - Competency-based QI training, using rolling training sessions through RTC, to be linked to CPD
  - Design and support 6 Collaboratives (one per province) on different priority issues
  - Build the capacity of NQEM assessors in coaching QITs, jointly with QAO
- Support the integration of measures of effective coverage and patient's confidence/trust into the existing health information systems (HMIS, NQEM, etc.) and into the QI Collaboratives, as appropriate
- Develop/support rapid scale up of best practices & improvements through multiple approaches within EQHA provinces
- Document and communicate results and learning: success stories, QI briefs, QI technical report

# Group work on coordination mechanisms

- At National level (public/private)
- At Provincial level (public/private)
- At district level (public/private)

# Existing coordination mechanism of QI efforts in health sectors

## National level

### QI structure in place:

1. HSD: QAO, Bureau of Regulation and Ethics; HRDD
2. National programs: NCHADS, CENAT, NMCHC, CNM, NCHP

### Coordinating platforms:

- QIWG, QEWG for NQEM, Private Sector Working Group, Private Sector Committees

## Provincial level

### QI structure in place:

1. PHD: QI team, NQEM assessors and coaches
2. Coordinators of national program at PHD: HIV/AIDS, TB, MCH, Malaria, etc.
3. One Window Service for private health facilities

### Coordinating platforms:

- Pro-TWG, Provincial Private Sector Committee, NQEM assessment and debriefing

## District level

### QI structure in place:

1. OD Assessors and coaches, coordinators of national programs at OD
2. RH QI team
3. One Window Service for private health facilities

- Coordinating platforms:?



# **Results Achieved using the QI Collaborative Model for Improvement in Cambodia**



## **Definition and features of the QI Collaborative**

**Results we can get through a QI Collaborative effort:  
examples from other countries**

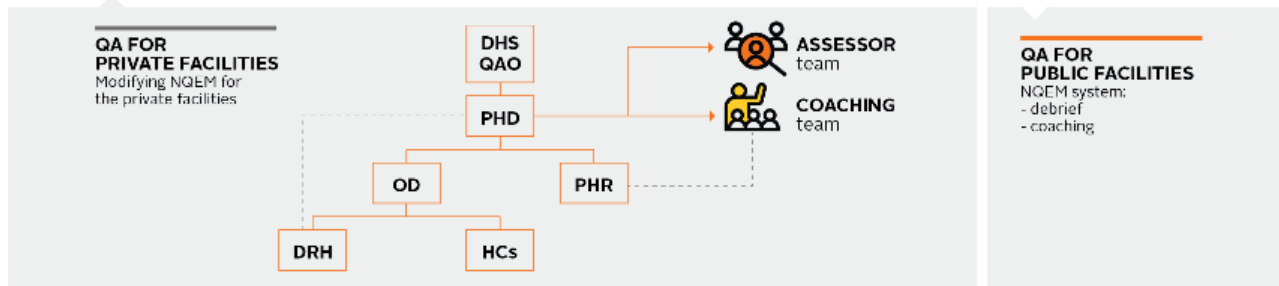
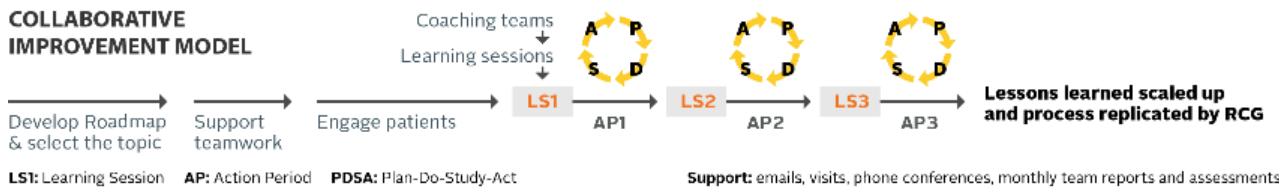
**(Dr. Nilufar Rakhmanova)**



## Strategy: Collaborative Improvement process to achieve higher NQEM scores

A “Collaborative” consists of teams from multiple health facilities that go through a structured learning process that alternates “action periods” (testing improvement through PDSA) and “learning sessions”

### COLLABORATIVE IMPROVEMENT MODEL



### Core stakeholders:

#### Public health system:

**H-EQIP (QAO)**  
 PHD, ODs,  
 Referral hospitals  
 Health centers

**Private practitioners**  
 (cabinets and individuals)

**Patient representatives**  
 and networks

**Provincial and district**  
 governors

# Features of the Collaborative that complement NQEM



**Multiple teams  
with common aim**



**Learning  
Sessions to foster  
exchange**



**Common QI  
indicators to  
benchmark**



**Management  
structure**

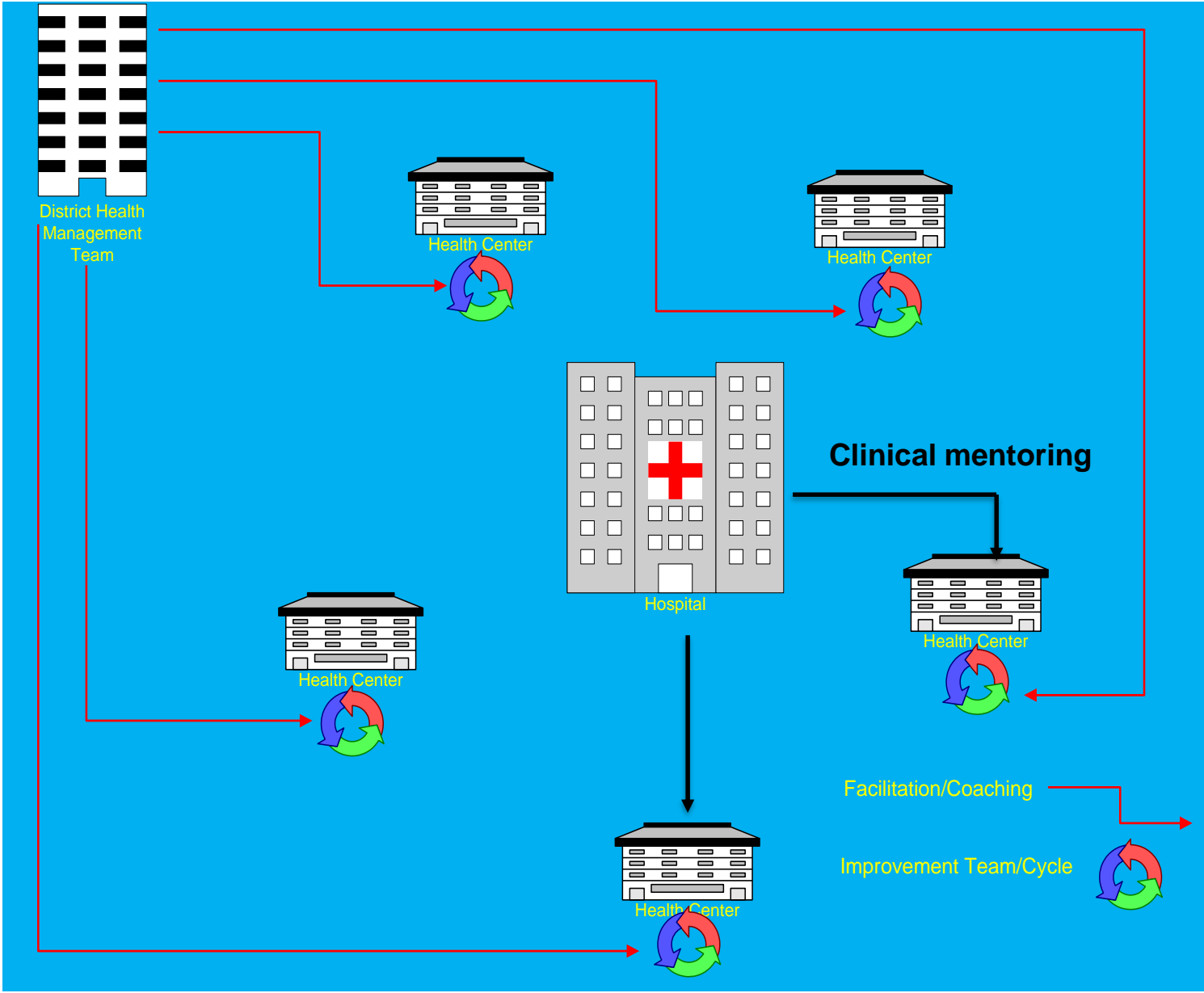


**Coaching with  
the focus on  
teamwork,  
analysis of  
data**

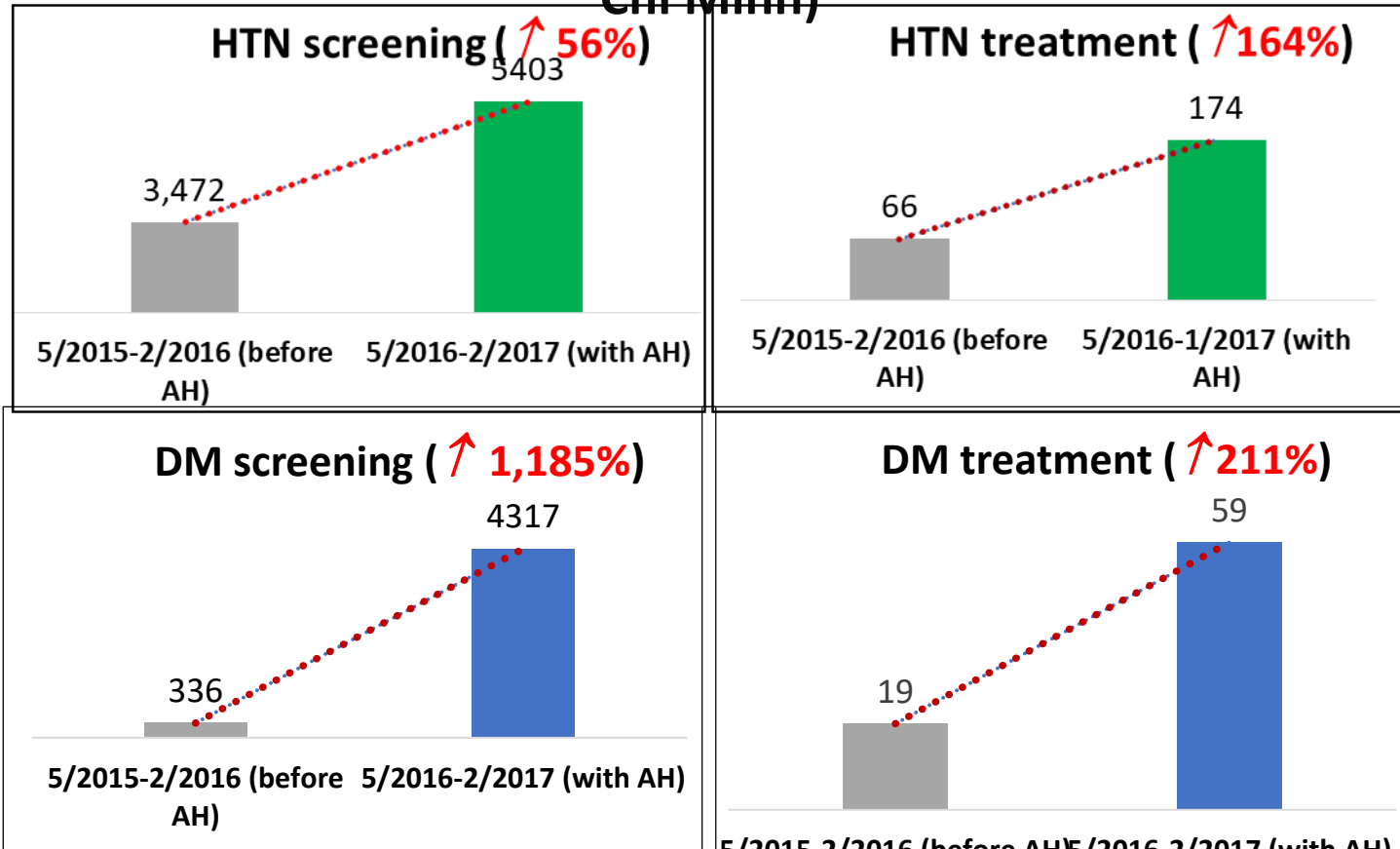


**Change  
Package (a list  
of effective  
interventions)**

# Structure of a District-Based QI Collaborative



## Results from a HTN and DM Collaborative in Vietnam (Ho Chi Minh)



# Results from Uganda QI FP collaborative

FIGURE 2. PERCENTAGE OF FP CLIENTS RETURNING TO A VHT ON TIME

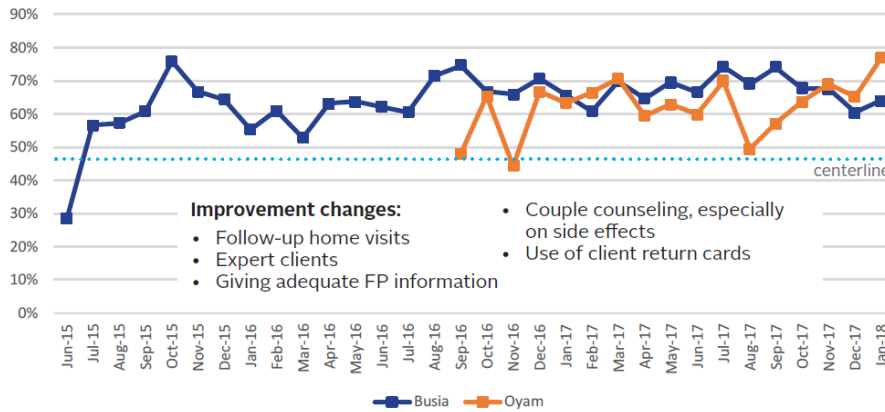
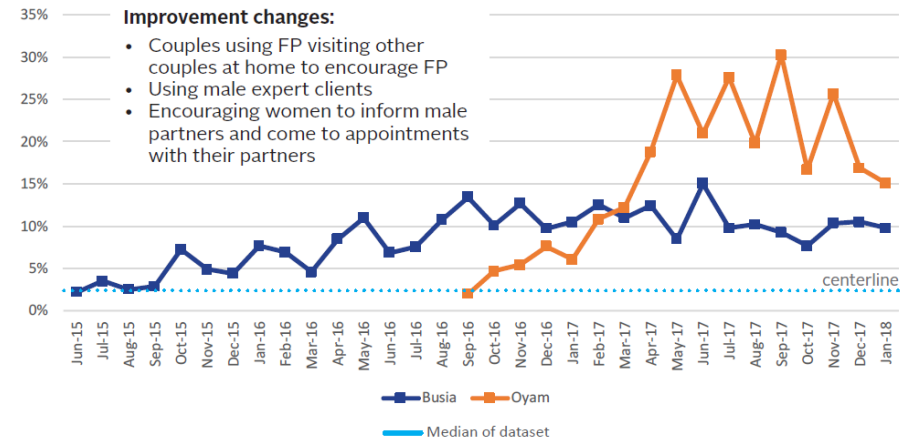


FIGURE 3. PERCENTAGE OF FEMALE CLIENTS COUNSELED WITH PARTNERS BY VHTS





**Results from the QI Collaboratives in Cambodia**  
**(Dr. Ratana Hun)**



# Roadmap shared aim & objectives

## **Aim:**

- Improve patient trust and outcomes (TB, HIV, MCH, FP, Malaria) and patient experience in the referral hospital and health center by the end of December 2020

## **Objectives:**

- Improve clinical skills and knowledge in TB, HIV, MCH, FP, Malaria
- Improve personal hygiene and facility environmental hygiene
- Improve infection control practices in the health facility
- Improve patient experience in the health facility

# Change Package Prioritized by Facilities

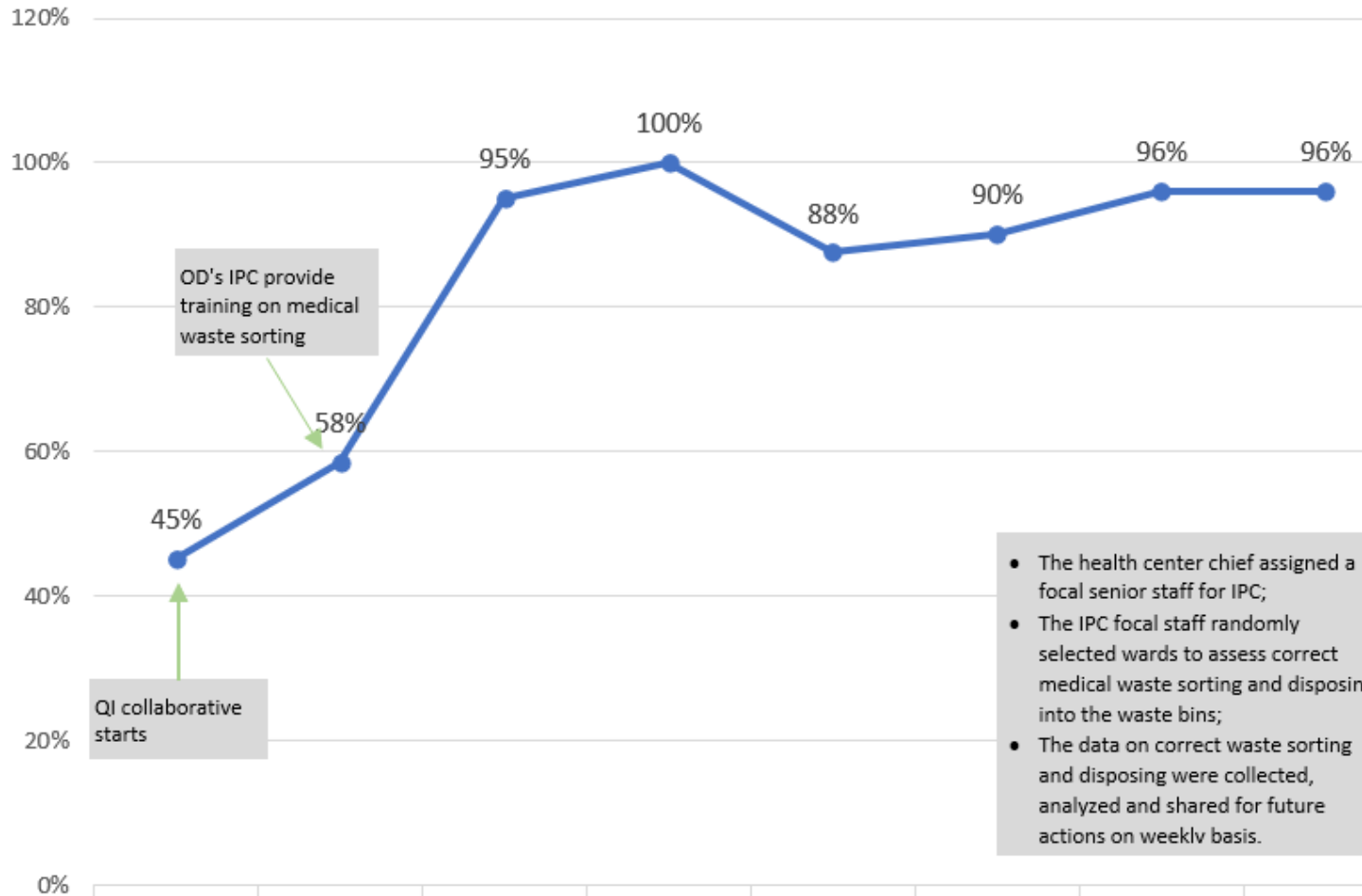
- 1 Ask and examine OPD patients for symptoms and signs to increase TB screening.
- 2 Provide ANC counseling to women with main focus on danger signs during pregnancy and birth preparedness to increase their knowledge.
- 3 Reduce patient's waiting time at OPD/Triage at RH by mainly classifying patients following ETAT and increase number of consultation rooms.
- 4 Reduce staff's absenteeism to work at facility.
- 5 Equip waste bins to and correct waste sorting at wards following to IPC Guidelines.
- 6 Provide health education on nutrition to mothers at facilities to increase their knowledge.
- 7 Reduce waiting time for vaccination service at EPI ward.
- 8 Train TB physicians' knowledge on TB X-ray film reading.
- 9 Build more VIP rooms for wards to increase patient's choice.
- 10 Equip facilities of hand washing and separate toilets for patients and health staff.
- 11 Reduce the turn-around time of TB smear testing's results from RHs to HCs.
- 12 Equip more waiting areas and distribute face mask at OPD/triage at RH to reduce chance of transmission of communicable.
- 13 Reduce waiting time for glucose, Hb, Malaria, ... tests of OPD patients from 120 min to 60 min
- 14 Rearrange OPD/triage building to improve triage and patient flow at RH.

# Results

No.	Change Ideas Tested	Results (Jun-Aug, 2019)		Remark
		from	to	
1	TB screening	1.7%, 1.3%, 1.0%, 1.7%, 0.4%, 0.5%, 0.7%	4.7%, 2.6%, 5.6%, 2.4%, 2.0%, 1.4%, 8.2%	
2	Correct medical waste sorting per IPC GL	45%, 53%, 43%	96%, 96%, 100%	
3	Equip medical waste bins to wards per IPC GL	No data	100%	
4	Ward cleaning	25%, 26%	88%, 79%	
5	ANC counseling focusing on danger signs and birth preparedness	82%, 50%, 44%	100%, 90%, 76%	
6	Waiting time for rapid tests e.g. glucose, Hb, Malaria, ... at OPD/triage	225 min	186 min	
8	Staff absenteeism	43%, 14%, 2.5%, 5.5%	13%, 1%, 2.6%, 00%	

# QI Collaborative: Improving IPC in Healthcare Facilities

Percentage of times of correct medical waste sorting per IPC GL in Saang HC, CPY OD, KCM



	Baseline	W1-Jul	W2-Jul	W3-Jul	W4-Jul	W1-Aug	W2-Aug	W3-Aug
Measure	45%	58%	95%	100%	88%	90%	96%	96%
D		12	20	20	80	100	100	100
N		7	19	20	70	90	96	96

# QI Collaborative: Improving IPC in Healthcare Facilities



IPC in-charge staff and cleaner monitor the medical waste sorted by healthcare providers

Before QI Collaborative (PDSA)

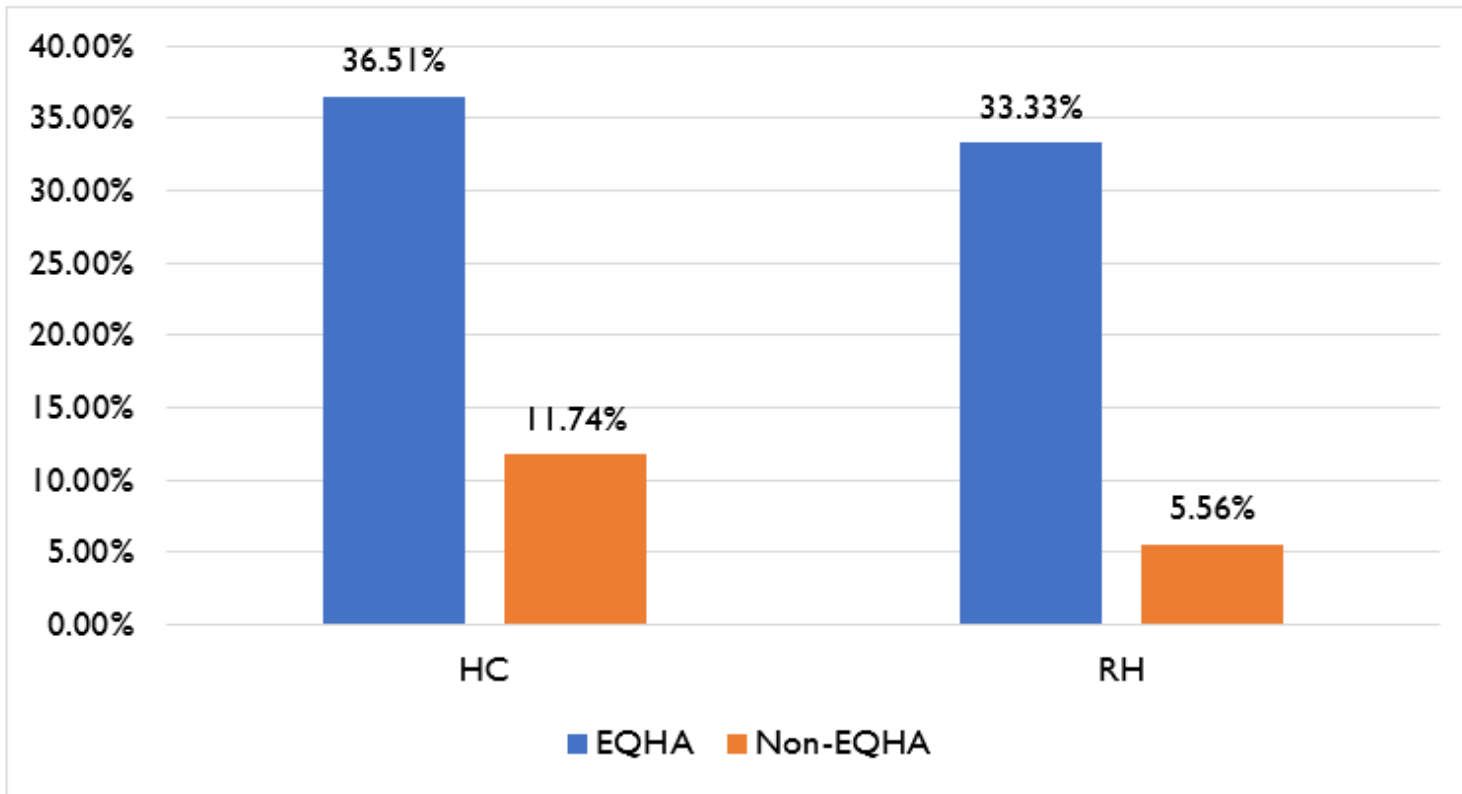


After 7 weeks of QI Collaborative (PDSA)



# NQEM Score: QI vs Non-QI Facilities

Figure 3. Comparison between non-EQHA and EQHA supported HCs and RHs that received at least 80% total score in Round 9.<sup>5</sup>

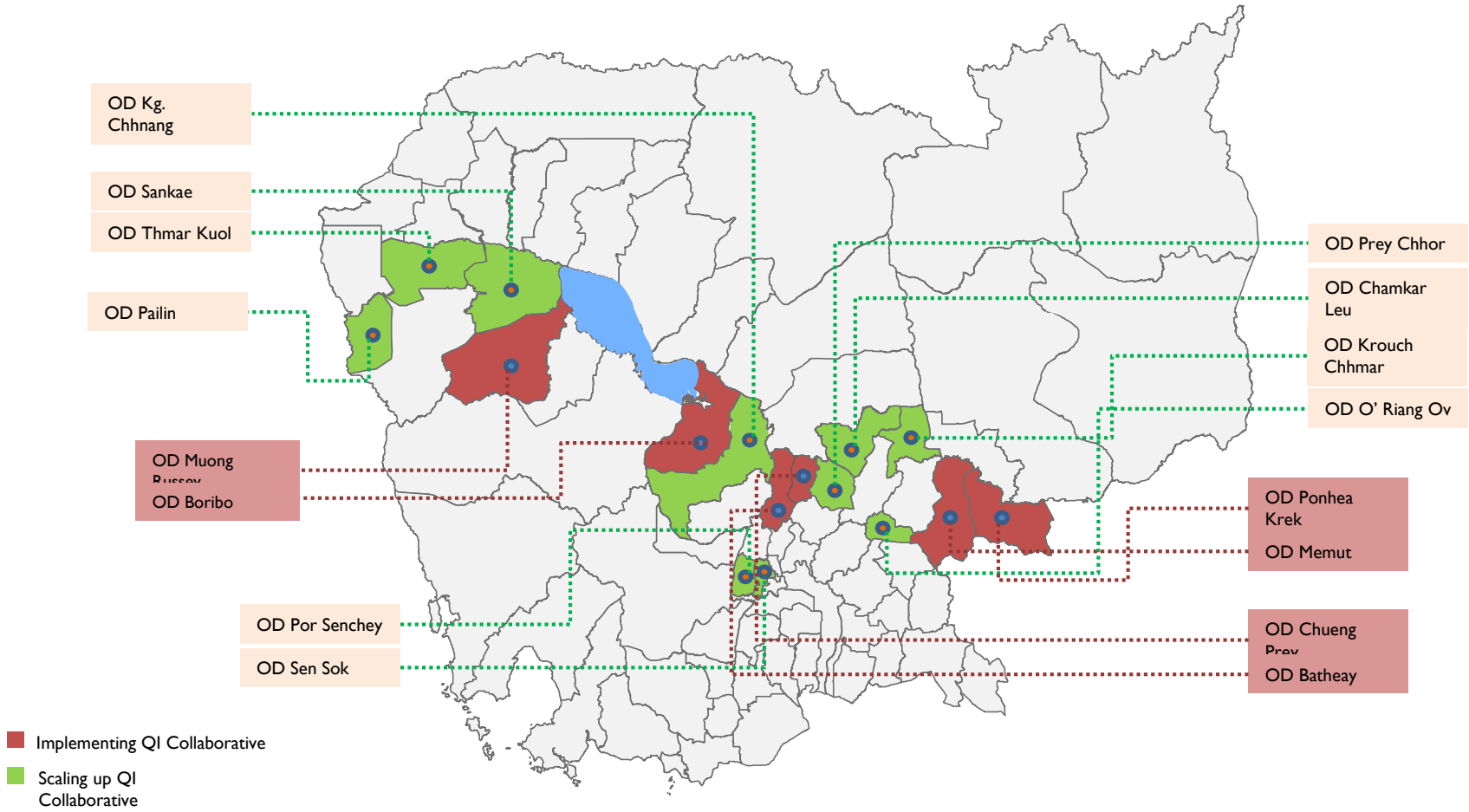


Reference: EQHA's Annual Report FY 2019 to USAID



**Sustaining Improvement and CQI in EQHA-supported  
provinces  
(Dr. Bruno Bouchet)**

# OD implementing QI Collaborative





# Elements of EQHA Scale-Up Plan (Including private facilities)

- **Sensitization of the leadership of the new provinces on QI Collaborative and change packages**
- **Selection of 2 topics per site**
- **Training of QI Coaches**
- **Coaching/Telegram**
- **Learning sessions for spread collaborative**
- **Peer-to-peer exchange visits**
- **SOPS for each change**
- **Clinical mentoring from national programs**

**Build the QI capacity of the PHD and ODs teams to manage a QI Collaborative**

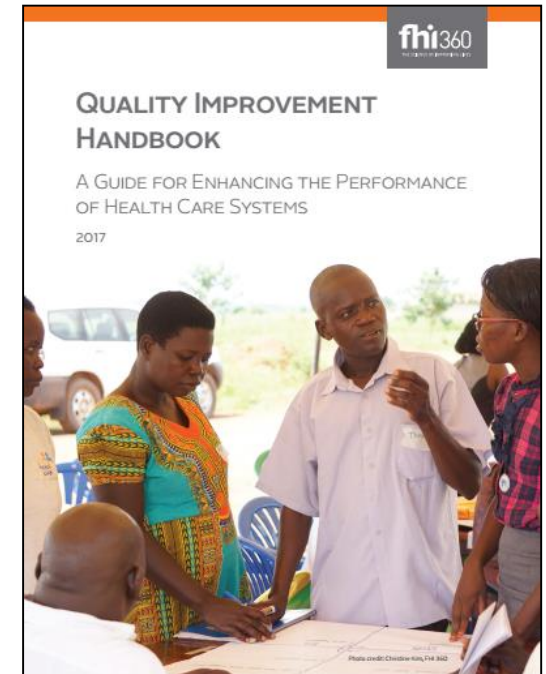
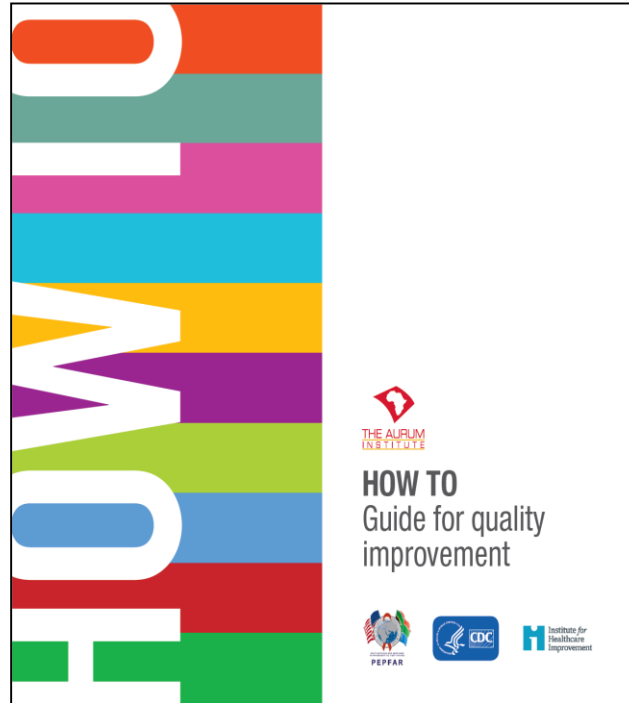
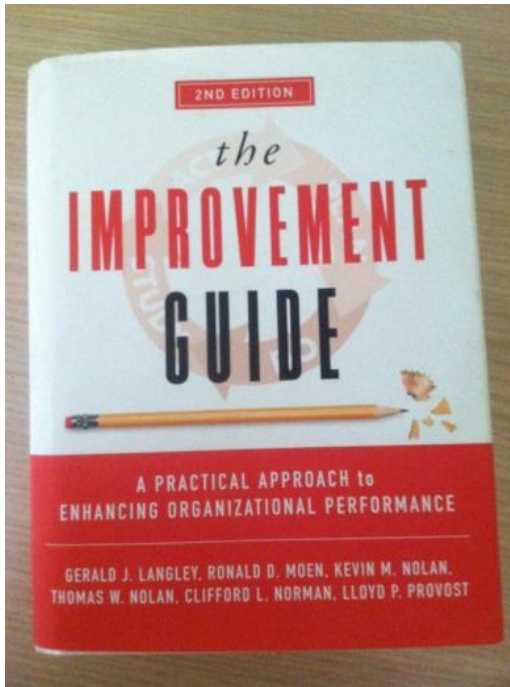


## Conclusion

- **Keep exchanging on progress of QI interventions among all stakeholders**
- **Contribute to scale-up best practices beyond EQHA provinces**
- **Consider updating the national QI policy**

# Additional Slides

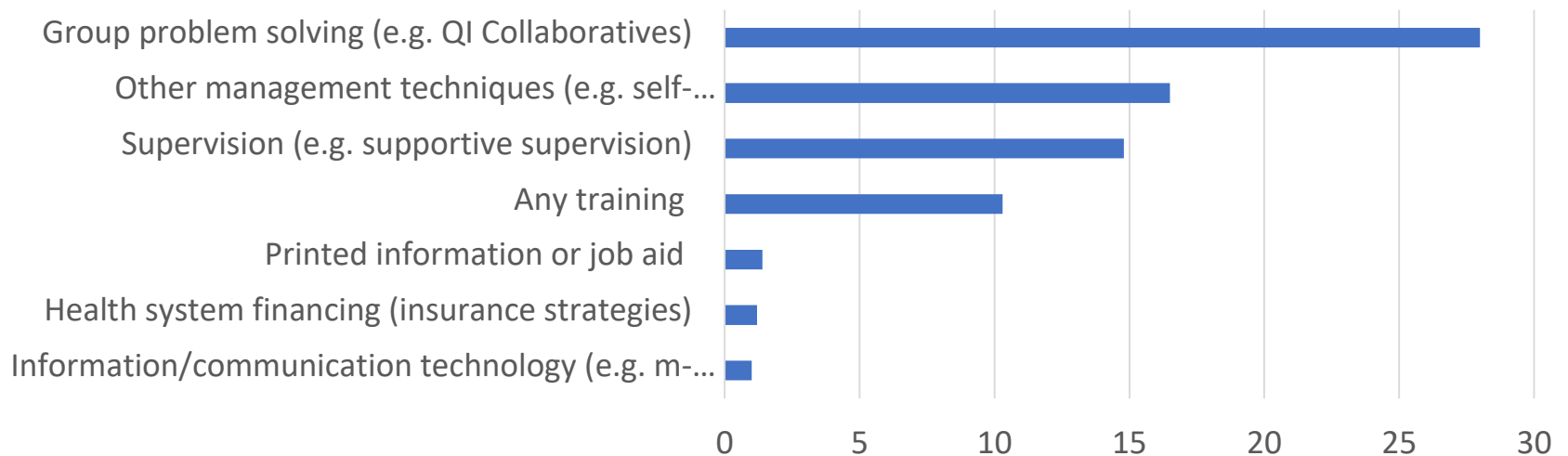
# Good References on the QI models



# What Works: Interventions to Improve Health Worker Performance

Rowe A et al., *Lancet* [VOLUME 6, ISSUE 11](#), PE1163-E1175, 2018

## Mean Effect Size of Single Interventions



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# Selected Scale-Up Models

Models	Conditions of Use	Examples
<b>Breakthrough Collaborative</b>	Complex issues requiring multiple changes/interventions over a long period of time	Decrease maternal mortality
<b>Campaign</b>	Accelerate implementation of a well-know intervention	Immunization campaign
<b>Communities of Practice</b>	Self-organized groups exchanging on one topic	QI CoP
<b>Wave sequence</b>	Complex interventions involving multiple actors working as peers	Organize HIV services for key populations
<b>Competition</b>	Incentives to diverse groups competing for a prize	Linked to PBF
<b>Hybrid</b>	Combination of the above: collaborative + wave sequence	Any topic

A brief compendium of networked learning methods. By [Joe McCannon, M. Rashad Massoud, & Abigail Zier Alyesh](#) Oct. 20, 2016

