



FOREWORD

Word from the Chief of Party

FHI 360 worked with national, provincial, public, and private health partners in Cambodia under the USAID Enhancing Quality of Healthcare Activity (EQHA 2018–2023). Through this complex project, FHI 360 helped to improve the quality and safety of health services and strengthen regulatory and pre-service education systems. FHI 360 also helped the Royal Government of Cambodia to improve policies, guidelines, and standards for quality assurance using evidence-based approaches in public and private health facilities.

Key achievements include developing the roadmap to establish a Cambodian national health care accreditation system, supporting a shift from knowledge to competency-based health professional education, and coordinating with select private health facilities to improve quality family planning counseling and services. Further, while maintaining core activities and with USAID support, EQHA pivoted to support the Royal Government of Cambodia's COVID-19 response. This entailed procuring viral transport media and other supplies; strengthening national and subnational teams within the Cambodian health care system to increase surveillance and response capacity, testing capacity, case management, and infection prevention and control: and addressing the challenges related to potential community transmission.

EQHA's initial family planning achievements were recognized by the 2021 Ministry of Health report on sexual reproductive health services, but gaps still existed within the health system. Some of those highlighted in this report include barriers to family planning uptake, such as persistent myths and misconceptions about modern methods, limited longacting reversible contraceptive (LARC) method coverage at public facilities, and high dropout rates among mobile and migrant populations. As a result, the project received additional funding from USAID to provide LARC services at public health facilities and strengthen the health system at national and subnational levels in 19 provinces. The project increased the availability and quality of family planning services and enhanced the efficiency and effectiveness of family planning service delivery. This was achieved by developing and implementing a sustainable and scalable technical assistance model to increase access. to the Jadelle® implant and improve modern contraceptive use among women of reproductive age and youth.

Building on the successes of EQHA, we continue our journey of improving quality and strengthening health systems with the USAID Enhancing Quality of Healthcare Activity II (USAID EQHA II), a five-year



Lisa Dolan-Branton
Chief of Party, USAID-EQHA III FHI 360

project (October 23, 2023–October 22, 2028) led by FHI 360 with KHANA, Kawsang, ThinkWell, and Data Elevates as partners. EQHA II aims to improve and sustain service quality by strengthening a harmonized Cambodian high-quality health system that will lead to better health outcomes for all Cambodians.

USAID EQHA II aligns with the Ministry of Health's Fourth Health Strategic Plan (2023–2033) and USAID's Vision for Health System Strengthening 2030. The project will build on the achievements of the Royal Government of Cambodia and its partners to enhance evidence-based policies, guidelines, and strategies for efficient health systems; improve individual and institutional capacity of public and private sectors to implement, monitor, and evaluate quality assurance according to the national standards; and improve individual and institutional capacity of subnational health systems to provide quality services to address emerging national program priorities.

We share his success story compendium as an inspiring review of the approaches and impact of our work in Cambodia, as told through the voices of our partners and the communities we served. We are deeply grateful to USAID for their investment that made these achievements possible.



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ACRONYMS

A&T	FHI 360 Alive and Thrive project	GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ADN	Associate Degree of Nursing		(German Society for International Cooperation)
ANC	antenatal care	HC	health center
APGAR	appearance, pulse, grimace, activity, respiration	H-EQIP	Cambodia Health Equity and Quality Improvement Project
ART	antiretroviral treatment	HIV	human immunodeficiency virus
BCG	Bacillus Calmette–Guérin	HMIS	Health Management Information System
BSN	Bachelor of Science in Nursing	HPC	health professional council
CBE	competency-based education	HRDD	Human Resource Development Department
CBR	client-based records	HTI	health training institution
CCF	Core Competency Framework	ICU	intensive care unit
CCN	Cambodia Council of Nurses	INC	immediate newborn care
CENAT	National Center for Tuberculosis and Leprosy Control	IPC	infection prevention and control
CHAS	Cambodian Hospital Accreditation Standards	ISQua	International Society for Quality in Healthcare
CHCAS	Cambodian Health Center Accreditation Standards	IT	information technology
CMC	Cambodian Midwives Council	I-TECH	International Training and Education Center for Health
COVID-19	coronavirus disease	IUD	intrauterine device
CPD	continuing professional development	KCM	Kampong Cham
DCC	Dental Council of Cambodia	LARC	long-acting reversible contraceptive
DHS	Department of Hospital Services	MCH	maternal and child health
DOP	Department of Personnel	MFI	model for improvement
EQHA	Enhancing Quality of Healthcare Activity	MLS	Minimum Licensing Standards
ER	emergency response	MOH	Ministry of Health
FB	Facebook	MOLVT	Ministry of Labour and Vocational Training
FP	family planning	NCD	non-communicable diseases
FY	fiscal year	NCHADS	National Center for HIV/AIDS, Dermatology, and Sexually
GATHER	Greet, Ask, Tell, Help, Explain, and Return		Transmitted Infections



NGO non-governmental organization

NMCHC National Maternal and Child Health Center
NQEM2 National Quality Enhancement Monitoring 2

OD operational district
OPD outpatient department

PCC Pharmacy Council of Cambodia

PDSA plan-do-study-act

PFS patient feedback system
PHD provincial health department

PLHIV people living with HIV

PMD Preventive Medicine Department

PPIUD postpartum IUD

PPQI provincial private-sector quality improvement

PRH provincial referral hospital
PSF patient satisfaction feedback
QAO Quality Assurance Office
QI quality improvement

QIC Quality Improvement Collaborative

RH referral hospital

RMS registration management system

RTC regional training center

STI sexually transmitted infection

TB tuberculosisTBK Tbong Khmum

TWG technical working group

USAID U.S. Agency for International Development

VTM viral transport media

WB World Bank

WHO World Health Organization

Improving Infection Prevention Control in Cheung Prey RH Using the QI Collaborative Approach

Cheung Prey RH's IPC committee has not been functioning for several years. As a result, the hospital did not have enough trash bins, proper hand- washing basins or working toilets, and most of the staff were unfamiliar with proper disposal methods of medical waste. The NQEM System recorded very poor scores (11–20 percent) on these indicators for the last two quarters.

Working with hospital management, EQHA developed an IPC improvement plan, reactivated the IPC committee and established a hospital-based self-assessment team and a system of monthly self-assessments. EQHA collaborated with OD to provide IPC coaching to all hospital staff. The new self-assessment system includes a reward method that recognizes staff contributions for their IPC performance.

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"Since receiving support from EQHA, our hospital created a clear improvement plan that includes clear priorities. All staff have participated actively in improving IPC processes in a responsible manner and the IPC situation in the hospital has been significantly improving."

Dr. Luy Sen, Director of Cheung Prey



To learn from IPC champions, EQHA took four staff members of Cheung Prey RH (the Nursing Manager, an ER/ICU Staff Member, the Administrative Director and the Chief Accountant), who are IPC committee members, on a learning visit to Kampong Cham Provincial hospital. These visits aimed to motivate the individual staff members, enhance their performance and allow them to learn from their colleagues.

Since the team introduced the improvement plan in May 2019, the staff has made significant improvements, including installing functional handwashing basins with tissues and placing soap bottles in each service area within the hospital. The staff also placed waste bins (classified by color and purpose) throughout the hospital, and the team mentored providers on how to separate medical waste. Additionally, the team provided housekeepers with uniforms and boots. As a result, the IPC-related NQEM score has increased from 0 to 50 percent in the latest NQEM assessment (October 2019).



"I am very happy with the Cheung Prey Referral Hospital service now. The healthcare staff are very nice and friendly to the patients, and the hospital is cleaner and has better sanitation," said Sun Sokhoeun, one of the patients from Kampong Cham who regularly uses the Cheung Prey RH services.



TB Case Detection of Sambaur Health Center

Chea Ei walks to the Sambaur HC once a month to pick up his TB medications and talks to the health provider about his treatment progress. Chea describes the HC, about 300 meters from his home in Sambaur village, as a happy place. "The health providers always smile, and their faces look happy when they meet patients," says Chea. "They take good care of me."

Chea is a 47-year-old farmer from Kampong Cham Province in Cambodia who was diagnosed with TB four months ago and began a course of TB treatment that will ultimately lead to his full recovery. Chea's journey back to health, a positive experience thus far, would have looked very different 14 years ago.

Chea reflected on the way things used to be: "The healthcare providers did not take good care of the patients, especially during the TB investigation." The former common practice from the caregivers was to ask the patient a few questions, provide some medicines and send the patients home. "They would not even ask me how long I had been coughing or sick," says Chea. The HC for TB treatment was far away and difficult to access for people like Chea. If he had had TB in the past, he would have been at a loss.

However, TB treatment and care are different now. Chea particularly remembered that his TB screening at the HC was very thorough and detailed, unlike in the past. "After they screened for my TB symptoms, they provided the medicines and advised me on how to keep myself from transmitting TB to other family members and people. They asked me to bring my sputum in each month to check and monitor the progress of my disease," Chea mentioned.

Today, with various capacity-building sessions provided by EQHA, such as TB QI screening at OPDs, the healthcare providers at Sambaur HC can deliver a higher quality of health services to the villagers. The enhanced experiences delivered by the healthcare staff generate patients' trust and positive feedback, as demonstrated from the increased score in patient satisfaction in NQEM (Q3 2019, 94 percent; Q4 2019, 96 percent; Q1 2020, 98 percent).

Chea says that he is "very happy with all of the healthcare providers at the Sambaur HC because of their hospitality, friendliness and ability to take good care of [him]," and that he trusts this HC and its personnel. Chea's testimonial confirms the achievements of EQHA and its ability to enhance the health system in Cambodia.



EQHA is working to deliver better quality health services to the villagers at the Sambaur HC. Photo credit: EQHA/FHI 360

Transformation of Cheung Prey as a result of the Quality Improvement Collaborative



"Since late 2019, when we started a collaborative improvement effort, the Cheung Prey RH has dramatically changed both its environmental and physical infrastructures. The hospital has installed a new incinerator, built new restrooms and consultation rooms and made available bottles of hand sanitizer and hand- washing areas almost everywhere in the hospital to fulfill the needs of patients, clients and healthcare providers."

 Mr. Mon Nimol, Director of Nursing and Vice Chief of the IPC team, Cheung Prey RH After starting the Quality Improvement Collaborative in the Cheung Prey Referral Hospital (RH) in May 2019, the Enhancing Quality of Healthcare Activity (EQHA) team introduced the Plan-Do-Study- Act approach to address gaps in the infection control and waste management practices and a lack of patient-friendly environment in the hospital. With the support of EQHA, the hospital team developed an Improvement Plan that included steps for construction and installation of a high- temperature incinerator , consultation rooms, restrooms, hand-washing tubs and hand sanitizer bottles, as well as painting the building walls and cementing the compound in front of the hospital building.

Since the implementation of the Improvement Plan, EQHA has supported study visits and coaching visits. The hospital Director and his team conducted a study visit at Angkor Hospital for Children in Siem Reap and Battambang Provincial Hospital to learn about proper practices on IPC triage and infection control management. IPC members also visited the Kampong Cham Provincial Hospital, and most hospital staff received IPC coaching from experts. Through these study visits, the hospital Director and his team identified several innovative ideas from best practice hospitals, particularly regarding infrastructure, to facilitate the rapid implementation of the Improvement Plan. The hospital management team also decided to allocate the Improvement Plan budget with a focus on building essential infrastructures.



The Cheung Prey RH, with newly painted walls and cemented ground. Photo credit: EQHA

Completed improvements include installing a new high-temperature incinerator, constructing three new spacious consultation rooms, renovating and constructing 20 restrooms, installing 22 hand-washing tubs (equipped with soap and drying tissue), painting the hospital's exterior wall, installing a large television in the waiting area to present educational messages, cementing the front of the hospital compound and planting a decorative flower garden. The front gate of the hospital also displays a map of the locations of various services within the hospital.

Several key factors enabled these changes. EQHA Quality Improvement Collaborative approach enabled a culture of supportive leadership and teamwork and facilitated the effective implementation of the Improvement Plan. The study visits to other hospitals also allowed the hospital Director and management team to learn best practices and encouraged them to improve both physical infrastructures and healthcare quality within the hospital. Additionally, the newly reactivated IPC team demonstrated high effectiveness and worked tirelessly to improve the physical infrastructures in the hospital.

"The Cheung Prey Hospital now is different from last year; the hospital looks very clean, a lot of new things have been built, such as clean restrooms, hand-washing tubs [and] new consultation rooms, and, most importantly, the healthcare providers are friendlier with patients and caregivers. I am very happy to see the healthcare providers here in this hospital take good care of patients," said Eng Kosal, a 37-year-old patient from Sragne commune of the Prey Chhor district of Kampong Cham province, who regularly uses the Cheung Prey RH services.

"Let's fight the virus together!" Resilience and Relationships in Cambodia with EQHA's COVID-19 Response

As the world battles the coronavirus disease (COVID-19), FHI 360, with financial support from the U.S. Agency for International Development (USAID), has been at the forefront of the global pandemic response. In Cambodia, the FHI 360-led, USAID-funded Enhancing Quality Healthcare Activity (EQHA) provided emergency response equipment to those on the ground.

On January 27, 2020, Cambodia reported its first COVID-19 case. By mid-February, the Ministry of Health (MOH) faced rapidly decreasing supplies of viral transport media (VTM, material designed to transport specimens for COVID-19 tests), as the Westerdam cruise ship docked at Sihanoukville and all V TM was allocated to the port city.

USAID solicited EQHA's urgent assistance in procuring VTM for Cambodia. At the end of February, the EQHA team received USAID funds to spearhead the COVID-19 response and collaborated with FHI 360's Bangkok office to deliver VTM to several health facilities throughout the country.

On March 20, EQHA delivered 2,000 units of VTM to the Cambodian MOH's central medical store, a record-breaking time for oversees procurement. However, procurement did not occur without challenges. As Kosal and Thanaroth, members of FHI 360's Bangkok procurement team, shared, "Vendors often [had limited] products due to high demand.

We had to check with them hourly to receive the latest stock update." Travel restrictions were another hurdle the team had to overcome. "Cold chain shipment was required for VTM, and there were limited cargo flights for shipping from Bangkok to Phnom Penh," the procurement team members stated.

Nevertheless, FHI 360 staff persevered. "Let's fight the virus together," Chatchawal (JoJo) Sa- Nguansilp, FHI 360's Senior Laboratory Specialist in Bangkok, stated in all of his emails to staff involved in the procurement process.

EQHA mounted a wide-reaching, community-based COVID-19 response across Cambodia that leveraged the power of resilience and relationships. The team sought local Provincial Health Departments' perspectives and learned that officials desperately needed personal protective equipment to protect health workers, as well as thermometers to screen migrants at the Cambodia- Thailand border.







Handover of VTM to the Cambodia MOH by the EQHA team in the Central Medical Store in May 2020. Photo credit: EQHA

With support from the FHI 360 Bangkok laboratory team and the FHI 360 China procurement team, EQHA disseminated digital thermometers to the rapid response teams in Provincial Health Departments of Banteay Meanchey, Battambang, Kampong Cham, Kampong Chhnang, Pailin, Phnom Penh, Pursat and Thong Khmum provinces to allow health officials to provide triage to migrants with fever.

While challenges emerged, the team's united spirit a solutions-oriented, systems-based approach. Within three months, EQHA's procurement

team, with its strong support network, was able to deliver 8,000 VTM units and 13,000 personal protective equipment sets to MOH, as well as computers and IT equipment to the Department of Infectious Diseases and Control to bolster contact tracing efforts.

A systems approach enabled EQHA to consider factors beyond infection prevention and control, with the team also administering video conference training and delivering distance-learning hub equipment for distance learning to 11 provincial hospitals, as well as the Department of Hospital Services.

H.E Dr. Hok Kim Cheng, Director General for Health in Cambodia's MOH, acknowledged EQHA's efforts in the country's COVID-19 response. Cambodia detected a total of 156 cases, and had zero COVID-19-related deaths. With an absence of community-level transmission to date. Cambodia has demonstrated an effective rapid response to the COVID-19 pandemic, with EQHA's efficient procurement team playing a vital role in this success.

Modeling Continuing Professional Development (CPD) in Cambodia

USAID-EQHA implemented by FHI 360 has provided substantial support to the Health Professional Councils (HPCs) in strengthening their policy and information systems to regulate Continuing Professional Development (CPD) for healthcare workers of Cambodia.

EQHA on a regular basis provides multiple training courses on topics such as the quality improvement collaborative approach, accreditation and technical and clinical knowledge to strengthen healthcare professionals' competencies and update health

providers' technical and clinical knowledge and skills. As part of these training sessions, FHI 360 wants to provide CPD credit to participating healthcare professionals and practitioners. To ensure that each course includes appropriate CPD information, the teamwork closely with relevant technical and vertical disease programs to incorporate necessary technical and clinical training content.

Based on the evidence-based activities related to the material mentioned above and the strong collaboration between HPCs and FHI 360, the four HPCs

(Pharmacy Council of Cambodia, Cambodia Midwives Council, Cambodia Council of Nurses, and Dental Council of Cambodia) have certified FHI 360 as a CPD provider by providing FHI 360 a three-year CPD-Provider's License. In addition, the PCC and DCC have composed appreciation letters to USAID-EQHA to express their gratitude for the support of printing CPD and IPC guidelines books. The status of a certified CPD provider, enables EQHA to build motivation for CPD among health providers through provision of CPD credits.



FHI 360 CPD-Provider License received from Pharmacy Council of Cambodia (Nov 23, 2020)



Appreciation Letter from
Pharmacy Council of Cambodia
to USAID-EQHA

SwipeRx Case Study: Testimonial from Pharmacy Professional

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"I see many good pieces of content posted through SwipeRx every day. As a pharmacist, I can say that this platform is very important and useful because it allows pharmacists across the country to be able to upgrade their skills. I noticed that all of the TB posters have their own meaning and key message. For example, I can now understand TB symptoms and recognize when I should refer the patients to the hospital for further advice.

Honestly, I didn't pay much attention to this public health issue previously. I didn't ask for further information when clients come to me with persistent cough. I almost forgot that TB is still happening in my community.

Now, whenever my clients present with cough and ask to buy medicine, I am able to take appropriate action. As a community pharmacist, I would like to have TB posters displayed at our pharmacy so that my clients can protect themselves and prevent transmission to others.

Last, I'm so excited to learn that soon I may be able to help my clients seek the care they need at a nearby health facility using the SwipeRx e- Referral tool. This will help pharmacies to be part of stopping TB."

First testimonial



– KHOV Gechchou, Pharmacist and Owner of Pharmacie KM6, Russey Keo. Phnom Penh.

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"I came to know SwipeRx through the Pharmacy Council of Cambodia and few of my friends. As a pharmacist, I truly consider SwipeRx to be a great tool enabling pharmacy professionals to share updated public health knowledge, helping each other address

health issues and upgrading pharmacy education to meet licensing requirements through digital CPD modules.

I have learned a lot from SwipeRx awareness posters and the CPD module about COVID-19.

I have adopted several of the recommended practices inside my pharmacy, such as always wearing a mask, social distancing and referring patients with symptoms of COVID-19 to the nearest health facilities. I saved the list of referrals sites (distributed through SwipeRx) in my phone so that I can more easily and promptly guide my clients. Additionally, I have changed my practice with respect to bulk sales. I no longer sell large quantities of any product or medicine to one customer, per guidance I received from the SwipeRx tips. I believe this is the best way to calm clients' anxiety and avoid stock-outs of essential supplies and medicines.

News regarding the development of a COVID-19 vaccine is exciting, as this measure has the potential to stop COVID-19 from spreading. In the future, I would like to request SwipeRx to provide us with information from the Ministry of Health regarding the availability of a COVID-19 vaccine, once it is approved for use in Cambodia. This will enable pharmacies to help promote COVID-19 vaccination."

Second testimonial



 Choeung Karo, Pharmacist and Owner of Pharmacie Vihearsour, Phnom Penh.

A Cambodian Accreditation Star

High-quality health systems require strong governance and regulatory frameworks to promote the desired outcomes and policies to institutionalize citizen accountability. Regulating or governing for quality means reframing the pursuit of quality healthcare from a peripheral activity to the mandate of a health system. EQHA pursues this objective by Establishing Cambodia's National Accreditation System, including the development of the Cambodian Hospital Accreditation Standards (CHAS) through building capacity of committed Cambodian health professionals.

Although Dr. Eap Tek Chheng is a practicing pediatrician and lecturer, he has devoted his personal time to helping develop the CHAS.

When Dr. Eap first started working on the development of the accreditation standards, he was skeptical of the process. But as he attended more meetings, he began to appreciate the process and decided to volunteer to work with all 12 TWGs. He never missed a meeting and became a technical expert in developing accreditation standards and helping other new TWG members learn the process. He became a leader of the groups, guiding them to understanding the intent of the standards and making it easier for others to understand how to meet them.

He is now one of the accreditation coordinators who have been registered for the Accreditation Coordinator Certification Course. Because of his strong commitment to accreditation and willingness to learn, he wants to become an accreditation surveyor. In this position, he hopes to help the Cambodian National Healthcare Accreditation agency survey hospitals against the standards to determine if the hospitals should be accredited.

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Dr. Eap said, "CHAS is a roadmap and a strategic business tool designed to support the development and continual improvement of healthcare quality and patient safety in private and public hospitals."

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Dr. Eap joined other members of the Quality Improvement Working Group conducting the testing of the standards in Sonja Kill Memorial Hospital in Kampot Province on October 12–14, 2020.

EQHA, with financial support from USAID and in collaboration with MOH, has put significant efforts toward developing a national healthcare accreditation system for private and public facilities. Such a system can help facility staff to meet the standards and maintain and improve service quality. Dr. Eap's personal contribution to the development of CHAS has been significant. MOH and USAID/EQHA have recognized his accomplishments and efforts and commend him for all he has contributed. He deserves to be called a "Cambodian Accreditation Star."

Providing High-Fidelity Training Equipment and Training to RTCs

Students' inability to gain hands-on-experience during pre-service training hinders the quality of care of Cambodia's health system. This is because Regional Training Centers (RTCs) that train nurses and midwifes typically lack sufficient equipment—or the equipment they have is broken or nonfunctioning—for students to practice the clinical skills they learn while sitting behind a classroom desk.

EQHA, with funding from USAID, identified this gap and worked with HRDD and RTCs to procure needed equipment for Battambang and Kampong Cham RTCs and held a handover ceremony in September 2020. Special ceremony guests include H.E. Thir Kruy, MOH Secretary of State; the Deputy Mission Director of USAID Ms Hanh Nguyen; and Dr. Sokneang, HRDD Director.

The team conducted training on the use of the new simulation teaching equipment for RTC staff, in addition to producing instructional manuals, videos, and equipment checklists.

The facilitation team used CBE teaching methods and approaches with up to 24 trainees from each site. All participants completed a practical test at the end to confirm that they could use the high-fidelity simulation teaching equipment and were also able to provide routine maintenance. Results from testing ranged from 75 percent to 98 percent.

Mr. Chea Polo, the Battambang RTC Technical Chief, stated, "I am so proud to see USAID provide this equipment training to my simulation staff. I can see most of my staff are able to use this high-fidelity equipment well, especially with the Sim-Pad connected to the multi-function mannequin."



Simulation Nursing Staff Practice Skill with Arm Model at Kampong Cham RTC.

Ms. Chhang Sina, Kampong Cham RTC Nursing Director, also added, "I am so delighted and thank USAID for providing this training to my staff to make sure we understand and can use the equipment. This is the first NGO that ... bought equipment for us and also provided training. In the past, we've kept donated equipment (that we couldn't use or maintain properly) in the cabinet. I will continue to train my staff with refresher sessions."

This experience demonstrates that manuals, training sessions, checklists, refresher training and instructional videos can help to ensure newly purchased equipment is used and not sitting in a cabinet or closet. It also demonstrates that by using this equipment accurately, graduates of the Cambodian Health Training Institutions not only have the knowledge but also the skills and experience to be effective members of the health workforce.

Improving IPC in Snor HC by using the QI Collaborative Approach



"I'm delighted to see the health center has made subsequent changes and all staff are significantly improving on waste sorting management. Also, the NQEM score has increased during evaluation."

- Dr. Chhour Khim, Chief of Snor HC

Waste sorting management has been a significant issue in Snor HC due to the lack of an IPC committee and relevant training, causing its IPC NQEM score to be much lower than expected and putting the health and safety of staff and patients at risk. Even if healthcare providers and clients had the training to understand waste sorting, the HC did not have an IPC work plan or enough basic equipment such as standard trash bins, plastic bags, handwashing areas or proper temporary medical waste storage.

In October 2020, EQHA stepped in to coach the Snor HC staff with a QIC PDSA approach and collaboration from OD QI teams. Snor HC has received monthly coaching relating to IPC waste management, helping the staff adhere to the national guidelines on IPC and enhance their NQEM performance.

As a result of the coaching, the HC team developed an IPC work plan, designated temporary medical waste storage and final waste disposal, created a waste shipping report, scheduled IPC training for staff and cleaners, and instated the IPC guidelines. After the implementation of the IPC work plan, EQHA collaborated with the OD QI teams and HC to develop change ideas with the PDSA approach. The teams

also worked on creating a daily self-assessment checklist, a biweekly checklist and a run chart for monitoring performance progress.

The support that Snor HC has received has pushed significant improvements in equipment availability in each of the service areas within the HC. In addition to having stocks of trash bins, plastic bags and posters, the HC now has a schedule for in-house training of healthcare staff, provides housekeepers with uniforms and cleaning supplies, and educates clients and their relatives when they come in for services. What's more, Snor HC's IPC NQEM score increased from 92.64 percent in Q4 of FY 2020 to 94.11 percent in Q1 of FY 2021.

"I'm satisfied to use the services at Snor HC. Healthcare providers take good care of me; they're friendly, answer my questions and make me feel safe. The HC also looks very clean, with proper trash bins, handwashing areas with enough soap, and no cotton on the floor after being injected." – Ms. Chak Channy, 30 years old with one child, has used HC services such as OPD to deliver a baby, vaccinate her child and obtain long-term FP such as the implant.



The OD assessor correcting the waste sorting.

SwipeRx User: Benefits of Digital Education

Between October 2020 and September 2021, USAID EQHA designed, deployed, and monitored three accredited digital education modules about TB and FP targeting pharmacy professionals in Cambodia. Consistent with national TB and FP national guidelines, CENAT or NMCHC approved each module — which includes an assessment of pre- and post- education knowledge levels — prior to accreditation by PCC. As of September 2021, an estimated 78 percent of all registered pharmacists in Cambodia (3,510) are using the SwipeRx application.

Over 1,600 individual pharmacists were educated through SwipeRx about at least one topic during FY 2021. Close to one-third of these (479) pharmacists were educated about all three health topics: contraceptive choice, balanced counseling for FP and TB. Digital education results by topic during FY 2021 are as follows:

- In less than four months, the modules educated 1,377 pharmacists about TB. This figure represents 71 percent of the eligible pharmacists active on SwipeRx during the 16 weeks that the module was accessible. A comparison of pre- and post- TB education assessment results reveals that educated pharmacists reported at least ten percentage points of improvement in TB knowledge for 10 out of 12 learning objectives.
- In less than five months, the modules educated 963 pharmacists about contraceptive choice. This figure represents 55 percent of the eligible pharmacists active on SwipeRx during the 19 weeks that the module was accessible. A comparison of pre- and post- contraceptive education assessment results reveals that educated pharmacists reported at least ten percentage points of improvement in contraceptive knowledge for 10 out of 13 learning objectives.

 In two and a half months, the modules educated 610 unique pharmacists about balanced counseling for contraceptive choice. This figure represents 45 percent of the eligible pharmacists active on SwipeRx during the 10 weeks that the module was accessible. A comparison of pre- and post-counseling education assessment results reveals that educated pharmacists reported at least ten percentage points improvement in counseling knowledge for seven out of 10 learning objectives.



THONG KUNVANNDA

Pharmacist & Pharmacy Owner in Phnom Penh
SWIPERX User Since 2020

90% POST-SWIPERX CPD Questions Answered Correctly

DIGITAL EDUCATION THROUGH SWIPERX

"I have used the SwipeRx app for around 2 years after getting a great recommendation from my colleague who recommended SwipeRx continuing professional development (CPD) modules. In the last year I have completed SwipeRx education modules related to tuberculosis, family planning and HIV and other STIs. All SwipeRx continuing education modules are so helpful and practical for pharmacists like me. It's pretty easy to access accredited learning modules at my fingertips through SwipeRx- anytime, at home or at my pharmacy. What I appreciate most is that I don't need to spend money or close my business to update my professional skills and learning.

Honestly, I often open the app to review previously completed modules more than I times even though I passed. The more I review, the more I gain confidence to consult my clients and offer trustworthy care and advice about community health.

I've learned a lot through the SwipeRx CPDs. For example, I previously was taught that only clients with all four symptoms should be referred for TB diagnosis. However, it's been years since I left school. Thanks to SwipeRx I now know that even clients with I of the common TB symptoms- such as a long-lasting cough-should be referred for diagnosis. The family planning CPDs available through SwipeRx helped me counsel clients seeking advice about which contraceptive methods are suitable for breastfeeding moms and clarify misconceptions. After helping my client make an informed choice about which contraceptive method makes the most sense for her individual needs, she seems so pleased to get such an informative consultation from me! SwipeRx helped me gain my client's trust!

As a health professional, I always find time to improve and update my knowledge. Thanks to SwipeRx for providing easy to use and relevant education modules through the app-pharmacists need more digital education opportunities in future!"

Chhnok Tru HC of Boribo OD: The power of peerto-peer learning

The Chhnok Tru HC is one of the most remote HCs in the Boribo OD, Kampong Chhnang province, covering one commune and three villages with a total population of 4,548 people. Like other HCs in Cambodia, the Chhnok Tru HC minimum package of activity services includes OPD, ANC, child delivery, prenatal care, vaccinations, TB screening and treatment, and minor surgery.

However, in 2017, the Chhnok Tru HC was incapable of detecting TB cases due to a lack of training, inconsistent screening and insufficient capacity to collect good quality samples for testing. Mrs. Noy Sonay, acting chief of the Chhnok Tru HC, shared that, since 2017, the staff could not detect any TB cases because they did not screen for it due to a lack of knowledge about the disease.

In mid-2019, EQHA started implementing the QIC approach in the Boribo OD. In the Chhnok Tru HC, the project trained staff on the QIC approach, TB screening and treatment, and other clinical topics. For TB screening and treatment, the HC set four goals:

- Increase the screening of TB symptoms among OPD patients to at least 90
- Increase the diagnosis of suspected cases up to 90 percent
- Increase the registration of detected TB patients to 100 percent
- Increase the knowledge, skills, and confidence of health staff on TB screening and treatment

With EQHA technical and financial support, the HC worked toward achieving these goals by attending training on TB screening and treatment, beginning screening all OPD patients for suspected TB symptoms, and receiving onsite coaching from the OD TB supervisor. In addition, EQHA supported two staff members from this HC to participate in peer-to-peer learning through a local exchange visit at Trapeang Chan HC, which was identified as the leading HC on attending to TB-related cases in the Boribo OD.

Overall, the approach promoted ownership among health staff by teaching them how to identify gaps, set goals for improvement, and develop ideas to achieve those goals. It also promoted the involvement of stakeholders, including local authorities, patients' representatives, the private sector and health staff.

As a result of these activities, 97 percent of OPD patients were screened for suspected TB symptoms from October 2019 to September 21. Among these patients, 27 percent were identified as suspected TB cases, and 22 percent as active TB patients who were detected and treated. Mrs. Ly Sean, who lives in the Phat Sanday village, was diagnosed as an active TB patient and treated at the Chhnok Tru HC. She shared, "At first, I got sad when the nurse told me that I was diagnosed with active TB. But I felt relieved when they explained that I didn't have to worry because TB can be cured 100 percent."

Mrs. Noy Sonay said proudly, In the end, my HC was able to start detecting and treating TB cases like other HCs in the Boribo OD. I don't know how many people would have gotten TB from these six active TB cases if our HC did not detect them... I am grateful to the EQHA project, which helped improve the quality of service in my HC.

Mr. Chan Buntha, QI coach and chief of the technical office of the Boribo OD who was actively involved with the EQHA project, also emphasized his delight in the improvements in staff teamwork and spirit, the documentation of cases, staff knowledge and skills on financial management, and the formation of report writing and action plans.

Making FP Services Available at Boreyrum Polyclinic



The 2014 Cambodia Demographic and Health Survey found that 12 percent of currently married women have an unmet need for FP services, as well as an opportunity to address these unmet needs by expanding FP access to the private health sector. 3 As a response, EQHA initiated a project to enable private health facilities to offer FP services through EQHA's QIC model. The project launched in two pilot provinces (Tbong Khmom and Kampong Chhnang) and will eventually be implemented in six EQHA target provinces by 2022.

EQHA and the PHDs identified 18 private healthcare facilities in Tbong Khmom and Kampong Chhnang and signed partnership agreements with them; one of these facilities is Boreyrum Polyclinic. Located in Kampong Chhnang OD and 5 km away from the nearest RH, Boreyrum Polyclinic offers various maternity services except for FP. During a private healthcare facility selection trip conducted by the EQHA team and the PHD Deputy Director in October 2020, the clinic's owner expressed an interest in joining QIC and expanding their services to focus on FP. In January 2021, the clinic signed a collaborative partnership agreement with the PHD to provide FP services and improve client experience and satisfaction.

To achieve these goals, Boreyrum Polyclinic's staff attended a capacity-building training on FP organized by EQHA and the PHD's technical unit to gain technical and QI skills. During the training, the clinic identified a need to improve its healthcare service and two ways of addressing it: (1) improving the staff's FP counseling skills using the GATHER approach and (2) strengthening infection prevention control within the facility.

Six months after joining the training, the clinic provided short-term FP methods to eight clients and conducted several birth spacing awareness sessions with pregnant women. Boreyrum Polyclinic attends to a high volume of ANC, delivery and postnatal care services, with an average of 235 clients per month. By having a full range of FP services and qualified professionals available, the clinic can now serve more clients who need quality FP services.

Dr. Men Monirath, a physician at Boreyrum Polyclinic's maternity unit, said that she and her colleagues did not expect to participate in any training and start FP services during the COVID-19 pandemic. However, through the EQHA team and PHD's blended training approach comprising a mixture of in-class and online sessions, Dr. Monirath and her colleagues were able to apply technical FP skills soon after their training was complete. She also appreciated the opportunity to discuss and identify areas for improvement in providing quality FP services through the training's PDSA sessions, conducted virtually with a QI coach. She commits to continue improving her QI and FP technical skills through onsite coaching visits.

From Content to Competency-Based: Successes in Transitioning the Associate Degree in Nursing Curriculum

The three-year national Associate Degree in Nursing (ADN) program is a six-semester curriculum that prepares students to work as registered professional nurses in various environments, including government, non-government and private healthcare settings. The program focuses on teaching core nursing knowledge, skills, attitudes, and behaviors related to wellness, sickness and disease management, health promotion and care delivery using the nursing process.

To revise ADN's curriculum from a content-based to a competency-based one, the USAID Enhancing Quality of Healthcare Activity (EQHA) — through FHI 360's preservice education team — provided substantial support to the Ministry of Health's (MOH) Human Resources Development Department. In 2019, a steering committee chaired by MOH's Secretary of State H.E Prof. Yit Sunnara was set up along with a technical working group (TWG) led by the Director of HRDD, Assistant Prof. Touch Sokneang. The TWG comprised representatives from various nursing schools, including the University of Health Sciences, four regional training centers (Kampong Cham, Battambang, Kampot and Steung Treng), the Royal Army Force Institute of Health Sciences and three private universities.

There were several achievements since the formation of the TWG, including the completion of a Core Competency Framework (CCF) for professional graduates in the Kingdom of Cambodia — which received its first stamp of approval from MOH — and the creation of a glossary for health professionals. The TWG further modified the CCF before starting the

curriculum revision to ensure that it was aligned with international and regional (Association of Southeast Asian Nations) competencies, enabling Cambodian nurses to practice globally.

After completing the CCF revision, under the facilitation and technical support from EQHA's objective 4 team, the TWG reviewed all aspects of the existing ADN curriculum — structure and flow, hours and credits, program learning outcomes, graduate profile, and program requirements — to provide updated minimum standards for nursing preservice education in Cambodia. To ensure the success of ADN's competency-based curriculum, the TWG developed an updated reference library, while EQHA supported two regional training centers and provided new textbooks to MOH.

Amidst challenges brought about by the COVID-19 pandemic, the TWG completed the following milestones in December 2021: (1) CCF revision, (2) ADN's minimum standards and (3) 60 competency-based courses, including 10 new courses. The translation of these materials is underway to ensure quality evidence-based preservice nursing education in Cambodia.

A contributing factor to achieving these successes is the education, empowerment, and involvement of the TWG. Since the curriculum revision started, EQHA ensured the continuous training of the TWG members so that they will understand all aspects of the revised curriculum. The aim was to instill ownership and pride in the nursing profession through competency-based

education. It has been one of EQHA's successful strategies to date, which will positively impact the project's implementation phase.

EQHA has made several adjustments to maintain this ethos despite delayed training, revisions of past decisions and timeline extension due to the COVID-19 pandemic. Now, the TWG (with support from EQHA) is finally ready to present the revised competency-based ADN curriculum to the steering committee for approval on January 19, 2022.

Improving Tuberculosis Screening Among Outpatients at Dar Health Center



I am impressed by our health center staff members because they are now highly committed to TB screening activities. This is a great step forward for our health center to be a part of the Government's goal to eradicate TB by 2030

Ms. Mao Pheara, Health Center Chief

Eliminating tuberculosis (TB) by 2030 is a key goal for the Indonesian Ministry of Health's National Center for Tuberculosis Control and Prevention. The USAID Enhancing Quality of Healthcare Activity (EQHA) is helping them achieve it. In 2019, EQHA committed to supporting more than 71 health centers (HCs) and six referral hospitals in Tbong Khmum (TBK) province to enhance the screening of TB symptoms in their outpatient department (OPD).

Dar Health Center is one of the facilities facing challenges in detecting and screening TB. In 2019, the HC set a TB screening target of 80 percent for its OPD. However, TB screening at that time was only done on outpatients displaying and reporting primary TB-related symptoms and complaints. According to Ms. Moa Pheara, Health Center Chief, the health center lacked resources and facilities needed to improve TB services and as a result, the facility did not reach its target, achieving only three percent or less by the end of 2019.

To address these challenges, Dar HC participated in an EQHA-facilitated Quality Improvement Collaborative training in February 2019. During the training, Dar HC's difficulty in achieving its TB screening target was identified as a priority for its quality improvement process. With technical assistance from Memot Operational District's (OD) TB supervisor, DAR HC's staff members identified various areas for improvement.

The facility initially saw little improvement from the implemented changes. However, a second round of the Plan-Do-Study-Act approach in July 2020 revealed that while core staff members were trained, replacement staff members who take on rotational roles at the OPD were not following the screening process or recording cases properly.

To address this problem, EQHA offered refresher TB course for health facilities in TBK province. The training was conducted in collaboration with the OD's TB supervisor, the TBK Provincial Health Department's TB Program Manager and a trainer from the National Center for Tuberculosis and Leprosy Control. After the training, Dar HC implemented a coaching program, where the participants shared what they learned with their colleagues who were likely to act as their substitutes.

After these changes, the number of outpatients screened for TB at Dar HC dramatically increased from below 4 percent before the training to 69.4 percent immediately afterward. After the consecutive drop in October–November 2020 due to the replacement of uncoached staff members, the facility has consistently screened over 70 percent of outpatients for TB since March 2021.

Dar HC's keys to success include transferring knowledge, improving practices gained from training all service sections and implementing improvements in reporting screened outpatients.



TB treatment at DAR Health Center, Thong Khmum Province.; Photo Credit: Savann Oeurm, FHI 360

Dar HC still strives to reach its 80 percent OPD TB screening target. It will continue to apply the Plan- Do-Study-Act approach — supported by coaching from the OD's TB supervisor — to refine changes and further improve its TB screening for outpatients. Other HCs in the TBK province can learn from Dar HC's success. Mr. Let Chamnan, OD TB Supervisor, also encourages all HCs in his OD to extend their TB screening to all service sections of their facilities. Dr. Ma Sokhon, Director of TBK's TB Program, was also grateful for EQHA's support in the province.



I am very proud of EQHA's efforts to collaborate with the provincial health department to initiate TB symptom screening among outpatients. I strongly believe that in the near future, TB screening activities will be carried out in all service units of public health facilities in TBK. – Dr. Sokhon

Improving Midwives' Skills to Deliver Better Family Planning Services

A close collaboration between the USAID-Enhancing Quality of Health Care Activity (EQHA) and the Kampong Chhnang provincial health department (PHD) is responding to the province's one- to two-percent decrease in the number of people accessing FP services due to the COVID-19 pandemic. Together they have worked to strengthen and improve FP services in public and private health facilities throughout the province.

Hum Sortly Clinic is one of many private clinics targeted for FP service improvement in Kampong Chhnang. Over the past several years, this clinic has seen a decline in the number of people accessing FP service. Clinic owner Hum Sortly said that her staff were unable to clearly explain to clients the advantages and disadvantages of FP methods, and they lacked the technical skills needed to place long-acting reversible contraceptives like intrauterine devices (IUDs) and implants.

"On average, we received only 20 clients per month these past few years. They were very small numbers. This was because our staff did not know how to provide any long-term FP methods like long-acting reversible contraceptive procedures. They were not able to use the FP equipment properly due to limited access to proper trainings on FP service, " said Hum Sortly.

One of the midwives in the clinic, Limsen Chanborey, said she previously never provided long- term FP methods to her clients. Because she did not have the confidence or skills to perform long-acting reversible contraceptive procedures, she could only provide counselling and advice on short-term methods like pills or injections.

PHD technical staff and EQHA assessed private health facilities across the province, including Hum Sortly Clinic. They discovered that several facilities had very low scores on many quality measurements such as infection prevention and control, sanitation, and technical knowledge of family planning consultation. Implementing quality improvement work in nine private health facilities in Kampong Chhnang province, PHD staff and EQHA trained private health providers like Chanborey on how to plan and set goals and objectives using the Plan-Do-Study-Act (PDSA) methodology. Clinic staff use PDSA knowledge to improve the quality of health care at their facilities, especially FP services such as IUD and implant insertion.

During the training, Chanborey identified two ways to improve FP services at Hum Sortly Clinic. First, improve clinic staff's FP counseling skills using the GATHER approach (Greet, Ask, Tell, Help, Explain, and Refer or Return). Second, increase the number of clients at the clinic receiving long-acting reversible contraceptives.

Chanborey observed that after joining several trainings with the EQHA project, her FP skills improved a lot. She has started to provide FP counselling using GATHER to help her clients make an informed choice about contraceptives. Moreover, she and her colleagues regularly utilize PHD quality improvement coaches to acquire more knowledge about the PDSA approach and refine their practical skills on long-acting reversible contraceptives.



Family planning and IUD training for private health care providers in Kampong Chhnang

As a result, Chanborey's clients who were counseled on FP using the GATHER steps increased from 48 percent to 96 percent between August 2021 and March 2022.

Hum Sortly Clinic continues to provide pre-natal care, post-natal care, family planning, and gynecology consultation to their clients, said Limsen Chanborey, who feels very proud of herself in helping the clinic increase its number of FP clients. She said, "I'm happy to serve more clients who need quality FP service. I observed that we received on average 25 to 30 clients per month, and most of them are using a long-term FP method."

Kheiv Chanthou, a 37-year-old mother of two living in Peamlongveak village, came to the clinic for FP consultation two months ago. After discussing with clinic staff, she decided to use the Jadelle® implant. "I am happy with the service provided by midwives in

Hum Sortly Clinic, "she related. "They explained very well the FP methods for me to decide which one is appropriate for me. I think having family planning is a very important way to ensure my family can have enough money to pay for the quality education for my young children."

Chanborey appreciates the support from the USAID-EQHA project and PHD Kampong Chhnang for providing technical support and continued coaching. With these additional knowledge and skills, her clinic is providing better service and serving more clients.



Family planning and IUD training for private health care providers in Kampong Chhnang

A New Online Registration Management System for Cambodia Midwife Council

The Cambodian Midwife Council (CMC) has taken the lead in engaging its members to use an online registration management system(RMS) that benefits practitioners, administrators, and patients. All health professionals in Cambodia are required to register with their respective health professional council(HPC) to legally practice their profession. Manual registration is burdensome and time- consuming. To ease this process, USAID supported the five HPCs in developing an online RMS, which launched in March 2018. The RMS has played a significant role in enabling registrants to self- manage their registration process at their own pace and with minimal technical skills. Users can also input and monitor Continuing Professional Development credits that are required to maintain their professional license. RMS provides HPCs with extensive functionality to monitor the process and maintenance of their health professionals' registrations. This system can further assist Cambodian health care consumers to identify licensed health professionals. Working collaboratively with the USAID-Enhancing Quality of Health Care Activity (USAID- EQHA), the Cambodian Midwife Council is championing all their members to utilize RMS.

To make sure that the RMS meets local needs, consultative meetings between CMC members and USAID-EQHA experts guided RMS implementation and training processes. Orientation and training of CMC members on the new system would normally be conducted in person, but the COVID-19 pandemic



USAID-EQHA provided a set of videoconferencing equipment and a Zoom license account to Cambodian Midwives Council (CMC) to disseminate the rules and regulations and networking with others, especially promoting the online registration system for CMC.

forced the CMC to pivot to a completely virtual platform. The CMC engaged an IT expert for support. Together with national-level members and the RMS software vendor, they set up a distance learning hub to facilitate learning and maximize reach. Close collaboration with the software vendor ensures the system's security, integrity, and sustainability.

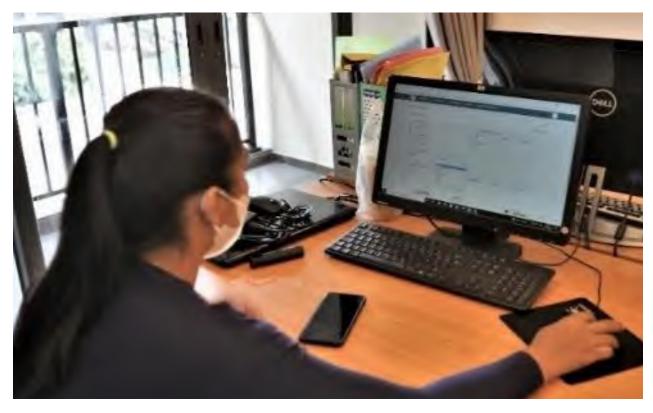
Ms. Hem Navy, immediate past president of CMC, acknowledged the benefits of RMS in facilitating the registration and licensing processes: "The most important point is that midwifery leaders should take

initiative in learning and using the system." Despite technological difficulties, Ms. Navy familiarized herself with each RMS function using guidance and training from USAID- EQHA. This extraordinary effort allowed her to perform at a higher level so that she felt confident to motivate midwives from regional and provincial levels. Using Ms. Navy's suggestions and comments, USAID- EQHA worked towards improving RMS to fit the user context. For example, CMC found that many members were unfamiliar with RMS technology, so they asked the vendor to remove the "time-out limit" on the homepage to give members more

time to complete their online tasks. CMC is finding RMS especially helpful to improve the accuracy and management of registration and licensing data. The sorting feature illustrates how users may customize output reports through filtering by practice location, licensing status, and other categories.

Ms. Navy shared how she engaged regional and provincial midwives to work together to learn to use RMS. She implemented a tiered learning strategy in which the most knowledgeable help those with less knowledge. In this case, the younger generation of midwives is generally more familiar with new technology, so these high-level learners mentored and trained their less experienced colleagues. CMC established a Telegram messaging group to provide immediate response and support to those encountering difficulties using RMS. Key representatives from all HPCs are invited to join to receive RMS updates and knowledge sharing. Members can post questions, problems, and suggestions to the group for rapid feedback.

In 2022, 5832 midwives had registered via RMS, and among them approximately 60 percent successfully received their licenses. This is a remarkable achievement for CMC and for midwives throughout Cambodia!



CMC staff demonstrate their confidence in using a new online registration system for Cambodia Midwife Council.

Competency-Based Education for Cambodia's Nursing Professionals

Cambodia's pre-service education for health professionals is undergoing transformational change. Competency-based education (CBE) is replacing the traditional knowledge-based education that had been in place for many years.

In 2019, the University of Washington's International Training and Education Centre for Health (I- TECH) partnered with FHI 360 as part of the USAID Enhancing Quality of Health Care Activity (EQHA) project to introduce competency-based education to Cambodia's health professions.

With EQHA collaboration and support, the Cambodian Ministry of Health (MOH) Human Resource Development Department (HRDD) began revising the nursing profession curricula in January 2019. They used skills learned from a bilingual course that EQHA developed to help HRDD and others working on curriculum revision understand and apply CBE to their task.



This course, Competency-Based Education: Design, Methods and Measures, covers the basics of using CBE approaches for productive teaching and learning in the health professions. It includes content on key CBE curriculum design principles, curriculum revision tools, pedagogy and assessment methods. Although the course uses nursing curricula as an example of CBE, the modules are relevant for pre-service educators in any of the health professions.

The CBE course is structured to be accessible in multiple ways: (1) as a repository of all instructional materials that can be downloaded or streamed for an in-person course or workshop, (2) as a fully online course for individual or group online study, and (3) as a blended learning course whereby some content is studied online in combination with occasional in-person meetings.

"The course is useful for anyone seeking to improve their skills in instructional design and CBE for the health professions, including pre-service educators, clinical instructors, curriculum designers, evaluators, and clinical preceptors and mentors," said Dr Sok Neang, Director of HRDD, MOH.

Learning outcomes for the course include sharing a common vocabulary and an understanding of CBE with others; using the best practices to improve curriculum design; aligning instruction and assessment with core competency frameworks for each profession; writing measurable competency statements, learning outcomes, and learning objectives; selecting teaching methods; and mapping assessment questions to core competencies.

The course can be accessed with the following link: https://uwgh.instructure.com/courses/217.

Dr. Sok Neang said, "EQHA successfully delivered this course to those working on revising the Associate Degree of Nursing (ADN), Bachelor of Science in Nursing (BSN) and the national core team CBE curriculum trainers over a period of two years." She explained, "The technical working group developed the Glossary of Terms, updated the Graduate Professional Nurse Core Competency Framework and Minimum Standard for Associate Degree of Nursing, and revised and updated 58 course syllabi using principles learned in this course."

Due to COVID-19 restrictions, in-person training was delayed numerous times. The final training was delivered when 30 participants completed teaching and assessment methods in March 2022.

"Cambodia now has a cadre of nursing professionals who have been trained in CBE, and updated nursing curriculum documents using CBE principles," declared Dr. Sok Neang. She continued, "After approval from MOH, the ADN curriculum will be launched and implemented in the coming academic year."

Improving Nursing Competencies Through High-Fidelity Simulation Equipment Training at Battambang Regional Training Center



FHI 360's preservice education team shows participants how to use the SimPad system at Battambang RTC.

EQHA's preservice education team conducted a total of six clinical simulation equipment trainings for 46 clinical instructors and faculty members of Battambang and Kampong Cham RTCs between December 2020 to present. The training aimed to boost faculty skills in the use of high-fidelity simulation equipment as part of the ADN's new curriculum to improve nursing students' competencies. The participants learned how to use automated external defibrillators, airway management mannequins, electrocardiogram machines, SimPad system (a software linked to mannequins and used for clinical scenarios), Autoclaves for sterilization and Neck Collars.

During each training session, the team provided lectures and demonstrations, followed by participants' practice in using simulation equipment in four scenario-based stations. A checklist- based, practical skills exam was conducted through all four scenario stations.

Everyone successfully attained at least an 80 percent score on their practical exam.

The training was successful in providing proper training for R TC staff members, engaging its faculty members and creating a cohort of "superusers" to coach all RTC staff. Because their exam scores were above 90 percent, they were chosen as "superusers". They also have good English skills, which means they can teach and use the SimPad System (available in English only). The "superusers" will help EQHA in training other faculty members in their RTC as well as in other RTCs, such as Kampot and Stueng Treng once their equipment has been purchased through the MOH/WB project.

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As a member of the clinical instructors and Chief of Technical Bureau of Battambang RTC, I would say that the trainings are very useful and come at the right time for our faculty members and also build a superuser faculty team who will help with knowledge transfer, especially related to nursing Competency Based Education.

 Mr. Polo, Chief of Technical Bureau for Battambang RTC All the participants were grateful for the training because even though Battambang and Kampong Cham RTC received several equipment donations, this is the first time they have received proper training on how to use them.

In fact, some of the previously donated equipment has not been used due to a lack of training and difficulty in understanding the manuals, which are usually in Chinese, French or English. To address this concern, EQHA also provided instruction manuals and videos in both English and Khmer so that the faculty could properly use the equipment.

The training also achieved high engagement from the participants. Many of the participants showed excellent skills and enthusiasm and even assisted their colleagues during their practice.



A Battambang RTC faculty member receives hands-on training on using high-fidelity simulation equipment for the first time.

SwipeRx TB Education Testimonial: Pharmacist and Pharmacy Owner Kiet Chankely, Kampong Chhnang Province

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"Two years ago, I noticed useful pharmacy-related content from the SwipeRx FB page. I was so interested in learning more and I decided to download the app and try it out. I found that the app helped me a lot through the accredited CPD modules. This is a more convenient way for me to stay current with my pharmacy knowledge, as I live in a province where there are not many offline training opportunities.

After completing the second TB module in SwipeRx, I realized that without this education I would forget and almost overlook TB presumptive cases. After learning through SwipeRx in my daily practice, I always try to encourage clients with TB symptoms to go to a nearby health center for diagnosis in a timely manner.

I recently learned that there is a tool within SwipeRx that allows pharmacists to screen and refer suspected TB clients in Phnom Penh and Battambang. I am excited to learn more about this tool as it becomes available to pharmacists in Kampong Chhnang so that I can help my clients get better, more complete and easier care that they need."



Pharmacist and pharmacy owner Kiet Chankley, Kampong Chhnang Province

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EQHA Improving Pharmacy Practice through use of SwipeRx professional education modules

"I joined the SwipeRx community in November 2020. It has been almost two years, and I would say I love using it as a professional platform that helps me to connect with peers and professional education as well as help clients to get proper care with the SwipeRx easy-to-use tool.

I have now learned all the SwipeRx CPD modules — TB, FP, HIV/STIs — as well as other trainings. After this learning, I am able to confidently and properly share my knowledge with clients. My pharmacy is based in a low-middle income community, and I was so glad to be equipped with the knowledge and tool since it can help lots of clients who need further diagnosis, such as presumptive TB, contraceptive methods, and other reproductive health concerns that are not available at my pharmacy. Between November 2021 and September 2022, I referred 67 clients using SwipeRx. As a result, I have helped clients start lifesaving treatment for TB and HIV. I also helped my clients access long-acting contraceptive methods that I can't provide at my pharmacy.

Looking at these results, I am so proud that I can be a part of helping my community, saving and improving my client's lives with better health care. Thanks to SwipeRx for empowering pharmacists, providing the opportunity as well the tools to make our work easier." Ms. Va Sopheakna, Pharmacist and owner of Sopheakmet Pharmacy, Phnom Penh.



Improving on-site health services for better factory workers' health

In Cambodia, an estimated 750,000 women workers depend on workplace health providers and their employers for their health care. Factory infirmaries are not primary care facilities; they have limited functions tied to safety, basic care, and referral to the appropriate level of health facilities. Yet, factory infirmaries are important because they are often a worker's first point of contact with health care providers and serve as the primary gatekeeper for referrals to external public or private health services.

As part of its activities to improve on-site health services for factory workers and strengthen interinstitutional collaboration, USAID-EQHA facilitated coordination between provincial- and district- level stakeholders to adapt the subnational linkages model — designed to improve on-site health services for factory workers and strengthen inter-institutional collaboration between Provincial Departments of Labor, District Health Offices, and factory management — as well as build capacity of infirmary staff for basic services, reliable and accurate referrals, and patient follow-up.

In 2020, USAID-EQHA, in collaboration with MOLVT, conducted an on-site factory quality assessment in 64 factories in three Cambodian provinces, including indepth interviews with over 80 health care providers and factory managers to understand the main issues and barriers for improving health care in the Cambodian garment industry.



The on-site assessment found that factory management can do much more to meet their regulatory obligations to ensure the provision of quality health services in their infirmaries. The other key findings were the need for better information flows and contact between local HCs and infirmary providers as quality improvements increasingly take hold at the local level public health facilities to redirect the strong preference by workers, providers, and management for referrals to private National Social Security Fundaccredited facilities and, to a lesser extent, large referral and national hospitals.

The USAID-EQHA started the first pilot by facilitating coordination meetings between the Kampong Cham Department of Labor's Chief of Vocational Training, the Cheung Prey district (where all five factories in Kampong Cham were located) to outline opportunities of collaboration through the subnational linkages model.

The team conducted site visits to five different factories and elaborated on opportunities for collaboration, including provision of on-site outreach services by Ministry of Health health care providers, increased referrals to the Cheung Prey HC, and strengthened registration and licensing.

In January 2022, Department of Labor for Kampong Cham Provision, District Health Office in Cheung Prey district, and SKY NICE II factory signed a Memorandum of Understanding to collaborate on the provision of on-site information/education and referral to public health services. SKY NICE II factory provided transportation support for Cheung Prey district's health providers for their regular visits to the factory for education/counseling sessions.



On-site education/counseling sessions being conducted by the nurse/midwife team from Cheung Prey district in SKY NICE II factory

On-site counseling/education and consultation services at SKY NICE II factory started in March 2022. The nurse and midwife team from Cheung Prey district health regularly visited the SKY NICE II factory, providing education/counseling sessions on a variety of health topics, on-site services, and referrals to the nearby Cheung Prey Hospital.

One of the factory workers said that she now understands a lot of health issues, especially the common health problems that are faced by the garment workers, and women in particular. In the past, she had never attended health education sessions by health providers.

"This model is very important. Our life is saved on time. So, when women face with health issues while they are working, there are nurses and doctor on duty to help us immediately. If our case is serious, they have the contacts of the health facilities that can refer us to," said one of the workers in SKY NICE II factory.

SKY NICE II factory representative said that the subnational linkages model is very important. It supports worker information and education regarding women's health, pregnancy, and contraception. It provides women with access to quality services without any out-of-pocket expenses and introduces workers to the range of services available at the nearby Cheung Prey health center and hospital.

"The cooperation between the factory, the Department of Labor, and the health center is well- coordinated and mutually beneficial. Therefore, the company intends to continue this cooperation for a long time, and even though the USAID-EQHA project ends, the company still plans to make this cooperation last because the relevant relationship is still there," said a SKY NICE II representative who expressed interest in expanding collaboration in the future to include annual check-ups for workers.

Increasing Use of FP Jadelle® in the Pich Chenda Health Center, Sampov Loun Operational District, Battambang

Pich Chenda Health Center is one of the most remote HCs along the Cambodia-Thailand border in Phnom Prek district, about 170 km from Battambang provincial town. The HC, built in 2000, provides the minimum package of activity services to the total population of 17,049 in 12 villages of two communes. Those services include OPD, ANC, delivery, postnatal care, FP, vaccination, TB screening and treatment, and minor surgery.

In the past, this HC had low-quality healthcare services. Meach Da, the chief of the HC said, "There were many challenges the health center faced, including IPC and family planning issues, infrastructure, irregular working hours, and staff behavior not being friendly enough to clients."

The challenges with FP were related to the lack of LARC methods, as the HC provided only short-term and IUD methods. Women of reproductive age who preferred to use the implant method of FP — Jadelle® — had to seek FP services in Battambang province or outside the country in Thailand. According to Chin Ren, a midwife at the Pich Chenda health center, "This was very expensive due to the cost of travel and high service fees. It also wasted a lot of time."

"Before, women of reproductive age in this area used only the short-term family planning methods because we, the health center midwives, had no skills in providing the long-term family planning services," said Chin Ren.

In July 2022, USAID-EQHA, in collaboration with Battambang PHD, introduced the QIC for Pich Chenda HC. The QI methods and tools helped them identify their problems and select evidence- based changes or interventions to improve the quality of healthcare services in their HC.

After the trainings, the HC team started to develop their improvement plan for IPC, infrastructure, and cleanliness inside and outside the HC building, as well as to expand the availability of LARCs. In September 2021, EQHA supported the HC midwives to attend a four-day training on LARC methods in Battambang provincial town, particularly Jadelle® insertion and removal, including informed choice counselling. The HC also received quarterly coaching from the PHD and OD to keep their momentum on FP service improvement plans.

"Since the start of implementing the Jadelle® insertion and removal service in October 2021, many women of reproductive age have come to receive family planning informed choice counselling and have used this method from the health center. During the period from January to December 2022, there were 77 clients that received the Jadelle® method from our health center," said Chin Ren.

Poch Ny is a 31-year-old housewife with six children living with her family in Au Thmey village, Pich Chenda commune. She visited the HC to follow up with the midwife after she had used Jadelle® for three months.

She said, "After getting married, my husband and I decided to have only three kids. We used a traditional method of family planning which was unsuccessful and caused me to have four unwanted pregnancies."

Poch Ny added that she used to be afraid of using the modern contraceptive methods because she heard a rumor about these methods, that they can cause health problems such as breast or uterus cancer or other health problems.

With a smile on her face, Poch Ny said, "When I gave birth to my youngest kid in Pich Chenda health center in July 2022, Chin Ren, the HC midwife introduced me to the long-term FP called Jadelle®. She explained it very well and said it was very useful for my health, easy to use, and would cause no harm or side effects. After discussing with my husband, we decided to use Jadelle®. I can admit that it really helps me from unwanted pregnancy again and again."

She continued by sharing that her family is poor, and "this long-term FP Jadelle® is my best choice. I will have enough time to take care of family and help my husband to earn an income for our family and children."

Poch Ny is very satisfied with the healthcare service of the Pich Chenda HC because the staff are friendly. They welcome every client and provide good advice and explanations about each FP method. She emphasized that she received the health care services free of charge because she has a Health Equity Fund card.



Poch Ny came to the Pich Chenda Health center to follow up on her health after she received three months of Jadelle®.

Another client, Him Koeun who is a 38-year-old with four children from Kandal village, Pich Chenda commune, Phnom Preak district, said "After I gave birth to my third child, who is now 13 years old, I started taking contraceptive pills. Last year, because of forgetting to take the contraceptive pill for some days, I got another child who is now 10 months old."

Him Koeun said she learned about the availability of FP Jadelle® in this health center through her village health volunteer.

"Now I've used FP Jadelle® for about seven months. There are no side effects. I have good health. It is really helping my family to improve our health and livelihood. If we don't have a baby in the next four or five years, I can help my husband in making more money to improve our family living," she added.

Chin Ren added, "I think that the QIC approach is a very good tool for quality improvement. I would like to say thank you so much to the USAID-EQHA project and hope it will continue to support the health centers in Cambodia."



After using Jadelle® for about seven months, Him Koeun feels very happy that she can support her husband to generate income for their family. They are on their way to the local market to buy materials for their shop in Kandal village, Pich Chenda commune, Phnom Preak district, Battambang.

Quality Improvement in Immediate Newborn Care in Boeung Thom Health Center

Immediate newborn care (INC) is the care given to a neonate by qualified personnel in the delivery room right after birth. It is an important first step to help term babies transition safely between intrauterine and newborn life. The first step is to get an APGAR score, a simple test that is conducted on a newborn in the first and fifth minutes after being born. Then, the provider assesses baby's first breath, weight, bowel movement, and circulatory and physiological respiratory changes at birth; performs umbilical cord care, bathing, physical examination, eye care, vitamin K injection, Bacillus Calmette–Guérin (BCG) and Hepatitis B vaccination; and initiates breastfeeding, skin-to-skin contact, sleeping, and warmth.

To ensure safe mother and neonate care, the USAID-EQHA supported HCs in six focus provinces to apply a QIC to systematically perform INC.

Sok Sovannaroth, the chief of Boeung Thom HC in Posenchey district, Phnom Penh Municipality said, "Before applying the QI methods, we were unclear how to improve our facility and increase service utilization. Moreover, there was inconsistent performance among staff, no resuscitation kits available, incorrect and incomplete INC records, and poor waste management."

She added, "Staff perceived the quality improvement work as the responsibility of the director only. So, fewer staff were present and fewer clients used our HC. They preferred the private clinics for their deliveries."

Working collaboratively with the USAID-EQHA team, INC interventions were implemented as part of the QI work in Boeung Thom HC. With good leadership from

the HC director and guidance from the municipal health department, QI coaches and the USAID- EQHA team, midwives created a comprehensive checklist with steps and scores for INC to practice self-evaluation.

The results in 2022 were significantly improved from 55.5 percent in Q4 2021; 78 percent in Q1 2022; 84 percent in Q2 2022; 91 percent in Q3 2022; to 89 percent in Q4 2022.



USAID-EQHA works in collaboration with the MOH and provincial health departments across the six provinces to provide support in response to facility needs as part of quality improvement intervention, especially in strengthening the capacity and competence of staff to perform immediate newborn care.

Sovannaroth claimed that "the QIC provides HCs with extensive quality improvement methods to increase service utilization. It also helps HCs engage with subject matter experts from ODs and PHDs in MCH, infection prevention and control, report and service management, and problem solving."

She added that "the model has not only built the knowledge and skills of our team, but also motivated us to work as a team with commitment and responsibility."

She expressed her gratitude to USAID- EQHA for always supporting the needs of her facility, especially building the capacity and competence of staff to perform INC. Most staff are familiar with the process and steps they need to take. Even though the scores have fluctuated slightly, the performance is under control and maintained.

She added that their best practice was shared at a learning session forum with 91 midwives from six USAID-EQHA targeted provinces. She believes that this positive performance will contribute to increasing the HC performance evaluation conducted by the MOH using the NQEM 2.



HC staff practices providing INC care during the coaching visit from the USAID-EQHA team.

Quality Improvement on ANC Counseling

Pongro-Mahaleap Health Center in Kampong Cham province, Cambodia, faced the challenge of providing quality antenatal care and counseling for pregnant women in their catchment area. Many women did not attend all of their ANC visits or did not receive adequate information and guidance from the HC staff. This resulted in low awareness and adherence to routine ANC and safe delivery practices, and increased the risk of maternal and neonatal complications, according to Heang Chhengly, chief of Pongro-Mahaleap HC, Koh Sotin district, Kampong Cham province.

According to the 2022 NMCHC report, although an estimated 97 percent of pregnant women in Cambodia (n=352,448) attended their first-time ANC, only 87 percent attended all four recommended ANC appointments. "The NMCHC recommends that every woman visit her ANC provider when she misses her menstruation period and follow up with the appointments," said Heang Chhengly.

To improve ANC follow-up, the HC participated in a quality improvement collaborative approach supported by USAID-EQHA in June 2021. The QIC aimed to improve the quality of maternal and child health services in six provinces in Cambodia by using QI methods and tools, such as plan-do- study-act (PDSA) cycles, run charts, and checklists. The USAID-EQHA team facilitated the QI collaborative trainings and coaching, as well as the exchange of knowledge and experience among the HC staff and other stakeholders, such as subject matter experts from the OD and PHD.

The Pongro-Mahaleap HC staff who joined the QIC trainings selected ANC counseling as their QI change idea and used a checklist to measure and improve their counseling skills. The checklist included items such as

screening for infections, monitoring fetal growth and well-being, providing nutritional and immunization advice, explaining the benefits of routine ANC and anticipated risk signs.

The HC staff used the checklist to assess their performance and identify gaps and areas for improvement. They also used PDSA cycles to test and implement changes to improve their counseling process. As a result of their QI efforts, the HC achieved remarkable improvements in the quality of ANC and counseling for pregnant women.

The percentage of pregnant women who received comprehensive ANC and counseling increased from 50 percent in June 2021 to 94 percent in December 2022. The HC also reported a reduction in maternal and neonatal complications such as bleeding, infection, and low birth weight. Moreover, the HC witnessed an increase in service utilization, as more pregnant women attended their ANC visits and delivered at the health facility.



HC staff practices providing INC care during the coaching visit from the USAID-EQHA team.

"The QIC approach proved to be an effective way to improve the quality of ANC and counseling for pregnant women in Cambodia. By using quality

improvement methods and tools, our HC staff were able to enhance their skills and performance and provide better care and guidance for pregnant women" said Heang Chhengly, chief of Pongro-Mahaleaph HC.

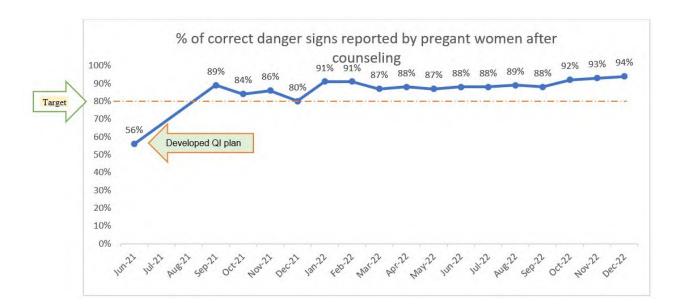
She added that the QI collaborative approach provides HCs with extensive quality improvement to increase service utilization. It also helps HCs to engage with subject matter experts from ODs and PHDs on MCH topics.

Heang Chhengly acknowledged the benefits of using the QI methods and tools. QI helped to increase the number of deliveries in HCs, as the number of women who delivered in HCs has grown from 8 in June 2021, to 15 in June 2022, to 18 in December 2022. This marks a 117 percent increase in the number of HC deliveries in 2022 (n=153) compared to the number of women attending ANC in 2021 (n=130).

Chhengly added, "Since we know how to communicate and talk to women, we have gained their trust and received more and more clients who visit the HC. Women call our staff for assistance when they are in labor at home alone [their husbands are away for work, regardless of working hours]."

"Our midwife, Mrs. Khat Chenda, has dedicated a lot of her time and resources to help women. Her model has earned the trust and confidence of the community in the service quality."

She added, "I am so proud of our staff here [all five women]. We help each other to manage the HC, including the care of patients, cleanliness and completeness of the patients' records. Besides, I am so thankful to the USAID-EQHA project that gave me an opportunity to learn and improve my capacity to lead the HC."



The patients were delighted with the HC staff and their wonderful chief. This was clearly appreciated by Sokhom Musoda, a 21- year-old woman from Roka Kong, Lvei, Koh Sotin, who was pregnant for the second time. She described a very comprehensive set of activities that she followed to take care of her health during pregnancy. She was committed to delivering her baby in the HC, and then she said she wants to use Jadelle® to prevent another pregnancy. She has also promoted the HC to women in her community."

Chhengly emphasized that by collaborating with other stakeholders, the HC staff were able to learn from best practices and receive feedback and support. The QIC approach also helped the HC to align with the national maternal and child health program goals and contribute to reducing maternal and neonatal mortality and morbidity in Cambodia.



The HC's midwife explains the important aspects of care during the pregnancy period at the Pongro-Mahaleap HC.

Enhancing Quality of Jadelle® Service Provision through Capacity-Building of Midwives in Prambei Mom Health Center, Kirivong OD,

Takeo Province

Sar Sony practiced FP- Jadelle⊠ implants during the coaching visit supported by USAID-EQHA project.

USAID-EQHA has been conducting training and on-site coaching on the most up-to-date technical knowledge and skills in family planning service provision and counselling, to support public health facilities in 19 provinces since August 2022. The aim of the FP activity is to strengthen the provision of LARC methods, especially Jadelle®, in public health facilities.

Sar Sony is a midwife working at Prambei Mom HC, Kirivong OD, Takeo province. She attended training on Jadelle® from October 26–29, 2022. Before receiving Jadelle® supplies, this HC provided many FP services except for implants like Jadelle®. During the training, Sar Sony learned how to insert and remove Jadelle®, practiced with real clients under expert supervision, and improved her counselling skills.

She said, "With my existing experience on implants (another one-rod contraceptive method) and with this Jadelle® training (theory, practice with clients, and immediate feedback from trainers), I have gained more confidence to provide informed choice FP to many clients who visit our health center."

So far, Sar Sony has provided Jadelle® to three clients. To expand FP services to clients in the community, she said "we need participation from health staff and commune leaders to announce the service to community people through the Village Health Support Group in different meetings."

She also mentioned some challenges she encountered with Jadelle®, such as side effects (weight gain, irregular menstruation) and said she offered support to clients, including counselling and a follow-up visit after one-month.



Ms. Muon Srey Pich, a 24-year-old woman, and her husband, Mr. Phy Morn, a 33-year-old man, along with their two kids, were at the HC for their four-month check-up. This client received Jadelle® from Sar Sony during the practicum session when her baby daughter was more than 1.5 months old.

She said, "When I came to get the 1.5-month vaccine for my baby, I met a healthcare provider, and she provided counselling and I decided to choose Jadelle®."

After four months of using Jadelle®, she came back for a check-up. She and her husband gave their reflections: "I think that using this method [Jadelle®] is good for me because it is a one-time insertion without bothering to take it on a regular basis. It has no significant side effects for me as well. I chose this

method because it is suitable for my family [as farmers with some chickens]; we have two children; we do not wish to have another baby and we want to have more time to take care of our family." She added, "This is my first time to use a FP method. I used this service because I trust the provider here. I am now more confident that I will not get pregnant although I have sexual intercourse."

Her husband also added, "I am happy that my wife chose this method because she could have more time to take care of her health, no need to repeat daily activities like taking contraceptive pills and have more time for our family."

This client lived outside of the coverage area for Prambei Mom HC, but they decided to use the service there because they felt more confident in the midwife's skills.

Sao Sokunthy, Chief of MCH at Kirivong OD, also shared her views on the FP activities in her OD based on her involvement in capacity-building for MCH providers and coaching support.

She said, "After attending the training in Prambei Mom HC, there were some obvious benefits for clients, MCH providers, HCs, and the OD. Those benefits included a variety of options for FP services for clients, including Jadelle®, at their visited HCs, knowledge and skills on Jadelle® service for trained MCH providers, confidence in the quality of Jadelle® service provision, lower service fees for clients using public health facilities, and also some financial contribution to staff and the health center to sustain services."

The Journey to a Better National Preceptor Program for Nurses

Training, coaching, and mentoring in their clinical skills practicum helps nursing students become competent graduates. Recent changes in the Cambodian nurse curricula have increased competencies and clinical practice time. Students learn physical examination skills and clinical procedures that incorporate nursing process and soft skills (including communication skills). Preceptors in the training sites have to be well-prepared to support students to attain the required competencies.

From October 2022 to March 2023, USAID- EQHA's pre-service education team, led by FHI 360, supported the Human Resources Development Department (HRDD) of the MOH to revise the five- day National Preceptor Program for Nurses training. The revision aimed to help preceptors implement the new competency-based nursing curricula.

The program developed a new core competency framework (with 19 core competency statements), revised the minimum standards for a preceptor program, defined roles and responsibilities of clinical instructors and preceptors, and revised the curriculum (60 percent theory, 40 percent practical). The program also wrote five modules: (1) Introduction to Competency-based Education, (2) Preceptorship, (3) Leadership and Management, (4) Teaching and Learning, and (5) Assessing Clinical Competence. The program developed 15 clinical teaching guides and tools to help preceptors in their role, such as strategies

and instructions on bedside teaching, case study, self-directed learners, the five-minute preceptor teaching model, coaching, feedback techniques, Socratic questioning, and reflection techniques. The program also included a teach-back activity guide to help preceptors practice these new clinical teaching methods in a group before using them with students. The program developed two assessment rubrics and guidance in direct observation of procedural skills to help preceptors in the evaluation component of their role.

By emphasizing clinically competent and caring nursing professionals who can communicate well with patients, family members and all health team colleagues, the revised preceptor program aims to greatly enhance the quality of nursing care across Cambodia. The technical working group members were eager and motivated to improve the quality of the preceptor training and delivered an excellent job to ensure a top-quality course.

"This is the first revision of the preceptor program, and it now includes competency-based education teaching principles and techniques. I anticipate that students will have thorough knowledge of clinical procedure skills and critical thinking skills as a result of good preceptorship when they finish their final clinical practicum at the hospital. They will then be ready to work competently in either public or private health facilities", said Ms. Chhun Yutheavy, TWG member from Kampot Regional Training Center.



Ms. Chhun Yutheavy, a member of the National Preceptor Program for Nurses' technical working group, demonstrates the five-minute preceptor clinical teaching method during the fifth consultative preceptor meeting.

A Journey to Better Health Care: The Launch of Integrated ART-NCD Services in Cambodia

There are an estimated 76,000 individuals living with HIV in Cambodia and 65,000 are on antiretroviral treatment-a remarkable achievement! There has been a 33% reduction in the number of new HIV infections annually since 2010 - currently estimated at 1,400/year. As Cambodia's PLHIV are diagnosed with non-communicable diseases (NCDs) as they age up or gain complications from long-term antiretroviral treatment (ART) use, the integration of ART-NCD services is essential.

The Ministry of Health (MOH) is driven to meet the needs of all its population for optimal health and wellness and has set a goal of Improving the quality of health services. The NCHADS in collaboration with the PMD have initiated the integrated ART-NCD service model to engage providers to strive to meet peoplecentered standards, and clients are satisfied with the health care services they receive.

Continuum of Prevention, Care, and Trestment Service

USAID-EQHA, NCHADS, and MHD have joined forces to launch an integrated ART and NCD service at Chaktomuk Referral Hospital. EQHA supports the service with training and coaching on QI methods, ART and NCD management, and patient satisfaction feedback systems. The initiative aims to meet CHAS standards and improve patient care.

USAID-EQHA conducted a formative study to assess the feasibility of integrating ART and NCD services at referral hospitals. The study found that integrated ART-NCD sites were operating effectively, and benefits of an integrated ART-NCDs service were highlighted, including clinical staff gaining new knowledge and skills, reduced discrimination against PLHIV, and increased convenience for patients.

With support from USAID-EQHA, four ART-NCDs sites were launched: Batheay Referral Hospital in Kampong Cham, Kampong Tralach Referral Hospital in Kampong Chhnang, Chaktomok Referral Hospital, and the NCHADS Clinic in Phnom Penh. A full package of integration services was set up at each site with support from USAID-EQHA, including staff capacity-building and basic materials to run the HIV and NCD consultation and treatment. Learning from this best practice, nine additional new sites joined the venture and were given intensive support, including training on operational and clinical ART and NCD management, followed by study tour to the champion site, the Soth Nikum Referral Hospital, and NCHADS Clinic, and regular onsite coaching.

According to interviews with three of the four sites above, several challenges were reported regarding the setup of the full package of integration and its implementation. However, from day-to- day implementation and management, most challenges were addressed and smooth practices enhanced. For example, in the first start, staff moved from providing standalone service at the AR T clinic. They were trained on both ART and NCD case management, and they are now capable of providing consultation to PLHIV with NCDs or non-PLHIV with NCDs.



At Bateay Referral Hospital, health staff work tirelessly to provide top-quality ART-NCD services. Their mission is to save lives and protect patients from opportunistic infections while meeting the rigorous standards set forth by the Cambodian Hospital Accreditation Standard (CHAS). With their unwavering commitment to excellence, the health staff at Bateay Referral Hospital are making a real difference in the lives of those they serve.

To address patient loss to follow up, Batheay Referral Hospital is working with local non- government organization Kampuchea Women's Welfare Action to contact patients about their follow-up appointments and setting up an internal ART-NCD Telegram group to allow effective communication between team members and quickly address the challenges. At Kampong Tralach Referral Hospital, one laboratory technician was assigned to work with clinicians, which can drive the testing process faster and reduce patient wait time.

All three referral hospitals were very appreciative of the support they received from USAID-EQHA and NCHADS. A series of coaching sessions following the training capacitated staff with additional clinical knowledge and skills and allowed coaches to observe

real practices to identify gaps for improvement. Dr. Krouch Satya, ART-NCD team leader at Batheay Referral Hospital said, "I did not feel confident to provide ART-NCD service after the training [learning from Soth Nikum] because ART and NCD are two new areas for me. Through regular onsite coaching I gradually built more confidence by learning on the job." The same was said by Dr. Bun Nalin, KTL ART-NCD team leader, who emphasized that she has not only gained technical knowledge and skills, but also in management for successful integration services.

Dr. Te Vanna, Kampong Tralach Referral Hospital Director said, "I found the improvement in staff capacity, they are confident through the course of intensive training and coaching. The equipment

supported by USAID-EQHA enabled the hospital to create a safe, comfortable, and trusted clinic that indicated in the patient satisfaction feedback data, most promised to return for follow-ups." Dr. Hout, director of Batheay Referral Hospital, added that the proper equipment allowed the hospital to set up a suitable space that is functional, confidential, and comfortable to encourage service uptake and retention.

An ART patient at Kampong Tralach ART-NCD, who had previously accessed ART service at Takeo and Udong Referral Hospital, said that "all three hospitals are great, but Kampong Tralach is much closer to home. Here at Kampong Tralach the wait time is much shorter. There are so many patients at Udong Referral Hospital and sometimes I had to wait for three hours to see a doctor, while I spent only 10 to 15 minutes here." In addition, a diabetes patient accessing Batheay Referral Hospital said, "The hospital's patient flow is clear and easy to follow, and the staff are friendly, professional, and helpful. I feel that staff here are well trained and very professional. When I needed assistance, they are quick to respond."

The integration service helped patients reduce their fear of stigmatization and discrimination. As one patient claimed, "When I first came to the hospital, I was worried about discrimination because of my HIV status. But in fact, I don't feel that way, I feel comfortable and get good outcomes. I am not the only one; many other patients I talked to also feel the same way."

These patients' feedback is proof that the integration of ART and NCD services can improve health care delivery for PLHIV in Cambodia. Batheay Referral Hospital was the host for staff who intended to learn best practices on the ART-NCD integration services, including delegates from Phnom Penh Municipality Health Department and their eight downside hospitals, along with the high delegation from USAID, NCHADS, and PMD.

From Challenges to Triumphs: The Impact of the QIC Approach on Maternal Care at Kampong Cham Provincial Referral Hospital

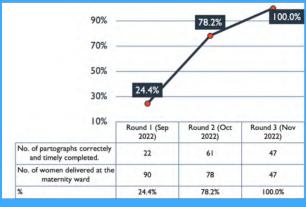
In a world where complications during labor and childbirth result in more than one-third of maternal deaths, half of stillbirths, and a quarter of neonatal deaths, improving the quality of care around the time of birth is crucial. To improve the quality and safety of delivery services, USAID-EQHA introduced the Quality Improvement Collaborative (QIC) approach to health facilities.

One such facility that benefited from this approach is the Kampong Cham Provincial Referral Hospital in Cambodia. This hospital serves as a training center for students from eleven provinces and from outside the country, including France and Japan. Its maternity ward, consisting of 39 personnel divided into four duties, serves around 400 women per month.

The ward's deputy chief, Dr. Kouk Karona, explained that before the introduction of the QIC approach, the ward had tried to improve the quality of services but faced limitations due to a lack of clear management and staff involvement.

However, with the introduction of the QIC approach, a system was put in place to complete partographs timely and correctly. Team leads were assigned to review and control documents daily, which were then double-checked by the chief of the maternity ward.

This approach led to significant improvements in the quality of labor and delivery services. The proportion of partographs used correctly, completely, and timely increased from 24.4 percent in September 2022 to 78.2 percent in October 2022, and finally to 100 percent in November 2022. The chief of midwives in Kampong



Percentage of partograph correctly and timely completed at Kampong Cham Provincial Hospital, Sep 2022–Nov 2022

Cham Provincial Referral Hospital, Ms. Muth Sovannara, confirmed that while there were initial challenges in engaging all staff and learning the tool, it became easier over time and problems were reduced.

Dr. Kouk Karona added that the staff must continue their professional development to maintain and improve their knowledge and skills in gynecology and obstetrics with the use of digitalized tools and to engage more clients for their hospital.

Dr. leng Eang Hor, chief of the maternity ward and infection prevention and control, revealed that the QIC approach benefited both providers and patients. "The better-quality application, the better patients' satisfaction obtained," he said. "It does not only gain in the assessment scores but also responds to the requirement of Cambodia Hospital Accreditation Standards." Pheak Srey Phy, a patient from Tboung

Khmum Province, is eagerly awaiting the birth of her second child. She has nothing but praise for the midwives and the hospital service, expressing her complete confidence and trust in their abilities. "The midwives in this hospital are exceptional," she says. "They treat their patients with the utmost care and respect, and their professionalism is second to none. I feel completely at ease knowing that I am in such capable hands."

Thanks to the QIC approach, Kampong Cham Provincial Referral Hospital has developed a policy and procedure on the management of partographs that is in line with the national safe motherhood protocol. This has helped guide staff and students in professionalism and reduce the rate of mother and child mortality.



At KCM PRH, a midwife attentively performs a health check on a glowing mother-to-be. As she awaits the arrival of her second child, the expectant mother is in the best of hands at Kampong Cham PRH, where skilled midwives provide topnotch care to ensure the health and well-being of both mother and baby.

Raising the Bar for Private Health Services with Minimum Licensing Standards

Cambodia's Ministry of Health (MOH) aims to provide better and safer health services for its people in both the public and private sectors. With the help of various partners and stakeholders, the MOH developed a set of Minimum Licensing Standards (MLS) for private health care facilities in Cambodia based on a new framework that led to the establishment of 88 standards, which will be used to regulate, license, and relicense private health care providers. The MLS framework addresses four key areas of health care: (1) construction and design, (2) human resources, (3) clinical services, and (4) equipment and supplies; along with three cross- cutting areas-infection prevention and control, quality improvement, and administration and legal requirements.

The MLS are based on the best practices and evidence from national and international sources. The standards have been tested through field visits and consultations with experts, representatives of private health facilities, a national team of specialists, and health development partners, including USAID through the USAID-EQHA project implemented by FHI 360, Gesellschaft für Internationale Zusammenarbeit (GIZ), and the World Health Organization (WHO).

"The old licensing checklist and inspection tool, developed in 2011, was outdated and inconsistent. We needed to update them to ensure that all private health facilities follow

the national regulations and guidelines, "said H.E. Dr. Ngov Kang, Secretary of State of MOH. "We also wanted to align our licensing process with the One Window Service, which is an integrated multisectoral office that provides various public services at the subnational level, including issuing licenses to pharmacies, medical consultation rooms, and traditional healers." The MLS also aligns with the Ministry of Health's Cambodian Hospital Accreditation Standards and the Cambodian Health Center Accreditation Standards, approved by the Minister of Health in June 2022.

The MOH approved the MLS in December 2022, immediately disseminated the standards, and started orienting provincial staff responsible for using the standards for inspecting facilities, and private health service staff who must apply the standards.

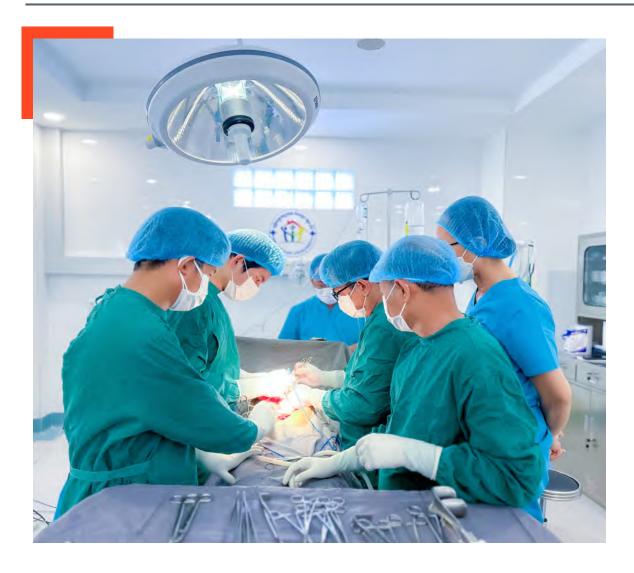
Dr. Leng Pini from the private sector in Prey Veng Province, who attended three USAID-EQHA-sponsored workshops to help the private sector understand the new system and the standards, shared his views. "In Cambodia, there are still many challenges for private health facilities. Patients still lack confidence in the treatment delivered. There is a need to build patient trust. Previously, there were no standards or inspection tools to help the private sector improve the quality and safety of their health facilities," he said. "Many patients leave the country to receive treatment or health services in nearby countries, which costs them a lot of money and time." Dr. Pini expressed



Dr. Leng Pini, a dedicated medical professional who always adheres to the Minimum Licensing Standards for Private Health Care Facilities in Cambodia, treats his patients with the utmost care and professionalism. His commitment to these standards has earned him the trust of his clients and led to quality improvement and an increase in patients.

his strong agreement with having the standards for licensing. He said, "The MLS are very good for those who operate in private health facilities and want to apply for a license. They should know and study the MLS before establishing private hospitals or health clinics. Using the MLS is the right way to check if the health care facilities are ready for licensing from the Ministry of Health and show they are a safe place to come for high quality and safe health care services."

H.E. Dr. Ngov Kang emphasized that implementing the MLS will result in significant benefits for the health sector and the people of Cambodia. The standards will raise professionalism and accountability among private health providers, enhance the trust



At Leng Pini Clinic and Maternity, a group of medical doctors successfully completes a surgery adhering to the Minimum Licensing Standards For Private Health Care Facilities in Cambodia. Their dedication to these standards has resulted in quality improvement and an increase in clients.

and satisfaction of patients and customers, reduce the risks of medical errors and adverse events, and contribute to the achievement of universal health coverage in the country. The standards also align with the Royal Government of Cambodia's vision to become a high-middle-income country by 2030 and a high- income country by 2050.

The MOH is proud of its achievements in developing and implementing the standards for private health facilities. H.E. Dr. Ngov Kang expressed his sincere gratitude to all the stakeholders and partners, especially USAID-EQHA, who generously supported this initiative.

The MOH also commends all the owners or directors of private health facilities who have embraced the standards and participated in the evaluation and competition processes. The MOH hopes that the MLS will continue to inspire and motivate private health facilities to provide high-quality and safe health services to the people of Cambodia.

USAID-EQHA is actively collaborating with the MOH's Department of Hospital Services until the end of 2023 to develop the necessary policies, procedures, and documents for implementing the standards. This includes creating training materials for licensing inspectors and assisting health staff from 25 PHDs and private health care facilities in understanding and preparing for the MLS, ensuring that their services meet the highest standards of quality and safety.

Advancing Healthcare: The Path to Excellence through CHAS Implementation— A Senior Surveyor's Perspective



Dr. Nhel conducted a comprehensive round of patient visits at the Battambang Provincial Hospital. He inquired about their health status with a professional demeanor, treating each patient with a friendly approach and utmost care.

Situated in the heart of Cambodia, a distinguished senior surveyor has been making significant strides in the health care sector. Dr. Oum Nhel, the Deputy Director of Battambang Provincial Hospital, has undergone extensive training from the Ministry of Health, USAID-EQHA, and ISQua. His efforts have been pivotal in implementing the Cambodian Hospital Accreditation Standards (CHAS) at his hospital, thereby markedly enhancing the quality of health care services.

"The implementation of CHAS is of paramount importance for enhancing health care in any facility," asserts Dr. Oum. "It aids us in formulating a strategic plan for the hospital and ensures that all staff comprehend their roles and responsibilities. This has resulted in improved patient care, efficient management of human resources, and fortified relationships between leaders and staff."

As a senior surveyor, Dr. Oum's expertise has been instrumental in elevating the quality of services at the hospital. "Understanding CHAS enables me to effectively communicate and disseminate all intended standards to staff," he emphasizes.

The application of CHAS and the integration of his acquired knowledge have led to significant improvements in the hospital's services.

"We now have robust relationships between patients, their families, and our staff, which helps prevent disputes. We also have established protocols and guidelines for treatment, clear roles and responsibilities for all hospital committees, and an effective staffing plan," he states with pride.

Looking forward, Dr. Oum has ambitious plans for further enhancing the health system at his hospital. "We aim to write policy and procedures for all standard requirements, develop a patient education program, better understand community needs, and encourage staff involvement in annual operation plan activities," he elaborates.

The implementation of CHAS has also facilitated the identification and rectification of several gaps or weaknesses in health service delivery. "We've pinpointed areas such as treatment guidelines, internal protocols, staffing plans, hospital acquired infections, and e-medical record systems that required improvement," he notes.

The Ministry of Health and the USAID-EQHA invaluable technical project have provided assistance, quidance, and recognition implementing and orienting the CHAS and improving performance. "They've conducted workshops. trained hospital accreditation coordinators, provided self-assessment tools, and offered training about plan-do-study-act (PDSA)," he acknowledges.

Quality Improvement Training Improves Infection Prevention and Control, TB Screening, and Family Planning Counseling

Svay Chrum Health Center (HC) in Kampong Chhnang province provides essential health care to 22 villages and has 15 staff with a capacity of 1,000 patients per month. The USAID-funded EQHA, with support from the operational district quality improvement (QI) team, provided Svay Chrum HC with QI training in November 2019, and the HC has been receiving quarterly half-day QI coaching since December 2019.

During the QI training, participants identified three areas for improvement based on the low NQEM score: IPC, TB screening, and FP consultation. According to the HC chief, staff remained unclear about setting improvement aims and indicators, and they lacked understanding of proper documentation to track progress to demonstrate improvement and results.

To address these challenges, QI coaches provided tailored hands-on support on the practical application of the QI Model for Improvement (MFI) to address problems in the three services identified. Coaches assisted and supported HC to develop QI plans, including setting aims, measurements, and indicators, and generating change ideas. At each session, HC staff received crucial clinical skills such as the proper use of medical waste bins, MFI refresher

including the use of the updated plan-do-study-act (PDSA) worksheet, skills to develop run charts, and support to review progress and challenges on PDSA cycles.

With the support from coaches, HC staff generated change ideas and indicators for the three services: (1) improve proper medical waste management by correctly disposing of medical waste in designed waste bins (self-reported IPC checklist completion score); (2) increase the number of patients screened for TB by actively screening all patients, regardless of complaints of TB symptoms, at the outpatient department (OPD) (number of patients screened for TB); and (3) increase the use of the "Greet, Ask, Tell, Help, Explain and Return" (GATHER) counselling technique by midwives when providing FP consultation (self-reported GATHER checklist completion score).

Svay Chrum HC has since produced impressive results. The rate of correctly completed medical waste disposal checklists increased from 14 percent in August 2020 to 93 percent in August 2022; the rate of TB screening at OPD improved from 6.8 percent in December 2019 to 70.78 percent in August 2022; and the rate of GATHER technique performed by midwives increased from 59 percent in March 2021 to 91 percent in August 2022.

Additionally, the HC's NQEM score also increased from 67 percent in quarter 4 (Q4) 2019 to 74 percent in Q4 2021. According to the HC chief, the number of OPD patients per month increased more than 20 percent, the goal set forth in the HC's annual operational plan, from an average of 600–700 patients in 2020 to an average of 800–1,000 patients in 2022.

According to QI coach Mr. Chan Buntha, staff are now able to independently develop and execute QI plans and use them to effectively create annual operation plans. Mr. Buntha stated that QI is an important tool to improve the quality of health care in Cambodia, and he is committed to providing continued support to HCs. He would like to establish Svay Chrum HC as a QI learning site for other HCs to learn from.

Quality Improvement Collaborative Improves Family Planning Services

Sum Sreynouch is a 32-year-old midwife and health care provider who owns a small clinic called Sum Sreynouch Health Care Room located in a remote district of Kampong Chhnang Province. The clinic mainly provides outpatient department services, antenatal care, family planning (FP), and vaccination for children. According to Sum Sreynouch, three or four years ago the clinic did not have many clients. In one month, only 25 patients came for health care services, and among those only one or two came for FP services. Some months there was no one looking for FP services at all. She said, "Three years ago, my clinic did not have a separate and private FP room. The space was small. It was very difficult to manage the hygiene and sanitation. Sometimes, I found my clients were not satisfied with my services and the clinic."

At the time, she did not understand infection prevention and control (IPC) very well. She said she did not know the procedure for equipment sterilization and did not have enough medical trash bins. Regarding FP she said, "Previously, I did not have enough technical skills on long term methods such as IUD and implant insertion. I could only provide FP counselling and suggest short-term methods such as the pill and injections. Sometimes, I referred clients to nearby health centers or others private health facilities if they chose long-acting reversible contraceptives." From March to August 2022, USAID-EQHA, in collaboration with Kampong Chhnang PHD and ODs, provided Quality Improvement Collaborative (QIC) trainings to health care providers from private clinics and facilities, including Sreynouch's clinic. The training focused on technical skills such as basic FP, digital CBR, IPC, IUD, and Jadelle® implant insertion.

In addition to these trainings, Sreynouch received ongoing monthly coaching from June to December 2022 from a provincial private-sector quality improvement for family planning (PPQI- FP) coach using the QI model on FP, IPC, patient satisfaction feedback (PSF), and CBR. The PPQI-FP coaches provided regular on-site coaching to support knowledge of quality improvement by using an FP assessment tool and the plan-do-study-act (PDSA) approach. They focused on the provision of long-acting reversible contraceptives, which was identified as an area of improvement for the Sun Sreynouch clinic.

Srevnouch said she feels very confident with the knowledge she gained from the support of the USAID- EQHA and the provincial health department (PHD), especially from the trainings on QIC, IUD, and implant insertion. She said, "I now can identify the need to improve FP services. Two ways to address it are to firstly improve FP counseling skills using the GATHER approach and provide technical skills of implant insertion based on the national guidelines, and secondly to use the QI approach to increase the number of clients who receive a longacting reversible contraceptive." In the six months between June and December 2022, Sreynouch said she gained a lot of confidence using the QI approach to improve FP counselling, including using the GATHER steps to improve access to an informed choice of contraceptive for clients, as well as being able to provide implant insertion for women.



GATHER steps and implant insertion (Jadelle®)

Based on the FP score of Sun Sreynouch Clinic that the coaching team assessed between June and December 2022, there was an improvement from 41 percent to 86 percent. The IPC score also improved from 76 percent to 94 percent. The number of FP clients increased from three to eight, and OPD increased from 25 to 40 clients per month. Sun Sreynouch said, "I am so happy to provide FP health care services with quality and safety, because I want to promote women's health, good spacing between children and to have enough time to make money for living and, moreover, to prevent dangerous delivery." Sun Sreynouch also shared her message about the use of the QI method to provide quality improvement in health care services with other clinics.

Changing the Future of Nursing Preservice Education in Cambodia

While the primary goals of all health professionals' education remain constant, the impact of outdated health education reverberates through society with less-than-optimal population health outcomes. It also heightens lack of trust in the health system and reflects on those delivering health care. Addressing this meant transitioning current knowledge-based preservice education to a strong competency-based education (CBE). USAID's Enhancing Quality of Healthcare Activity (EQHA) preservice education team led the way nationally with the development of a national CBE program for all health professionals, followed by revision of nursing education programs and support to midwifery and medical curricula updates.

An evidenced-based integrative approach was used to inform the design and implementation of the project. This ensured international and regional acceptance that will have a positive long-term impact for the nursing profession in Cambodia. The preservice team, along with the MOH-assigned technical working groups (TWGs), worked consistently to ensure a focus on those well-documented challenges highlighted during the initial assessment phase. Integrating updated CBE theory, with competencies of nursing process and clinical best practice, was achieved by identifying curriculum threads, increasing practice hours, and scaffolding through the curricula of the two nursing degree programs.

The project was rigorously underpinned by a strong process of partnership and collaboration at every level. The Cambodian MOH instigated the curriculum revision, and while the preservice education team provided regular guidance and feedback, the

technical working groups (TWG) made final decisions on curriculum structure, flow, and content. While the project directly supported the two RTCs of Battambang and Kampong Cham, the TWGs were comprised of representation from the six government schools of nursing as well as four private universities, four national training hospitals, one NGO hospital (Angkor Hospital for Children), and direction from the Cambodia Council of Nurses.

Training of the TWGs in CBE was provided simultaneously throughout the revision process, using the e- learning program developed by the project in partnership with the University of Washington. This program has now been used as the basis for a national CBE program developed for improving faculty competency in all health professions. The bilingual online Competency-based Education for Cambodia is freely available and permanently housed on the University of Washington website. The Preceptor Training Program for Nurses was also revised and is now being used by the midwifery preservice education team as the basis for the midwifery preceptor training revision.

Simulation training was an exciting part of the revision for the faculty. EQHA's two target RTCs were provided with new simulation equipment, and 14 training videos were created to train faculty in use of this new equipment. A further 12 videos explaining steps in common clinical nursing procedures were developed in collaboration with Battambang and Kampong Cham faculty to assist students in their learning.

Additional education resources were developed to support implementation of the nursing curricula at classroom level, and this was supported by updated or new textbooks for all subject areas.

Subject matter expertise—in-country and internationally—was engaged for both associate and bachelor degree programs, with both externally evaluated. Evaluation feedback was largely positive, and the TWG accepted the majority of recommendations for both programs. Donors and partners involved in pre-service education provided invaluable contributions, as shown in the table below.



Major stakeholders supporting the nursing components of the CBE preservice project

USAID	International University
Ministry of Health, Human Resource Division Department	Chenla University
Battambang Regional Training Centre	University of Puthisastra Norton
Kampong Cham Regional Training	University Cambodia Council of
Centre Stung Treng Regional Training	Nurses University of
Centre Kampot Regional Training	Washington Auckland
Centre University of Health Sciences	University of Technology
Military School of Nursing	University of Pittsburgh World
International University	Health Organization

The three-year Associate Degree in Nursing was introduced into all schools of nursing in the 2023 academic year, and faculty in both public and private facilities are now working on the implementation phase. The four-year Bachelor of Science in Nursing will be introduced into health training institutes in the 2024 academic year. Training new preceptors using the revised one-week Nursing Preceptor Program has also begun in regions of EQHA's target regional training centers.

The CCN has accredited the online CBE for Cambodia course that provides accessible quality training, and nurses will also be able to attain credits towards their continuing professional development.

The EQHA project has successfully led the transition from knowledge-based to competency-based preservice education reform for health professionals in Cambodia. While EQHA has focused mostly on nursing programs, the national CBE curriculum will benefit all health professional faculty. The revision process and many tools and templates the project has developed have been and are likely to be further utilized in revising other health professional curricula going forward. These tools will be disseminated to all HTI and relevant clinical settings to be used as future resources before the project's end.

A Small Referral Hospital with a Big Vision:

Increasing the Use of Digital Patient Satisfaction Feedback to Improve Hospital Service

Patient feedback is an important and useful tool to reflect the quality of hospital service and identify areas for improvement. Requests to provide feedback anonymously using modern technology instills the public's trust and confidence in the hospital and the health care system.

Sampov Lun Referral Hospital has been receiving support from the USAID EQHA project and the provincial health department (PHD) quality improvement (QI) team to pilot the electronic patient satisfaction feedback (PSF) system since April 2021. Previously, the hospital collected patient feedback using conventional written forms, and usage was low. Hospital director Dr. Poun Sambath reported several barriers, including patients being unaware of the system, paper- based PSF being time-consuming to provide and to analyze, and patient illiteracy. The short, user-friendly digital PSF system with an audio option addresses these barriers and aims to include more patient voices in service improvement.

With support from EQHA and PHD, the Sampov Lun Referral Hospital (RH) QI team developed ideas for change and used the plan-do-study-act (PDSA) approach to test those changes. Several innovative best practices have been implemented since August 2021 to facilitate the use of PSF.

First, all hospital staff are orientated on PSF, and duty staff are designated to orient patients on the system. Second, PSF is integrated into the patient flow, and a flow chart is displayed at the outpatient waiting area. Third, all patients are familiarized



At least 5 to 10 patients per day (more than 200 patients per month) provide feedback for health care services at Sampov Lun RH, according to Pov Raksa, PSF focal person

on using a PSF tablet without staff influence. Additionally, sticky notes on patient files are used to identify patients who completed PSF and to encourage those yet to participate. PSF data is presented at monthly staff meetings to identify areas requiring further improvement.

As a result of these activities, PSF usage increased from 2.1 percent in April 2021 to 72.9 percent in December 2021. The number decreased sharply due to the worsening COVID-19 crisis but eventually began to increase again, reaching 47.3 percent in August 2022.

Comparing data collected in June and August 2022, the rate of patients reporting "very satisfied" or "satisfied" with overall service received was 82 percent versus 96 percent, respectively; quality of consultation received 81 percent versus 97 percent; cleanliness and hygiene of the hospital 79 percent versus 96 percent; and friendliness of the physician 82 percent versus 95 percent. Additionally, 86 percent of patients in June and 89 percent in August reported an average wait time of less than 30 minutes. In August, 99 percent of patients stated that they would return to the hospital and were willing to refer Sampov Lun RH to their friends and families.

The dedicated QI team at Sampov Lun RH has demonstrated their enthusiasm using QI approaches to continue improving services and to achieve the 55 percent PSF usage goal. Mr. Mem Vattanak, deputy chief of the general medicine ward, stated that patients are happier with hospital services and patient numbers have increased. Currently, the general medicine ward is reported to be nearing full capacity. Sampov Lun Referral Hospital is truly a small district hospital with a big vision that strives to utilize QI approaches to improve its services to the community.

Notable quotes on the electronic patient satisfaction feedback system:



"PSF data is useful for staff to change and improve service, and a motivator for them to provide good service" — Mr. Nem Vattanak, deputy chief of general medicine ward, Sampov Lun Referral Hospital



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"We understand this is voluntary, but we have not had patients refuse to provide feedback after they were oriented" — Mr. Nem Vattanak

"Using digital electronic tablet system makes it easier than writing on paper, and it allows me to express my opinion about service provided, consultation and hygiene without fear" — Sampov Lun hospital patient



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"Currently the general medicine ward is almost at full capacity, patients are happy to come to the hospital" — Mr. Nem Vattanak



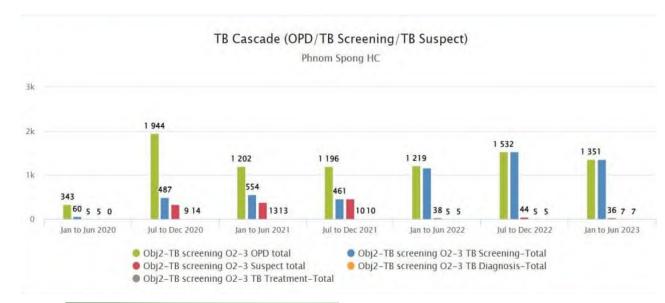
QIC Increases TB Case Detection at Phnom Spong HC, Pailin Province

Systematic screening for TB in the outpatient department (OPD) has led to an increase in TB case detection. In 2022, Cambodia's National Center for Tuberculosis and Leprosy Control (CENA T) indicated that 37 percent of TB cases were missed every year. With the support of CENAT, the Ministry of Health, and provincial health departments, a five-year support program from USAID-EQHA performed TB symptomatic screening at OPDs in 321 health facilities in six provinces.

The Quality Improvement Collaborative (QIC) is a creative approach and strategic direction for increasing service utilization, including TB case detection. Ms. Long Yem, the chief of Phnom Spong Health Center (HC) in Pailin operational district (OD), Pailin province, said, "Before using the QI approach, TB case detection was very low. Since we have applied it to symptomatic screening at the OPD, the yields have increased. Suspected cases were detected and treated."

She added that "The QIC provides HCs with extensive quality improvement to sustain high levels of performance. Not only does it improve TB screening, but also partograph and IPC. This approach can further assist CENAT in finding more TB cases and support HC in achieving higher scores in the second phase evaluation of the NQEM 2 [National Quality Enhancement Monitoring] scores."

According to statistics on TB screening, within the five years of support and in collaboration with CENAT and PHDs, 3,110,616 out of 5,639,151 patients receiving OPD services were screened for suspected TB. Of these, 98,987 were identified as suspected TB cases, and 7,316 were diagnosed with TB.

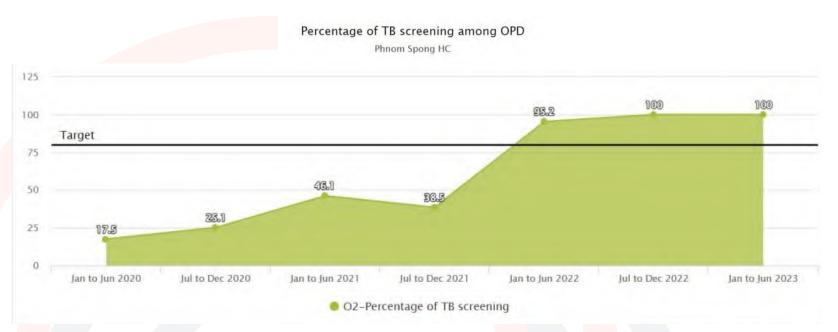




Svay Sok appreciated the health care provider's care and friendly service during his TB check-up at Phnom Spong HC.

Based on two graphs below, Phnom Spong HC shows that TB screenings have been increasing since July 2020 when the QIC application began. The trend of screening was lower up until January 2022. However, the trend has risen to its highest level (100 percent) and remained at that level until June 2023. The numbers of identified cases and treatment were 100 percent.

The HC chief and staff are highly committed to maintaining these results and will scale this model for other improvements throughout the HC. In addition, Long Yem has become a model health care provider for her team and motivates them to continue to apply the QIC successfully.



Svay Sok, a 52-year-old farmer and patient living near the health center, who is currently undergoing TB treatment, said: "I realized I had TB just about a month after I went to the health center for consultation. In the past, I had never believed that I had TB, as I looked healthy physically. People in the past believed that TB could be transmitted from one person to another by blood relation, but nowadays, it is different. People can get infected with TB by working very hard physically. That's why I came for the treatment."

He added, "I am very happy with the staff and the health center because they are very friendly and take good care of my treatment. Treating TB is very important because it will help us to reduce the transmission of the infection."

Another 33-year-old patient, Prain Sen, a farmer who came for TB treatment, said he had had TB for about

two months. He was advised by the medical staff to check his sputum.

"I was aware of the TB case but I drank and smoked a lot in the past. I coughed for more than 14 days and I felt very concerned about my health so I decided to stop smoking and drinking," said Prain Sen. He continued, "the treatment of TB in this health center is very good. All medical staff are taking good care of us. They provided good advice, especially on medication. I trust them because they said I have to take the medicine regularly based on the prescription if I want to recover well from TB. I feel very relieved and better after taking more than 20 days of the TB medication."

Both of the patients were satisfied with the health center service, and they encouraged everyone who suspected they might have TB to come to the health center for treatment.



A health care provider performs the TB check for Prain Sen when he came for his follow-up health check-up at Phnom Spong HC.

From the Worst to the Best IPC Practice:

Svay Chrum Health Center



IPC follow-up coaching for Svay Chrum HC conducted by USAID-EQHA and Boribo OD.

Four to five years ago, patients always complained about the poor management of waste and cleanliness of Svay Chrum HC in Kampong Chhnang province. The daily practices on medical waste management such as waste separation, storing, and incineration at this health center was not properly implemented in accordance with the national IPC guideline of the MOH, according to Chhe Chanthoeun, a midwife staff and the IPC committee member of Svaychrum HC.

Previously, there were some challenges in managing

the IPC for the HC due to lack of IPC trainings for new staff and no encouragement from the management team on improving hygiene and sanitation.

The HC did not have enough handwashing areas and waiting space, or basic equipment such as standard trash bins and plastic bags. Patients threw garbage everywhere at the HC, and health staff did not redirect them not to do so. Particularly, the health care team was not aware of QI methods or an IPC improvement work plan, according to Chanthoeun.

Chanthoeun said, "A few years back, our health center was very poor in managing IPC. We did not have IPC committees. We received very little coaching from the operational district, and we did not have any opportunities to learn the best practices of IPC management from other facilities."

In December 2019, the HC was assessed with the NQEM tool for IPC. It received a very low score of 28.90%. In addition, the number of patients who visited the HC was low.

Svay Chrum Health Center provides essential health care services to 22 villages in the area with a capacity of 1,000 patients per month. Improving IPC is very important for the HC team to deliver quality of care, improve patient safety, and protect all those providing care in the health system, according to Chan Buntha, technical officer, and QI coach from Boribo OD. He said, "IPC standards should be in place at the national and facility level to provide minimum protection and safety to patients, health workers and visitors."

In August 2020, The USAID- EQHA in collaboration with Kampong Chhnang provincial health department and technical team from Boribo OD, trained and coached staff on the practical quality improvement collaborative approach using MFI and PDSA testing

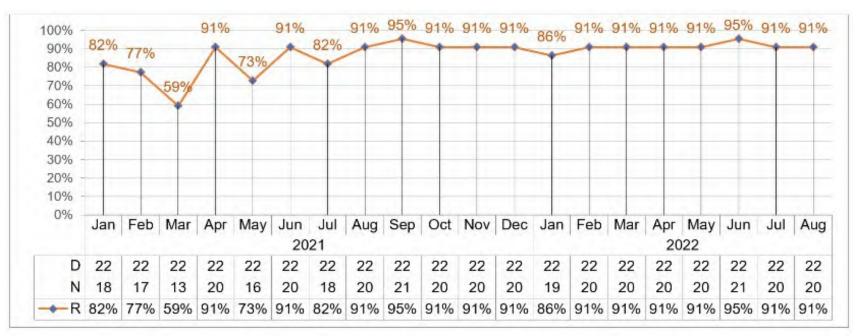
cycles to address the IPC problem.

"We learned to identify our problems on IPC. We developed a QI plan and selected IPC change ideas to work on. We set up our aim and using the MFI approach with our measurements and indicators for the IPC improvement of the HC," said Thea Ty, chief of Svay Chrum HC. Thea admitted that his staff really benefited from the QI training and coaching supported by the USAID- EQHA and OD team.

According to Chanthoeun, the HC team developed an IPC work plan and checklist adapted from the national IPC guideline, and established IPC committees for IPC monitoring at all units of the HC. All the staff are

required to do IPC self-assessments at least two times per month and to provide hygiene and sanitation education for their clients once each week. She said that the HC teams also implemented IPC self-assessments using a checklist twice weekly, and created a run chart for monitoring performance progress.

The Svay Chrum HC received monthly coaching and refresher trainings relating to IPC waste management until September 2021 for all staff, including cleaners. From December 2021 to August 2022, the HC staff received quarterly coaching that helped them adhere to the national guidelines on IPC and enhance their NQEM performance.



IPC Run-Chart for Svay Chrum HC, from Jan 2021-Aug 2022

Two years later, after the implementation of the IPC quality improvement work plan, the health center's self-assessment score for IPC increased to 91 percent in August 2022, compared to the baseline in August 2020 of only 14 percent.

"I'm happy to see the improvement progress of our HC, especially on the significant changes regarding the IPC. As a result, we can see the number of patients visiting our HC for healthcare has increased around 20 percent between 2021 and 2022. This is because of the knowledge we gained from the EQHA, and it makes us very confident to provide healthcare services to our people with quality and safety," said Thea Ty, chief of the HC.

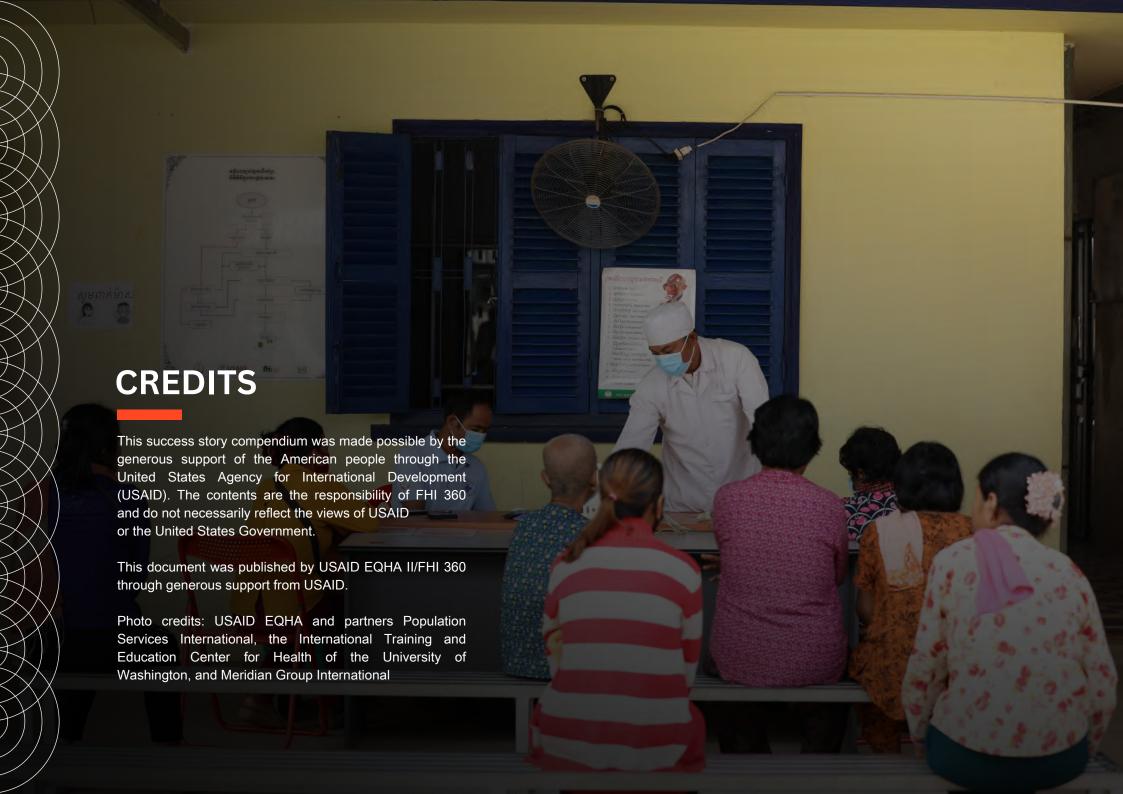
Sao Thim, 47 years old with four children living in Oleach Village, Banteay Preal Commune, Rolea Bier District of Kampong Chhnang Province, said he is very satisfied with the health care services of Svay Chrum Health Center. Health care staff are very friendly and take good care of the patients.

"Particularly, I like the cleanliness of the health center. It has proper trash bins and hand washing areas with enough water and soap," said Sao Thim.

Thea Ty smiled and expressed his appreciation for the support from the EQHA and OD team. He said the QI intervention helped his HC sustain improved IPC practices. Since August 2022, his HC decided to stop testing PDSAs for IPC, but they are continuing to follow IPC standards and protocols from MOH and implement the IPC workplan routinely by themselves.



Practicing waste sorting exercise with Boribo OD team at Svay Chrum HC.







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