IMPROVING HEALTH WORKER PERFORMANCE IN CENTRAL AMERICA USING INTRAHEALTH'S LEARNING FOR PERFORMANCE METHODOLOGY

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INTRODUCTION

Health facilities in the Central American region face significant challenges to delivering quality comprehensive HIV/AIDS care and treatment to people living with HIV (PLHIV) and populations at higher risk. The HIV/AIDS epidemic in Belize, Costa Rica, El Salvador, Guatemala, and Panama is concentrated in certain key populations, such as sex workers and men who have sex with men. Against the backdrop of widespread homophobia and stigma and discrimination, the virus spreads into the general population through well-established bridges with these hidden populations. There is an urgent need to expand and improve outreach and accessible comprehensive interventions for these populations (Soto et al. 2007).

As a result, IntraHealth has been tasked via the USAID|Central America Capacity Project funded by the United States Agency for International Development (USAID), to help strengthen the capacity of health workers in the region to deliver high-quality and comprehensive HIV/AIDS care and treatment services based primarily on decreasing the stigma against PLHIV and removing barriers to care and treatment. The project is tasked with providing technical support to help ensure that Central American HIV/AIDS programs expand and strengthen their responses to the HIV/AIDS epidemic. The project's mandate, in part, is to build public sector health worker capacity to deliver these user-friendly services through preservice and in-service training.

In order to accomplish this task at the in-service level, IntraHealth works with trainers at the central governments and hospitals to close health providers' gaps in knowledge, skills, and attitudes in specific thematic areas identified by health facility performance measurements. Trainings are designed not only to increase knowledge, but also to strengthen application of the acquired knowledge as a learned skill to address the identified performance gaps.

At the preservice level, IntraHealth works with the medical and nursing schools of the universities of Belize, Costa Rica, El Salvador, Guatemala, and Panama to help improve the quality of their HIV curricula, including the topics of antiretroviral therapy, tuberculosis (TB)/HIV co-infection, biosafety, voluntary counseling and testing, and stigma and discrimination, as well as performance improvement methodologies. In total, five HIV curricula have been updated and are being implemented in the region's universities and nursing schools. Eight technical proposals have been accepted by the schools, strengthening a total of 11 preservice education systems.

This curriculum development work in both the in-service and preservice sectors was accomplished through the use of IntraHealth's Learning for Performance (LFP) instructional design methodology.

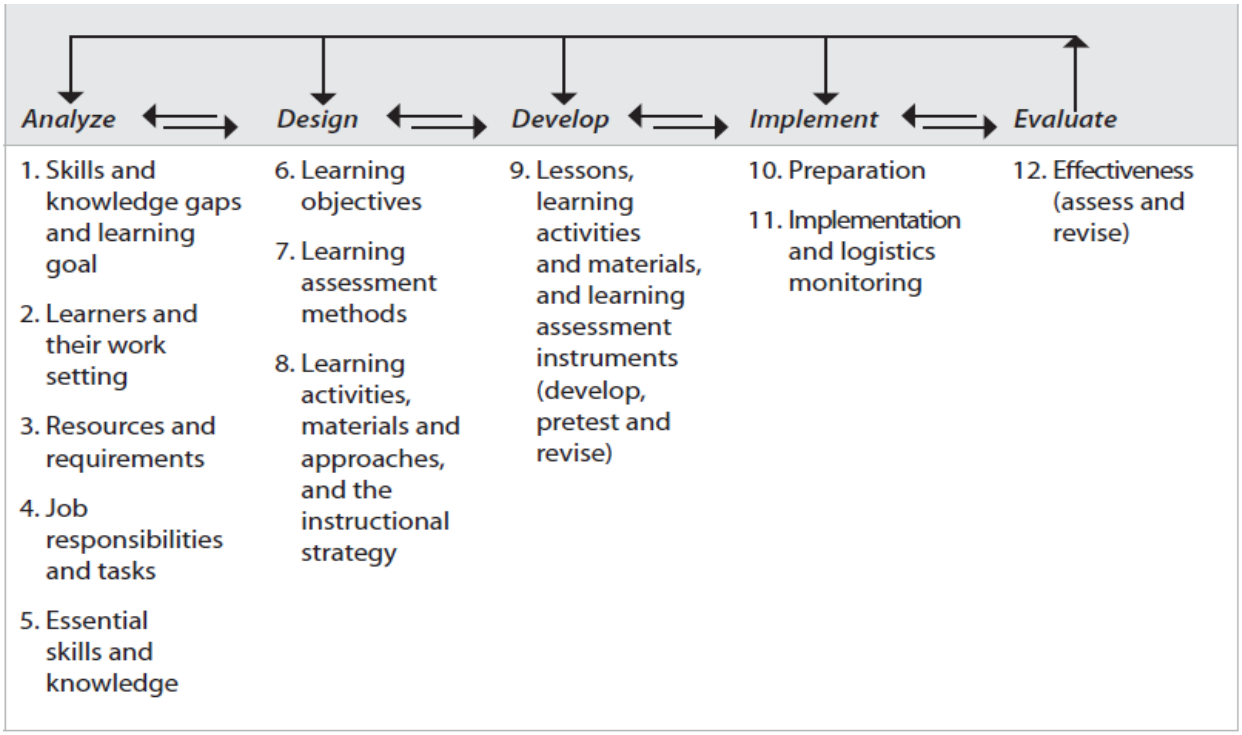
Learning for Performance

Health workers are the most valuable resource of the health system. Recognizing this, the project has supported the development of competent training teams that can update health

workers' knowledge and skills and enhance their ability to respond to constantly changing needs and conditions. Developed by IntraHealth with support from USAID, the LFP methodology provides a step-by-step way for achieving this goal. LFP combines two key disciplines, performance improvement and instructional design, to enable the development of effective learning interventions on any scale. IntraHealth's Optimizing Performance and Quality (OPQ) is an innovative performance improvement methodology that empowers workers to: analyze the performance problems of their health workforce teams, institutions, and systems; determine the factors that lead to these problems; and set up systems to eliminate them. LFP involves a similar assessment process to identify the specific knowledge and skills needed for particular job responsibilities and then ensuring that the resulting curriculum content and design match these needs through the use of proven instructional design principles.

Using LFP yields training that concentrates on the competencies essential for health workers to do their jobs and on effective learning methods while addressing the contextual factors in the learning and work environments that ensure application of new skills on the job. The LFP guide and toolkit offers a 12-step customizable process to strengthen the relevance and efficiency of learning by systematically linking curriculum content and learning methods to the needs of the specific learners and their precise work contexts and job tasks (see Figure 1 below). This process results in better transfer of learning and, consequently, to improved performance on the job. These qualities make LFP a practical and results-driven tool for scaling up training to strengthen HRH.[1]

Figure 1: The Learning for Performance Process



[1] See: http://www.intrahealth.org/page/focusing-on-the-essentials-learning-for-performance

LFP Training of the Curriculum Development Team

According to the project's objectives, a large number of current and future health care workers from the five participating countries were to be trained on a variety of HIV-related topics within a short amount of time. Before this could happen, however, the curricula used for these trainings needed to be revised or developed. It was decided that those responsible for this task should be oriented in LFP so they could apply this methodology to improve the quality of curricula used for training current health care workers and preservice students. Since the participants in these orientations were in five different countries, and funds were not available to bring them together for face-to-face training, it was decided that these initial LFP trainings would be delivered via distance learning.

A six-week course schedule was designed that combined individual readings and assignments with weekly guided discussions, using Collaborate (formerly Elluminate) webinar software. Facilitation of the webinars was led by IntraHealth training staff in the United States and the project headquarters in Guatemala City. Participants in the course included professional trainers within the ministries of health and hospitals as well as faculty members at local universities who were involved in curriculum design and health worker training. It was expected that, once trained, these teachers, trainers, curriculum developers, researchers, supervisors, and managers would then form a national curriculum development team to review and revise HIV curricula, as well as continue to apply LFP in the subsequent development and design of training materials related to their own work.

Face-to-face reinforcement workshops were held after the conclusion of the distance-learning portion of the training. The regional senior technical advisor for training traveled to each country to hold in-person, three-day workshops on the methodology's basic concepts, for both distance course participants and additional healthcare trainers and supervisors. Some participants from the self-study training served as co-facilitators of these workshops. Subsequent to the training of trainers, each country office also conducted additional LFP workshops with health personnel, academics, and members of multi-sector networks to ensure that a critical mass of workers responsible for health-related training were familiar with LFP. This last step would help ensure that LFP would continue to be used for HIV-related training interventions in the region, both during the project as well as after it ended.

Comprehensive care clinical counselor Elia Monterroso counsels a client at Escuintla Hospital in Guatemala.

As a result of this rollout, HIV-related curricula have been revised using the LFP methodology and are being used by institutions in all five project countries.

USE OF LFP IN PRESERVICE EDUCATION

Updating Curricula in Institutions of Higher Learning

After taking part in the virtual LFP course, participants worked with project-trained consultants to form national curriculum development teams in order to review and revise HIV training curricula for participating universities using the LFP methodology. Since 2009, 92 university faculty members across the five countries have successfully completed the LFP training program. These teachers found the methodology to be friendly, flexible, and focused on the needs of the students.

Initially, some participants were skeptical about this approach, but as they learned and used the methodology, they increasingly understood the importance of closely linking curriculum content to job responsibilities. The LFP methodology in Central America can be considered a success given that it has been widely accepted by those who have undergone the training; and all five universities working with the project have accepted the new LFP-based HIV curricula.

Dr. Geraldine Grajeda is a professor at the University of Rafael Landivar in Guatemala and was hired by the project as a consultant to lead the revision of the HIV teaching curriculum at the National Nursing School (ENEG) using LFP. She said that she did have some difficulty understanding the methodology at first, "This way of designing curricula is totally different from what I learned. So, I had to unlearn a lot of things." But once she understood the methodology, Dr. Grajeda became convinced of its value: "This methodology has provided me with the answer, which is to really focus on the gaps at the most basic level. And from that aspect you focus on identifying on what [essential skills and knowledge are] missing… And that's when you begin to develop other things [such as learning activities, learning objectives and materials, and learning assessment instruments]."

> *"This way of designing curriculum is totally different from what I learned. So, I had to unlearn a lot of things."* Dr. Geraldine Grajeda

Once the HIV curricula were revised, the national curriculum-development teams then worked with their respective academic institutions on the following activities to implement their use:

1. Reaching a consensus on and finalizing the curricula with each institution
2. Training faculty in implementing the revised curricula
3. Incorporating modifications indicated by the universities into their study programs
4. Finalizing editing and incorporation of graphics and printing of documents
5. Implementation of the curricula as part of their study programs.

Belize is the only country incorporating the HIV curriculum as a specific course on HIV in the School of Nursing, Allied Health and Social Work. The pilot course "Education for Health: HIV and other STIs" began in January 2012 and ended in May 2012. This three-credit course is now a requirement and since January 2013 the course is offered to students from other disciplines as an optional course as a result of joint efforts between the university and the National AIDS Commission (NAC).

Costa Rica's University of Costa Rica was one of the more skeptical universities, yet after receiving LFP training and successfully redesigning their HIV curriculum, some teachers have reported using the methodology for their own instruction. The HIV curriculum was presented to the new Nursing College Board with support from the chief of the MOH Strategic Planning Unit and Evaluation of Activities, and now the HIV curriculum is implemented in seven nursing schools in the country.

El Salvador's HIV curriculum for Matías Delgado University is taught to 2nd to 7th year medical students and to those in the postgraduate school. Project staff, University faculty, and local experts have established a working group of all health training schools to further encourage the development of new HIV curricula using LFP in order to harmonize and strengthen the HIV training across all of the health careers in the country. The Matías Delgado University School of Medicine and the Specialized Institute for Higher Learning for Health Professionals in El Salvador developed an entire post-graduate diploma program to improve the quality of care for PLHIV developed using LFP.

Guatemala trained all faculty members at the National Nursing School faculty in LFP and the revised HIV curriculum content. The project is coordinating with the Ministry of Health Sub-Directorate for Training to update the HIV curricula in all its nursing and nurse auxiliary training schools for a standardized HIV curriculum.

Panama's University of Panama held three validation workshops with faculty and students to review LFP-developed educational materials to be included in the Adult Health II course in the nursing sciences professional degree program. The project continues to work with the academic vice-rector and president of the Panama University Technical Coordinating Committee to negotiate the details of implementing the curriculum in other health-related professional training schools. In parallel, the curriculum for the Panama Campus has also been incorporated into another Panama University campus, the Azuero Regional University Center.

The curricula developed by those trained in LFP more comprehensively cover the knowledge and skills required for specific on-the-job tasks than those developed without the methodology. For instance, the Health Ministry in El Salvador has identified the curriculum-strengthening process conducted at the José Matías Delgado University Medical School as an important model to be developed in the country. For this reason the Health Ministry is considering to expand the use of LFP to all health training institutions in the country. A focus group comprised of representatives of these institutions is being formed to strengthen their approach to curriculum development.

One example of how HIV-related skills have been developed via curricula that benefited from LFP are the voluntary counseling and testing (VCT) trainings conducted for university faculty and students in Costa Rica, Guatemala, Panama, and El Salvador. After being trained, faculty and student peer educators served on support teams for the Voluntary HIV Testing Days in their respective universities, conducted in coordination with the Ministry of Health National AIDS Program in each country from 2010 to 2012. Up to this point, educational programs for VCT were rare or not available; and the few existing training initiatives did not include basic competences. The project took this opportunity to improve preservice VCT training and practice skills through the university HIV testing days. (For an example of LFP-based VCT training outcomes, click here[2].) Since 2012 the project has trained 1,214 faculty and students in VCT.

USE OF LFP FOR IN-SERVICE TRAINING

In-service trainings are focused on closing gaps in knowledge, skills, and attitudes in specific thematic areas identified by the performance measurements of participating health facilities. Using the LFP methodology, these trainings are designed not only to improve knowledge but also to focus on the application of the acquired knowledge as a learned skill. Since 2010 the project has trained 228 health workers in LFP with the expectation that they would use the methodology when designing and implementing their own trainings and workshops (Table 1).

> *"For me the LFP methodology is a means to get the results you want from training sessions, workshops, and educational activities that need to be performed within network and health district objectives."* Veronica Cruz

Several participants adopted the LFP methodology in their in-service curriculum development work following the training. Verónica Cruz, LFP team member and supply manager for the Coatepeque Health District in Guatemala, said, "For me the LFP methodology is a means to get the results you want from training sessions, workshops, and educational activities that need to be performed within network and health district objectives." Dr. Roberto Calvo, director of Hospital Regional de Escuintla, Guatemala, said, "It is worth having technical assistance from an organization with a methodology that identifies good and bad issues that can be improved." Results from application of the methodology in different circumstances demonstrate that the methodology is sufficiently versatile to be used in various settings, including universities, health care facilities, and HIV multi-sector networks.

Table 1. In-Service Health Workers Trained in LFP, by Cadre, in Five Project Countries from October 2009 to September 2012

Year	# of health workers trained			
	Doctors	Nurses	Others	Total
Total	**41**	**107**	**80**	**228**

Source: Project Monitoring & Evaluation Unit

[2] http://www.intrahealth.org/page/facebook-an-outlet-for-responding-to-stigma-

All persons selected to participate in LFP trainings are responsible for developing curricula and training others as part of their job responsibilities. The project also applies LFP when designing in-service trainings for use in gap-closing activities in health facilities. Since the beginning of the project, 4,084 health workers have been trained in various topics based on the LFP methodology in HIV-related issues such as stigma and discrimination, counseling and testing, and bio-security (see Table 2). In accordance with the project's application of LFP, only persons with a minimum of 16 hours in-course, and who also achieve a minimum of 80% on the post-test, are certified as trained. In addition, the project verifies that the trainees have acquired a minimum score of 80% on skills-based testing.

Table 2. Health Workers Trained in Various Topics with LFP-Based Curricula, by Cadre, in Five Project Countries from October 2009 to June 2013

Year	# of health workers trained			
	Doctors	Nurses	Others	Total
Total	**653**	**1,596**	**1,835**	**4,084**

Source: Project Monitoring & Evaluation Unit

PLANS FOR FUTURE USE OF THE LFP METHODOLOGY

To improve performance, the project will continue to facilitate the competency-based training of health workers through the use of the LFP methodology in counseling and testing, stigma and discrimination, the legal framework for human rights, nutrition, and adherence to antiretroviral treatment.

As demonstrated above, the project has attained successes in reviewing and updating HIV curricula and has built strong alliances with training and health authorities, as well as with regional universities. These alliances will further strengthen the HIV curricula implementation process in four countries: Costa Rica, El Salvador, Guatemala, and Panama. The next steps are:

- **Costa Rica**: Monitor the HIV curriculum in the seven nursing schools using LFP as part of a curriculum standardization process.
- **El Salvador, Guatemala, and Panama**: Provide curriculum strengthening using LFP in two additional higher education institutions for health trainers, per country.
- **Guatemala**: Work with the country's nursing schools to promote standardization of the national HIV curriculum using LFP. Counterparts from the University of San Carlos are planning to use LFP and have requested that the project assist them in accrediting the training-of-trainers training within their curriculum.
- **Belize**: The project maintains an active support and monitoring role for curriculum implementation through visits and meetings with key personnel (i.e., students, authorities, and teachers). In-service training efforts are maintained with the seven current hospitals in training for closing gaps, based on LFP, as part of their exit plan.

Moving forward, schools of nursing and medicine will partner with teaching hospitals to ensure that students apply the skills and knowledge acquired in their training as health workers. To ensure sustainability, each school will appoint clinical training supervisors to participate in an LFP workshop to enable them to verify the transfer of knowledge and competencies to their students. In anticipation of possible modifications to curricular content, in the next two years the project will offer participating universities annual trainings to update curriculum based on the evolving skills needs of health workers identified through the LFP process, which may include topics on adherence, antiretroviral therapy, and opportunistic infections. This is meant as a refresher course for teachers who have already received the first training; however, due to staff rotation, it is also intended to include new teachers, if present. This situation presents the opportunity for universities to offer comprehensive training to health providers through the inclusion of topics such as gender and stigma and discrimination, as well as PLHIV and most-at-risk population-related vocabulary, language, and images to further respond to the needs of the workplace.

Conclusion

While qualitative data show that the LFP methodology has been popular and effective in Central America, quantitative data to support participants' positive reviews of the process are limited. Furthermore, the project has not been able to make statistically significant comparisons between those trainings that were developed using the LFP methodology and those trainings that did not. IntraHealth is currently developing a tool to assess and compare the impact of training with LFP against other methodologies.

However, given these limitations, it is clear that the LFP curriculum design methodology has improved in-service and preservice competency-based HIV-related training in Central America in collaboration with local training institutions and professionals. Through the project's regional network of trained LFP collaborators and the resulting national curriculum-development teams, the project has provided competency-based trainings to thousands of regional health workers over the past three years in stigma and discrimination, bio-safety, VCT, and team-work skills.

Furthermore, through the application of LFP, revised HIV curricula have been developed and are being implemented by institutions of higher learning in all five project countries. Training trainers and curriculum developers in the LFP methodology has produced strategic and effective training curricula that translate into improved performance on the job. These efforts will enable future health professionals to implement preventive and clinical practices in the workplace and in their personal lives, as well as to provide services free of stigma and discrimination.

Reference

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