I-TECH PROJECT PROFILE

The I-TECH Approach to Clinical Mentoring

Background

The International Training and Education Center on HIV (I-TECH) is a global network that supports the development of a skilled health care work force and well-organized national health delivery systems in order to provide effective prevention, care, and treatment of infectious disease in the developing world.

The I-TECH approach to training recognizes that classroom-based training alone is not sufficient to support the application of complex clinical skills related to care and treatment of people with HIV and AIDS (PLWHA). I-TECH's six-level framework for training reflects the importance of a comprehensive approach to clinical training and is designed to ensure that training programs result in the transfer of learning to the jobsite. The framework outlines a model in which the trainee progresses from acquisition of new skills and knowledge in the classroom, to closely supervised clinical practice of new skills, to increasing independence and responsibility in care and treatment supported by onsite mentoring, to initiation of the provision of guidance and advice on an as-needed basis. Responsibility and decision-making are thus gradually shifted to the trainee throughout this process as the trainee acquires increased skill and confidence.

Clinical mentoring is a critical component of I-TECH's comprehensive approach to training, as it provides a bridge between didactic training and independent clinical practice. Clinical mentoring enables health care workers (HCW) to practice new skills in clinical settings with the support and guidance of a more specialized and experienced clinician. Intensive, practical training is especially important in HIV care and treatment given the diversity of illnesses associated with AIDS and the complexities of antiretroviral therapy (ART). According to the Co-Director of I-TECH, Dr. Michael Reyes:

> "A key lesson learned from the US experience with the HIV and AIDS epidemic is that we spent too many of the early years in the classroom. We later recognized the impact of clinical mentoring and consultation on changing provider behavior, and followed through with programs that moved training to the bedside."

Global Efforts in HIV Care and Treatment

I-TECH's recognition of the importance of clinical mentoring is in alignment with global efforts to decentralize the provision of ART and expand the

number of sites providing HIV treatment. In 2003, the World Health Organization (WHO), the Joint United Nations Programme on HIV/AIDS (UNAIDS), and The Global Fund to Fight Tuberculosis, AIDS, and Malaria (GFTAM) announced the 3 by 5 Initiative, which set a goal of treating 3 million HIV-positive people in middle-income and resource-poor settings with ART by 2005. The program supported access to HIV treatment and prevention as a universal human right.

In order to treat 3 million people, it was estimated that 100,000 HCW would need training. WHO developed a strategy to strengthen and build the human capacity for scale-up of ART that included the development of a list of core competencies for HCW training programs and training packages, such as the Integrated Management of Adult and Adolescent Illness (IMAI). While the 3 by 5 Initiative resulted in massive implementation of didactic HIV training courses for HCW around the world, very few programs provided on-the-ground clinical support for the newly trained HCW.

In June 2006, the United Nations member states established the goal of achieving "universal access to comprehensive prevention programs, treatment, care and support" by 2010 at the United Nations General Assembly High Level Meeting on AIDS. WHO established priorities for its technical work reflected in five critical areas in which the health sector must invest if this goal is to be realized. One of these areas is "accelerating the scale-up of HIV and AIDS treatment and care." Clinical mentoring is a clear strategy to support progress in this area.

Task shifting is another strategy identified in the international arena as critical to the effort to achieve universal access to HIV services. A WHO/President's Emergency Plan for AIDS Relief (PEPFAR)/UNAIDS report entitled "Task Shifting: Global Recommendations and Guidelines" describes the task shifting approach as "one method of strengthening and expanding the health care workforce to rapidly increase access to HIV and other health services." Task shifting was defined as "the rational redistribution of tasks among health care workforce teams. Specific tasks are moved, where appropriate, from highly qualified health care workers to health care workers with shorter training and fewer qualifications in order to make more efficient use of the available human resources for health." Among the 22 recommendations in this report, several refer directly or indirectly to the need for onsite clinical mentoring, support, and monitoring and evaluation to help achieve the goal of task shifting. Recommendation 11 articulates the need for supportive supervision and clinical mentoring to be "regularly provided to all health care workers within the structure and functions of health teams."

The objectives for I-TECH's clinical mentoring programs are consistent with the WHO's public health approach to scaling up HIV care and ART. They include:

- Support decentralized delivery of HIV care, ART, and prevention services;
- Promote application of classroom learning in clinical settings by enhancing skills, knowledge, and confidence of clinicians in service delivery;
- Improve the equality of clinical care and patient outcomes; and
- Strengthen systems, policies, and procedures that support delivery of high quality care.

I-TECH views clinical mentoring as a key component of HIV clinical capacity building and a critical intervention in support of the decentralization of ART programs.

What Is Clinical Mentoring?

I-TECH defines clinical mentoring as "a sustained, collaborative relationship in which a highly experienced health care provider guides improvement in the quality of care delivered by other providers and the health care systems in which they work."
Typically, the clinical mentor is an experienced clinician-trainer who provides onsite training and consultation on complex cases; supports and enhances high level problem solving, diagnostic, and decision-making skills; leads case discussions; and addresses issues of quality assurance and continuing education. These mentoring activities take place in the context of an ongoing, two-way relationship between the mentor and the clinicians working at the site. Within the resource-constrained settings in which I-TECH works, systems and resources issues inevitably intersect with clinical activities and have an impact on the clinicians' ability to provide high-quality care and treatment. As a result, most clinical mentors also work with health facilities on systems strengthening activities to support high-quality service delivery.

The I-TECH approach to mentoring includes five key components:

1. **Relationship building.** The establishment of a trusting, receptive relationship between the mentor and mentee(s) that evolves and grows over the course of mentorship is the foundation of effective mentoring practice.
2. **Identifying areas for improvement.** Observation and assessment of existing systems, practices, and policies leads to the identification of areas for improvement. I-TECH has developed a number of tools for use during the assessment phase. Information obtained during an assessment helps to inform the establishment of goals and objectives for the mentorship.
3. **Responsive coaching and modeling of best practices.** Mentors must demonstrate proper techniques and model good clinical practice. Targeted activities with mentees may include demonstrating appropriate examination techniques, modeling proper infection control measures, and setting examples for establishing good rapport with patients. Setting a good example and intervening directly to improve mentee practice are equally important in mentorship.
4. **Advocating for environments conducive to quality patient care and provider development.** This component relates to technical assistance in support of systems-level changes at a site. Mentors work with colleagues to enhance the development of clinical site infrastructure, systems, and approaches that can support the delivery of comprehensive HIV care. For example, mentors might provide technical assistance in support of improved patient flow at a facility, advocate for provision of privacy for patients during examination, or help to promote a multidisciplinary approach to HIV care at a site.
5. **Data collection and reporting.** Mentors support the utilization and integration of patient data into clinical practice by encouraging staff to adopt documentation practices that promote effective chronic disease management. Mentors can help demonstrate the utility of data collection and reporting to mentees during mentorship. For example, data on patients who were lost-to-follow-up was collected and discussed with mentees in one I-TECH program. This led to an analysis of causes and solutions and, ultimately, a decrease in the cases lost-to-follow-up. A similar positive result occurred following an analysis of the time of initiation of ART among TB-HIV coinfected patients.

The ultimate goal of I-TECH's clinical mentoring programs is to build the skills of local clinicians to become clinical mentors themselves. Ideally, as the pool of expert HIV/ART clinicians in each country expands, a network of local HIV clinical mentors will emerge to support and train other HIV clinicians with less experience.

I-TECH's vision of clinical mentoring involves development of care and treatment skills of local partners in resource-limited settings through intensive and sustained collaboration.

Clinical mentors may be involved in:

- Providing direct one-on-one mentoring of HCWs during patient consultations.
- Conducting stand-alone sessions for staff on various HIV topics, such as:
  - The diagnosis and treatment of opportunistic infections (OIs);
  - Immune reconstitution inflammatory syndrome;
  - Adherence counseling; and
  - Prevention counseling for HIV-infected patients.
- Leading case discussion training sessions highlighting management of complex cases.
- Accompanying ward staff on rounds to provide bedside teaching to staff on management of HIV and related diseases.
- Developing or strengthening standard operating procedures for the provision of HIV clinical care.
- Identifying and addressing systems challenges that affect the provision of quality care, such as:
  - Patient flow;
  - Tracking defaulters;
  - Referral systems; and
  - Record-keeping systems.
- Introducing and/or attending regular meetings of the multidisciplinary team to strengthen and promote a multidisciplinary approach to care and treatment.

I-TECH Clinical Mentoring Program Models

At I-TECH, mentoring typically occurs within the context of a clearly articulated mentoring program with specified goals, objectives, and structure. Over the past several years, I-TECH country projects have developed a number of models for mentoring programs. These models have emerged in response to varying needs, goals, priorities, resources, and constraints within specific countries.

Internal Mentoring Model

In this model, mentors are identified from among existing staff at a health facility based on their clinical expertise in a specified area and given training on how to mentor others. This is a sustainable model in which the mentor already has a deep understanding of the health care system, cultural context, issues, and challenges, and little time is required for preparation, orientation, and adjustment to a new setting. Some of the challenges in this model include lack of appropriate human resources at clinical sites and perception of the clinician as a colleague rather than a mentor. This model has been used in I-TECH Haiti, where I-TECH supports mentors at the l'Hôpital Universitaire de l'Etat d'Haïti (HUEH), Haiti's largest hospital, and in the I-TECH India Fellowship program.

External Mentoring Model

This model involves placement of an expert clinician at a specific facility for a designated period of time, which usually ranges from several weeks to more than a year. The mentor, who may be a clinician from within or outside the country, is identified based on his/her clinical expertise and interest in teaching others. This model has the advantage of drawing from a larger pool of clinicians with expertise in HIV and AIDS care and treatment than may be available in a given district, region, or country. Significant resources may be required to recruit, relocate, and orient the mentor to their site. Acquiring familiarity with the systems, operation, issues, challenges, and personalities at a site may take several months.

In either of the above models, the mentor might be responsible for mentoring at a single facility, such as a district hospital. Alternatively, mentors may be assigned to a base facility within a district or region and provide outreach mentoring services to smaller clinics in the area. For example, within I-TECH Namibia's program, mentors are typically assigned to a region made up of one to four districts. They are then responsible for providing mentoring services in the district hospital ART clinics and conducting regular visits to health centers and clinics throughout the region.

Field-Based Team Mentoring Model

In this model, multidisciplinary field-based teams

provide ongoing clinical and systems mentoring to hospital sites and health care centers. The field-based team model allows for key groups of expert staff to regularly visit a select number of clinical sites and provide intensive site support and clinical mentoring. This model is being implemented in Ethiopia, where I-TECH currently has 13 field-based mentoring teams providing technical assistance to 38 health care sites.

Mentoring as a Component of a Training Package

Several I-TECH country projects have incorporated mentoring into broader training programs. In Ethiopia, the HIV/ART Nurse Specialist (HANS) program includes 7 days of classroom training, followed by a 6-day preceptorship rotation at different sites. A follow-up evaluation is completed at the trainees' site 6 to 8 weeks after the classroom and preceptorship components, and includes mentoring and support as well as evaluation.

Another example is the fellowship program in India, a year-long program designed to produce physicians trained in HIV and AIDS medicine who will move into positions of direct patient contact and care; and to develop individuals to become leaders in the field of HIV and AIDS care, prevention, research, and program management. The program includes daily ward placements for fellows supported by three different cadres of mentors.

In Mozambique, I-TECH is initiating a PMTCT mentoring program for nurses, in collaboration with the International Center for AIDS Care and Treatment Programs (ICAP) at Columbia University. The program includes a 2-week preceptorship at two regional PMTCT reference and training sites, followed by monthly structured mentoring visits for 6 months.

Key to the success of effective clinical mentoring in any of these models is the establishment of a trusting and receptive relationship between the mentor and mentee, and the use of a collaborative process for establishing goals and objectives for the mentorship.

Training Clinical Mentors

Mentoring is a challenging job that requires flexibility, skill in coordinating disparate stakeholders, excellent communication and relationship-building skills, and the ability to cope with rapid change of direction, in addition to possessing up-to-date clinical knowledge and teaching skills. In order to ensure that clinical mentors are well-prepared for their work, I-TECH has developed a 3-day generic curriculum to train clinical mentors. Country projects can adapt and tailor this curriculum to meet their specific needs. The curriculum includes three modules:

1. Interpersonal/communication skills;
2. Clinical teaching skills; and
3. Program orientation.

Topics covered within these modules include giving feedback effectively, rapport building, bed-side teaching, addressing systems issues, starting a mentoring assignment, and accessing clinical resources. Sessions are designed based on principles of adult learning. They include a variety of participatory exercises and activities designed to build confidence and skills in clinical teaching, as well as provide guidance on how to approach a mentoring assignment.

Ongoing support and education of mentors after their initial training is critical. In Ethiopia, field-based mentoring teams receive technical assistance, clinical training, and mentoring from I-TECH Ethiopia clinical staff and US-based nurse advisors on a regular basis. Site visits by these mentors of mentors (MOMs) usually include an initial meeting with the

medical director, mentors, and site-level clinicians; individual work with the mentors as they provide guidance to the clinicians; and a debriefing with the medical director. The MOMs and the field-based team mentors typically engage in case-based learning either during the provision of care to patients or following an encounter with a patient presenting a complicated case. MOMs share educational and up-to-date clinical reference materials about HIV care and treatment, and provide guidance around HIV service delivery and performance on an organizational level at each site.

Monitoring and Evaluation

Clinical mentoring programs involve small cadres of mentees learning at a very high-level, and thus are fairly resource-intensive. Monitoring and evaluation of a mentoring program is essential to ensure that this investment translates into improved patient care and clinical outcomes.

The purpose of monitoring and evaluation is to track how an intervention is being implemented, what can be done to improve it, and whether it is achieving its intended outcomes. Clearly identifying and articulating the desired outcomes of a program facilitates the selection of the right methods and tools for monitoring and evaluating that program. What are you hoping will be different as a result of your clinical mentoring program?

The following are examples of different objectives or intended outcomes that a clinical mentoring program might have:

- Increase skills and knowledge of health care workers in relation to care and treatment of PLWHA.
- Strengthen ability of medical officers to treat HIV cases according to national care and treatment guidelines.
- Increase providers' skills in diagnosis and treatment of OIs.
- Assist in solving delays in patient flow in the ART clinic.
- Aid in the development and documentation of standard operating procedures.
- Develop a system for tracking ART defaulters.
- Help with direct patient care when necessary.
- Establish a network of clinical mentors.
- Improve quality of care delivered at specified facilities.

Monitoring and evaluation of clinical mentoring activities should occur at the program level as well as at the facility level. Program level monitoring and evaluation may include monthly written reports from mentors, feedback from mentees on mentor performance, regular meetings of mentors to share experiences and lessons learned, and supervisory or support visits from MOMs. At the facility level, I-TECH has developed a variety of observation tools and checklists to enable the mentor to monitor and evaluate change in HCW performance as well as change in systems and facility issues. Mentees' acquisition of knowledge and skills may also be assessed through observation, self-reporting, and demonstrated capacity to work through case studies or vignettes.

Recently, I-TECH conducted an evaluation of the field-based nurse mentors who are providing mentoring to nurses in ART clinics in Ethiopia. Assessments focused on mentoring skills were conducted by US-based nurse advisors who have been involved in the training and support of the field-based nurse mentors for many years. Results of the evaluation documented strengths in mentoring skills and identified individual mentoring challenges and next steps.

Outcomes

When done right, clinical mentoring can deliver powerful results. Nurses trained in I-TECH Ethiopia's HANS program, which features mentorship as a key component of instruction, have demonstrated adequate skills in more than 80% of the program's competencies. In addition, outstanding HANS graduates are moving into mentoring roles.

Clinical mentors in India are helping fellows in I-TECH's year-long residential fellowship program to learn new history taking, examination, and record-keeping skills. At the same time, the mentors are

managing patients on the wards and outpatient department (OPD) at the Government Hospital of Thoracic Medicine (GHTM), I-TECH's training partner. Without mentoring, the fellows would be disposing of cases rather than systematically examining them," said Dr. Gurusamy Manoharan, I-TECH India Medical Director, referring to the tendency of some physicians to ask a few questions, perform a quick examination, and send patients off with a prescription.

Under the mentorship of Dr. Manoharan and others, fellows learn to take patients off the open wards, use more private rooms to elicit sensitive information about sexual history, and conduct thorough physical exams based on the patient's symptoms. The fellows are also mentored through a process called "advisorship" in which four advisors mentor a group of four to five fellows regularly over a period of 1 year.

Mentors in Namibia have implemented a wide range of systems improvements. In one region, a clinical mentor identified that no Pap smears were being given despite the increased risk of cervical cancer in women with HIV. With technical assistance from I-TECH, the Communicable Diseases Clinic (CDC) now offers Pap smear clinics twice monthly, during which care is provided to an average of 10 women. In order to address overcrowding in CDC clinics due to increasing numbers of HIV patients on ART, CDC teams and the clinical mentors started promoting the use of outreach teams to visit smaller outlying clinics. Outreach points were established, and within the first couple of months more than 10% of patients registered in the CDCs were being seen at outreach, with figures being much higher at some clinics. Most importantly, patients were able to access treatment closer to home, and health care workers reported near perfect adherence to appointments.

To date, I-TECH has delivered clinical mentoring to over a thousand health care workers at 180 facilities in 12 countries. I-TECH actively works to move the best of these clinicians into mentorship roles themselves once they have acquired enough clinical experience and expertise.

Conclusion

I-TECH seeks to serve as a source of state-of-the-art, resource-appropriate clinical expertise, and as a partner in the development and evolution of self-sustaining training systems for HIV and AIDS care and support. The I-TECH approach to clinical training is distilled from relevant educational literature, years of AIDS Education and Training Centers (AETC) experience providing continuing medical education to HIV care providers in the United States, and lessons learned from on-the-ground experience in resource-limited settings. The I-TECH model of clinical mentoring supports the provision of high quality care and treatment services, and strengthens the systems that support delivery of such services.