

Full proposal submission to Global Bridges and Pfizer Independent Grants for Learning & Change (IGLC)

Project title: *Expand availability of tobacco dependence treatment services in the Eastern Mediterranean Region through building sustainable evidence-based in-country training programs (category 1)*

Contents

Project goal and objectives.....	1
Technical approach.....	2
Current assessment of need in target area	2
Intervention design and methods.....	4
Evaluation design.....	5
Dissemination of project outcomes.....	9
Detailed work plan and schedule.....	9
Component 1: Creation of training hubs	9
Component 2: Evaluation of change in TDT practices as a result of training	12
Organizational detail.....	13
Appendix 1: Staff Biosketches.....	16
Appendix 2: Letters of commitment.....	25
References	32

Project goal and objectives

In order to meet an evident gap in the field of tobacco dependence treatment (TDT) in the Eastern Mediterranean Region (EMR), this project ultimately seeks to increase the number of trained healthcare providers (HCPs) in the EMR who can integrate TDT into their practice. To achieve this goal, the project will build on training programs offered to date and on previously fostered relationships to establish four self-sustaining training hubs across the region (in addition to the incumbent hub at King Hussein Cancer Center in Jordan). These hubs will primarily serve countries within which they are established (Morocco, Tunisia, Egypt, Oman, and Jordan) while also functioning as regional training centers for neighboring countries.

Between all five hubs, TDT curricula and content will be developed and made available in all three languages that are in use in the region; Arabic, English, and French. The core curriculum common across all five hubs will be jointly developed based on evidence, and informed by results of the evaluation component included within this project. Beyond that, hubs will integrate additional content depending on country-specific circumstance and needs.

At project completion, we anticipate that this experience will serve as a model for the region and beyond. Each hub will be capable of facilitating establishment of training programs in other parts of the pertinent country and in other countries of the region, ultimately availing TDT training and education throughout the EMR.

The specific deliverables of this project are:

- I. Developing a self-sustaining TDT training hub in each of the participating countries, through developing systems, building faculty capacity, and developing training curriculum. The sub-deliverables in each country are:
 - a. Identifying host organization or incubator
 - b. Identifying and building capacity of in-country champion(s)
 - c. Identifying, training, and building capacity of in-country faculty
 - d. Developing curricula, content, and evaluation mechanisms
 - e. Developing a distribution strategy
- II. Developing evidence-based core TDT training curriculum in Arabic, English, and French
- III. Developing various models of TDT training programs across the region
- IV. Creating the nucleus for a network of TDT trainers (across the region) who can provide training to other HCPs
- V. Initiating or advancing model TDT clinics to offer a practical component to training programs (*where applicable, to be decided based on emerging needs during execution*)
- VI. Generating evidence on the effectiveness of TDT training in influencing HCPs' integration of TDT into their practice
- VII. Generating two peer-reviewed publications

Technical approach

Current assessment of need in target area

Despite the proven value of TDT services, the situation in EMR indicates that while a significant number of smokers are interested in quitting, the availability of TDT services continues to be limited and marginally growing from year to year.^{1,2} In general, TDT services are not consistently available across the region and are not yet integrated within the health care system. While some countries (Kuwait, UAE, and Iran) offer a quitline and cover costs for cessation services and nicotine replacement therapies (NRTs), most countries offer partial to no coverage.¹ Accordingly, data on screening for tobacco use depict insufficient screening and advice. In Jordan for example, only 20% of smokers report receiving advice from their HCPs on quitting.³ In Egypt only 22% of smokers have visited a healthcare provider in the past 12 months, of those 74% were screened for smoking, and of those screened only 67% were advised to quit smoking.⁴

Article 14 of the Framework Convention on Tobacco Control (FCTC) mandates parties to design and implement effective programs to promote cessation of tobacco use and provide adequate treatment for tobacco dependence, including integration of cessation advice in primary healthcare services.⁵ The shortage of TDT services in EMR may be attributed to the lack of a general enabling infrastructure: shortage of trained HCPs, interruptions in availability of medication, lack of financial coverage of treatment, lack of national policies to promote tobacco cessation, shortage of population level strategies that promote cessation including price measures and pictorial warnings, in addition to prevalence of tobacco use among HCPs themselves (where for example the prevalence of ever smoking cigarettes among medical students⁶ ranged between 24% and 42%). Guidelines for the implementation of Article 14 of the FCTC highlight training and capacity building of service providers as a key low-cost strategy to developing an infrastructure that supports cessation and TDT. At a minimum, the guidelines call for training of health-care workers to record tobacco use, provide brief advice, encourage quit attempts, and refer tobacco users to specialized TDT services. Article 14 also calls for incorporating cessation training into the curricula for health professions as well as in continuous professional development programs.⁷

Research provides evidence for the value of offering TDT training and education. In medical school, students who report instruction, modeling, and feedback on TDT by their preceptors report higher skill than others receiving less comprehensive training.⁸ In general, TDT training and education enhance physicians' confidence and their readiness to advise, counsel, and offer TDT services.⁹ HCPs can be better engaged in TDT by intercepting them both during their education and as professionals; while the first affects their patients' quit rates, the latter is effective in increasing their screening rates.¹⁰ A recent Cochrane review looked at randomized trials where the intervention was training HCPs in smoking cessation. The review concluded that such training has a measurable effect on the continuous abstinence and on the point prevalence of smoking. Trained HCPs were more likely to ask patients to set a quit date, make follow-up appointments, and counsel smokers.¹¹ Results from KHCC's TDT training workshops, offered in Jordan and other countries of the EMR since 2011, indicate an improvement in knowledge among participants (average test scores rising from 53% pre-workshop to 74% post-

workshop), and high levels of post-workshop confidence in offering counseling and prescribing medications (79% and 69% respectively).

Despite being a low-cost strategy to enhance availability of TDT services, tobacco education and training in healthcare disciplines continues to be lacking in the EMR countries as is the case in other parts of the world. An international survey of TDT training programs could identify only four programs in the EMR, training a total of 98 individuals in 2007.¹² Responses from 23 medical schools to a worldwide survey of education on tobacco in medical schools indicates that in the Middle East (Western Asia) only 9% of schools taught a specific module on tobacco in 2008, and that 43.5% taught the topic informally.¹³ In addition, results from the Global Health Professions Student Survey (GHPSS) indicate a shortage of formal training in smoking cessation approaches in medical schools. The percentage of medical students reporting receiving training ranges from 38% in Tunisia (2010), 32% in Oman (2010), 21% in Egypt (2005), to around 9% in Morocco (2010). Exploring training and education in other healthcare disciplines reveals similar gaps.⁶ Accordingly, the EMR is in need of TDT training and education programs that can build HCPs' knowledge and confidence and allow them to integrate various levels of TDT within their practice. This project seeks to address this gap.

In less developed countries, and in light of the absence of plans to change medical curricula to introduce a tobacco component, medical schools report several barriers that face integrating a tobacco module in medical programs. These include: (1)the lack of staff to teach, (2)the lack of time in medical program to introduce tobacco-related issues, (3)the lack of financial resources, (4)the lack of a key person to champion and organize teaching, (5)the lack of incentive to teach, and (6)the lack of access to evidence-based resources.¹³ To that end, developing capacity of faculty facilitates institutionalizing TDT training for both students and community practitioners.¹⁴ Specifically in the EMR, given the shortage of expertise to offer TDT training, KHCC continues to be requested to conduct training workshops in the region. Collaborators include health authorities and academic institutions, in addition to the World Health Organization that has awarded KHCC a contract to conduct a regional TDT workshop in 2014. In addition, the shortage of resources in the region has been underlined by continuous requests from trainees to offer materials and programs in Arabic and French (in addition to the English content already in use). This project seeks to address most of the abovementioned barriers by identifying champions and faculty, building their capacity, and availing TDT training curricula that build on evidence.

Accordingly, this project targets HCPs (students and professionals) in participating countries. Priority audience(s) will be further defined per country through a needs assessment exercise (refer to methods and plans for further details). Through that audience, benefit will reach smokers and extend to the whole population of participating countries (138 millions).¹⁵ The benefit can indirectly reach beyond these countries to benefit the whole population of the EMR.

Intervention design and methods

Building on evidence of the importance of training as a key factor in growing the availability of services, and given the shortage in the region of TDT training opportunities both as part of health professions education programs and continuing education programs, this project seeks to create programs that address this gap.

The project engages King Hussein Cancer Center from Jordan in addition to the following in-country partners (host organizations): Ain Shams University- Institute of Psychiatry (Cairo-Egypt), Ministry of Health (MoH; Tunis-Tunisia), Sidi Mohamed Ben Abdellah University – Faculty of Medicine - Hospitalier Universitaire Hassan II (CHU Hassan II; Fez – Morocco), and Sultan Qaboos University – College of Medicine and Health Sciences (SQU; Muscat – Oman). These partners will serve as in-country counterparts throughout the project and house the established training hubs.

The selection of countries allows for a good reach across the EMR (Northern Africa, Central EMR, and Arabian Gulf) so that hubs are strategically located to serve the entire EMR. The selection builds on and benefits from established collaborations between KHCC and the in-country organizations. The project brings together a regional group of individuals with diverse backgrounds, expertise, and resources who are already involved in training and education within the medical field to create a network that can collaboratively design and deploy model programs. The regional group (consisting of KHCC staff and in-country champions) brings together expertise in tobacco dependence treatment, medicine, pharmacy, public health, psychiatry, epidemiology, cognitive behavioral therapy, occupational medicine, research, design of training programs and supporting systems, developing training curricula, delivering teaching and training courses, and project planning and management. The group also brings in affiliations with universities, teaching hospitals, tobacco control research groups, national tobacco control programs, and civil society organizations. Each of the participating countries has had at least one expert participate in Mayo Clinic's Tobacco Dependence Treatment Specialist course (except for Morocco, scheduled to attend the course in November 2014). Coming from five different countries, the group collectively masters three languages (Arabic, English, and French).

The project builds on synergy: countries will support each other in addressing knowledge gaps, developing curricula and systems, sharing best and tested practices, and providing a safety net or 'go-to' reference group. The group will benefit from the experience of KHCC over the past few years in developing and delivering TDT training across the region, translating and culturally adapting the Distance Learning Module created by Global Bridges in collaboration with The University of Toronto Centre for Addiction and Mental Health in 2013, and finally launching a TDT diploma program to be taught starting October 2014 in collaboration with the School of Pharmacy at University of Petra in Jordan. The project will also benefit from the regional network of healthcare providers and tobacco control advocates that KHCC has established over the years; the group can tap into the pool of contacts to identify additional partner organizations and individuals who can serve as in-country faculty. Finally, the group will benefit from the Global Bridges website and listserv to tap into a diverse global audience with interest,

experience, and activity in TDT. In addition, the group and recruited faculty will be requested to join the Global Bridges network and to contribute to the network via blogs, sharing resources, discussion of treatment cases with the listserv, and any other possible form of engagement.

The group will also benefit from the experience of Ain Shams University in offering on-the-job TDT training through the Institute of Psychiatry; the experience of CHU Hassan II in offering TDT training through specialization programs in pulmonology, oncology, and psychiatry; the experience of the MoH in Tunisia in offering TDT training to primary healthcare physicians; and that of SQU in offering TDT training through partnerships with the Omani Ministry of Health and other stakeholders.

Accordingly, and building on the qualifications, expertise, and experiences brought into the project by the champions and partner organizations, the project will create several training programs that address varying audiences in the healthcare field. Over the project life-span of 24 months (November 2014 – November 2016), the regional group (KHCC staff and in-country champions) will review evidence on successful TDT training programs, conduct high-level in country needs assessment to identify entry points, develop a framework for the core curriculum and develop content in three languages, develop supporting systems (e.g. distribution system and evaluation system), and launch in-country training programs through host organizations. In addition, the core team (KHCC staff) will generate evidence on the effect of training on integration of TDT service in HCPs' practice. The deliverables of the project will fill a gap in training and education of HCPs in the EMR.

Evaluation design

1. Evaluation of satisfaction, knowledge, and competence:

With reference to Moore et al's expanded outcomes framework for planning and assessing CME activities¹⁶, the evaluation and assessment mechanisms currently in use as part of KHCC's TDT training program generate data at Levels 1 through 4. In addition to reporting participation, these mechanisms assess participant satisfaction, declarative and procedural knowledge, and self-reported confidence (and some form of observation in an educational setting).

As part of its current TDT training program, and upon completion of a training workshop, KHCC administers a workshop evaluation form to participants to assess satisfaction. The form seeks input on alignment of the workshop with expectations, practicality of content and its relevance to daily work, the design of the workshop (sessions, flow, and time), and the knowledge of trainers and their capacity to deliver. The form also solicits qualitative input from participants regarding immediate and long-term measures they plan to take after completing the workshop.

KHCC also utilizes a learning and competence assessment mechanism. The assessment is conducted through administering a pre-workshop test with multiple choice questions, and a post-workshop test with multiple choice questions and a case study. The questions gauge knowledge gain while the case gauges competence –after completing the workshop- in performing motivational interviewing and specifying medications. In addition, participants are requested to report pre- and post-workshop competence in performing TDT related activities.

Furthermore, and throughout the workshop, several facilitator-supervised practice opportunities arise in the form of exercises and case studies, and the participants are encouraged to participate and practice skills and competencies they learn. These opportunities allow participants to pinpoint weakness in their own knowledge that need to be addressed.

This project introduces a new level of outcomes assessment (Level 5 of Moore et al's expanded outcomes framework for planning and assessing CME activities) to gauge the degree to which participants integrate TDT training in their daily practice. The following section describes in details the design for this assessment component.

II. Evaluation of change in of TDT practices:

An evaluation of the core curriculum to be introduced across hubs in the EMR will be performed specifically in one hub, Jordan. The evaluation will be small-scale with three main purposes:

1. To generate preliminary objective evidence with regards to the potential benefit of training healthcare providers in the EMR on tobacco dependence treatment. Given the lack of such evidence thus far, and the fact that evidence-based and sustainable training programs have yet to be developed in the region, such an [initial] evaluation in a limited number of clinics can help provide proof of effect for training.
2. To inform the regional group, through quantitative and qualitative data generated from HCP surveys and structured interviews (respectively), on how the core TDT training program suggested in this proposal can be further customized to take into account additional factors and externalities that may not have been originally covered.
3. To complement evaluation mechanisms to be shared with local and regional partners in order to promote expanded and large-scale future evaluations of TDT training.

II.A Site selection:

An accessible and contained (with regards to both HCPs and patients) healthcare system, primary healthcare clinics in the United Nations Relief and Works Agency (UNRWA), will be used. The clinics which operate within a well-structured and organized medical system (hence facilitating a structured evaluation) are characterized with a limited staff turnover and reasonably consistent patient flow. Four primary healthcare clinics with established non-communicable disease (NCD) management and counseling units will be selected for the evaluation. Each NCD unit operates under the direction of a physician and a group (four to five) nurses.

II.B Source of data:

A randomized double-arm intervention design (see Figure 1) will be used to assess the impact of training. Specifically, clinics will be randomized to receive training or else serve as a control. The evaluation will rely on the use of survey tools to generate both subjective and objective effects of TDT training in the immediate-term as well as the long-term:

- Source of data for subjective outcomes: A pre-post survey design will be used to assess the impact of training on physician and nursing self-reported confidence to practice TDT-related activities (asking about tobacco consumption, conducting brief interventions, and

documenting TDT-related activities), the frequency at which TDT activities were performed, and barriers to integration of TDT-related activities in their practice. Assessments will be conducted at baseline (wave 1), immediately (two weeks) after training (wave 2), and six months after training (wave 3).¹⁶ Specifically, surveys to HCPs will be distributed to all clinics before training; to clinics receiving training immediately (two weeks) after training; and again to all clinics six months after training was conducted. In addition, final in-depth qualitative interviews will be conducted with providers in order to better understand how factors which impact the application of their training can be addressed to improve their integrating TDT-activities in their daily practice.

- Source of data for objective outcomes: A pre-post survey design will be used to assess the impact of training on patient reports of having received TDT support. Specifically, patient exit interviews will be conducted in all clinics as follows: at baseline (wave 1), immediately (two weeks) after training (wave 2), and six months after training (wave 3).

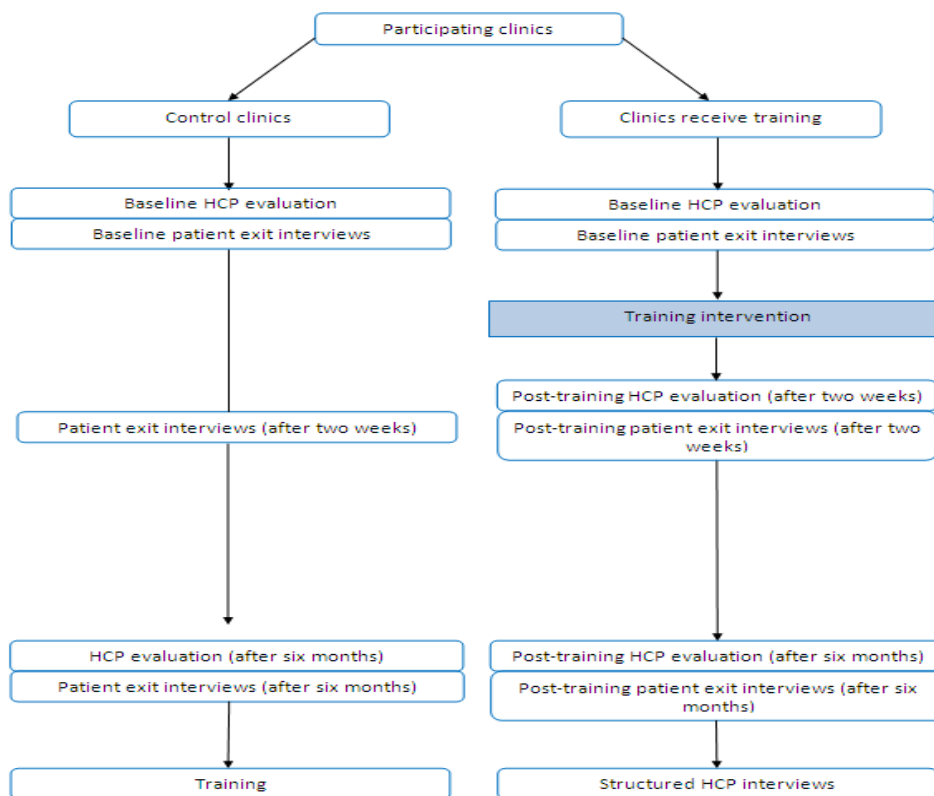


Figure 1. Proposed evaluation design for TDT training

II.C Data collection and analysis:

HCP surveys will be distributed for self-administration, while field assistants will intercept patients and conduct patient exit interviews (interviewer-administered surveys). Given the relatively small sample of HCPs, all HCPs in the NCD units of selected clinics will be targeted.

The sample size calculation used was as follows (using a power of 80% and significance level of 5%:¹⁷

$$N \text{ (per arm)} = \{0.84\sqrt{[p_1(1-p_1) + p_o(1-p_o)]} + 1.96\sqrt{[2p(1-p)]}^2 / (p_1-p_o)^2$$

Where p_o is the proportion representing current practice of a TDT-related activity (this was assumed to be 45%*) and p_1 is the proportion representing practice of a TDT-related activity after the training intervention (this was assumed to be 55%, based on a 10% effect size). In the absence of local or regional data, an effect size of 10% was assumed based on the Cochrane review of TDT training effect on HCP practices,¹¹ which revealed a range of proportions of providers performing TDT-related activities of 7% to 17% (depending on the specific activity). Thus, a 10% effect size, falling within the observed proportions reported in the review, was selected. Accordingly, the minimal sample size required equals 391 patients per arm.

Change over time of HCP-reported and patient-reported practice rates, and levels of HCP self-efficacy will be calculated and compared between the control and intervention arms, and within intervention arms, pre-post intervention.

II.D Control Methods:

A randomized pre-post survey design will be used to assess the impact of training on physician and nurse self-efficacy and practices both immediately and six months after training. The control arm serves to correct for other time-varying influencers on HCP practices. It should be noted that the control clinics will receive TDT training after the evaluation is completed.

II.E Expected outcomes:

- At baseline, we anticipate to observe low (less than 50%) rates of performance of TDT-related activities in all clinics (in both subjective and objective measures).
- We anticipate no substantial change in rates of TDT-related activities over time in the control group (in both subjective and objective measures).
- We anticipate, depending on the specific activity being tracked, to observe, approximately, a 10% (depending on the activity) difference in rates of performance of TDT-related activities when comparing pre-intervention rates to immediate post-intervention rates (as described in the sample size calculations under “Data collection and analysis”).
- At a minimum, we specifically expect the following activities will increase
 - i. Asking about tobacco (cigarette or waterpipe) use
 - ii. Documenting tobacco use status in medical files
 - iii. Advising patients with regards to the health effects of tobacco use
 - iv. Assessing patient’s interest in quitting
 - v. Providing patients with tips to quit smoking (discussing a quit plan)
 - vi. Setting a target quit date with the patient
 - vii. Discussing pharmacotherapy with the patient

* This proportion was based on an on-going study being conducted at KHCC on a sample of primary healthcare clinics. The survey study measures the proportion of healthcare providers who report various cancer-control related counseling activities, including tobacco counseling. The presented proportion is based on an interim analysis of the data.

Dissemination of project outcomes

Several reports will be generated and shared with the regional group throughout the project lifespan. In addition, peer-reviewed publications will be generated.

With respect to the newly-introduce evaluation component (change in TDT practices) reports will be generated at each evaluation time-point. An overall end-of-evaluation report will also be generated and shared with all regional hubs as a learning experience. The experience will be published in peer-reviewed journals.

A report on the experience of KHCC to date will be generated and shared with the regional group, and possibly developed into a peer-reviewed publication. In addition, reports after completion of the kick-off workshop and completion of each in-country workshop will be generated and shared with the group. The overall experience will be documented and shared with the group and will be developed into a peer-reviewed publication.

Detailed work plan and schedule

From a planning perspective, the project consists of two components that run parallel to each other: creation of the training hubs and evaluation of change in TDT practices as a result of training. The first component (creation of training hubs) consists of three separate groups of activities: background work, initiation of hub creation, and in-country activities. The second component (evaluation of change in TDT practices as a result of training) consists of three survey waves, a training workshop addressing the intervention group in between survey waves, and a training workshop addressing the control group after completion of all three waves of surveys. The two components chronologically overlap, and certain interdependencies between individual steps exist.

Component 1: Creation of training hubs

Background work

Conducted weeks 1 - 12, at no cost (excluding salaries)

The core team (KHCC staff) will lead establishing an infrastructure that supports developing training programs in all participating countries. This phase entails documenting KHCC's experience to serve as a reference and model, conducting literature reviews on training programs and evaluation mechanisms, and generating country assessments as they pertain to TDT training. Leading into the following phase, countries will refine definitions of target audience, and accordingly develop criteria for selection of in-country faculty. In addition, this phase entails signing Memoranda of Understanding (MoUs) with host organizations which will serve as incubators of the training programs.

Item	Week to start	Week to finish	Main responsibility	Supporting responsibility
Document and summarize the experience of KHCC (qualitative and quantitative) in conducting TDT training, translating and culturally adapting the GB Distance Learning Module, and developing the joint diploma with University of Petra	1	4	KHCC	
Develop, finalize, and sign MoUs with host organizations (in collaboration with in-country champions)	1	6	KHCC	In-country champions
Conduct literature review of TDT training models, evaluation exercises, training management, evaluation of training programs, conducting a needs assessment, principles of adult learning and training, ...)	1	4	KHCC	In-country champions
Compile reading materials and share with regional group	5	6	KHCC	
Develop needs assessment tool (TDT training focused) and share with champions to collect country data	7	8	KHCC	In-country champions
Conduct in-country needs assessments and share results with group Use country assessment to refine definition of primary audience for each country	9	11	In-country champions	KHCC
Develop selection criteria for faculty (per country) which builds on definition of primary (and secondary where applicable) audience	10	12	In-country champions	KHCC

Initiation of hub creation

Conducted weeks 13 – 20 (excluding salaries)

The core team (KHCC staff) will lead designing and developing a kick-off workshop. The workshop will bring together two representatives from each country together with KHCC staff to draft a detailed execution plan that covers development and translation of core curriculum, identification and development of additional content as per requirements of individual countries, conducting in-country workshops, and launching of the training hubs. Individual responsibilities will be assigned to members of the group, milestones and check points will be documented, and communication and monitoring mechanisms will be set. Leading into the workshop, members of the regional group will work on developing select curriculum components (special topics that can be presented to the group during the workshop for testing and evaluation).

Item	Week to start	Week to finish	Main responsibility	Supporting responsibility
Initiate distance discussions and communication to start outlining core curriculum, start identifying faculty per country, and identify need for establishing or advancing a TDT clinic (if needed)	13	16	KHCC	In-country champions
Develop and design outcomes, agenda, and methods for kick-off workshop	13	18	KHCC	In-country champions
Develop specialized sessions (not within KHCC's core curriculum) to be tested during kick-off workshop	13	18	In-country champions	
Hold kick-off workshop in Jordan: provide background info on project objectives and execution, refine and finalize execution plans, develop communication and monitoring mechanisms, and assign individual responsibilities	19	20	KHCC	In-country champions

In country activities

Conducted weeks 21 – 103 (excluding salaries)

KHCC staff will travel to participating countries to train faculty on core curriculum, principles of adult learning, and accompanying systems. The Global Bridges Distance Learning Module will also be marketed during these visits as tool useful for certain audiences. The first trip will be to Oman about 10 months into the project. This will be followed by trips to Tunisia, Egypt, and Morocco taking place about 2-3 months apart during the second year. On each trip, parallel to conducting a four-day workshop to faculty on TDT and training on TDT, KHCC staff will work with champions and program administrators on instilling evaluation systems, distribution systems, and general support. In addition, where identified as a need for the success of the training hub, KHCC staff will work with in-country counterparts on establishing or advancing a TDT clinic. This might be in the form of advising clinic staff on clinical set-up and TDT process of care, data generated and tracked during operations, outcome indicators and reporting process, and potential modifications that can improve outcomes in the clinic. A report will be generated following each workshop documenting outcomes and lessons learnt to help inform future work and serve as input to the final report on the project.

Item	Week to start	Week to finish	Main responsibility	Supporting responsibility
Finalize identification and recruitment of in-country faculty	21	24	In-country champions	KHCC
Execute content development plan as set during kick-off meeting	21	33	In-country champions	KHCC
Customize components of core curriculum				
Refine evaluation, distribution, and support systems	21	33	KHCC	In-country champions
Translate components of core curriculum	34	51	In-country champions	KHCC
Develop additional content for specific countries				
Trip to Oman to conduct TDT training to faculty (English), capacity building to champion and select faculty on systems, and (where applicable) build capacity of clinic staff.	37	40	KHCC	In-country champions
Generate summary and report on in-country trip, share with champion, and share with group. Use lessons learned to inform design and execution of future in-country workshops	41	48	KHCC	In-country champions
Trip to Tunisia to conduct TDT training to faculty (Arabic and French) capacity building to champion and select faculty on systems, and (where applicable) build capacity of clinic staff.	52	55	KHCC	In-country champions
Generate summary and report on in-country trip, share with champion, and share with group. Use lessons learned to inform design and execution of future in-country workshops	56	60	KHCC	In-country champions
Trip to Egypt to conduct TDT training to faculty (Arabic and English), capacity building to champion and select faculty on systems, and (where applicable) build capacity of clinic staff.	67	70	KHCC	In-country champions
Generate summary and report on in-country trip, share with champion, and share with group. Use lessons learned to inform design and execution of future in-country workshops	71	75	KHCC	In-country champions
Trip to Morocco to conduct TDT training to faculty (Arabic and French) capacity building to champion and select faculty on systems, and (where applicable) build capacity of clinic staff.	82	85	KHCC	In-country champions
Generate summary and report on in-country trip, share with champion, and share with group.	86	90	KHCC	In-country champions
Generate summary and report on in-country trips, document the experience and lessons learnt, and initiate drafting of peer-reviewed manuscript summarizing the project.	87	103	KHCC	In-country champions

Component 2: Evaluation of change in TDT practices as a result of training

Conducted weeks 1-65 (excluding salaries)

After developing two evaluation tools (patient tool and HCP tool), a baseline assessment of patient-reported and HCP-reported TDT-related activities will be conducted. Baseline assessment (wave 1) will proceed across a six-week period. Following this assessment, the intervention (TDT training) will be implemented in two clinics. Two weeks after the intervention, the immediate effect of TDT training will be assessed (wave 2). Patient-reported (both arms) and HCP-reported (intervention arm) TDT-related activities will be re-assessed in this wave. Finally, six months after the training period, the final assessment (wave 3) of patient-reported and HCP-reported TDT-related activities will be conducted. In addition, a set of structured interviews with HCPs will take place in the third and final wave of assessment in order to further inform the training design.

Item	Week to start	Week to finish	Main responsibility	Supporting responsibility
Develop and refine evaluation tools (content and linguistic validity)	1	3	KHCC	UNRWA
Submit IRB application	4	6	KHCC	UNRWA
Administrative preparations and arrangements for first wave of baseline surveys (pre-intervention); coordinating with clinics for best dates	7	9	KHCC	UNRWA
Execution of patient surveys (wave 1)	10	15	KHCC	UNRWA
Execution of physician surveys (wave 1)	16	17	KHCC	UNRWA
Data entry and analysis	11	19	KHCC	UNRWA
Administrative preparations and coordination with clinics for intervention and immediate post-intervention assessment	19	21	KHCC	UNRWA
Intervention in two clinics	22	23	KHCC	UNRWA
Execution of patient surveys (wave 2)	26	31	KHCC	UNRWA
Execution of physician surveys (wave 2)	32	33	KHCC	UNRWA
Data entry and analysis	27	35	KHCC	UNRWA
Administrative preparations and arrangements for last wave of surveys (long-term post-intervention) and coordinating with clinics for best dates	46	48	KHCC	UNRWA
Execution of patient surveys (wave 3)	49	54	KHCC	UNRWA
Execution of physician surveys (wave 3) WITH STRUCTURED INTERVIEWS	55	57	KHCC	UNRWA
Data entry and analysis	50	59	KHCC	UNRWA
Compiling final report and generating publication	60	74	KHCC	UNRWA
Administrative preparations and coordination with clinics for intervention and immediate post-intervention assessment	61	63	KHCC	UNRWA
Intervention in two control clinics	64	65	KHCC	UNRWA

References

- ¹ WHO Report on the Global Tobacco Epidemic, 2013: enforcing bans on tobacco advertising, promotion and sponsorship. Geneva, World Health Organization, 2013.
- ² WHO Report on the Global Tobacco Epidemic, 2008: The MPOWER package. Geneva, World Health Organization, 2008.
- ³ The Center of Consultation- The University of Jordan. The National survey “Knowledge, Attitudes and Practices towards Cancer Prevention and Care in Jordan”. 2011. Report available through Center of Consultation.
- ⁴ Centers for Disease Control and Prevention. Health-Care Provider Screening for Tobacco Smoking and Advice to Quit — 17 Countries, 2008–2011. *MMWR* 2013;62.
- ⁵ World Health Organization. Protocol to eliminate illicit trade in tobacco products. Geneva: World Health Organization. http://apps.who.int/iris/bitstream/10665/80873/1/9789241505246_eng.pdf?ua=1
- ⁶⁶ World Health Organization. Global Health Professions Student Survey fact sheets and country reports. <http://www.emro.who.int/tobacco/gtss-matrix/ghpss-factsheets-reports.html> Accessed: Feb 2014
- ⁷ Guidelines for implementation of Article 14 of the WHO Framework Convention on Tobacco Control. http://www.who.int/fctc/guidelines/adopted/article_14/en/ Accessed: Feb 2014
- ⁸ Geller AC, Hayes RB, Leone F, Churchill LC, Leung K, Reed G, et al. Tobacco dependence treatment teaching by medical school clerkship preceptors: survey responses from more than 1,000 US medical students. *Prev Med*. 2013 Aug;57(2):81-6.
- ⁹ Muramoto ML, Lando H. Faculty development in tobacco cessation: Training health professionals and promoting tobacco control in developing countries. *Drug Alcohol Rev* 2009; 28(5):498-506.
- ¹⁰ Anderson P, Jané-Llopis E. How can we increase the involvement of primary health care in the treatment of tobacco dependence? A meta-analysis. *Addiction*. 2004 Mar;99(3):299-312.
- ¹¹ Carson KV, Verbiest MEA, Crone MR, Brinn MP, Esterman AJ, Assendelft WJJ, Smith BJ. Training health professionals in smoking cessation. *Cochrane Database of Systematic Reviews* 2012, Issue 5. Art. No.: CD000214.
- ¹² Rigotti NA, Bitton A, Richards AE, Reyen M, Wassum K, Raw M. An international survey of training programs for treating tobacco dependence. *Addiction*. 2009 Feb;104(2):288-96.
- ¹³ Richmond R, Zwar N, Taylor R, Hunnisett J, Hyslop F. Teaching about tobacco in medical schools: a worldwide study. *Drug Alcohol Rev*. 2009 September; 28(5): 484–497.
- ¹⁴ Muramoto ML, Lando H. Faculty development in tobacco cessation: Training health professionals and promoting tobacco control in developing countries. *Drug Alcohol Rev* 2009; 28(5):498-506
- ¹⁵ July 2013 estimates, the World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/>
- ¹⁶ Moore D, Green J, Gallis H. Achieving Desired Results and Improved Outcomes: Integrating Planning and Assessment Throughout Learning Activities. *J Contin Educ Health Prof*. 2009 Winter; 29(1): 1–15.
- ¹⁷ Essential Medical Statistics. Kirkwood BR and Sterne JA. Second edition. Blackwell Publishing.