INTERNATIONAL QUITLINE INSTITUTE EXTENSION PROJECT

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C. MAIN SECTION OF THE PROPOSAL

1. Overall Goals and Objectives

The overall aim of this proposed project is to expand the programs of the International Quitline Institute over the next three years as a key part of the global effort, led by the World Health Organization (WHO), to decrease smoking rates—and related deaths—worldwide. Our training project began in 2011 to address Article 14 of the WHO Framework Convention on Tobacco Control (FCTC), a global health treaty created in 2003 for ameliorating diseases and deaths due to tobacco. As of this year (2013) the FCTC has been signed and ratified by 177 countries, covering 90% of the world's population.[1] Article 14 of the FCTC calls for governments to implement smoking cessation programs as part of a comprehensive strategy to reverse the tobacco epidemic. The main objective of the International Quitline Institute (IQI) is to assist low- and middle-income countries (LMICs) to expand the reach and effectiveness of smoking cessation interventions through the development and improvement of toll-free tobacco quitlines that can be integrated with existing health care systems or programs as well as broader tobacco control policies and initiatives.

Research has demonstrated that telephone quitlines can dramatically increase access to cost-effective, evidence-based smoking cessation treatment, and augment the benefits of broader tobacco control policies to reduce smoking-related disease, disability, and deaths, improving population health and saving millions of lives.[2] However, only 56 countries—just a third of all FCTC signatory nations—have tobacco quitlines.[3] And, existing quitlines are disproportionately located in developed, high-income nations, while two-thirds of smokers live in low- and middle-income countries, where 80% of all tobacco-related deaths will occur.[4] Thus, the IQI strives to increase accessible and effective tobacco cessation services for those countries most in need.

With this supplemental funding, we will be able to continue the work of the IQI to expand quitline services around the world, while launching a new IQI tobacco treatment specialist program to train quitline counselors who will then be able to provide more effective, tailored, one-on-one cessation counseling and information to smokers trying to quit. Buoyed by successes among our original IQI trainees who have expanded the services, reach and/or effectiveness of quitlines or other smoking cessation treatment programs in Thailand, South Korea, China, Hong Kong, India, Argentina, Zambia, Israel, Singapore, Jordan and Egypt, we will seek to engage representatives from additional countries through their respective government ministries, WHO regional offices, healthcare organizations, and NGOs to receive the training, resources, and technical support necessary to develop and implement national or regional quitlines or improve existing ones. We will also encourage trainees to integrate their quitline efforts with broader clinical and public health policies and activities to enact changes in systems to enhance reach and effectiveness of tobacco treatment. The IQI plans to continue working with our current partners—the UW Tobacco Studies Program, Alere Wellbeing, Inc. (formerly Free & Clear), WHO, and the Centers for Disease Control (CDC)—creating new trainings and expanding access to existing ones.

The three key objectives of the proposal are 1) to increase smokers' access to smoking cessation services via toll-free quitlines (by creating new quitlines, expanding capacity of existing quitlines, and reducing barriers to using them); 2) to improve the quality and effectiveness of quitline programs and services (by implementing more robust, evidence-based practices within quitlines); and 3) to integrate quitlines with healthcare systems and broader tobacco control policies to extend their reach and effectiveness.

Objective 1: Increase number of smokers with access to quitlines. This will require working with/assisting public health leaders—who are prepared and have the resources—to help them develop and implement new quitlines in countries that don't yet have them, expand capacity and services of existing quitlines in countries that do have them (e.g., longer hours of operation, increased number of counselors or coaches) and reduce barriers and increase motivation for smokers to use quitlines in their country or region (e.g., toll-free calling, advertising and promotion, quitline phone number on cigarette packs)

Objective 2: Improve quality and effectiveness of existing quitlines. This will require implementing more robust, evidence-based practices within quitlines, including hiring well-trained counselors, using evidence-based protocols, offering proactive calls as well as unlimited reactive calls, providing adjunct self-help materials or quit guides (by web or paper), offering information about pharmacotherapy, and, assessing and trouble-shooting issues related to smokers' quitting experience.

Objective 3: Integrate quitlines with healthcare systems and broader tobacco control policies. This will require working with regional and national healthcare system leaders, care providers, and health ministry representatives to raise awareness about the benefits of quitting tobacco, increase knowledge about effective means for treating tobacco dependence, and develop linkages between health care organizations (providers, clinics and hospitals) and quitlines, to alert health care providers about the efficacy of quitlines, engage them in identifying smokers who want to quit, and referring them for treatment. This can be accomplished by supplying clinics and hospitals with brochures and posters promoting the quitline, and providing cards or brochures with information about available quitline services and the quitline phone number. The referral process can also be streamlined to lessen the burden on the clinician by automating the Ask, Advise, and Refer intervention (e.g., via an electronic health record, developing a clinical team approach, or enabling fax referrals from health care providers to the quitline, which will then generate a proactive call to the patient and provide feedback regarding his or her disposition with regard to treatment and quit outcomes).

We will also assist participating countries in positioning their quitline efforts within a larger tobacco control and prevention framework, as laid out by WHO's MPOWER[*] technical assistance package, a set of six policies that guide and support implementation of the FCTC. Such complimentary policies to reduce demand for tobacco are essential catalysts for cessation.

[*] MPOWER stands for: **Monitor** tobacco use, **Protect** people from secondhand smoke, **Offer** quitting help to smokers, **Warn** people of the dangers of smoking, **Enforce** tobacco advertising bans, and **Raise** taxes

For example, smoke-free laws, a cornerstone of the MPOWER package, serve to denormalize smoking behavior and drive people to quit.[5] Likewise, well-designed anti-tobacco media campaigns that warn of the dangers of smoking (including graphic warnings on cigarette packs) have served to decrease smoking prevalence among target populations.[6] Raising tobacco excise taxes is possibly the most effective means of motivating population-level cessation; for every 10% increase in price, consumption falls by 2.5-5%.[7] The evidence-based policies outlined by WHO, when combined with easily accessible cessation programs, hold the most promise in reducing tobacco-related death and disease.

Our objectives will be accomplished by extending our current IQI offerings through a combination of an IQI online course, in-person regional trainings and pre-conference workshops. Additionally, we plan to complete a new quitline counselor training program and manual, which will be used as the textbook to pilot our new IQI 5-day telephone counselor training in 2014. This new training will serve to fill a critical gap in the delivery of effective quitline interventions. In partnership with WHO, the CDC-Bloomberg Initiative to Reduce Tobacco Use and Global Tobacco Control unit, we will be able to assist leaders and representatives from Ministries of Health, WHO regional offices, and public health and health care organizations to reach their quitline development goals.

2. Technical Approach

a. Current Assessment of Need in Target Area

In the first three years of this project, the IQI had remarkable success in helping tobacco control leaders from mostly low- and middle-income countries (LMICs) address Article 14 of the WHO FCTC by beginning the process of implementing or improving telephone-based smoking cessation services. Through our inaugural 5-day IQI Seattle training in 2011, the writing and publishing of the WHO Quitline Manual later that year, conducting an IQI pre-conference workshop and symposium at WCTOH in 2012, and creating webcasts of the Seattle IQI main sessions, now available on the IQI website, we have had approximately 170 participants from over 50 countries take part in our live trainings and events, and reached countless others through the publication and distribution of the quitline manual and webcasts.

When the International Quitline Institute (IQI) began in 2011, the World Health Organization (WHO) and the Centers for Disease Control (CDC) worked together with us to identify the countries, and the individuals from those countries, who were in the best position to obtain maximum benefit from attending the inaugural IQI training in Seattle in October of 2011. This five-day training, conducted for these specific participants, was key to helping their countries build on existing momentum to start new quitlines or enhance current ones, and to prioritize integration of smoking cessation programs into national health systems and FCTC-mandated tobacco control activities. The training brought 26 people (22 trainees and 4 faculty panelists) from 16 countries representing all six WHO regions. The 13 countries whose representatives were invited to attend in order to create or enhance their quitlines, included Argentina, China, Egypt, Hong Kong, India, Israel, Jordan, Philippines, Republic of Korea, Singapore, South Africa,

Thailand, and Zambia. Additional international faculty came from Australia, Sweden, the United Kingdom, and the United States.

On-site participant surveys and oral feedback at the 2011 training events demonstrated extremely high satisfaction ratings and attendees found the content and materials relevant and helpful to start or improve quitlines in their countries or regions. The vast majority (86%) of attendees who completed an evaluation (22 out of 26, or an 85% response rate) gave the training experience the highest possible rating, with the remainder giving IQI the second highest score. All participants said that they would recommend IQI to a colleague. Six months later, as a follow-up to the 5-day training, we conducted a full day pre-conference workshop and main conference symposium at the 15th World Conference on Tobacco or Health (WCTOH 2012) in Singapore. The workshop drew 70 participants from 36 countries, several of whom had attended the Seattle training. Another 70 participants filled the room for the main symposium two days later.

Since that time, we have received 12- and/or 24-month post-IQI follow-up surveys from 11 of the 13 original IQI countries, demonstrating significant progress towards their goals of increasing reach, access and utilization of smoking cessation services either through quitlines or other tobacco treatment programs. A majority of our attendees described starting or improving existing quitlines, although many of them did not provide quantitative outcomes data. Of the eleven attendees who completed the 24-month post-IQI survey in 2013, seven attendees reported that their countries had expanded or improved an existing quitline (64% of the sample). Three countries (India, Jordan and a private sector Israeli program) have plans to create one or more quitlines in 2014, and have continued to ramp up tobacco control and prevention efforts through other means since the 2011 Seattle training and/or 2012 WCTOH workshops.

Countries that expanded or improved quitlines in the wake of IQI trainings almost universally saw increases in the number of callers using their services. Increases in call volume ranged from more than 1000% (Argentina's National Quitline Service) to 171% (Zambia) and 167% (Singapore). Many countries have also increased quitline staffing to handle the surge in calls, with nearly half (45%) adding smoking cessation counselors. Two nations without quitlines trained hundreds of medical personnel in tobacco cessation and dependence (Jordan and India) and both are planning to launch quitlines in 2014.

Consistent with the FCTC guidelines, many participating countries effectively integrated their smoking cessation treatment efforts with other tobacco control programming and policies. Several countries' quitlines receive referrals from providers, employers and schools, or refer clients to medical facilities as needed. Four (of the eleven that participated in our post-test, or 36%) have employed new and innovative technologies, such as implementing proactive calling and electronic medical records, or harnessing social media to promote smoking cessation.

More detailed, post-IQI progress reports, by country and WHO region, may be found in Appendix I. Supplemental materials.

IQI's momentum towards supporting cessation efforts needs to continue so we can reach out to other LMICs with high smoking rates. WHO is committed to working with us in many ways to increase this momentum, including communicating with its regional and country offices to identify priority countries and trainees, and contributing to improve the cultural sensitivity for the regional trainings. The primary audience for this intervention, therefore, will be identified through the WHO and CDC based on countries who will receive maximum benefit from increased training on quitlines.

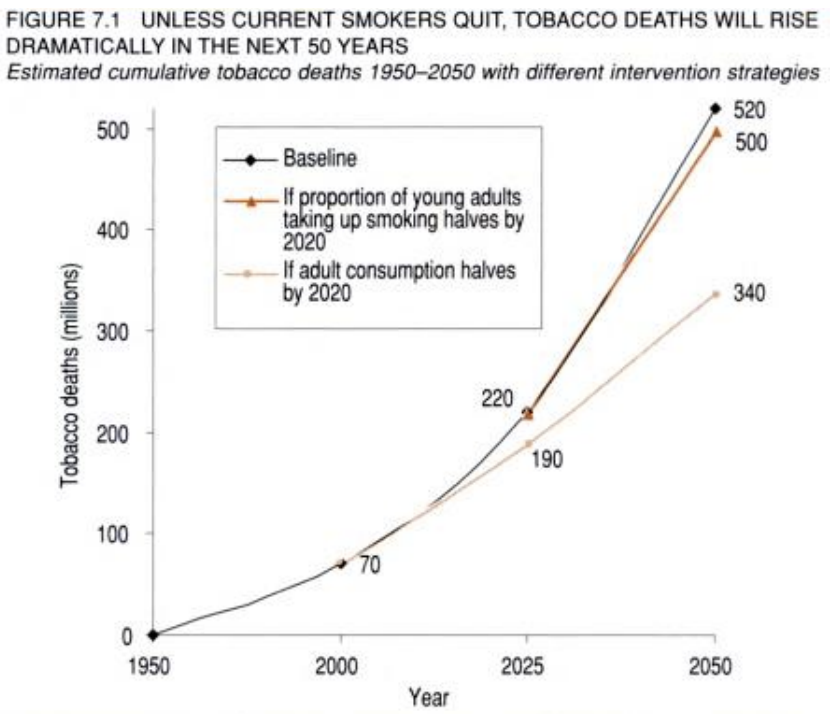
The proposed project has the potential to reach millions of current smokers around the world and help them quit tobacco use. At least 1.3 billion people in the world smoke tobacco, and 14,500 die from tobacco-related illnesses every day.[8] Unless we act, the tobacco epidemic will get much worse. The World Health Organization estimates that by 2030, tobacco could kill 8 million people a year, up from 6 million today. Globally, one-third of adults are regularly exposed to second-hand smoke and more than 600,000 people die prematurely from secondhand smoke exposure—mostly women and children. All tobacco-related deaths are completely preventable.[3]

The WHO Framework Convention on Tobacco Control (FCTC) advocates for a comprehensive strategy to decrease smoking, and providing help to smokers to quit is one of the six core provisions (FCTC Article 14).[1] To help countries abide by this global health treaty on tobacco control, a technical assistance package of six cost-effective tobacco control policies called MPOWER was created by WHO to help countries implement the demand reduction strategies of the FCTC. The "O" in MPOWER calls for countries to "offer" to help people quit tobacco use, noting that cessation treatment doubles or triples a smoker's chance of quitting, and even brief advice from a physician increases the quit rate by 66% and a quitline encounter by 41%.[2]

Increasing cessation will reduce the epidemic's toll of disease and death more quickly and effectively than prevention, yet the MPOWER* "O" is often referred to as the "orphan" due to its not receiving attention commensurate with its importance and potential life saving impact. Current global prevalence of smoking in adults is estimated at about 25%.[4] In 2007, Thomas Frieden, current Director of the CDC, wrote a viewpoint piece for The Lancet with Mayor Michael Bloomberg showing that if the world reduced absolute adult smoking prevalence by 5% by the year 2020, at least 100 million fewer tobacco-related premature deaths would occur in people alive today, and another 50 million deaths would be prevented in infants born between now and 2030.[9] Quitlines are a key component in the global strategy to reduce tobacco consumption. Frieden and Bloomberg said that "faced with high prices, strong anti-tobacco advertisements, and the inability to smoke in public places, many smokers will want to quit but most will fail without assistance. Clinical and quitline-based cessation services can double an individual smoker's chance of quitting, are highly cost-effective compared with other clinical

interventions, and can reduce illness and death."[9 p.1760] Supporting current tobacco users in quitting is the key to achieving health gains in the short to medium term; prevention of smoking will, in the short run, only have a limited positive effect on reducing mortality.

Figure 1

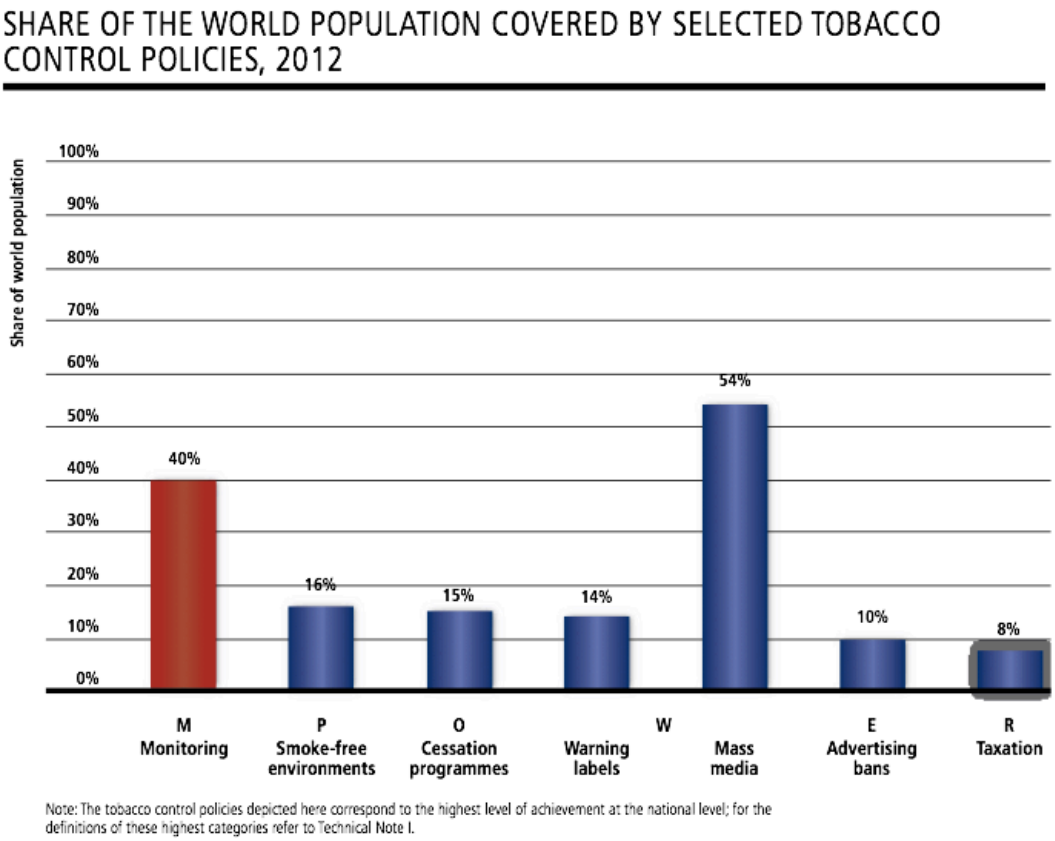


Source: Jha, P. (1999). *Curbing the epidemic: Governments and the economics of tobacco control*. Washington DC: World Bank Publications.

Article 14 of the WHO Framework Convention on Tobacco Control includes the provision that: *All Parties should offer quitlines in which callers can receive advice from trained cessation specialists. Ideally they should be free and offer proactive support. Quitlines should be widely publicized and advertised, and adequately staffed to ensure that tobacco users can always receive individual support. Parties are encouraged to include the quitline number on tobacco product packaging.*[10]

However, despite the facts that treatment for smokers is feasible (advice takes less than a minute), effective (brief non-judgmental advice works) and efficient (both doable and worthwhile), and that a majority of smokers want to quit and most have tried, little progress has been made in supporting tobacco users to quit; as of 2012, only 15% of the population has access to evidence-based treatment.[11] (Figure 2)

Figure 2



Source: World Health Organization. (2011). *WHO Report on the Global Tobacco Epidemic, 2011*. Available at http://whqlibdoc.who.int/publications/2011/9789240687813_eng.pdf Accessed November 9, 2013

b. Intervention Design and Methods

The proposed project is designed to reduce the gaps in the implementation of the FCTC Article 14 and MPOWER provisions to help smokers quit, by focusing on increasing access to and effectiveness of global smoking cessation treatment as outlined above. We will continue to work with our IQI partners, building on our prior IQI training and workshop successes with the following plan:

Create an online IQI course, based at the University of Washington. This would become the third course offered by the UW Tobacco Studies program, using the interactive Canvas Learning Management System platform that allows for the integration of online learning technologies and evaluation. The course would provide historical background information about the global tobacco epidemic and how it can be addressed, using tools and strategies of the FCTC, with a focus on treatment of tobacco use and dependence and the synergy between smoking cessation services and other tobacco control measures. The course would use recorded podcasts from the didactic portions of the original Seattle IQI training, along with supplemental

materials, including the WHO Quitline Manual, plus suggested readings and short assignments for each of the ten class sessions. Two versions of the course would be available; one free and available to anyone, and the other college-accredited for a fee. Either one could be used as background preparation for future one-day pre-conference IQI workshops at international public health and tobacco control conferences, and for further study in global health and the prevention and treatment of tobacco use and dependence.

Pilot the WHO Quitline Counselor-Tobacco Treatment Specialist (TTS) Training in year 1 and offer it a second time in year 2 or 3. This nearly completed 4-5 day intensive training program is designed to support implementation of tobacco quitline services by developing counselors' knowledge, skills and confidence to serve as Tobacco Treatment Specialists. The training manuals and supporting power point presentations, co-authored by Ken Wassum and Etta Short, consist of 14 modules, each addressing a specific aspect of delivering counseling services to quitline callers. Each training module is presented in a facilitated, interactive, small group, four-step format: Preparation, Presentation, Practice and Evaluation. Once this training has been piloted, we will expand our one-day workshops by incorporating a session focusing on quitline counseling procedures and techniques, and will explore the feasibility of a one-day pre-conference TTS workshop to be developed for future IQI pre-conferences. A shorter version of the training has also been developed for countries or regions with fewer resources to devote to training.

Provide and evaluate an updated version of the IQI pre-conference workshop and symposium at WCTOH 2015. IQI workshops are tailored to adult learners and employ a hands-on, highly interactive strategy to impart information and foster the knowledge, skills and understanding needed to carry out best quitline practices, using didactic sessions and facilitated small group discussions and technical assistance. We plan to create an advanced version of our basic quitline workshop (which we presented at WCTOH 2009 and 2012) in two ways: 1) by requiring that participants who have not attended a prior IQI training take the online IQI course beforehand (to provide them with a background foundation on quitline basics), and 2) by incorporating a major session of the workshop focused on counseling, utilizing material from the TTS training program and manual.

c. Evaluation Design

Our primary evaluation goal is to assess the impact our programs and interventions have on the development of evidence-based quitline support systems, access to these systems by the smoking population of low and middle income countries (LMICs), uptake and utilization of treatment offered to smokers in LMICs that participate in the proposed IQI trainings and other events (e.g., conference workshops and symposia), and sustainability of new quitline services supported through the IQI. While smoking cessation outcomes may not be measurable directly (since individual level data is often not collected, especially in under-resourced countries), we will try to estimate quit outcomes based on the number of callers to the quitlines and the characteristics of the quitline programs themselves (i.e., types of services that are available and utilized). Thus, the evaluation plan will include both descriptive and quantitative process

measures (e.g., number and content of IQI training events; number, position and country of origin of participants; and attendee satisfaction survey results) as well as descriptive and quantitative outcome measures (e.g., number and types of quitlines started or improved; services offered; number of callers per month seeking treatment, and, if available, services provided to callers wanting to quit, and any other follow-up information that is collected). See Table 1: Selected key outcome measures for selected metrics.

We will also collect data from our participants using similar tools as before. Our original IQI trainings included on-site participant surveys and oral feedback at the training events, baseline assessments of current quitline services and goals, and 12- and 24-month follow-up surveys, conducted by email or website. Evaluations will utilize both qualitative and quantitative measures to assess progress towards participants' individual quitline development goals and desired outcomes, in terms of reaching and offering quitting assistance to their country or region's target population of smokers. Follow-up surveys will additionally assess integration of new and existing quitlines and their contribution toward strengthening other smoking cessation services or programs, and advancements in broader tobacco control policies within their regions. We will continue these current evaluation procedures, and expand them as we conduct additional trainings and workshops in order to track short-term accomplishments and long-term results, assess potential population impact, assure program relevance and quality, and make adjustments as needed to help participants meet their outcome goals. This primary data will be paired with secondary sources, described below, to develop a more complete picture of IQI program outcomes.

Through our partners at the CDC Foundation, we will have access to data and results from the Bloomberg Initiative to Reduce Tobacco Use-funded CDC Global Tobacco Surveillance System (GTSS), which aims to enhance country capacity to design, implement and evaluate tobacco control interventions, and monitor key articles of the World Health Organization's (WHO) Framework Convention on Tobacco Control (FCTC) and components of the WHO MPOWER technical package. The GTSS collects data from 128 countries through four surveys: the Global Youth Tobacco Survey (GYTS); the Global School Personnel Survey (GSPS); the Global Health Professions Student Survey (GHPSS) and the Global Adult Tobacco Survey (GATS). GTSS collects information on a range of tobacco use behaviors in these populations, including desire and attempts to quit, as well as what resources, if any, smokers used to quit, including medications and quitlines. In addition to using GTSS country-level data for our evaluation, we will obtain data collected from our trainees' quitlines. The WHO Quitline Manual and IQI trainings provide information, guidance and technical assistance to help quitline providers develop systems to collect data and create reports using aggregated data about the smokers accessing their quitlines, the services provided to callers seeking help to quit, and 6-month follow-up for those who received treatment, to assess quit status and satisfaction with the program. Through our IQI participants and health ministry representatives, we will be able to obtain such reports, when available, from the quitline operators. (See Table 1: Selected key outcome measures below for description of variables).

We will engage our partners at Alere, WHO and the UW's Institute for Health Metrics and Evaluation (IHME)—all of whom have formidable research and evaluation experience and expertise—to help us design and implement this evaluation plan. The Graduate Student Assistant we hire will be from the IHME's MPH degree program, which specializes in training students in measurement and assessment of health policies and interventions. IHME's widely publicized 2010 Global Burden of Disease study, first published in the Lancet in December 2012, is the largest and most complete assessment and analysis of global health and diseases to date.[12] This project, involving nearly 500 researchers around the world, concluded that hypertension and tobacco smoking were responsible for the greatest share of preventable death and disability worldwide, and the IHME is continuing to work on monitoring and addressing this catastrophic problem.[13]

Table 1: Selected key outcome measures

Measure	Variable type/purpose	Source	Proposal objective addressed
Process measures			
WCTOH 2015 Workshop: Attendees' countries and WHO regions represented	Categorical/ demonstrate program reach	Primary data collection at time of event	Objective 1: Increase access to quitlines
IQI Quitline & Tobacco Treatment Specialist Trainings: Attendee satisfaction (survey)	Continuous/ demonstrate training effectiveness	Primary data collection at time of event	Objective 2: Improve quality of quitlines
IQI Quitline & Tobacco Treatment Specialist Trainings: Attendee learning (quiz scores)	Continuous/ demonstrate training effectiveness	Primary data collection at time of event	Objective 2: Improve quality of quitlines
Outcome measures			
Number of quitlines started or improved	Continuous/ demonstrate reach, adoption, implementation and maintenance	Primary data collection at 6-, 12- and 24-month follow-up surveys	Objectives 1 and 2: Increase access and improve quality
Number of callers to quitline per month	Continuous/ demonstrate reach, adoption, implementation and maintenance	Primary data collection at 6-, 12- and 24-month follow-up surveys	Objectives 1 and 2: Increase access and improve quality
Adult tobacco use prevalence rates by IQI-participating country	Continuous/ demonstrate implementation and maintenance	Secondary data from CDC Global Tobacco Surveillance System (Global Adult Tobacco	Objectives 1, 2 & 3: Increase access, improve quality, and Integrate with

Measure	Variable type/purpose	Source	Proposal objective addressed
		Survey)	health systems and tobacco policies
Level of interest in quitting and resources used to quit by IQI-participating country	Categorical/ demonstrate implementation and maintenance	Secondary data from CDC Global Tobacco Surveillance System (Global Adult Tobacco Survey)	Objectives 1, 2 & 3: Increase access, improve quality, and Integrate with health systems and tobacco control policies

Glasgow's RE-AIM framework (reach, effectiveness, adoption, implementation and maintenance) serves as a guide in planning our evaluation mechanisms.[14] With the assistance of our Alere and IHME colleagues, we will use statistical software (SPSS) to measure the effect of our IQI work if and when appropriate. Anticipated methods would include:

- Descriptive statistics (i.e., means, medians, crosstabs, etc.)
- T-tests to determine if two continuous variables are statistically different at $p < 0.05$ level (i.e., tobacco use rates at baseline and at follow-up)
- Chi-square tests to determine independence of categorical variables
- Regression analysis, if indicated (i.e., when concern about confounders present)

All evaluation and monitoring activities will contribute to the continuous improvement of the IQI curriculum, through testing the effectiveness of training in supporting new quitline services, creating best practice, evidence-based telephone based cessation support to complement other cessation programs, and through being responsive to changes in tobacco control policy globally and regionally. The delivery of the IQI program over a three-year period will also provide opportunity for the development of mentor relationships between participants working in similar settings and cultures but at difference stages of quitline development, and testing of the effectiveness of these relationships in contributing to the community of support developed by IQI. In terms of dissemination, results, conclusions and best practices garnered from IQI trainings and evaluations will be shared openly through conference presentations, online access to all IQI materials, including recorded talks, WHO-published training manuals and workbooks, as well as peer-reviewed publications and policy reports, disseminated through our global partners.

3. Detailed Work Plan and Deliverables Schedule

International Quitline Institute Extension Project									
WORK PLAN and TIMELINE	**1st Year**			**2nd Year**			**3rd Year**		
Create on-line course from original IQI quitline training	X	X	X						
Monitor progress and outcomes from original IQI training	X	X	X						
Finalize WHO Counselor Training Manual & Workbook	X	X							
Pilot 5-day counselor training in EMRO or WPRO region			X						
Prepare updated preconference workshop program and submit abstract/proposal for WCTOH 2015			X	X					
12/31/14 Deliverables as above									
Conduct 1-day pre-conference workshop at WCTOH 2015, using IQI online course as preparation for participants				X					
Monitor progress and outcomes from earlier IQI trainings				X	X	X			
Evaluate and refine counselor training program				X	X	X			
Modify/update original IQI training for advanced training with online IQI course as prerequisite						X			
Conduct second regional counselor training and/or advanced IQI quitline training					X	X			
12/31/15 Deliverables as above									
Monitor progress and outcomes from previous IQI trainings							X	X	X
Conduct third IQI training and/or preconference workshop								X	X
Collect and analyze data from Year 1 & 2 activities								X	X
Create dissemination plan								X	X
Prepare final summary report									X
12/31/16 Deliverables as above **Follow-up Assessment and Summary Report**									

Year 1, Jan-Dec, 2014:

The major goals for the first year are to complete and publish the WHO Counselor Training Manual and accompanying workbook, pilot a 5-day counselor training in the Western Pacific (WPRO) or Middle East (EMRO) region; and create an online course from the original IQI 5-day Seattle training to be used as a prerequisite for the counselor training and more advanced future IQI trainings. Additionally, we will prepare an updated preconference workshop program for WCTOH 2015, incorporating a module on cessation counseling techniques, and submit abstracts for the one-day workshop and a main conference symposium highlighting the progress that has been made in global quitline development, the challenges that remain, and how to continue improving smokers' access to treatment and increase the number of successful quitters. Throughout all three years, we will continue to monitor progress from past IQI

participants and evaluate progress of creation, implementation and improvement of quitlines in target countries and regions.

Year 2: Jan-Dec 2015

The main goals for the second year are to finalize the on-line course and conduct the new, advanced one-day pre-conference workshop at WCTOH 2015 as described above. Using the IQI course as background to prepare participants for the workshop in advance will save time so that we can incorporate a new module on the principles and practices of smoking cessation counseling that includes an opportunity for attendees to practice counseling techniques in small groups (of 3-4 people) with experienced TTS counselors. Following the pilot counselor training, we will collect descriptive and quantitative data in order to evaluate and refine counselor training program. We will also update the original IQI training, tailoring it for a specific country that is in a position to benefit by a more advanced training, using the online IQI course as a prerequisite, and conduct either a second regional counselor training or the advanced, tailored IQI quitline training (depending on which will meet the greatest need). Monitoring, as described above in Year 1, will continue.

Year 3: Jan-Dec, 2016

The goals for the third year include conducting a third IQI training and/or preconference workshop, collecting and analyzing data from Year 1 & 2 activities, creating a dissemination plan, and preparing a final summary report. There will also be an iterative, ongoing improvement process, based on the evaluations of the trainings conducted in 2014 and 2015, to further develop and modify the online course and live trainings as needed. The final report will include descriptive and quantitative assessments of accomplishments and challenges, projected impact of the IQI on quitline reach and effectiveness, and plans for potential future activities and programs.

APPENDICES

D. Organizational Details

1. Leadership and Organizational Capacity

University of Washington (UW) The University of Washington is a premier public research and teaching institution located in Seattle, Washington. UW's Schools of Medicine and Public Health are consistently ranked among the top schools in the US. UW partners with internationally-renowned health organizations such as the Bill and Melinda Gates Foundation, Fred Hutchinson Cancer Research Center and PATH (formerly known as the Program for Appropriate Technology in Health, now known only by the acronym) and the Group Health Research Institute (GHRI). The School of Medicine boasts one of the nation's leading academic medical centers. UW's interdisciplinary Global Health Department (GHD), housed within the Schools of Medicine and Public Health, currently has projects in over 90 countries and offers one of the most competitive programs of its kind. The GHD is also home to UW's prestigious Institute of Health Metrics and Evaluation (IHME), a reservoir of expertise in global health statistics and measurement. The Department of Family Medicine's Research Section, where the proposed project will be based, is housed in a suite of offices conveniently located near the UW Schools of Medicine and Public Health. The department and section will provide administrative support, office supplies, computers and internet/phone as well as office space for the project. A conference room as well as printer, copy and fax machines are available on-site. Parking is available for off-site investigators to attend project meetings. As a faculty member in the UW Schools of Medicine and Public Health and founding director of the UW Tobacco Studies program, Dr. Abigail Halperin is uniquely qualified to serve as Project Director. She has a 15-year history of leadership in the prevention and treatment of tobacco dependence at UW, as well as ten years experience medical directing and consulting for the Alere Quit for Life program, and three years co-creating and co-directing the International Quitline Institute. (See *Staff Capacity* and *Biosketches* sections for additional information about Dr. Halperin.)

Alere Wellbeing, Inc. (AWI) formerly known as Free & Clear, established the Quit for Life Program within the Group Health Center for Health Promotion in 1983, after researchers from the National Cancer Institute, Robert Wood Johnson Foundation and the Group Health Research Institute (formerly the Center for Health Studies) demonstrated the efficacy and effectiveness of telephone-based smoking cessation treatment. Alere is currently the largest provider of telephone quitline services in the US, operating quitlines in 26 states and through over 750 employers and health plans, including more than 70 Fortune 500 companies, serving around 350,000 unique callers per year. In addition to providing direct quitline services, Alere is a leader in developing and conducting cessation counselor trainings for culturally diverse groups, and offers online, CME/CE-accredited health care provider trainings for utilizing the Ask, Advise & Refer intervention. Alere also continues to have a robust research and evaluation unit, which has helped advance quitline technology and build the evidence base for smoking cessation by participating in over 50 NIH, State, and privately funded smoking cessation trials and quitline studies, and publishing over 140 peer-reviewed papers over the past 30 years. Ken

Wassum, who is currently the Associate Director of Alere's Quit for Life program and sits on the boards of both the Association for Treatment of Tobacco Use and Dependence (ATTUD) and the North American Quitline Consortium (NAQC), is eminently qualified by his vast experience and expertise, to serve as Co-Director and lead trainer of the project. (See *Staff Capacity* and *Brief Biosketches* sections for additional information about Mr. Wassum.)

World Health Organization (WHO) Tobacco Free Initiative (TFI) is part of the Non-communicable Diseases and Mental Health cluster, based in Geneva, Switzerland. Established in 1998, TFI focuses international attention and resources on the global tobacco epidemic through ongoing collaborations with other WHO departments, member states and non-governmental organizations. WHO administers the Framework Convention on Tobacco Control, an international treaty adopted by the World Health Assembly in 2003 and entered into force in 2005. As of 2013, 177 countries (covering about 90% of the world's population) have ratified the convention, which provides guidance and resources for the reduction of demand for tobacco as well as reduction of the supply of tobacco using evidence-based public health and policy measures as outlined in the MPOWER package. WHO partnered with UW and Alere in developing and implementing the initial IQI training programs, as well as co-authoring, publishing and distributing the WHO International Quitline Manual. A companion WHO International Quitline Counselor Training Manual is in the final stages of development and is slated to be published in 2014.

The CDC Foundation (CDCF) was created by Congress as an independent, non-profit entity. It serves to build partnerships between private organizations and the Centers for Disease Control and Prevention (CDC) in order to create and expand innovative, evidence-based public health programs. Since 1995, the CDC Foundation has disbursed $400 million to the CDC and funded over 700 programs around the world. One such program is the Bloomberg Initiative to Reduce Tobacco Use, which is a multilateral effort to help countries monitor adult tobacco use, exposure to second-hand smoke, quit attempts and effectiveness of tobacco control measures. The CDC Office on Smoking and Health (OSH) and the CDCF were both partners in the original IQI project. OSH Director Dr. Tim McAfee (former Chief Medical Officer of Alere) was a central figure in the creation and development of both the WHO International Quitline Manual and the IQI; he also served as a core faculty member at the Seattle training, including giving the keynote address. The CDCF acted as the fiscal agent for trainee travel to Seattle and provided essential administrative and logistical guidance for ensuring appropriate selection of participating countries and individuals to maximize the benefits of trainings and workshops. The CDCF will provide these same functions for the new proposal (see CDCF's Letter of Commitment).

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