Improvement in Interpersonal and Clinical Skills among HIV Providers in Serving Key Populations in the Caribbean:

Results of a Training Program Outcome Evaluation

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FINAL REPORT

Study Team Members:
Clive Anderson, MD
Liz Blanton, MPH
Lauren Dunnington, MPH
Alana Lum Lock Cardinez, MSc
Shelia St. Thomas, MA

HRSA Health Resources & Services Administration

THE UNITED STATES AND THE CARIBBEAN IN PARTNERSHIP TO FIGHT HIV/AIDS

I-TECH International Training & Education Center for Health

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ACRONYMS & ABBREVIATIONS

CT	Computed tomography
DGH	University of Washington Department of Global Health
GOJ	Government of Jamaica
HIV	Human Immunodeficiency Virus
HHS	U.S. Department of Health and Human Services
HRSA	Health Resources and Services Administration
IAETC	International AIDS Education and Training Center
IDI	In-Depth Interview
IRB	Institutional Review Board
I-TECH	International Training and Education Center for Health
KP	Key Populations
KPP	Key Populations Preceptorship
LGBTQ	Lesbian, Gay, Bisexual, Transgender and Queer
MOH	Ministry of Health
MOHW	Ministry of Health and Wellness
MRFTT	Medical Research Foundation of Trinidad and Tobago
MSM	Men who have Sex with Men
OSCE	Objective Structured Clinical Examination
PAHO	Pan-American Health Organization
PEPFAR	President's Emergency Plan for AIDS Relief
PLHIV	People Living with HIV
SPSS	Statistical Package for the Social Sciences
STI	Sexually Transmitted Infection
SW	Sex Worker
TOT	Training of Trainers
USG	United States Government
UW	University of Washington
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

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DISCLAIMER

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EVALUATION TEAM

Clive Anderson, Liz Blanton, Lauren Dunnington, and Shelia St. Thomas all contributed to evaluation design. Data analysis was completed by Ms. Blanton. Interviews were conducted by Ms. Blanton and Alana Lum Lock Cardinez. All members of the evaluation team contributed to identification of themes and report writing. All members of the evaluation team have experience designing, implementing, managing, monitoring, and evaluating public health programs. Members of the evaluation team have no conflicts of interest to declare.

EXECUTIVE SUMMARY

Background & Purpose

In multiple Caribbean countries, specific key populations (KPs) bear a disproportionate burden of HIV. Across the region, HIV prevalence is estimated at 1.2%; however, HIV impacts specific KPs (including men who have sex with men, transgender women, and sex workers) at higher rates. Training clinicians and other healthcare workers to improve care for members of KPs is recommended by researchers and the Pan American Health Organization (PAHO) (Rogers et al., 2014; PAHO et al., 2010; PAHO et al., 2014).

The International Training and Education Center for Health (I-TECH), a center housed within the Department of Global Health at the University of Washington, received funding in 2015 from the President's Emergency Plan for AIDS Relief (PEPFAR) to improve HIV care for KPs in the Caribbean. I-TECH worked with gay, bisexual, transgender, sex worker, and HIV-positive communities in Jamaica and Trinidad to develop the Key Populations Preceptorship (KPP) training. The KPP training is a two-day training that uses clinical simulation and experiential learning to build provider skills in sexual history taking and patient-centered care for KPs. In the training, skilled patient trainers who are recruited from gay, transgender, and sex worker communities enact scenarios and offer feedback, coaching, and discussion to healthcare workers, supported by a clinical facilitator.

I-TECH conducted an outcome evaluation to determine the effectiveness of the KPP program in changing knowledge, attitudes, and skills of clinicians in providing comprehensive care to KPs.

Methods

Two observational skills checklists were developed to assess clinician performance before and after the two-day KPP training. Each clinician participated in two interactive clinical scenarios with patient trainers immediately preceding training and again immediately following training. Clinicians' performance during the pre- and post-training scenarios was rated by a clinical facilitator using a clinical skills observation checklist. Clinician skills were also assessed immediately following the scenario by the PT using an interpersonal skills observation checklist. Quantitative data was analyzed using a McNemar's test for significance for binary variables and a Wilcoxon signed rank test for related pairs for Likert scale responses.

Follow-up in-depth interviews were conducted with a subset of the clinicians at least six-months post training using an interview guide administered by I-TECH monitoring and evaluation staff.

Results

A total of 33 clinicians were included in the interpersonal skills assessment, 25 were included in the clinical skills assessment, and 15 were included in the follow-up interviews. Participating clinicians worked at HIV care and treatment facilities in Jamaica, Trinidad and Tobago, or Suriname. The quantitative data showed improvement in almost all areas related to

interpersonal skills and clinical skills (20 out of 23 [87%] and 42 out of 44 [95%] respectively) among clinicians from pre- to post-training. Clinicians demonstrated improvements in greeting patients, non-verbal communication skills, clinical expertise and exam skills, interpersonal skills, and skills related to patient-centered care.

Quantitative findings in specific areas were echoed in the qualitative data analysis, including use of preferred pronouns; show of empathy; comfort with the use of appropriate terminology and language; confidence and skill in taking medical and sexual history; and, screening for mental health, substance abuse, and violence. Qualitative data underscored that clinicians have maintained some changes in clinical practice after completing the KPP. These changes include improvements in giving step-by-step explanations during physical exams, using more direct approaches to interviewing and asking questions of the patient, and conducting digital rectal and anogenital exams more frequently.

Conclusions

The results of the evaluation indicate a high level of program effectiveness in generating positive changes in the knowledge, skills, behaviors, and attitudes of clinicians providing HIV care to KPs. The intensive KPP training model utilizing clinical simulation, feedback and discussion is a promising model that fosters understanding, empathy, and sensitivity towards KP issues.

1. BACKGROUND & INTRODUCTION

HIV prevalence in the Caribbean is estimated at 1.2%, with 340,000 persons living with HIV (UNAIDS, 2018). Among individual Caribbean countries and populations, HIV prevalence varies; however, some groups in the region exhibit disproportionately high rates of HIV across different countries. In Jamaica, Suriname, and Trinidad and Tobago, HIV prevalence among men who have sex with men (MSM) is estimated at 32.8%, 16.6%, and 31.6% respectively (UNAIDS, 2017; UNAIDS, 2018). HIV prevalence among transgender women is estimated between 25.2%-52.9% in Jamaica, and data on transgender women is not available for Suriname or Trinidad and Tobago (Logie et al., 2016; Figueroa et al., 2015). Although HIV rates among female sex workers are lower than MSM and transgender women, they are still higher than the general population – estimated at 2% in Jamaica and 10.3% in Suriname (UNAIDS, 2017; UNAIDS, 2018). In Jamaica, evidence suggests that healthcare workers lack training on working with MSM and sex workers, and one 2013 study observed doctors and nurses expressing stigmatizing attitudes and beliefs towards patients who were gay and/or doing sex work (Rogers et al, 2014). Regional expert working groups convened by the Pan American Health Organization (PAHO) during 2009–2013 identified healthcare provider training and awareness-building as critical needs for serving both MSM and transgender people in the Caribbean region (PAHO et al., 2010; PAHO et al., 2014).

Since 2016, the International Training and Education Center for Health (I-TECH) Caribbean program has been implementing a Key Populations Preceptorship (KPP) training program for clinicians. The KPP training program focuses on improving comprehensive HIV care and treatment for MSM, transgender women, and sex workers in Jamaica, Trinidad and Tobago, and Suriname. The preceptorship provides a skills-based opportunity for clinicians to gain experience working directly with key populations (KPs) in simulated clinical settings. Patient trainers are recruited from MSM, transgender, and sex worker communities and trained to play the role of patients in simulated case scenarios. Case scenarios were developed in partnership with representatives of the gay, bisexual, transgender, sex worker community; and HIV-positive community. During the two-day KPP training, clinicians complete between 8–12 simulated clinical scenarios and receive direct feedback from the patient trainers, as well as coaching and feedback from an expert clinical facilitator. Clinicians practice sexual history taking, risk assessment, risk-reduction counseling, and anogenital examination skills using anatomical simulators. Participating clinicians were from priority HIV care and treatment facilities that see a high volume of HIV-positive patients, and either volunteer or are selected by a supervisor. To participate in the KPP training program, clinicians had to be working at least part-time in caring for HIV-positive patients.

I-TECH carried out an evaluation of the KPP between May 2016 and March 2018 to determine the effectiveness of the program. Data analysis was completed during 2018–2019.

2. EVALUATION GOALS AND OBJECTIVES

The main goal of the evaluation was to determine the effectiveness of the KPP training program in changing knowledge, attitudes, and skills of clinicians in providing comprehensive care to KPs. The evaluation aimed to answer the following questions:

1. Does the KPP training program significantly increase clinician trainees' knowledge on providing comprehensive care to KPs including MSM, transgender women, and sex workers?
2. Does the KPP training program significantly influence/change clinician trainees' attitudes on providing comprehensive care to KPs including MSM, transgender women, and sex workers?
3. Does the KPP training program significantly increase clinician trainees' skills in providing comprehensive care to KPs including MSM, transgender women, and sex workers?
4. What is the clinicians' perceived impact of the KPP training program on their clinical practice of providing comprehensive care to KPs?
5. Were the clinicians able to retain key clinical knowledge they learned from the training?

3. EVALUATION IMPLEMENTATION AND COSTS

I-TECH develops annual workplans and monitoring and evaluation plans which are submitted to the funder as well as quarterly and annual progress reports. In addition, during the time period of this evaluation, the I-TECH Caribbean Senior Program Manager led regular team meetings, met weekly with the Monitoring and Evaluation Advisor, and participated in weekly performance monitoring calls with the HRSA project officer. The planning, implementation and oversight of this evaluation was discussed during these meetings.

The costs for this evaluation were primarily comprised of staff time who were already engaged to work on the I-TECH Caribbean program, such as the Monitoring and Evaluation Advisor, the Technical Officer for Training Development and the Senior Program Manager. The level of effort for each person varied across the evaluation period and ranged from 0-20% per month depending on which aspects of the study were underway. In addition to I-TECH staff time, the evaluation also included small portions of several local consultants' time during the course of the evaluation period, including the clinical facilitators, the KPP program coordinators and the patient trainers. I-TECH also engaged the services of a Monitoring and Evaluation Consultant in Trinidad to implement the follow-up interviews in that country and to assist with the completion of this evaluation report. Travel costs were minimal, but included one trip to Jamaica from the U.S. and ground transportation in Trinidad for the local M&E consultant. Total cost of the evaluation is estimated at US$75,000.

4. METHODS

4.1 Evaluation Rationalization

I-TECH implemented a program evaluation to determine the effectiveness of the KPP training in changing knowledge and skills of clinicians to provide comprehensive clinical care to KPs in an HIV care and treatment setting. The program also captured qualitative reflections from clinicians after returning to their facilities of practice. Evaluation data presented in this summary include results from a pre-/post-observational checklist of interpersonal skills, a pre-/post-observational checklist of clinical skills, and a summary of the qualitative follow-up interviews from a subset of clinicians who completed the KPP training program.

4.2 Evaluation Design

In order to yield the results of clinician skills uptake and skill application, the evaluation was designed to facilitate **observation** of the clinicians both before and after training, as well as **in-depth interviews** (IDIs) with the clinicians post training.

The quantitative evaluation utilized a pre- and post-training observation of clinician skills, rated by a clinical facilitator and by skilled patient trainers (see *Appendix 1* for an illustrative training agenda that shows how the pre- and post-training evaluation scenarios fit into the overall program). Each clinician participated in two interactive clinical scenarios with patient trainers immediately preceding the training and again immediately following the two-day training. These scenarios were similar to allow for comparison and followed a comparable format and structure to the core training, which required comprehensive history-taking, simulated physical exam, recommendations for follow-up testing, and identifying next steps. The pre- and post-training scenarios portrayed one MSM sex worker and one transgender woman, each with unique characteristics but similar pre- and post-training symptoms and concerns. Clinicians' performance during the pre- and post-training scenarios was rated by a clinical facilitator using a clinical skills observation checklist. Their skills were also assessed immediately following the scenario by the patient trainer using an interpersonal skills observation checklist. These observations allowed for quantitative data collection and highlighted the areas where additional resources and training could be provided to the clinician.

Follow-up IDIs were conducted with a subset of the clinicians at least six-months post training using an interview guide administered by I-TECH monitoring and evaluation (M&E) staff. These IDIs allowed for qualitative data collection.

4.3 Data Collection

Interpersonal Skills Checklist

I-TECH developed an interpersonal skills observational checklist using Likert scale questions. This tool was adapted from a checklist on communication and interpersonal skills used with

standardized patients in a primary care training program (Potter et al, 2015).[1] I-TECH's tool evaluated clinicians on facets of patient-provider interactions including greeting the patient, non-verbal communication skills, clinical expertise and exam skills, interpersonal skills, and patient-centered care (see Appendix 2 for a copy of the *Observation of Clinician Interpersonal Skills* tool). For each criterion evaluated, the patient trainer ranked the clinician on their skills using a Likert scale rating from *strongly agree* to *strongly disagree* for each item. All data was then entered into Catalyst, a web-based survey tool, and stored in a University of Washington (UW) database.

Clinical Skills Checklist

A clinical skills checklist, using both yes/no (binary responses) and Likert scale questions, was developed by I-TECH staff, drawing on key aspects and objectives from the KPP training program for clinical skills and knowledge that the training program sought to improve. Clinicians were evaluated on the following facets of patient interaction: establishing rapport, presenting complaint and history, social and sexual history, substance abuse screening, mental health assessment, violence and abuse screening, mucocutaneous exam, anogenital exam, laboratory tests ordered, management and treatment, risk-reduction counseling and patient education and referrals (see Appendix 3 for a copy of the *Clinical Skills Observation Checklist*). For each criterion evaluated, the clinical facilitator ranked the clinician on their skills using a rating scale from *exceptional* to *not done* (Likert criteria) or *yes/no* (binary) for each criterion. All data was entered into the UW Catalyst tool.

In-Depth Interviews

In late 2017 and early 2018, follow-up interviews were conducted with 15 clinicians: nine in Jamaica and six in Trinidad. Inclusion criteria for this sample included having completed the KPP training program at least six months prior to the time of the interviews, willingness to be interviewed and (in Jamaica) a convenience sample based on the feasibility of visiting the trained clinician's facility. Fourteen interviews were conducted in person and one by phone. I-TECH staff developed a standard interview guide who pre-tested it with one Jamaican clinician over the phone (see Appendix 4 for a copy of the *KPP Follow-Up Evaluation Interview Guide*). During the pre-test, the interview guide did not require significant changes and therefore the pre-test subject's data is included in the summary. The guide included questions related to recruitment for the KPP training program, feelings and thoughts during the KPP, main take-aways from the training, and any changes that may have occurred in clinical practice since returning to their facilities. The interviews were audio-recorded and transcribed for analysis by I-TECH M&E staff.

4.4 Training of Evaluators

The clinical facilitator, who completed the clinical checklist, and the patient trainers, who completed the interpersonal skills checklist, were trained and oriented to the data collection

[1] The Potter et al. tool was developed as part of an Objective Structured Clinical Examination (OSCE), and was based on the University of Illinois at Chicago Communication and Personal Skills Scale.

tools. Trainings were conducted separately for Jamaican and Trinidadian evaluators. I-TECH program staff reviewed each criterion in both tools, including examples of what would constitute a particular rating along the Likert scales. An active discussion was facilitated among the evaluators to ensure inter-rater reliability between evaluators filling out similar tools in Jamaica and Trinidad. Of note, all Surinamese trainees traveled to Jamaica and were assessed by Jamaican evaluators. All evaluators were also oriented to research ethics, methods to ensure all items in the tools were complete, and processes for quality control checks.

In addition to the evaluation orientation, all patient trainers and clinical facilitators attended a four-day Training of Trainers (TOT) workshop, conducted separately for Jamaica and Trinidad. During the workshop, patient trainers and facilitators were oriented to program objectives, roles and responsibilities, effective communication, and feedback skills. Participants worked in small groups to learn relevant patient character profiles. Participants rehearsed scenarios during the TOT workshop and again during two pilot training sessions. The patient trainers selected to serve as evaluators received additional coaching to portray consistent pre- and post-training evaluation scenarios.

Qualitative interviews were conducted by two members of the I-TECH M&E staff who were well trained and experienced with qualitative research techniques, interviewing skills, and research ethics.

4.5 Data Analysis

Quantitative data from the interpersonal skills checklist and clinical skills checklist was analyzed using Statistical Package for the Social Sciences (SPSS) software. Data was cleaned, coded, and prepared for analysis in Excel, and then analyzed with SPSS using a McNemar's test for significance for binary variables and a Wilcoxon signed rank test for related pairs for Likert scale responses.

The I-TECH staff who conducted the interviews transcribed verbatim the interview data from the audio recordings. Then, the M&E lead for I-TECH Caribbean analyzed the qualitative interview data. All data was analyzed in Atlas.ti.

4.6 Informed Consent

Written informed consent was collected from all participating clinicians included in this analysis for the pre/post observational checklists (see Appendix 5 for a copy of the *Consent to participate in an Evaluation of the "Improving HIV Care for Key Populations in the Caribbean" Preceptorship Training Program*). All clinicians participating in follow-up interviews gave verbal informed consent.

4.7 IRB Approvals

This program evaluation was determined to be non-research; therefore, no formal determination was sought by the UW Institutional Review Board (IRB). Local IRB approvals in Jamaica, Trinidad, and Suriname were not required. This decision was determined by representatives from the Ministry of Health (MOH) who were queried in each country regarding the program, evaluation design, and evaluation population. Based on the advice from local MOHs, formal clearance was not sought in any of the countries.

5. RESULTS

5.1 Evaluation Population

The evaluation population includes clinicians from Jamaica, Suriname, and Trinidad who completed KPP training between May 2016 and March 2018. The quantitative data included in this summary are from all clinicians in those three countries who had a complete set of data equaling four total clinical observations: two pre-training scenarios and two post-training scenarios. Clinicians with incomplete data were excluded for the purpose of this analysis.

Table 1: Data Collection Participants

Data Collection	Jamaica	Suriname	Trinidad	Total
Interpersonal Checklist	25	1	7	33
Clinical Checklist	12	2	11	25
Follow-up Interview	9	0	6	15

5.2 Pre- and Post-Training Evaluation Results

Interpersonal Skills Pre/Post Assessment

Clinicians were rated on five broad categories of skills in the Interpersonal Skills Observation Checklist, namely: greeting skills, non-verbal communication skills, clinical expertise and exam skills, interpersonal skills, and skills related to patient-centered care. Clinicians were rated using a five-point Likert scale that included *strongly agree, agree, neither agree or disagree, disagree*, and s*trongly disagree*. An option for *not applicable* was provided as well, though this was rarely selected. Each clinician was rated on 23 individual criteria falling under these broad categories. Of the 23 criteria on the checklist, 19 criteria showed significant improvements in a pre/post comparison of related pairs ($p = <0.05$ significance) and three criteria showed a negative significant correlation in a pre/post comparison, whereby the clinicians were rated lower in the post-training assessment compared to the pre-training assessment. One criterion was not significant. Table 2 summarizes the interpersonal criteria upon which each clinician was evaluated as well as the significance value of the Wilcoxon signed rank test.

Table 2: Results of the Interpersonal Skills Pre/Post Assessment

Criteria	Mean rank (pre)	Mean rank (post)	p value
I felt the clinician **greeted me warmly** and **respectfully** at the beginning of our session.	18.8	14.2	<.001*
The clinician **asked me** my **preferred name and pronouns** and used them correctly throughout the session	11.3	25.9	<.001
I felt the clinician had **good eye contact** throughout our session.	13.0	16.9	.001
I felt the clinician used **positive body language** throughout our session.	13.5	16.8	<.001
I felt that the clinician was **knowledgeable** about health issues that affect people like the patient I was portraying (e.g., MSM, transgender, sex worker, homeless, etc.)	17.0	18.1	<.001
I felt that the clinician's advice was **relevant** to the patient I was portraying (e.g., relationships, current sex practices, presenting complaint, etc.).	14.9	18.0	<.001
The clinician assured me that the information I share with him/her is **private and confidential**.	16.7	22.3	<.001
The clinician **informed me in advance of each step** of any exams, procedures, or assessments and ensured that I was comfortable before proceeding. (e.g., clinician narrated the procedure).	11.5	20.5	<.001
The clinician showed **a desire** to work with me	12.0	14.5	.001
The clinician showed **professionalism** throughout the encounter and never acted rude or annoyed with me.	10.5	12.8	.074
I felt that the clinician showed an **open, non-judgmental attitude** towards me.	12.0	15.6	<.001
I felt that the clinician handled personal or difficult topics with **sensitivity and respect**.	13.5	16.6	<.001
I felt that the clinician only **asked questions relevant** to my care.	22.7	14.1	.010*
I felt that the clinician **listened to my concerns** and was careful not to interrupt me while I was speaking.	14.0	16.0	.002
I felt the clinician showed **empathy** towards me.	13.5	20.2	<.001
I felt the clinician was careful to use **plain language** and not medical jargon when speaking to me.	11.0	17.5	<.001
I felt the clinician was careful to use **terms that were comfortable for me** throughout the session (e.g., describing body parts, etc.).	12.0	18.7	<.001
I felt that the clinician **discussed options** with me.	15.5	17.3	<.001
I felt the clinician **made sure that I understood** those options.	17.8	18.0	<.001
I felt the clinician **asked my opinion**, allowing me to make my own decision.	16.7	15.2	.005*
I felt the clinician **encouraged me to ask questions**.	17.3	20.5	<.001
I felt the clinician **answered my questions**, never avoiding them.	9.5	14.8	<.001
I felt the clinician **clearly explained** what I needed to know about my problem; how and why it occurred.	9.5	18.8	<.001

** Criterion shows a negative correlation between the pre and post assessment tests.*

Clinical Skills Pre/Post Assessment

Clinicians were rated on 57 clinical criteria in the following categories: establishing rapport, presenting complaint and history, social and sexual history, substance abuse screening, mental health assessment, violence and abuse screening, mucocutaneous exam, anogenital exam, laboratory tests ordered, management and treatment, risk-reduction counseling and patient education and referrals. For 37 of the criteria clinicians were rated using a five-point Likert scale that included *strongly agree, agree, neither agree or disagree, disagree*, and s*trongly disagree*. An option for *not applicable to this case* was also provided. For 20 of the criteria, clinicians were determined to have completed the task or not in yes/no responses.

Of the 37 Likert criteria, only 30 were included in this evaluation dataset. Seven criteria were excluded from the analysis. In some cases, clinical facilitators noted some criteria were not applicable to the particular cases used for the evaluation. In other cases, criteria were eliminated from the analysis as they were not priority areas for clinical teaching. Four criteria related to mucocutaneous exams were excluded from analysis; specifically: clinician washes hands and dons gloves, clinician indicates intent to conduct oral exam, clinician indicates intent to examine patient's skin, clinician indicates intent to examine patient's lymph nodes. Three additional criteria were also excluded from analysis: clinician ensures that chaperone is present; clinician discusses concerns, safety planning regarding potential for violence in the relationship; and clinician discusses concerns regarding gender transition. Of the 30 Likert criteria included in this analysis 28 criteria showed significant improvements in a pre/post comparison of related pairs (<0.05 significance) and two showed a negative significant correlation in a pre/post comparison, whereby clinicians were rated lower in the post-training observation compared to the pre-training observation. Table 3 summarizes the clinical criteria upon which each clinician was evaluated as well as the significance value of the Wilcoxon signed rank test.

Table 3: Results of the Clinical Skills Pre/Post assessment (Likert criteria)

Criteria	Mean rank (pre)	Mean rank (post)	p value
Greets patient and introduces self	9.5	14.7	<.001
Asked about patient's preferred name and pronouns and used correctly throughout session	0	18.5	<.001
Clinician obtains an adequate history of the presenting complaint	9.5	13.2	<.001
Clinician asks about current and past medications	9.7	15.0	.001
Clinician asks about family medical history	5.0	19.7	<.001
Clinician asks about: • Marital/relationship status • Occupation • Housing/living situation • Education	19.5	23.2	<.001
During sexual history the clinician asks detailed questions about sexual partners, including number, gender, etc.	6.0	18.2	<.001

Criteria	Mean rank (pre)	Mean rank (post)	p value
During sexual history, the clinician asks detailed questions about sexual practices (vaginal, oral, anal)	20.5	18.3	<.001*
During sexual history, the clinician asks detailed questions about protection (condoms, etc.)	7.0	14.8	<.001
During sexual history, the clinician asks detailed questions about past sexually transmitted infection (STI) history (ever had an STI?)	11.5	16.8	<.001
During sexual history, the clinician asks detailed questions about pregnancy (plans, contraception, etc.)	11.0	11.0	<.001
Clinician asks about current and past substance use	0	20.5	<.001
Clinician asks about most commonly used recreational drugs, including alcohol, tobacco, marijuana/ganja, or other stimulants (cocaine, ecstasy, etc.)	0	22.0	<.001
Overall assessment of mental health screening	0	22.0	<.001
Clinician asks patient about experiences of violence/abuse	0	22.5	<.001
Clinician screens patient for violent behavior	3.5	22.9	<.001
Clinician ensures that patient is comfortable	0	15.0	<.001
Clinician fully explains the procedure to the patient and ensures that patient knows what to expect	0	20.5	<.001
Clinician conducts abdominal exam	0	18.0	<.001
Clinician examines lymph nodes in groin area	0	20.5	<.001
Testicular Exam	0	20.5	<.001
Digital rectal exam	0	21.0	<.001
Anoscopy Exam	2	24.5	<.001
Clinician prescribes appropriate course of action for the patient to manage their HIV infection	16.0	9.1	.001*
Clinician prescribes appropriate antibiotics to treat their STI	9.0	14.2	<.001
Clinician prescribes appropriate follow-up to treat their condition (i.e. anal warts)	6.5	12.8	<.001
Clinician prescribes appropriate follow-up testing, test of cure	15.8	17.1	<.001
Discusses sexual health risk emphasizing condom use and protection from STIs	4.5	14.9	<.001
Discusses partner notification and testing	15.6	20.0	<.001
Discusses substance use as it relates to risk behavior	5.0	20.8	<.001

** Criterion shows a negative correlation between the pre and post assessment tests.*

Of the 20 binary response criteria, only 14 were included in this analysis dataset. Six criteria were excluded from the analysis and predominately fell under the referral category. These criteria were excluded from analysis due to a large number being noted as not applicable to a particular case. Of the 14 binary response criteria included in this analysis, 12 criteria showed significant improvements (p=<0.05) in a pre/post comparison of related pairs (<0.05 significance) and two were not significant in change from pre to post in analysis. Table 4 summarizes the clinical criteria upon which each clinician was evaluated as well as the significance value of the McNemar's test for significance.

Table 4: Results of the Clinical Skills Pre/Post Assessment (Binary criteria)

Criteria	% positive (pre)	% positive (post)	p value
Clinician asks if the patient is sexually active? / When did you last have sex?	5.1%	94.9%	.022
Asks how many sexual partners have you had in the last 3 months?	8.3%	91.7%	.013
Clinician ask the patient the gender of their partners?	12.1%	87.9%	.031
Without any prompting the clinician asks about patient's current mood	0%	100%	<.001
Clinician asks over the past 2 weeks, how often has the patient had little interest or pleasure in doing things?	16.7%	83.3%	<.001
Clinician asks over the past 2 weeks, how often have you felt down, depressed, or hopeless?	0%	100%	<.001
Clinician asks the patient if they have wished they were dead, or wished they could go to sleep and not wake up?	14.3%	85.1%	<.001
Clinician asks if the patient has had actual thoughts of killing themselves?	0%	100%	<.001
Urinalysis	12.5%	87.5%	<.001
Syphilis screening (VDRL/SD Bioline)	100%	100%	ns
HIV screening	100%	100%	ns
Hepatitis B	16.7%	83.3%	<.001
Herpes Simplex Virus (IgG)	33.3%	66.7%	<.001
Appropriate lab tests ordered	0%	100%	<.001

5.3 In-Depth Interview Results

Beginning in November 2017, interviews were conducted with 15 clinicians: nine in Jamaica and six in Trinidad. All interviewees had completed the KPP training at least six months prior to the interview. In Jamaica, all of the clinicians interviewed were female and reported belonging to the following age categories: 25-34 (4), 35-44 (4), and 45-54 (1). They had a wide range of clinical experience from 2-20 years (median of 6) with anywhere from 1-10 years (median of 4) in working specifically with HIV patients. In Trinidad, five of the six clinicians were male and reported the following age categories: 35-44 (4), 45-54 (1), and 55-64 (1). Interviews from Jamaica and Trinidad were analyzed together and no major differences in themes were identified across the two countries. No follow-up interviews were completed with trainees in Suriname as they did not meet the 6-month post-training window at the onset of the interview period. Results are reported together and any minor differences between the two groups are reported as such in the combined description of results.

Experience Working with Key Populations

Fourteen clinicians (93%) reported some experience working with members of KPs prior to the preceptorship training program. These clinicians reported the greatest exposure to patients who were MSM and those engaged in sex work. Two clinicians (13%) reported exposure to transgender patients prior to the preceptorship. However, clinicians acknowledged that they may have been treating members of KPs that simply did not disclose belonging to a KP group. Three clinicians in Trinidad (20%) expressed a higher level of exposure to KPs, reporting that they were exposed to members of these populations everyday as part of their work at their current facility. Three clinicians (20%) reported greater awareness of members of KPs among their patients after participating in the KPP training program. These clinicians noted that they are asking more in-depth and sensitive questions during the client interview process; that other staff members at the facility are referring more members of KPs to this clinician knowing that the physician was trained at the KPP; or, the clinician is requesting to see more KP patients. Other clinicians reported seeing the same number of KP patients before and after KPP training.

KPP Training Program Recruitment, Expectations, and Reservations

Twelve clinicians (80%) reported being recruited for the KPP training program through their direct supervisor or a senior administrator at their facility who had received a letter of invitation from I-TECH along with a description of the training, its purpose, and the training modality. While clinicians reported knowing in advance that the training was focused on KPs, several clinicians reported complete surprise at the interactive format of the training, stating that they expected a classroom-style, larger group training where someone would be giving presentations on HIV care for KPs. These clinicians did not anticipate a one-on-one training experience simulating a patient-provider interaction.[2]

> *"[I was told to go] on a specific day… to a specific place and I thought … I would be in a room with [other] persons and someone would be presenting something" (P5, IDI).*

> *"I thought it was a group setting. [When] I realized it was one-to-one …. it was a big shock…… Once I found out what it was … I was actually looking forward to the next day. … I was there early and I was like 'I am READY.'" (P4, IDI)*

Twelve clinicians (80%) reported no reservations on attending the KPP due to not having an idea of what to expect or acknowledging there were still areas of KP care about which they would like to learn.

Experience during the KPP Training Program

All clinicians reported an overall positive training experience, despite feeling shock, nervousness, discomfort, and an inability to know the 'right' questions to ask in the beginning. These clinicians

[2] I-TECH's invitation letter provided a description of the training that explained the one-on-one clinical simulation format; however, it is possible that the invitation letter was not shared from the supervisor at the healthcare facility to the direct trainee, or that the trainee did not read the invitation letter.

seemed to become more confident in their interviews and skills in working with KPs as they progressed through the training.

> *"Honestly, when I just started and I realized [the clinical facilitator] is observing me with a mock patient and I am being judged on my clinical skills… I was very nervous at first because I didn't expect any of it. … It was a little unsettling. But then I just tried to zone out and pretend someone else was not in the room and it was a real patient." (P5, IDI)*

> *"The first day it was like … being thrown out to the sea to see how well you did. I sank. I was sick, because I was very uncomfortable just asking questions that really needed to be asked for these particular persons of the key populations. … But, once the patients, the actors and [the clinical facilitator] came and explained …'this is how you do it' by the next time around I was swimming. So it was a really good experience." (P4, IDI)*

> *"They didn't explain anything much. They said 'you have to experience it.' ... When I went out there for two days… man that was a rigorous kind of training. … The way I was speaking to [my first patient]… was completely different from the last one. I think we had 8 or 10 patients and by the time I reached my 10th patient … I was handling the situation …completely different. Even [the clinical facilitator] was saying 'you handled it excellently by the end of the day.'" (P9, IDI)*

> *"I expected to be nervous. The first session I knew I was going to fumble and that was what I did, but I was trying to figure out 'How do I go about this thing?'. But the more sessions you went into, it briefed you on everything else…. You got more comfortable and more fluent." (P14, IDI)*

Clinicians found the feedback sessions following the scenarios to be a particularly helpful forum for asking questions of the patient trainers and fine-tuning skills related to interviewing patients and taking a comprehensive sexual history. Clinicians said that the one-on-one nature of the feedback sessions allowed them to be more comfortable asking sensitive questions of their patients.

> *"I think the dialogue you can have with the members of the key populations afterwards, you know, the debriefing sessions. I think that was really helpful." (P2, IDI)*

> *"Those [feedback sessions] were very helpful - very, very helpful - because it was an open atmosphere. I could ask questions easily without someone saying, 'why are you asking that, you are too inquisitive.' It was a good opener." (P3, IDI)*

> *"The feedback was very good to direct me to handle certain topics that I was not familiar with. … [I learned] certain terms that I had never heard before that enabled me to [have] better communication with persons in that population." (P5, IDI).*

> *"Once [the patient trainers] started speaking or giving me … the feedback it was a wonderful thing because they [came out of the character] and they said 'no, this is how it*

is' and 'this is how you make persons feel comfortable.' They were able to give me a very concise practical way of saying 'no don't do this.' They were very honest, [not] to the point… where I was uncomfortable, but I was comfortable with them giving me the feedback so that I could know … how I move forward the next time." (P4, IDI).

Key Takeaways from the KPP Training Program

When clinicians were asked about their biggest takeaways from the KPP training, several common themes emerged. The most common theme was gaining a better understanding of the unique needs and experiences of patients from KP groups. Clinicians reported a greater sense of empathy towards the reservations and anxieties that many KP patients carry into a patient-provider interaction. Several providers commented that this deeper understanding changed their approach with these patients.

"The take away was the attitude a lot of healthcare providers give to [KPs] and the reservations they have when they come to access care. I can honestly understand more of what [KP patients] are going through and why they might not come and have such poor healthcare seeking behaviors." (P1, IDI)

"The one patient I had [difficulty] communicating with was my aggressive MSM patient who came in with [an] anal discharge complaint and I couldn't understand why a patient would come to me and be aggressive because even if you are coming [because you stubbed] your toe, I am still going to speak to you nicely. So I couldn't wrap my head around that. [The training] has opened my eyes up. Patients might not always be so pleasant, they may not want to come, and when they do come, they might not be the happiest camper, so you really have to just try to gauge the situation and tailor your questions and answers to that particular patient." (P3, IDI)

"[The training taught me] about how very sensitive individuals are in those populations about seeking healthcare and about the choice of words the clinician uses. That was the biggest [takeaway] - Just to be aware of the choice of words and how we interact with persons in that population." (P5, IDI)

"What I believe really stood out in my mind was that … any patient, especially [KP] patients, have initial hesitation and fear about talking and coming out and opening up either to a doctor or a counsellor or to a nurse, or whatever staff. They will always enter with a slightly defensive kind of mode; they are also not so amicable in the beginning, but then you make them comfortable after a few minutes and then they realize 'this guy is being for real.'" (P13, IDI)

Another common takeaway from the training among the clinicians was a better understanding of history taking and interviewing patients. Clinicians expressed a better understanding of the questions to ask, terminology to use, and a better approach to more direct questioning and interviewing.

"I can give you an instance where in my private practice I take a sexual history for everyone I meet and this one particular time I asked a gentleman [if he had] a partner. He said 'yes'. I [asked if the] partner [was] male or female and he … said [surprised] 'you know you are the only doctor who has ever asked me that?' … And he said 'male'. So he looked up at me. And I said 'OK. Do you use a condom?' And he said 'so you are not going to ask me why am I gay?' And I said 'no.' (laughing) I want to ask you 'do you use a condom?' … This is [a practice of sexual history taking] after [completing the training]. [Before] I would always ask 'do you have a girlfriend?' Or 'do you have a boyfriend?'" (P10, IDI)

"One thing we were discussing the other day is males seem to be very shy in saying what their problems are, so I have learned now to ask more directly 'do you have any problems down there?' Because most people don't want to expose themselves to let you look at them." (P11, IDI)

Several clinicians described a better understanding and approach to transgender healthcare after completing the KPP. Two clinicians (13%) stated that they never encountered a person that they knew to be transgender prior to the preceptorship and had very little understanding of transgender health issues, approaches that work best for transgender patients, and services and referrals available to transgender patients in their country.

"Being … comfortable addressing transgender populations - I think that was … one of the things that was a good takeaway for me. One of the things that stuck is using the preferred pronouns because … I was not familiar with persons of the transgender population before, so … just being able to ask somebody, 'what is your preferred gender, how do you want to be addressed?', and using that in the clinical practice, that is something I have actually accepted and have started doing in practice daily." (P2, IDI)

"I really didn't realize that Jamaica has such a high number of transgender [persons]. I did not know. And I did not know that we provide hormone therapy and that there are specific persons to refer patients to. I was not aware of that before." (P5, IDI)

Less prevalent takeaways included learning to conduct anoscope exams, reminding the patient about confidentiality, taking a more holistic approach to KP care, including adding in social elements into the clinician exam and better knowledge of referrals and social services for KP patients.

Experience with Anogenital Exams Taught in the KPP Training Program

Most clinicians were enthusiastic to learn about the anoscope exam. Seven clinicians in Jamaica (78%) had experience with digital rectal and anogenital exams but had never performed an anoscope exam. Two Jamaican clinicians (22%) reported that they knew how to do all the exams in the preceptorship, but one (11%) reported that she regularly referred anoscopy exams to surgeons. In Trinidad, all of the clinicians were familiar with the digital rectal and anogenital

exams, and three (50%) had previously done anoscope exams. A few clinicians expressed that the KPP helped them to refine their exam skills on examinations that were rarely used.

Changes in Clinical Care since Completing the KPP Training Program

A primary objective of the follow-up interviews was to determine, from the clinician's perspective, if there had been any changes in the clinical care they provided post training. All clinicians were asked to describe any changes they had made in provision of care after completing the KPP. Interviewers probed most clinicians for the following categories of responses: interpersonal interactions, sexual history taking, risk assessment and/or risk reduction messaging, STI screening, anogenital exams, mental health assessments, and referrals.

Interpersonal Interactions

The most common themes to emerge for changes in interpersonal interactions with patients were having a greater sense of comfort, being more knowledgeable of the terminology that pertained to KPs, and being more patient with KP clients. Six clinicians (40%) stated that they were more comfortable during their interpersonal interactions with KP clients. One of these clinicians attributed this greater sense of comfort to being exposed to KPs during the training.

> *"Because of the exposure, if a patient says [what sounds like an obscene term] to me I am not going to be as surprised, or shocked. So you kind of get sensitized to the matter so now you don't have that big shock reaction and the patient is confused and offended. I think I am more relaxed about the whole idea because I know it exists and I know what it entails so I don't have that reaction anymore." (P6, IDI)*

Five of the clinicians (33%) spoke about feeling more knowledgeable with terminology relevant to KP groups which has improved their interpersonal interactions.

> *"Well I am much more aware about how to address persons, to be sensitive to their needs, … [both] clinical and interpersonal. For instance, a person will tell you how they want to be addressed. And also, to be familiar with the different terms that they use so it has changed on how I deal with them on an interpersonal level." (P7, IDI)*

> *"I am a little more knowledgeable with certain terminologies depending on the type of patient. [For example, using words like] 'top' [or] 'bottom'. Things like that I wasn't so comfortable with." (P3, IDI)*

Two clinicians (13%) spoke of being more patient with their KP clients and one gave the following example:

> *"Sometimes I'm seeing a patient for the first time and I would like to examine them, and if for any reason the patient doesn't want to be examined I would have been very dismissive and I would have said 'you know what?, That is your problem.' But now I understand and [say] 'Ok you know what? When you are ready you can come back and I give you an open appointment and in the meantime you can use x, y, and z until your open*

appointment comes.' So generally, I am a lot more patient if they don't want to be examined and if they don't want to give certain information I don't press. I tell them when they are ready they can come and talk to me anytime." (P1, IDI)

Less common interpersonal changes mentioned by clinicians included being more confident, maintaining better eye contact and tailoring the interaction to the client's needs for that appointment.

Sexual History Taking

Clinicians described changes in their approach to sexual history taking since being trained at the KPP. Clinicians reported asking more questions during the sexual history, not being afraid to ask uncomfortable questions, and asking questions more directly.

"I think that [sexual history taking] has improved a lot. … I am not afraid to ask the questions. It's now become part of the history and that is what it is." (P2, IDI)

"Sometimes the tendency is to ask 'do you have a sexual partner?' and then if there is a male in front of you, 'how is she doing?' So, now I tend to make sure I don't put a gender onto the person. [For example,] "So do you have sexual partners?, males or females?, both partners? which one do you prefer?' … I used to ask about the sexual history before, but now I make sure I'm more open about it, more inclusive, and get more in depth about how many partners, how long [it has] been. I don't want to seem very intrusive you know, making sure they know I don't want to get into your business, but I want to make sure you're protected." (P11, IDI)

"After the training [sexual history taking] has been completely different. Now I have a general understanding about how to ask the questions, how to make them feel comfortable so that they can answer the questions, and the overall experience has been much better. I never used to ask about anal sex. Now it's like asking 'How are you?' [laughing]." (P4, IDI)

"[Sexual history taking] is a lot easier because sometimes … coming from [a] very conservative religious background … it is difficult sometimes to get [some sensitive questions] out. That was part of the initial issue I had, words used to stumble out of my mouth like bricks falling down, … not falling out fluently. That practice of doing it on a regular basis and how to ask such [questions] without being insulting or without being fearful that you're insulting the patient." (P14, IDI)

Risk Assessment and Risk-Reduction Messages

Approximately 50% of the clinicians reported improvements in risk-reduction assessments and/or risk-reduction counselling with their KP clients. One clinician (13%) described how his/her approach differs after compared to before being trained at the KPP.

"I give a lot more advice on precautions. Initially I would have told [my patients] 'you know you can't be having sex with ten different people' and now I try not to do that too much.

So now I say, 'if you are going to, you need to be very careful, you need to get tested regularly, you need to use a condom.' So I try not to be too judgmental and tell them what to do and that it is wrong and they need to be with one partner. I don't encourage them, but I try not to dwell on that too much because if that is their way of life they are not going to want to come back to me because they will say 'that's all she [dwells] on you know?' So, I will just explain to them that they need to be very careful. I also advise them on what is going on out there and also ask them about drug and alcohol use during sex because [the clinical facilitator] had put a lot of emphasis on the mental state during unprotected sex if they are using drugs and alcohol." (P1, IDI)

The other 50% of clinicians said their approach had not really changed and several cited time limitations as a major reason why risk assessment and risk-reduction messaging were not done as comprehensively as they would like. Some clinicians also expressed this challenge in regards to more in-depth sexual history taking and conducting mental health assessments. Most of these clinicians expressed a desire to integrate these skills more fully in their clinical practice, though their time limitations and client load did not allow it.

"I still try to do some amount of risk assessment, especially when it is a STD complaint, but again, the volume of patients does not allow a lot of time for you to interview them the way you would like. Because you can't just ask the questions, you have to leave time to counsel and educate." (P6, IDI)

STI Screening

Clinicians reported no major changes to their STI screening practices after the KPP. Of the two (13%) that reported any differences in their STI screening practices, one now recommends the VDRL test for syphilis once a patient is sexually active and the other more frequently screens their hospitalized HIV-positive patients for STIs.

Anogenital Examinations

Five clinicians (33%) reported not doing anything differently in how they provided anogenital exams, with the same number reporting that they changed the way they provided these types of physical exams. The remaining one third did not specifically refer to anogenital exams as the question addressed a number of different skills. Nine clinicians (60%) reported that they had no anoscope equipment and if they did, would likely be conducting more anoscope examinations. Clinicians lacking equipment expressed their frustration and felt that they may lose the new skill they were just taught in the KPP if they were not regularly practicing it.

Of the clinicians that did report changes in their approach to anogenital examination one reported having developed a better technique due to what the facilitator taught in the training, particularly regarding transgender anogenital exams.

"I'm a little more comfortable with things… [The clinical facilitator] showed me a better technique [on] how to do it. A more solid flow, especially if you have someone who is transgender, how best to approach a patient like that and examine them so that they are

comfortable. That's the only thing really, but I haven't had anyone to practice on." (P3, IDI)

The clinician described the technique further:

"What [the facilitator] recommended was that you begin with palpitation of the nodes and that you are very careful if the patient has taped the genitals, things like that, and making sure the patient is totally comfortable and making sure the patient is ready for you to [examine the genitals], knowing the right terminology to use, knowing if the patient associates as a man or woman and the right gender and description of the genitalia, things like that. And I am a lot more comfortable with anoscopy for sure." (P3, IDI)

Two other clinicians described conducting anogenital exams more often and one described conducting more anogenital exams due to asking better/more questions during sexual history taking that resulted in a need for further examination.

Mental Health Assessments

Of the seven clinicians (47%) that reported a change in how they approached mental health assessments, most reported either doing them more often, more thoroughly or both.

"I do conduct [mental health assessments] more [often] now. I don't conduct them on every patient, but usually there are history taking cues, like their interpersonal relationships, that makes me say 'maybe this is someone [with whom] I need to delve [into some issues] a little bit more' or they will make a [particular] comment and I will think 'that's a little [odd].'" (P2, IDI)

"Previously it was more [about picking up cues], but now [asking about mental health is] more standard." (P14, IDI)

Providers described limitations to conducting mental health assessments, including lack of time to conduct them, lack of available resources, and a shortage of skilled personnel such as psychologists who could be enlisted to support a client if they required a follow-up visit with a mental health professional.

"So now I do ask about [mental health] and about drug abuse. … I assess for drug abuse and depression, definitely, even though sometimes when you [are familiar with] your patients you can tell when they are different, but I do ask about suicide ideation and suicide attempt. The fact is, even though we do the assessment, resources are lacking … in terms of the follow up and just getting the persons the necessary assessment that is needed immediately." (P7, IDI)

Referrals

Clinicians were asked to share any changes in their referral practices. Of those, three clinicians reported referring patients more often to social workers, contact investigators, and other professionals for services including psychological support, partner notification, and contact

tracing. Three clinicians reported no change in referral practices. The remaining interviewees were not asked about changes in their referral practices or they offered inconclusive responses.

Recent Clinical Experience Where KPP Skills Were Used

Clinicians were asked to describe a recent clinical experience where they used skills learned in the KPP training program. Most experiences described by clinicians highlighted a combination of skills learned in the KPP training.

> *"Just last week… at the psychiatric clinic, we had a patient who is an MSM, who is part of [a] group who was diagnosed one week prior with HIV and he had a VDRL reactive [indicating he tested positive for syphilis]. He was very stressed because [he had] been living on his own since he was 10 years old, was [involved] in sex work and he'd been battered and bruised all over. … He just felt like the whole world was against him and he didn't want anyone to examine him, so I took him aside and I interviewed him and I explained to him what I was going to do first [which] was examine him, because he had also mentioned he had some warts, and he said 'you know, the doctors were so judgmental.' Every time he would try to see somebody they would talk to him about his life and tell him that he needed to clean up his life. He said they were telling him what to do and no one was helping him. So I spoke to him … and explained … what I was going to do and he said he felt very much at ease and this was the first time he'd been examined by a doctor like that." (P1, IDI)*

Another clinician described conducting an examination taught in the KPP and discovering an extensive problem as a result and making an appropriate referral.

> *"I can recall a patient not expressing [a] problem with anogenital warts, though now knowing that that is needed, particularly in that population [of] MSM, I did the examination and it was quite an extensive problem, so that knowledge made a big difference with that patient because I could refer for further care." (P5, IDI)*

Another clinician described using more direct interviewing skills with a long-time patient and discovered the patient had anal warts.

> *"A few weeks ago, I [had a patient with] a very, very huge wart that we thought might even be cancerous and we had to send him to the hospital. He was admitted immediately. [He had seen] all of us, all the nurses and doctors and … he never told anybody that he had [warts]. Actually, when he came in he told me had some pain on his left thigh. So, I asked him if he had anything in his genital area and he [said] he had a sore … that had just become a little bit more widespread. I asked him if he would mind if I had a look at it. And I asked him why he didn't tell us all these years he'd been coming to the clinic. … He claimed he [didn't] know when it started. So apart from the training and the personal*

experience with the clients, I've learnt that it is important to ask directly if there is any problem down there and if I can have a look at it and see." (P12, IDI)

Two clinicians described how attending the KPP training influenced the clinical care they provided to transgender patients. One described feeling more prepared and comfortable discussing hormonal therapy and gender affirmation procedures with a transgender patient. Another clinician went into greater detail, describing the following interaction:

"I had [a transgender patient] that was actually going through the hormonal treatment before she discovered that she had the … HIV virus. So, she had to stop the hormonal treatment. … I sent her to our endocrinologist here. I've not seen her since … to know what level of success she may have achieved, but I discussed the case with the endocrinologist and he was willing to provide assistance. … The training truly opened my eyes. … The training that the physicians themselves require, the endocrinologists and gynecologists require, to be able to [provide clinical care to a transgender patient]…I didn't know all that, so the training opened my eyes." (P12, IDI)

Upon prompting for clarification by being asked if he would have consulted with an endocrinologist prior to the training, this clinician further explained that prior to the KPP training, he would not have known to make a referral to an endocrinologist for this patient.

"No, I may not have done that [endocrinology referral], I would not have done that. Because I said the training truly opened my eyes." (P12, IDI)

Feelings about Providing Care to KPs

Clinicians were asked if their feelings had changed providing care to KPs since the preceptorship training. Eight clinicians (53%) reported feeling more comfortable, empathetic and sensitized to the needs of KPs with five clinicians (33%) expressing that their feelings about KPs had not changed as they were previously comfortable with KPs.

"Now I am aware of the different groups, the different practices, and different concerns that they have. … I believe I am more sensitive to the entire matter, like I don't have any feelings of discrimination or anything like that. Just like every other patient, I just handle their complaints and I just do the very best thing I can do for them. And I always try to include education on that interview. … I have to tell them something to change, influence or encourage some different thing." (P6, IDI)

Another provider described how the KPP training helped prepare him/her more for discussions with KP patients. As a result, this clinician felt more prepared and comfortable with KP patients.

"I feel more prepared. … One of the problems that I had [was that] I assumed [a gender transition] was just usually male to female and that [was] it, everything [for that patient's sexual behavior] is vaginal intercourse. And after the interaction at the preceptorship, I realized 'I really need to ask'. Because yes, there are some males they do have vaginal

intercourse, yes, but they do also have anal sex with men. And there are those that are not going to come out and tell you so. I have to be asking a whole lot more questions because it's not in the box anymore. You have to think outside of the box. I am now more prepared, I am now more comfortable because I know these are questions I need to ask and I am able to perform whatever I need to do." (P4, IDI)

Changes at the Facility after the KPP Training Program

Clinicians were asked if they tried to initiate any changes at their facilities after the KPP training and three main themes emerged. The most common change providers tried to initiate was sensitizing other staff at their facility on some of the issues they learned in the KPP training. Some clinicians shared information from the training with other clinicians and some provided the information to other cadres and auxiliary staff at the facility. Several providers spoke about advocating for changes to the intake form to incorporate more in-depth sexual history questions, including asking about anal sex. Providers advocating for this change were referred to higher levels of their MOH in order for these changes to be considered. A few clinicians spoke about advocating with the other clinicians and nurses at their facility to conduct more anal exams, and several advocated for the procurement of anoscopes.

Challenges in Providing Comprehensive Care to KPs

Clinicians were asked if they were still experiencing challenges in providing comprehensive care to KPs. Challenges identified included high staff turnover where clinicians who were trained in the KPP program or sensitized by trained clinicians may have moved on to other facilities. In addition, respondents noted stigma and discrimination towards KP clients by other clinic staff and patients waiting to be seen at the clinic. The stigmatizing actions seemed to particularly affect patients who were transgender or MSM. It was noted that these experiences can negatively affect the KP patient prior to the patient being seen by a trained clinician. Clinicians suggested that I-TECH incorporate training of other cadres into the KPP program. Some clinicians also reiterated that short staffing and high patient loads affect their capacity to provide comprehensive care in areas of sexual history taking, mental health assessments, and risk-reduction messaging. Lastly, several clinicians listed the lack of equipment (e.g. anoscopes) limits their ability to conduct comprehensive anogenital examinations.

Additional Training Desired

Clinicians were asked if they needed or desire additional training with KPs. Eleven clinicians (73%) were eager for more KP training but were not specific about the area of interest. Six of the total number of clinicians interviewed (40%) felt that there was need for additional training addressing the transgender population, particularly hormone therapy and the process of gender transition.

6. DISCUSSION AND CONCLUSIONS

The evaluation identified some critical successes for improving clinician skills in working with KPs using the interactive structure, format, and content of the KPP training program. In addition, the evaluation raised valuable considerations for program improvements.

The results of the evaluation indicated a high level of program effectiveness in generating positive changes in the knowledge, skills, behaviors, and attitudes of clinicians providing HIV care to KPs. Program effectiveness can be credited to the combination of interactive teaching and learning methods, as well as the strategic delivery of content in a way that evokes understanding, empathy, and sensitivity towards KP issues. Evaluation results underscore the effectiveness of using a training structure that encompasses the following:

a) One-on-one, face-to-face interaction with the population of interest;
b) Feedback mechanisms that allow that population to clarify, explain, teach and advocate for specific considerations;
c) Opportunity for a trainee to make repeated mistakes, seek clarification, and self-correct; and,
d) A safe space for learning for all parties.

Quantitative data analysis identified some evaluation items with negative findings, where clinician performance declined between the pre- and post-training scenarios. In the interpersonal skills checklist, patient trainers rated clinicians lower in the area of warm and respectful greeting after the training (mean rank of 18.8 pre-training and 14.2 post-training). Interestingly, the same item did not decrease when rated by the clinical facilitators (mean rank of 9.5 pre-training and 14.7 post-training). Some aspects of patient-centered care also showed a negative trend in the interpersonal skills checklist. Patient trainers noted a decrease in asking questions relevant to the patient's care (mean rank of 22.7 at pre-training and 14.1 at post-training). Asking the patient's opinion also decreased (mean rank of 16.7 at pre-training and 15.2 at post-training). In the clinical skills observation, there was a slight decrease in one element of sexual history taking (asking about detailed sexual practices); however, this component was rated highly in the pre-training assessment suggesting that clinicians were performing well in this area before the KPP training (mean rank of 20.5 pre-training and 18.3 post-training). Other components of sexual history taking (i.e., questions about partners, prevention, past STI history, and pregnancy/parenting) all improved from pre- to post-training. Clinician performance in prescribing the appropriate course of action for managing a patient's HIV infection (mean rank of 16.0 at pre-training and 9.1 at post-training) also declined. The study team's hypotheses regarding these decreases include clinician fatigue at the end of the training, seeing the same patient trainer again (i.e., novelty of the overall experience had passed even if the patient trainer was acting as a new client), and inadequate orientation of patient trainers and clinical facilitators to the interpretation of these specific criteria; however, these theories cannot be confirmed with the available data.

Consolidated below are several items demonstrating the usefulness and benefit of the training model to achieve the program objectives. Both the quantitative and qualitative data support the following conclusions:

- ***Improved Interpersonal and Clinical Skills*.** The results of the IDIs showed consistency with the quantitative results of the pre- and post-training observational evaluation scenarios. The quantitative data showed improvement among clinicians from pre- to post-training in almost all areas related to interpersonal and clinical skills (20 out of 23 [87%] and 42 out of 44 [95%] respectively). The areas that stood out in that analysis and were then specifically referenced in the IDIs included: using preferred pronouns; showing empathy; being comfortable with use of appropriate terminology and language; having confidence and skill in taking medical and sexual history; and, screening for mental health, substance abuse and violence. Having patient trainers score for interpersonal skills, clinical facilitators score for corresponding clinical skills, and I-TECH M&E staff to conduct IDIs to understand the perspective of the trained clinician allowed for better data triangulation and validation to determine where the key areas of improvement lay.

- ***Increased level of comfort and confidence with KPs***. The interactive training design that incorporated repeat exposure to KPs and scenarios, as well as a feedback mechanism for patient trainers to help guide and shape the clinician's actions, fulfilled an important objective of the training. Clinicians described a growing level of comfort and confidence with each successive interaction, regardless of their level of comfort or confidence at the start of the training. Clinicians openly credited the feedback sessions with making them feel more comfortable asking KPs sensitive questions. Further indications of a good level of comfort were that clinicians reported there were still areas of KP care about which they would like to learn. An important training feature for increasing comfort levels was allowing the clinician the opportunity to debrief after a scenario and to engage in open dialogue with the KPs, clear up misconceptions about KPs, and learn more about the issues of importance to them and how it affects their healthcare-seeking behaviors. Responses indicated that this feature was highly valued by clinicians.

  According to clinicians, the level of comfort they felt helped to improve sexual history taking, increased their awareness of appropriate questions and terminology, and enabled them to employ a more direct approach to questioning and interviewing.

  It was also noted that at the onset of training, physicians were often forced to confront levels of discomfort, fears, anxieties, and nervousness all stemming from a variety of sources, among these being: receiving little or no knowledge of what to expect, dealing with new subject matter, being observed and critiqued, and learning from the 'patient.'

- ***Increased understanding and empathy for KP patients***. Described as one of the biggest takeaways from the KPP training, clinicians articulated a deeper understanding about how patients' previous bad experiences of stigma, discrimination, and/or marginalization

could negatively influence the patient's expectations of the health care system and provider before a patient-provider interaction even begins. This helped the clinician to have more empathy towards the patient as they reflected on previous interactions with patients they did not understand, attempted to rationalize these situations, and set intentions to exercise more patience with these clients in the future.

- ***Developed or improved sensitization to KP health concerns (including transgender health)***. Many clinicians demonstrated improved knowledge of the health and psychosocial concerns of transgender women following the training. Several clinicians expressed that they had minimal or no (known) prior experience working with transgender patients and knew little to nothing about hormone therapy or appropriate referrals prior to this training. After the training, the most popular request for additional training by clinicians was in transgender health and hormone therapy.

- ***Experienced benefits extending beyond immediate training*****.** An effective clinical training program is one that maintains improvements in clinical practice when a provider returns to their workplace. The KPP training program aimed for clinicians to adapt and integrate effective approaches to KP care into general practice beyond the immediate training period. Clinician recounts about recent applications of skills learned in the KPP training suggested longer-term benefits of this intervention, not just immediate benefits post training. The skills that resonated and were applied include: conducting physical exams on the patient while explaining actions step by step; using more direct approaches to interviewing and asking questions of the patient; and conducting digital rectal and anogenital exams more frequently. A key point to note is that the training offered opportunities for clinicians to learn and apply new skills but the KPP training was also readily received by clinicians who had previously been exposed to a given skill (such as comprehensive sexual history taking, digital rectal exams, and/or anoscopy) as an opportunity to further practice and hone their skillset. At the post-training follow-up, it was found that mental health assessments were being conducted more often, more thoroughly, or both.

- ***Identified persistent, system-level challenges*****.** After training, clinicians identified that they are limited in practicing some of the targeted skills. Some limitations were due to time constraints during a typical clinic day with high patient volume (e.g., detailed sexual history taking, risk assessment, and risk-reduction counselling) or there was a lack of anoscopy equipment to conduct anoscope exams. At the time of writing this evaluation report, the Jamaica Ministry of Health and Wellness has pledged to supply anoscopes to all HIV care and treatment centers to facilitate improved anogenital health screening.

Evaluation results show that the KPP training, both in design and execution, achieved the outlined objectives and had a positive effect on changing not only the knowledge and skill of physicians to engage with and treat KPs, but on their behavior, attitudes, and practices as well. The benefits

of this training include a cadre of clinicians at HIV treatment sites who are equipped to provide comprehensive, quality care to MSM, transgender women, and people who engage in sex work.

7. LIMITATIONS

This outcome evaluation had several limitations:

1. The design of the training model emphasized one-on-one interactions and the target audience yielded a small number of participants for this evaluation (n=33 for quantitative analysis, n=15 for qualitative analysis). Within the study group, numbers were too small to discern any statistical associations, differences by country, or other characteristics (such as gender, years of clinical experience, etc.).
2. The study design did not allow for a control group, which limited the team's ability to draw conclusions about the training intervention's effectiveness.
3. The short training duration of two days could lead to higher performance in the post-training evaluation scenario due to familiarity with the assessment format.
4. Although the evaluation used an observational design, it was conducted in a controlled and simulated environment. The team was unable to assess trainees' performance in an actual clinical setting immediately post-training.
5. Observation checklists used in this study were designed by the study team and were not externally validated psychometric instruments.
6. Some data collection challenges occurred, including recall bias when data collectors did not complete the *Interpersonal Skills Checklist* immediately following the clinical scenario completion and occasional use of substitute data collectors (which could introduce inconsistency in rating trainee performance). Due to an internet service outage, some electronic data collection using the *Clinical Skills Observation Checklist* was lost.
7. Observations from clinical facilitators and reports from trainees suggest that trainees were experiencing fatigue after two intensive training days and that they may not have performed at their personal best during the post-training evaluation.
8. Qualitative interviews in Jamaica relied on a convenience sample of clinicians located near Kingston due to budget constraints.
9. The study team was unable to conduct a third skills observation of clinicians several months post-training to determine how well clinical and interpersonal were maintained, and instead relied on self-report in qualitative interviews.

8. RECOMMENDATIONS

Based on the evaluation results, the following recommendations and next steps are encouraged for the KPP program, aimed at improving HIV care and treatment provided to KPs in the Caribbean region. The recommendations and next steps are to:

- ***Provide ongoing clinician training*.** The KPP training program should be maintained to continue training clinicians at HIV clinical care facilities. The program should monitor sites where training has already occurred to ensure that training is provided to any new clinicians that join the facility.
- ***Maintain successful components of the interactive training model*.** This iteration of the KPP training program and future training programs utilizing clinical simulation should incorporate the cornerstone successes of the KPP training model, including:
    - Creating opportunities for one-on-one interaction and feedback from the "patient" perspective.
    - Practicing skills in a safe learning environment with frequent repetition and reinforcement.
    - Partnering directly with members of marginalized communities to design training scenarios and implement training.
    - Recruiting patient trainers directly from affected communities and providing comprehensive coaching that enables patient trainers to portray realistic clinical scenarios, provide effective feedback to clinicians, and to evaluate clinician performance.
- ***Implement targeted improvements to the KPP* training program.** Identify opportunities to improve the program using feedback, including better preparing clinicians for the intensive preceptorship experience as a way to counter some of the initial shock and anxiety.
- ***Expand KPP training to other cadres*.** Review and adapt the KPP training for other cadres within the healthcare system. Adaptations for other cadres must carefully consider the role, scope of practice, and specific challenges related to offering care to members of KPs. To date, I-TECH has adapted the KPP to train nurses, social workers, and case managers working in the HIV care and treatment system. Additional cadres (such as contact investigators, pharmacists, or other allied health professionals) may also be considered for future adaptations.
- ***Ensure KP-related training is sustainable within the local health system*.** The KPP training program in its current form provides an individualized training experience; however, this model may be challenging to sustain over time by local MOHs. To improve sustainability, additional training models such as e-learning should be explored. An interactive, self-

paced e-learning model could easily be scaled-up to reach a wider range of health providers and to ensure that a critical mass of clinicians, nurses, and allied health providers are trained in best practices for providing HIV care to clients from KP groups.

- ***Offer additional training in transgender health*.** Design and provide additional training on transgender health and hormone therapy to interested providers and continue to sensitize HIV providers to the needs of transgender women and men.

This evaluation report will be shared with relevant stakeholders, including Ministries of Health and I-TECH programs. The evaluation report will be made available on the I-TECH website. Findings and recommendations may be presented at relevant local and international meetings and conferences.

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APPENDICES

Appendix 1: Key Populations Preceptorship Training: Learning Objectives & Agenda

KPP Learning Objectives

By the end of the preceptorship, clinicians are expected to be able to:

- Communicate effectively and sensitively with patients who identify as sex workers, MSM, and/or transgender by demonstrating active listening skills, a respectful approach to sensitive issues, and privacy/confidentiality.
- Take a targeted health history of patients who identify as sex workers, MSM, and/or transgender, including a detailed social and sexual history.
- Articulate components of comprehensive care for patients who identify as sex workers, MSM, and/or transgender, including screening tests and physical exams (e.g. anogenital, prostate, pelvic) as deemed appropriate for the organs present.
- Demonstrate effective HIV/AIDS counselling skills for the psychosocial, behavioral, sexual, and reproductive issues faced by patients who identify as sex workers, MSM, and/or transgender.
- Recommend appropriate screening tests, health risk factor reduction for patients who identify as sex workers, MSM, and/or transgender.
- Provide appropriate referrals for members of these groups.

Sample Clinician Training Agenda

Day 1	Day 2
Pre-Training Evaluation Scenarios (0.5 hrs)	**Orientation** to Day 2 (0.25 hrs)
Orientation to Training Activity (0.25 hrs)	**Transgender Women Training Scenarios** with feedback & debrief (1.5-2 hrs) • "Bebe" • "Doneisha"
MSM Training Scenarios with feedback & debrief (1.5-2 hrs) • "Nigel" • "Kevin & Jeremy"	
Lunch	***Lunch***
Female Sex Worker Training Scenarios with feedback & debrief (1.5-2 hrs) • "Monique" • "Lisa"	**Gender Non-Conforming & MSM Training Scenarios** with feedback & debrief (1.5-2 hrs) • "Vicky" • "Joel"
	Post-Training Evaluation Scenarios (0.5 hrs)

Appendix 2: Observation of Clinician Interpersonal Skills Tool

Use this form to assess the clinician's skills. Please fill in after each scenario as completely as possible. Please make a brief note in the "comments" column for anything specific that you observed, and for any place you have ticked "neither agree nor disagree."

Case Scenario (Patient Name):	☐ **Pre-test** ☐ **Post-test** *(check one)*
Preceptorship Trainer/Patient Trainer (Your Name):	
Clinician ID:	

Item	**Tick one (✓)**						**Comments**
	Strongly Disagree	**Disagree**	**Neither Agree or Disagree**	**Agree**	**Strongly Agree**	**Not Applicable**	
Greeting							
I felt the clinician **greeted me warmly** and **respectfully** at the beginning of our session.							
The clinician **asked me** my **preferred name and pronouns** and used them correctly throughout the session							
Non-Verbal Communication Skills							
I felt the clinician had **good eye contact** throughout our session.							
I felt the clinician used **positive body language** throughout our session.							

Item	Tick one (✓)						Comments
	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Not Applicable	
Clinical Expertise & Exam Skills							
I felt that the clinician was **knowledgeable** about health issues that affect people like the patient I was portraying (e.g., MSM, transgender, sex worker, homeless, etc.)							
I felt that the clinician's advice was **relevant** to the patient I was portraying (e.g., relationships, current sex practices, presenting complaint, etc.).							
The clinician assured me that the information I share with him/her is **private and confidential**.							
The clinician **informed me in advance of each step** of any exams, procedures, or assessments and ensured that I was comfortable before proceeding. (e.g., clinician narrated the procedure.)							
Interpersonal Skills							
The clinician showed **a desire** to work with me							
The clinician showed **professionalism** throughout the encounter and never acted rude or annoyed with me.							
I felt that the clinician showed an **open, non-judgmental attitude** towards me.							
I felt that the clinician handled personal or difficult topics with **sensitivity and respect**.							
I felt that the clinician only **asked questions relevant** to my care.							

Item	Tick one (✓)						Comments
	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree	Not Applicable	
I felt that the clinician **listened to my concerns** and was careful not to interrupt me while I was speaking.							
I felt the clinician showed **empathy** towards me.							
I felt the clinician was careful to use **plain language** and not medical jargon when speaking to me.							
I felt the clinician was careful to use **terms that were comfortable for me** throughout the session (e.g., describing body parts, etc.)							
Patient-Centered Care							
I felt that the clinician **discussed options** with me.							
I felt the clinician **made sure that I understood** those options.							
I felt the clinician **asked my opinion**, allowing me to make my own decision.							
I felt the clinician **encouraged me to ask questions**.							
I felt the clinician **answered my questions**, never avoiding them.							
I felt the clinician **clearly explained** what I needed to know about my problem; how and why it occurred.							

Adapted from: Potter J, Fessler D, Huang G, Baker J, Dearborn H, Libman H. Challenging Pelvic Exam. MedEdPORTAL Publications; 2015.

Appendix 3: Clinical Skills Observation Evaluation Checklist

The clinical facilitator should fill in the form below during each scenario. Use this form to assess the clinician's skills.	
Clinician ID (Code):	**Today's Date:**
Case Scenario (Patient Name):	☐ **Pre-test** ☐ **Post-test** *(circle one)*
Preceptorship Trainer/Patient Trainer (Name):	
Facilitator/Observer (Your Name):	

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
Establishing Rapport							
Greets patient and introduces self							
Asked about patient's **preferred name and pronouns** and used correctly throughout session							
Presenting Complaint & History							
Clinician obtains an adequate **history** of the presenting complaint							
Clinician asks about current and past **medications**							
Clinician asks about **family medical history**							
Social and Sexual History							
Clinician asks if the patient is **sexually active**? / "When did you last have sex?"	Yes			No			

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
Asks: "**how many sexual partners** have you had in the last 3 months?"	Yes			No			
Clinician asks the patient the **gender** of their partners?	Yes			No			
Clinician asks **social history** questions: • Marital/relationship status • Occupation • Housing/living situation • Education							
Clinician asks detailed questions about sexual **partners**, including number, gender, etc.							
Clinician asks detailed questions about sexual **practices** (vaginal, oral, anal)							
Clinician asks detailed questions about **protection** (condoms, etc.)							
Clinician asks detailed questions about **past STI history** (ever had an STI?)							
Clinician asks detailed questions about **pregnancy** (plans, contraception, etc.)							
Substance Use Screening							
Clinician asks about current and past **substance use**							
Clinician asks about most commonly used **recreational drugs**, including alcohol, tobacco, marijuana/ganja, or other stimulants (cocaine, ecstasy, etc.)							

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
Mental Health Assessment							
Without any prompting the clinician asks about patient's **current mood**		Yes			No		
Clinician asks over the past 2 weeks, how often has the patient had **little interest or pleasure** in doing things?		Yes			No		
Clinician asks over the past 2 weeks, how often have you **felt down, depressed, or hopeless**?		Yes			No		
Clinician asks the patient if they have wished they were **dead**, or wished they could go to **sleep and not wake up**?		Yes			No		
Clinician asks if the patient has had **actual thoughts of killing themselves**?		Yes			No		
Overall assessment of mental health screening							
Additional notes from mental health screening							
Violence & Abuse Screening							
Clinician asks patient about **experiences of violence/abuse**: • Does a partner, or anyone at home, hurt, hit or threaten you? • Have you been hurt, hit or threatened by anyone outside of your home? • Have you ever been physically, sexually, or emotionally abused?							
Clinician screens patient for **violent behavior**: • Have you lost your temper to the point where you would hurt someone?							

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
• Have you hit or slapped someone? …What about grabbing and shaking?							
Mucocutaneous Exam							
Clinician washes **hands** and dons **gloves**							
Clinician indicates intent to conduct **oral exam**							
Clinician indicates intent to examine patient's **skin**							
Clinician indicates intent to examine patient's **lymph nodes**							
Anogenital Exam (using a simulator)							
Clinician ensures that patient is **comfortable**							
Clinician ensures that **chaperone** is present (as needed)							
Clinician fully **explains the procedure** to the patient and ensures that patient knows what to expect							
Clinician conducts **abdominal exam**							
Clinician examines **lymph nodes in groin** area							
Testicular Exam (for natal males): • Visually inspects the penis on all sides and note any obvious lumps, swellings, ulcers or scars • Visually inspects the scrotum and notes lumps, swellings, ulcers or scars • Palpate each testicle noting any abnormalities • Palpate the epididymis and spermatic cord on both sides • Collects urethral swab (as needed)							

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
Digital rectal exam: • Positions the patient correctly • Separate the buttocks and inspect area around anus, noting any abnormalities • Lubricate index finger • Place finger on anus and apply pressure • Assess anal tone by asking patient to squeeze finger • Sweep the finger clockwise and counter-clockwise, feeling for any abnormalities • Check size, consistency, and presence of prostate • Remove finger and examine glove for feces, mucus, and/or blood • Clean off lubricant from patient and dispose of gloves							
Anoscopy: • Instructs patient to lie on side with knees drawn to chest • Separate the buttocks and inspect area around anus, noting any abnormalities • Lubricate anoscope and insert it into the anus completely or as far as patient can tolerate • Ask patient to breathe deeply and bear down • Remove the obturator to examine anal mucosa • Observe mucosa, pectinate line, vasculature, blood, mucus, pus, hemorrhoidal tissue • Collect swab (as needed) • Gently remove anoscope • Clean off lubricant from patient and dispose of gloves							

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
Lab Tests Ordered:							
Urinalysis	Yes		No		N/A		
Syphilis screening (VDRL/SD Bioline)	Yes		No		N/A		
HIV screening	Yes		No		N/A		
Hepatitis B	Yes		No		N/A		
Herpes Simplex Virus (IgG)	Yes		No		N/A		
Appropriate lab tests ordered	Yes		No		N/A		
Other tests (specify)							
Management & Treatment							
Prescribes appropriate course of action for the patient to **manage their HIV Infection**							
Prescribes **appropriate antibiotics** to treat their STI							
Clinician prescribes appropriate **follow-up to treat their condition (i.e. anal warts)**							
Clinician prescribes appropriate **follow-up testing/test of cure**							
Risk-Reduction Counselling & Patient Education							
Discusses sexual health risk emphasizing **condom use** and **protection** from STIs							
Discusses **partner notification** and **testing**							

	Tick one (✓)						
Item	**Not done**	**Unacceptable**	**Needs Improvement**	**Acceptable**	**Exceptional**	**Not Applicable to**	**Comments**
Discusses **substance** use as it relates to **risk behavior**							
Discuss **concerns, safety planning** regarding potential for violence in a relationship							
Discusses concerns regarding **gender transition**							
Referrals:							
Gender-based violence	Yes		No		N/A		
Housing support	Yes		No		N/A		
HIV screening	Yes		No		N/A		
Support groups and services for PLHIV	Yes		No		N/A		
Community/peer support for PLHIV, MSM, transgender people, sex workers, etc.	Yes		No		N/A		
Gender transition-related care	Yes		No		N/A		
Psychological care (social work, therapist, etc.)	Yes		No		N/A		

Additional comments:

Appendix 4: Key Populations Preceptorship Follow-up Evaluation Interview Guide

Interviewer to inform the participant that the recorder will be turned on now

Interview recording:

A. Date:

B. Gender:

C. **Age range (please tick one)**:

____ 18-24 years old
____ 25-34 years old
____ 35-44 years old
____ 45-54 years old
____ 55-64 years old
____ 65-74 years old
____ 75 years or older

D. **Total interview time (x hours / mins)**:

PROFESSIONAL EXPERIENCE

1. How many years have you worked as a clinician? (*Probe: at that facility you currently work at? Other facilities*)?

2. How long have you worked with HIV patients (in years)?

3. Prior to your KPP training, how much professional experience/exposure did you have in working with key populations? (*Probe: MSM, transgender, sex workers*)

4. Could you estimate how many persons belonging to key population groups receive care at your facility/in your clinical practice? (*Probe: MSM, transgender, sex workers; professional, private practice; before and after the preceptorship*)
   ____ 0
   ____≤10 persons
   ____10-40 persons
   ____ >40 persons

EXPERIENCE WITH KEY POPULATIONS PRECEPTORSHIP

5. Please describe the process by which you were recruited to attend the KPP. *(Probe: Who asked you to participate and when? How did you feel when you were asked to participate? What were your expectations? Did you have any reservations about participating? If so, what were they?)*

6. Please describe how you felt during the preceptorship. Did it invoke any feelings towards the key populations; positive or negative? *(Probe: during the evaluation scenarios, during the training scenarios, during the feedback sessions)*

7. What were the biggest takeaways from the KPP?

8. Did you already have experience or know how to conduct the exams taught in the KPP? (*Probe: digital rectal, anoscopy, genital*)

9. Do you recall receiving a handbook during the training that included some resources and reference materials? **Yes / No**

    a. If Yes, did you ever refer to these materials after the training? What were your impressions of the materials – helpful, unhelpful, etc.?

10. Do you recall receiving an email with links to an electronic dropbox of resources, such as journal articles, about healthcare for key populations? **Yes / No**

    a. If Yes, did you ever access these materials after the training? What were your impressions of the materials – helpful, unhelpful, etc.?

EXPERIENCE AT THE FACILITY (POST-TRAINING)

11. What, if anything, has changed in the way you provide care to key populations since completing the KPP? *(Probe: Interpersonal interactions, sexual history taking, risk assessment and risk reduction, STI screening, anogenital exams, mental health assessments, referrals)*

12. Can you tell us about a recent clinical experience you've had where you had to use the skills learned during the KPP training? What skills did you use? How did the person respond? Would you have changed anything? Did you feel prepared?

13. To what extent do you conduct the physical exams you have learned in the KPP at the facility where you work? *(Probe: anogenital exams such as digital rectal exam and anoscope)*

14. To what extent do you conduct mental health assessments since the KPP?

15. Has anything changed with your feelings on providing clinical services to key populations?

16. Did you initiate any changes related to KP care at your facility based on the KPP? If yes, what were they?

17. Do you currently experience any challenges in providing comprehensive care for KP patients at your facility? If yes, what are they?

FUTURE TRAINING NEEDS AND SUGGESTIONS FOR THE KPP PROGRAM

18. Do you feel that you need or desire additional training with key populations? *(Probe: types of training among specific key populations)*

19. Which areas do you feel/think are still uncomfortable for you when working with key populations? *(Probe: specific examples)*

20. Do you have any suggestions for I-TECH to improve the existing KPP program? *(Probe: content, duration of KPP, additional resources/materials)*

Appendix 5: Consent to participate in an Evaluation of the "Improving HIV Care for Key Populations in the Caribbean" Preceptorship Training Program

INTRODUCTION

You are being asked to participate in an outcome evaluation sponsored by the International Training & Education Center for Health (I-TECH). We are conducting a pre-training observation and a post-training observation to assess the effectiveness of the training program in building essential skills for working with key populations. The information learned from this evaluation will be used to provide evidence of the program's effectiveness and inform if the program should be continued, adapted, expanded, and/or scaled up to other countries. In addition, this information may also be used for a journal article that we may try to publish in a peer-reviewed journal. At the end of this consent you will be asked if you are comfortable with your results being used in a potential publication.

WHAT IS INVOLVED

If you chose to participate in this evaluation you will be asked to take part in two main data collection exercises before and after the training. The first exercise is a written questionnaire where you will be asked to rate your attitudes and feelings in providing clinical care to key populations, specifically men who have sex with men (MSM), transgender people, and sex workers. The second data collection exercise will be participating in simulated scenarios that are portrayed by trained I-TECH Preceptorship Trainers. Two scenarios will be conducted at the beginning of the program, before any training has occurred, and two scenarios will be conducted at the end of the training. Throughout the simulated clinical interactions you will be evaluated, through direct observation, by both the Preceptorship Trainer portraying the scenario and a clinician. Both the Preceptorship Trainer and the clinician will rate your skills using a structured checklist.

RISKS AND BENEFITS

The nature of the scenarios involves sexual health and/or HIV patient care with members of key population groups. The simulated scenarios may make you slightly uncomfortable; however, it is not likely that the issues raised in the scenarios are outside of what you normally encounter in your clinical practice. You will not personally benefit from participation in the evaluation; however, others may benefit if the future from the information we find from this evaluation.

CONFIDENTIALITY

No personally identifiable information (including name, sex, age, or clinic where you work) will be collected from you on these data collection tools. Each participating clinician will be assigned a unique identifier code on the data collection forms. All the information collected will be analyzed and disseminated in aggregate, no individual clinician's scores will be used. All data will be collected by trained member of I-TECH's staff and all data will be kept in I-TECH's office in a locked cabinet. The only persons with access to the paper questionnaire and checklists are I-TECH's staff. Our Preceptorship Trainers have been trained and instructed to keep your information strictly confidential and will not discuss your performance with one another or anyone outside of I-TECH.

YOUR RIGHTS AS A PARTICIPANT

You can choose whether or not to participate in this evaluation. Your participation in the evaluation will not influence your participation in the training. In other words, you can still fully participate in the key populations preceptorship training even if you choose not to be part of the evaluation.

Although part of the evaluation uses simulated patient scenarios we would like to obtain as true of a baseline as possible and would like to ask you to act as though you are in your own clinic providing care to patients. If I-TECH resources are available, we are also interested in doing a 6 month follow-up at your clinic and would like to get your feedback if this is something that would be acceptable to you.

Please let [CLINICAL FACILITATOR NAME] know when you have reached this point in the document.

CLARIFYING QUESTIONS

1.	Do you understand the purpose of this evaluation?	Yes / No
2.	Do you understand that no personal identifiable information will be collected from you?	Yes / No
3.	Do you wish to participate in this evaluation?	Yes / No
4.	Are you comfortable with your unidentifiable results being used for our program evaluation?	Yes / No
5.	Are you comfortable with your unidentifiable results being used in a potential publication?	Yes / No
6.	Would you be willing to participate in a 6 month follow-up data measurement at your clinic?	Yes / No
7.	Do you have any additional questions for me?	Yes / No

CONSENT

I understand this information and agree to participate fully under the conditions stated above:

Signed:_____ Date:_____

About I-TECH

The International Training and Education Center for Health (I-TECH) is housed in the Department of Global Health at the University of Washington. Its mission is to support the development of a skilled health care work force and well-organized national health delivery systems to provide effective prevention, care, and treatment of infectious diseases in resource-limited settings. Staff work in more than 20 countries worldwide in partnership with local ministries of health, universities, non-governmental organizations, and medical facilities.

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www.go2itech.org

I-TECH
908 Jefferson Street,
12th Floor
Seattle, Washington 98104
USA

I-TECH
15 Trinidad Terrace
New Kingston
Kingston 5
Jamaica