**“Tobacco Treatment Specialist Training during a Pandemic: Successfully Moving to a Virtual Format”**

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**Introduction**

The UMass Center for Tobacco Treatment Research and Training (CTTRT) hosts Tobacco Treatment Specialist (TTS) training, accredited through the Council of Tobacco Treatment Training Programs (CTTTP). Since 1999 our TTS training program has been held over 175 times in the United States (22 different states), Canada, and Saudi Arabia; and over 3,700 individuals have attended one of our TTS trainings.

Our TTS training is a hybrid design: 10 hours of the course, TTS Part 1, are available to trainees via an online learning platform, Blackboard Learn. This asynchronous, self-paced course must be completed before trainees attend the in-person TTS Part 2 component of the course. TTS Part 2 is a three-day, 21-hour training with a focus on developing counseling skills, learning about pharmacotherapy, conducting an intake and assessment interview, and completing a case study exercise. There are several small group exercises each day, and there is usually a great deal of interaction among participants and between the trainees and presenters.

We had a training scheduled for April 2020, but in March UMass Chan Medical School enacted in-person meeting and teaching restrictions due to the COVID pandemic. As 10 hours of our TTS training were already delivered online asynchronously via an online learning application, we quickly made the decision to use Zoom, through our university’s account, to conduct the remaining 21 hours of live, synchronous training virtually – the first accredited program to move an in-person training to a virtual setting due to COVID.

Twenty-five individuals had registered for the training: 11 from Massachusetts, 7 from neighboring states in New England, and 7 from other states. We contacted registered individuals and gave them 3 options: 1. Attend the virtual training, 2. Reschedule to a future training, or 3. Cancel and receive a full refund. Sixteen (16) chose to take the virtual training scheduled for the original dates of training, 7 wanted to transfer to a later date in hope that it would be offered in-person at that time, and 2 cancelled and requested a refund.

Presenters were trained in the use Zoom features including breakout rooms, chat, and polling. Staff worked with presenters to optimize the use of breakout rooms for small discussions, counseling practice, and developing a case study report. All exercises and practices on the in-person agenda were adapted to the virtual format. Polling was used to ascertain participants’ past experience with tobacco treatment and as knowledge checks during the presentations. The Zoom chat feature was used to encourage participant input and questions during delivery of training modules.

Our initial virtual training was highly successful:

* 100% of participants reported that the training increased their ability to deliver tobacco treatment services “a great deal.”
* 100% were satisfied with the use of Zoom. (e.g., “I loved the format of the virtual training. The breaks at the top of every hour helped to keep us engaged, and the use of breakout rooms and interactive activities helped the material and information stick.”)
* 95% reported “excellent” rapport with instructors.
* Exam scores were high; the mean exam score of this first virtual group was the same as the mean score of CTTRT participants in 2019 who participated in in-person training.

**Methods**

To ensure training program quality, we conducted an analysis of 2 years of in-person trainings (2018 & 2019) versus 2 years of virtual training (2020 & 2021), reviewing exam scores and training evaluations.

Fisher’s Exact tests were used to analyze contingency tables for Likert scale responses and determine significant differences between virtual and in-person groups.  All analyses were carried out using StataMP, Version 16.

**Results**

We first looked at the average grade among in-person trainees versus virtual trainees. The in-person trainees’ average grade of 85.2% was slightly higher than the virtual attendees’ average grade of 83.3%, but this was not a significant difference.

There was a significant difference among in-person and virtual participants with respect to satisfaction with the course, with the virtual trainees more likely to note being “very” or “somewhat” satisfied with the overall course. (See Table A).

Table A: Please rate your overall satisfaction with the course:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Very Satisfied  % (n) | Somewhat Satisfied  % (n) | Somewhat Dissatisfied  % (n) | Very Dissatisfied  % (n) | Total N |
| In-Person | 86.81%  (79) | 7.69%  (7) | 3.30%  (3) | 2.20%  (2) | 91 |
| Virtual | 85.71%  (84) | 14.29%  (14) | 0.00%  (0) | 0.00%  (0) | 98 a |

a p=0.043

We also asked trainees to rate the extent to which the course increased their ability to deliver effective tobacco treatment. Virtual participants were more likely to report that their ability increased “a great deal” versus “somewhat.” (See Table B).

Table B: To what extent has this course increased your ability to deliver effective tobacco treatment?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | A Great Deal  % (n) | Somewhat  % (n) | Not at All  % (n) | Total N |
| In-Person | 84.62%  (77) | 13.19%  (12) | 2.20%  (2) | 91 |
| Virtual | 94.90%  (93) | 5.10%  (5) | 0.00%  (0) | 98 b |

b p=0.038

We also looked at each individual training module to determine if there were differences between two measures: satisfaction with the module, and to what extent the goal of the module was met. There were no significant differences between the training types with respect to these two measures.

**Discussion**

We are pleased that on these important measures (grades, overall satisfaction, increase in self-efficacy, and individual module satisfaction) we found very similar results for in-person and virtual training. We have since hosted 8 UMass-based trainings virtually, and our Certified Trainers have also begun hosting their trainings virtually.

**Lessons learned**

* Given the success of this trial program, we have held subsequent virtual trainings at UMass and nationally through our network of Certified Trainers and will continue to do so after travel restrictions are lifted.
* The availability of skilled support and an appropriate platform are key for the hosting of trainings. Utilize institutional support when available.
* Use of the chat feature, small group discussions, and polling questions stimulated exchange of ideas among trainees and trainers to replicate as much as possible the in-person training experience.
* Virtual trainings allowed us to capitalize on the expertise of out-of-state colleagues by having them present during trainings.
* We deliberately kept registration numbers low to encourage participation during presentations and activities.
* We found that virtual trainings had a lower percentage of individuals from Massachusetts compared to in-person trainings.
* Most states do not have a CTTTP-accredited TTS training program. Virtual training can expand the reach of TTS training by decreasing costs of out-of-state training.

**Next steps**

* Look at individual trainee factors that may indicate likely success in virtual training versus in-person.
* Continue to incorporate new and innovative virtual training techniques to increase participant engagement
* Since this analysis there have been 8 additional virtual trainings (3 at UMass; 5 through our Certified Trainers). We plan on an analysis of all virtual trainings to date versus a similar number of in-person trainings.