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# Integrating Oral Health into Community Health Worker and Peer Provider Certifications in Michigan: A Community Action Report

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# Integrating Oral Health into Community Health Worker and Peer Provider Certifications in [state name omitted for blind review]: A Community Action Report

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**Abstract:**

**Introduction:** A multi-disciplinary, community-university-government collaboration resulted in the development of *Oral Health for Community Workers*, a brief, oral health online e-learning module. The e-learning module was designed to improve oral health literacy among frontline health workers who are members of underserved communities, and to address oral health disparities in safety net medical and behavioral health settings. **Methods:** Community-based participatory methods were used to design and evaluate the e-learning module. Participants took pre-, post-, and 3-month follow-up surveys. **Results**: Oral health literacy and confidence in incorporating oral health into practice improved. Satisfaction with the module was high. **Discussion**: *Oral Health for Community Workers* is now sustained as a standard module within Community Health Worker, Peer Support Specialist, and Peer Recovery Coach Certification and continuing education offerings in [state omitted for blinding].

**Keywords:** *Oral Health, Community Health Workers, Lay Health Workers, Mental Health*

**Introduction:**

*Oral Health for Community Workers* is an online, self-paced educational module that teaches basic oral health concepts. It was designed using community-engaged methodology[1] to meet the needs of two workforces that serve underserved communities in non-dental settings: Community Health Workers (CHW), who are trained frontline health workers who are trusted members of, or closely connected to, the population served[2]; and Peer Support Specialists and Peer Recovery Coaches (PSS/PRC, or Peer Providers), who are people in recovery from a mental health or substance use disorder and who have been trained to support others with similar experiences, typically in Community Mental Health settings.[3] CHWs and Peer Providers are unique members of the health and behavioral health workforces due to their first-hand knowledge of the communities they serve. The module was therefore tailored to their strengths, such as their ability to promote hope by sharing their own "oral health recovery story."

CHWs and Peer Providers hold great promise in bridging gaps caused by social determinants of health and can help people stay committed to health goals.[4] Until this project, however, oral health was not covered in any depth within [State name omitted for blinding]-based CHW and Peer Provider certification programs and continuing education offerings. Oral health simply lacked salience for those overseeing these trainings. The separation of oral health from other medical and behavioral health care was a historical mistake with far-reaching adverse consequences for public health.[5] Communities with elevated oral health risks, including people served in safety net behavioral health settings, are often those least likely to access dental care and most likely to have low oral health literacy.[6] As health professionals outside dental schools typically receive less than five hours of oral health education,[7] and services integration between primary care, dental care, and behavioral health care is often based on ad-hoc referrals as

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opposed to true care coordination,[8] the CHW and Peer Provider training landscape suffered from the same lack of integration as other health workforces, despite clear linkages between oral health, whole health, mental health, and quality of life.[6]

The purpose of this initiative was to improve the oral health literacy of CHWs and Peer Providers, to make it possible for them to have basic discussions about oral health with the people they serve, and to raise their awareness about the importance of establishing a Dental Home. To accomplish this goal sustainably, it was determined that the project team would create an e-learning module with dynamic text and voice-over that could be incorporated into CHW and Peer Provider certification or continuing education offerings *without* facilitation by a dental professional.

**Module Development**

A clinical psychologist with the [University omitted for blinding], Department of Psychiatry and a dental hygienist with the [University omitted for blinding] of Dentistry were awarded funding from the [state name omitted for blinding] Health Endowment Fund to develop the oral health module in July 2019. A Community Advisory Board (CAB) was then convened, which consisted of a member of the [City omitted for blinding] Health Department, the executive director of the [Organization omitted for blinding], a member of the [State omitted for blinding] Department of Health and Human Services, two PSSs, and three dually-certified PSS/CHWs. CAB members were offered a stipend to thank them for their service to the project. The group met on a quarterly basis over the course of 18 months to collaboratively develop module content, design the evaluation, and ensure sustainability. Prior to the COVID-19 pandemic, meetings took place either in person or virtually, and the meeting location rotated between three cities to make

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them more accessible, as CAB members hailed from across the state. After the start of the pandemic, meetings were held virtually.

Prior to the advent of COVID-19, the project team envisioned the e-learning module being incorporated into live certification and continuing education courses. It was assumed that a non-dental professional trainer would "play" the module from their podium computer and then facilitate group discussions based on the information within it. After the pandemic struck and all face-to-face trainings were canceled indefinitely, it was determined that the e-learning module's digital platform should be optimized for live virtual trainings, and that it should additionally be available as a free-standing learning experience outside of trainings for greater access.

Module content was determined through discussions with CAB members on their communities' needs and priorities. As the module was developed, the CAB vetted each of its elements – such as voice-over, text, and graphics – at quarterly meetings and over email, to ensure goodness of fit for the priority audience. Any differences of opinion on module content or dissemination approach were resolved using consensus, and the university investigators deferred to the CAB on such matters. For example, the CAB felt strongly that the module should be less than one hour long, because both CHW and Peer Provider certification courses are already very rich with content, and trainers are often pressed for time. Dental content details were created by the dental hygienist lead, and the voice-over script was developed by both project leads. An instructional designer then digitally produced the module using Articulate 360 software.

The result was a two-part e-learning module that could be incorporated into the now-virtual trainings, but also could be viewed outside of a formal training. This module differs from other existing oral health educational materials for frontline workers, such as Smiles for Life,[9] in that it is an e-learning module with a voice-over rather than a set of text-based presentations for

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trainers to deliver. Also, the module was developed using a community-based participatory methods to address the specific needs of the population served by CHW and Peer Providers in [state name omitted].

Box 1 presents an overview of module content, which includes oral healthcare, oral self-care, and oral health promotion strategies. Throughout the module it is emphasized that it is never too late to make positive changes to oral health. Additionally, multiple pause points titled "What would you do?" were included in the module to encourage application in practice. These pause points created opportunities for participants to consider how they would handle oral health related conversations with the people they serve. Each of the two parts is approximately 20 minutes, not counting pauses. If completed outside of a live course, the module can be completed at any pace that the learner wishes. If completed as part of a certification or continuing education course, the two parts are typically viewed back-to-back, with multiple pause points for discussion. The project team also created facilitator guides for the non-dental professionals who would incorporate the module into live trainings. The facilitator guide includes discussion prompts for the "what would you do" pause points, provides resources for furthering their own knowledge of oral health, and emphasizes creating opportunities for trainees to share their personal oral health journeys with the people they serve.

After the e-learning module was finalized, [organizations omitted for blinding] advertised *Oral Health for Community Workers* through their networks as a continuing education opportunity and integrated the module into initial CHW and Peer Provider certifications.

**Evaluation**

The module was evaluated between July 2020 and March 2021 using pre-, post-, and 3-month follow-up surveys. During the evaluation period, 113 community workers took the

module and completed both the pre- and post-module surveys, among whom were 44 (39%) CHWs, 53 (47%) Peer Providers, 13 (12%) dually certified CHW/Peer Providers, and 3 (2%) who selected "other" and entered credentials that could not be recategorized (e.g. Prevention Specialist). Table 1 shows additional participant demographics. The 3-month follow-up survey response rate was 40% (31-49%, n=45) with the response rate higher among continuing education (CE) participants [59% (46-70)] than trainees in their initial certification programs [16% (8-29)]. Table 1 shows additional participant demographics.

Figure 1 describes pre-, post-, and three-month survey responses. Percent responses are presented with 95% confidence intervals for a population proportion based on the normal approximation to the binomial and compared using two sample z-tests. Associations between responses within a time point were reported as conditional odds ratios and assessed using Fisher exact tests. P-values less than 0.05 were considered statistically significant. With respect to health promotion behaviors, 93% (95% CI, 88-98%) of respondents at baseline agreed or strongly agreed that community workers *should* provide people with information or support on oral health topics. However, prior to training only 12% (6-19%) reported feeling well prepared or very well prepared to do so, and only 23% (15-31%) reported planning to do so often or very often. These changed significantly after training, with 87% (91-93%) planning to discuss oral health topics often or very often, and 79% (71-86%) feeling well prepared or very well prepared. After three months, sense of preparedness retreated relative to immediate post-training levels, but remained improved relative to baseline, with 53% (39-67) reporting feeling well or very well prepared. Also, after three months, 64% (50-77%) reported actually discussing oral health topics often or very often with the people they serve. Feeling well or very well prepared was associated with planning to discuss oral health topics in the pre-training survey [OR = 4.14 (1.10-15.8)] and

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with reporting discussing oral health topics on the post-training [OR = 11.6 (3.08, 50.3)] and 3-month follow-up surveys [OR = 8.17 (1.52, 59.6)].

With respect to health literacy, most respondents at baseline correctly selected “brushing with fluoride toothpaste” as the best way to prevent cavities from among other, less optimal choices [66% (58-75)], and this increased post-training [76% (68-84)]. This increase was significant among CE participants [+18% (+2 to + 33)] and nonsignificant among trainees in their certification programs [+11% (-5 to +27)]. After the module, respondents also significantly increased the extent they valued fluoride [those endorsing “extremely important” increased from 62% (53-71) to 92% (87-97)] and baby teeth [those endorsing “extremely important” increased from 52% (43-61) to 91% (86-96)]. After three months, similar patterns were observed for endorsing fluoride [84% (71-92)] and baby teeth [80% (66-89)] as “extremely important.”

After three months, we found that 73% (59-84) agreed or strongly agreed that the module resulted in changes to how they did their work. Most respondents reported they were extremely satisfied [71% (57-82)] with the module and found them extremely useful [67% (52-79)]. Most others were moderately satisfied [24% (14-39)] and found them moderately useful [27% (16-41)].

**Sustainability**

A key role of the CAB was to ensure sustainability. After the program evaluation concluded, the [University omitted for blinding] formally transferred ownership of the module to [Organization omitted for blinding] for greater sustainability and community access. The module was also made publicly available on YouTube. As of this writing, *Oral Health for Community Workers* is a formal component of CHW and Peer Provider certification in [State omitted for blinding] and is available free of charge through [Organization omitted for blinding] as a CE

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opportunity for new and existing CHWs and Peer Providers. Because module content focuses on very basic oral health information such as brushing and fluoride, it is not expected to go out of date from a content perspective. The overall experience of the module can, however, be adjusted by revamping the facilitator guides as needed. For example, new ideas for discussion topics, or new local resources for dental care, can be added to the facilitator guides by [name of organization omitted for blinding] whenever needed.

**Conclusion**

Improving the oral health awareness of all members of the safety net workforce can reduce disparities in marginalized communities through improved cross-sector linkages and knowledge of oral self-care behaviors. *Oral Health for Community Workers* was developed through a community-engaged process and resulted in an e-learning module that successfully improved the oral health knowledge, skills, and confidence of a non-dental professional workforce that serves underserved communities. As a result of this project, oral health is now a key topic in CHW and Peer Provider certification and continuing education offerings in [state omitted].

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**Conflicts of Interest**

The authors have no conflicts of interest to declare.

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**Box 1. Module Topics**

Part 1: Introduction to Oral Health

- Rationale for learning about oral health
- Oral health and quality of life across the lifespan
    - Oral health and whole health
    - Oral health and mental health
- Oral health terminology
- Signs of oral health problems
- Preventing oral health problems
- Going to the dentist

Part 2: An Oral Wellness Toolbox

- Home care tools that support oral wellness
    - Toothbrushes
    - Toothpaste
    - Fluoride
    - Dental floss
- Home care practices and techniques
- Oral health recovery: it's never too late

Figure 1. Change in oral health knowledge and skill

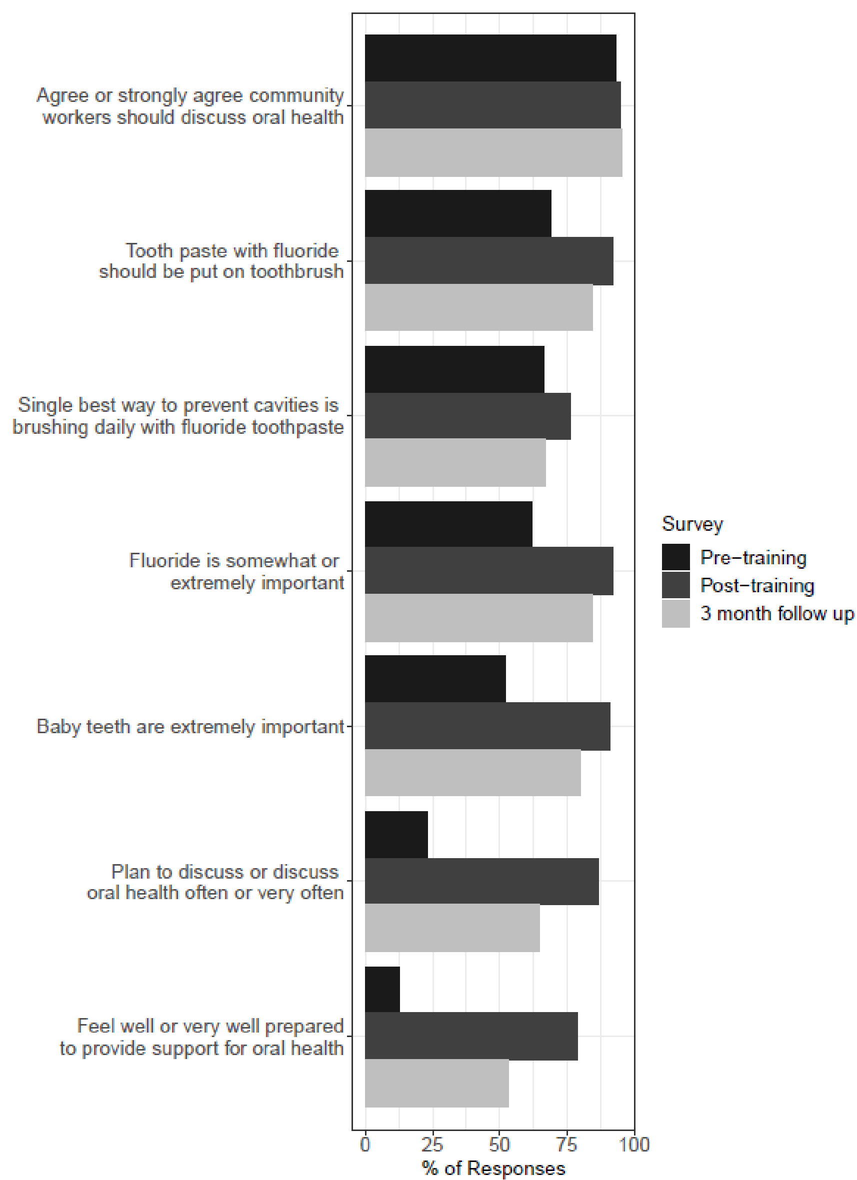


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**Table 1: Participant demographics**

| | N | Percent (%) |
|---|---|---|
| Gender | | |
| Female | 86 | 76 |
| Male | 24 | 21 |
| Other/Missing | 3 | 3 |
| Age | | |
| 18-34 | 27 | 24 |
| 35-44 | 31 | 27 |
| 45-54 | 28 | 25 |
| 55-74 | 26 | 23 |
| No response | 1 | 1 |
| Race/ethnicity | | |
| White | 55 | 49 |
| Black | 36 | 32 |
| Other/multiracial | 22 | 19 |
| Latino/a | 12 | 11 |
| Education | | |
| Middle School | 1 | 1 |
| High-school graduate or equivalent | 14 | 12 |
| Some college | 43 | 38 |
| 2-year degree | 21 | 19 |
| 4-year degree | 26 | 23 |
| Graduate degree | 8 | 7 |
| Training status | | |
| Trainee in initial certification | 50 | 44 |
| Continuing Education (CE) | 63 | 56 |
| Prior oral health training-Baseline | | |
| None | 54 | 48 |
| 1 hour or less | 28 | 25 |
| 2-10 hours | 25 | 22 |
| >10 hours | 2 | 2 |
| Not sure | 4 | 4 |

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