

The Next Generation of American Indian Public Health Workers: What we learned from the PHWEIC project

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Abstract:

Background- American Indian and Alaska Native (AIAN) populations experience more health disparities than any other racial/ethnic group in the United States. Developing a skilled AIAN public health workforce is one way to address health disparities and build a new generation of public health workers.

Approach- To address this call, the Rocky Mountain Tribal Leaders Council (RMTLC) developed the Public Health Workforce Expansion in Indian Country (PHWEIC) project. PHWEIC is a 5-year project funded by the Centers for Disease Control and Prevention. This evaluation focused on process and impact measures related to building the public health workforce.

Methods- PHWEIC participants were invited to take part in semi-structured interviews to assess their experiences with the program. Authors recorded interviews, transcribed responses, and analyzed the data. Thematic content analysis was used to determine common themes then organized using a process and impact evaluation framework focusing on exposure, reach, quality, satisfaction, and potential impact. Codes were grouped into categories and key categories were summarized. The data was then quantitized utilizing MAXQDA software, each interview was coded and sub-coded to capture the main themes.

Results- The evaluation revealed that PHWEIC had a positive impact on individuals and building the future tribal public health workforce. Themes also demonstrate the benefits to working locally,

barriers to participation, interest in public health, and activities that support public health. Findings show that the PHWEIC approach builds interest, capacity, community awareness, and confidence. There is clear evidence that PHWEIC adds value and impact to Tribal communities in Montana.

Keywords: American Indian and Alaska Native | AIAN | health disparities | public health workers | Public Health Workforce Expansion in Indian Country

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The Next Generation of American Indian Public Health Workers: What we learned from the PHWEIC project

Cover Page Footnote

Acknowledgements: We wish to thank the Centers for Disease Control, Rocky Mountain Tribal Leaders Council, Public Health Workforce Expansion in Indian Country Staff, Aaniiih Nakoda College, Blackfeet Community College, Chief Dull Knife College, Fort Peck Community College, Little Big Horn College, and Salish Kootenai Colleges and their PHWEIC teams. This project's success is entirely due to their participation and support.

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Background

American Indian and Alaska Native (AIAN) populations experience more health disparities than any other racial/ethnic group in the United States. Developing a skilled AIAN public health workforce is one way to address health disparities and build a new generation of public health workers. Effective public health practices require an adequately staffed, highly skilled, diverse, and interdisciplinary workforce. Previous reports call for addressing the workforce training needs, retaining high quality public health professionals, building skills, and offering training necessary to improve the health status of all (Dean, Myles, Spears-Jones, Bishop-Cline, & Fenton, 2014). There are 50,000 fewer public health workers in the United States today compared to 20 years ago – Tribes are significantly impacted (Rosenstock, Silber, Helsing, et al. 2008). Previous reports documented the shortage of Tribal public health workers and ongoing funding deficits within the Indian Health Service as key factors that contribute to health disparities in AIAN communities (Kelley & Andreini, 2017). Tribes are often left out from national, state, and regional public health workforce assessments, leading to limited understanding about the Tribal public health workforce needs. Tribal leaders, educators, researchers, health care professionals, and advocates demand health equity to ensure that people have what they need to reach their fullest potential (Kelley, 2020). To address this call and move toward a healthy seventh

generation, the Rocky Mountain Tribal Leaders Council (RMTLC) developed the Public Health Workforce Expansion in Indian Country (PHWEIC) project. PHWEIC is a 5-year project that began in January, 2019 and is funded by the Centers for Disease Control and Prevention. PHWEIC supports Tribal public health partnerships that cultivate community-based strategies through workforce development. The overall goal of PHWEIC is to increase public health workforce among American Indian populations to address the opioid crisis in their communities.

PHWEIC is designed to create and strengthen partnerships between Tribal Colleges, Tribal Health Departments, and the University of Montana. The focus of the partnerships is to engage current Tribal college students to enter into public health-related professions, with the ultimate goal of transitioning students into advanced public health degree programs. PHWEIC is based on the assumption that exposure to public health-related professions will increase the number of AIANs entering public health degree programs, and eventually strengthen the AIAN public health workforce.

PHWEIC is supported by three objectives: strategic planning, Tribal public health associates' program, and quick impact opioid prevention projects. The larger project objective is to establish a two-year public health associate degree program within Tribal community colleges. For each objective, RMTLC designs and

implements a number of activities that link students, Tribes, and advisors to resources and competencies that build their public health capacity and interests. Students learn about public health from their Tribal college advisors and through monthly learning sessions. RMTLC hosted 10 90-minute learning sessions throughout the year that included topics such as grant writing, budgets, community-based strategies, data use, and offered mentoring from University of Montana public health students.

About RMTLC

The RMTLC (formally the Tribal Chairman Association-1994 and the Montana-Wyoming Tribal Leaders Council-2015) is dedicated to improving health, economic development and education for Tribes and their members through a variety of programs, policy recommendations, and Tribal Leader meetings. For over 20 years, RMTLC's mission has been to preserve Tribal homelands, defend rights of the Indian Treaties with the United States, speak in a unified voice, offer support to Indian people, offer a forum in which to consult each other and enlighten each other about our peoples, and to otherwise promote the common welfare of all the Indian Peoples of Montana, Wyoming and Idaho. RMTLC is governed by Tribal Leaders from the following Tribes: Blackfeet Tribe, Chippewa Cree Tribe of Rocky Boy, Fort Belknap Indian Community, Fort Peck Assiniboine & Sioux Tribes, Northern Cheyenne Tribe, Crow Tribe, Little Shell Tribe of Montana,

Confederated Salish & Kootenai Tribes, Eastern Shoshone Tribal Council, Northern Arapaho Tribal Council, and Shoshone Bannock Tribes of Ft. Hall. RMTLC endeavors to coordinate advocacy and promote the similar interests of member Tribes through various collaborative initiatives and projects. RMTLC serves a total tribal population in Montana and Wyoming of approximately 100,000 American Indians with reservations range in population size from 2,700 children and adults to over 26,000 per reservation.

Through the RMTLC recommendations, regional Tribal government leaders determine the health priorities for the various programs: the Rocky Mountain Tribal Epidemiology Center (RMTEC, the federally-recognized public health agency for the American Indians within Rocky Mountain region); Tribal Prevention Initiative (TiPI, SAMHSA funded initiative with the goal to reduce underage alcohol & drug abuse and to promote a holistic community based wellness movement); Transitional Recovery and Culture (TRAC, SAMHSA funded initiative to build Peer Recovery Support capacity for Tribes and Urban Indian Centers), Bureau of Indian Affairs funded projects (BIA, focused on national and regional child welfare issues, trainings and methamphetamine use in Indian Country), Rocky Mountain Tribal Institutional Review Board (RMT-IRB, since 2012) and the Good Health and Wellness in Indian Country Project (GHWIC, CDC funded initiative to address obesity and promote wellness through culturally-based interventions).The Rocky Mountain Tribal Epidemiology Center (RMTEC), a

division under the Rocky Mountain Tribal Leaders Council, is one of twelve Tribal Epidemiology Centers (TEC) and a federally recognized public health authority that serves American Indian/Alaska Native (AI/AN) populations. RMTEC's mission is to empower American Indian Tribes in Montana and Wyoming in the development of Public Health Services and systems. RMTEC provides support for the PHWEIC project and epidemiological data for tribes to plan and respond to public health concerns.

Partnerships

PHWEIC has entered into Memorandums of Understanding with six Montana Tribal colleges: Aaniiih Nakoda College, Blackfeet Community College, Chief Dull Knife College, Fort Peck Community College, Little Big Horn College, and Salish Kootenai College. They have also developed relationships with key individuals in the Tribal Health Departments in each college's community. Additionally, PHWEIC collaborates with staff from the University of Montana to provide entry level public health training for the PHAs. Partnering with the University of Montana was a natural fit as it is the only University in the State to offer a graduate level Public Health degree.

PHWEIC

PHWEIC is centered on community-based strategies to develop the American Indian workforce in Montana. PHWEIC leverages partnerships between educational institutions, Tribal public health systems, including chemical

dependency programs, community groups, and non-traditional partners such as community members, cultural experts, social services, and youth-serving organizations. Together, they provide professional development opportunities for the Public Health Associates (PHAs) that focus on the eight-core public health competencies (Wholey et al., 2018) and the ten essential public health services (CDC, 2020). PHAs plan and implement culturally relevant community-based opioid overdose prevention Quick Impact Projects (QIPs) with guidance from their community and advisors. Using local data that is backed by community evidence of what the needs are, works. This form of evidence-based data is more relevant to communities than publicly available data that does not report American Indian community opioid-related impacts.

Partnering with Tribal colleges to develop the public health workforce makes sense. Across the nation, community colleges provide an avenue to higher-wage employment for undereducated workers by serving as the hub of regional partnerships that bring together all the key actors in the workforce development system – workforce agencies, community-based organizations, social service agencies, and employers. Working together, these partners can create new “career pathways” that meet both employers’ and workers’ needs. (Workforce Strategy Center, 2002). This study aimed to explore participant perspectives about the PHWEIC project focusing on process and impact measures.

Methods

The PHWEIC project centers around teams at six Tribal colleges in Montana. The teams consist of one advisor and two students. Each college has engaged two public health associates (PHAs) from their student pool to implement a Quick Impact Project (QIP). The QIP is community-based using local Tribal culture, tradition and practice to address opioid overdose. Students were chosen based on academic performance, relationship with the advisor, by recommendation from fellow staff or students, and by volunteering.

The PHWEIC teams were supported by an administrative team consisting of one director, one project coordinator, one administrative assistant, two student mentors and public health consultants, and one Indigenous health and social services consultant.

Recruitment

Twenty PHWEIC advisors and students from the six participating Tribal colleges were invited to take part in a personal interview to assess their experiences with the program and projects. Fifteen of the partners, six advisors and nine students, agreed to complete in-depth interviews for a response rate of 75%.

Design

The evaluation design was participatory, and advocacy focused. The evaluation focused on process and impact measures related to building the public

health workforce, this included exposure, reach, satisfaction, and implementation of PHWEIC, as well as whether PHWEIC had enhanced the ability of the PHAs to improve the health of their communities through their QIPs.

Data collection

Evaluation of the PHWEIC project involved the collection of qualitative data through semi-structured interviews conducted with PHWEIC students and advisors. Interviews were conducted approximately one-year after the project started. Interviews were conducted by the lead author who had complete understanding of program objectives and program focus. The interviews consisted of twelve questions designed by the report authors to explore process and impact evaluation measures such as: the participants' project roles, project engagement and success, prior public health experience, workforce development, future public health plans and recommendations (Table 1).

Due to the current COVID-19 pandemic, interviews were conducted using Zoom, a virtual meeting software. All interviews were video-recorded and transcribed verbatim by the report authors.

Table 1: Semi-structured interview question and evaluation focus.

Question Focus	Evaluation Focus
Q1: What is your role in the PHWEIC program?	Process – program reach

Q2: Tell me how you became involved in PHWEIC.	Process – recruiting fellows Process – program reach
Q3: How often did you meet with.. <i>Prompts: your advisor, PHWEIC students, or TLC admin</i>	Process – program implemented as planned Process – engagement in program
Q4: What was your experience with public health before this project?	Process - professional development goals Process – influences on program delivery
Q5: What types of activities did you engage in? <i>Prompts: email, webinar, learning sessions, site visits, etc.)</i>	Process – engagement in program
Q6: What has been a highlight for you in this program?	Process – satisfaction Process – influences on program delivery
Q7: Did you experience any barriers to participation? If yes, please tell me about these.	Process – satisfaction Process – influences on program delivery

Q8: Describe how PHWEIC builds the public health workforce.	Process – engagement in program Process – program implemented as planned
Q9: Will you pursue a public health profession as a result of this experience?	Impact – professional development goals
Q10: Did PHWEIC result in changes at the organizational/community level?	Impact – community programs that resulted from project
<i>Prompts: Tribal college, community/awareness, resources, etc.</i>	
Q11: What is needed to further develop the public health workforce in your community or in Indian Country?	Process – influences on program delivery
Q12: What are your recommendations for the PHWEIC program?	Process – influences on program delivery Impact - sustainability

Analysis

A thematic content analysis of the interview data was conducted to determine common themes to gain a deeper understanding of the program. Themes were also organized using a process and impact evaluation framework with a focus on exposure, reach, quality, satisfaction, and potential impact. Report authors first

open coded transcripts independently without using pre-established codes. From this, a code list was created and both authors agreed with the list. Codes were then grouped into categories and key categories were summarized. The data was then quantitized utilizing MAXQDA software, each interview was coded and sub-coded by the first author to capture the main themes around the process and impact evaluation questions.

Results

Themes

Results from thematic analysis revealed that PHWEIC had a positive impact on individuals and the future workforce. Themes also demonstrate the benefits to working locally, barriers to participation, interest in public health, and activities that support public health.

Reach of PHWEIC

PHWEIC team meetings varied, with most students meeting with each other daily while meeting with their advisor weekly. The teams engaged in webinars, hosted site visits, attended virtual learning sessions while also holding community outreach and trainings, and attending national conferences pre-COVID. Interactions with PHWEIC Administrative staff was limited to two site visits at each college.

Public Health Experience

Most team members, 73% (n=11), had little to no prior health experience prior to PHWEIC. We learned that despite that fact, they felt PHWEIC granted them the opportunity to expand their knowledge base and learn new ways to engage their communities through activities that support public health. One student said, “It was like a hand up that gave me something to shoot for, and that’s why I am really thankful for this program. I never thought I would be able to do something like this, and I’m doing it.”

Highlights of PHWEIC

When asked about the highlights of the program, 46.7% (n=7), stated that working together amongst their Tribal college team was what they looked forward to most, followed by bringing awareness to their community regarding opioid use and abuse at 33.3% (n=5). The PHAs increased their knowledge, 26.7% (n=4), surrounding opioid use while 20% (n=3), stated collaborating with other health and social services programs in their communities was a highlight.

Barriers to Participation

PHAs and advisors identified communication as a barrier to participation, 61.5% (n=8). Program organization followed at 46.2% (n=6). These results can be attributed to multiple changes in leadership within the initial two years of the grant; this was also identified by 38.5% (n=5), of the interviewees. COVID-19 was

also determined to be a barrier by 30.8% (n=4). Many PHAs were unable to carry out their plans and had to adapt strategies to complete their QIP.

Impact of PHWEIC

PHWEIC has been a catalyst for change in partner communities mainly by raising community awareness surrounding opioid use 53.8% (n=7), through the use of program FaceBook pages, FaceBook videos, program brochures, and community fair booths. Program collaboration also increased, 46.2% (n=6), of the partners reported engaging with established Tribal health programs such as recovery, medication-assisted treatment staff, Tribal opioid response staff, the Montana State University Extension Program, and other Tribal entities. Advisors reported witnessing increased self-esteem among the PHAs during the project period. They went from shy students to leading community presentations.

Building Workforce Capacity

Of the nine students interviewed, 88.8% (n=8), reported they would continue to the university in pursuit of a public health degree due to their participation in the PHWEIC project. This is important as it on track to fulfill PHWEIC's ultimate goal of increasing the public health workforce in reservation communities.

Developing a Public Health Workforce

The need for public health programming at the Tribal colleges was identified by 46.7% (n=7). For this to become concrete, 26.7% (n=4), responded

there needs to be an increase in public health awareness in their communities defining what public health does, as well as an increase in funding at the Tribal college level, 26.7%, to provide public health courses. In most instances, Tribal colleges and universities are not recipients of state tax financial support, and most Tribes do not levy taxes because their populations have such high poverty rates. So, TCUs depend primarily on promised federal funding. (Stull et al., 2013).

Participant Satisfaction

Overall, PHWEIC partners spoke highly of the project's overall goals and see value offered to PHAs. They attributed PHWEIC with providing a valuable community resource in terms of creating collaborations between programs, fostering teamwork among the college students, increasing student's self-confidence, and the feeling that they are making a difference.

Their recommendations included requesting for clearer expectations, 60% (n=9), while 46.7% (n=7), want more communication from PHWEIC staff. To aid in program delivery 33% (n=5), of the PHAs recommend having student only meetings monthly, while 13% (n=2), request advisor and administrative meetings regularly. An additional 13% would like to have individual college team meetings with the PHWEIC administration.

Discussion

Despite their limitations, semi-structured interviews can be a productive way to collect open-ended data from participants (DeJonckheere, Vaughn, 2019).

Limitations can include reluctance of the participant and bias on behalf of the researcher. Conversely, this type of interview platform offers the researcher an opportunity to develop relationships with stakeholders and gather subjective information about a given topic or experience that can be utilized for process and impact evaluation.

The limitations of the PHWEIC project include the small sample size. This project works with only six Tribal colleges in Montana; therefore, it is not generalizable to other Tribes or populations. It is also not possible to determine relative impacts of the PHWEIC efforts on individual Tribal communities. Additionally, social desirability response bias was considered when conducting the interviews. The participants were assured their individual answers and the recording of the interview would remain anonymous to elicit truthful statements.

This study aimed to explore the PHWEIC project at RMTLC. Findings show that PHWEIC is a powerful tool for building the workforce, and that the PHWEIC approach builds interest, capacity, community awareness, and confidence. There is clear evidence that PHWEIC adds value and impact to Tribal communities in Montana. The collaborative approach, driven by community-identified needs and partner support, leads to success.

Conclusion

The qualitative evaluation of the PHWEIC project found that PHWEIC promotes learning, capacity and interests in public health. There is a need to take

recommendations and themes from this study and apply them to future work of the PHWEIC grant, at RMTLC, in Montana, and throughout Indian Country. By creating an interest in public health to future Tribal college students, giving current students public health education, and offering partnerships with Tribal Health programs for work experience the overall health of the Native communities can be improved through public health efforts. The public health workforce is a valuable source of resilience and strength.

References

- CDC - Public Health System and the 10 Essential Public Health Services - OSTLTS*. (2020). Centers for Disease Control.
<https://www.cdc.gov/publichealthgateway/publichealthservices/essentialhealthservices.html>
- Dean, H. D., Myles, R. L., Spears-Jones, C., Bishop-Cline, A., & Fenton, K. A. (2017). A strategic approach to public health workforce development and capacity building. *American journal of preventive medicine. American Journal of Preventive Medicine*, 47(5), S288–S296.
<https://doi.org/10.1016/j.amepre.2014.07.016>
- DeJonckheere M, Vaughn LM. (2019). Semistructured interviewing in primary care research: a balance of relationship and rigour. *Family Medicine and Community Health* 7(2).
<https://doi.org/10.1136/fmch-2018-000057>
- Kelley, A. (2020). *Public Health Evaluation and the Social Determinants of Health*. Routledge. ISBN 9781003047810
- Kelley, A. & Andreini, M. (2017, November). *Tribal Public Health Workforce Needs* [Presentation]. APHA 2017 Annual Meeting, Atlanta, GA, USA.

- Rosenstock, L., Silver, G. B., Helsing, K., Evashwick, C., Katz, R., Klag, M., Kominski, G., Richter, D., & Sumaya, C. (2008). On linkages: Confronting the public health workforce crisis: ASPH statement on the public health workforce. *Public Health Reports*, 123(3), 395-398.
- Stull, G., Spyridakis, D., Gasman, M., Castro Samayoa, A., & Booker, Y. (2013). *Redefining Success: How Tribal Colleges and Universities Build Nations, Strengthen Sovereignty, and Persevere Through Challenges*. Virginia Tech. <https://vtechworks.lib.vt.edu/handle/10919/95128>
- Wholey, D. R., LaVenture, M., Rajamani, S., Kreiger, R., Hedberg, C., & Kenyon, C. (2018). Developing Workforce Capacity in Public Health Informatics: Core Competencies and Curriculum Design. *Frontiers in public health*, 6, 124. <https://doi.org/10.3389/fpubh.2018.00124>
- Workforce Strategy Center. (2002). *Building a career pathways system: promising practices in community college-centered workforce development*. <https://eric.ed.gov/?id=ED470457>