UTAH DEPARTMENT OF HEALTH
Office of Health Disparities

Survey of Oral Health Professionals and Students

who volunteered at the UDOH Office of Health Disparities' Dental Day Clinics

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"This survey has been adapted with permission from the Clinical Cultural Competency Questionnaire (CCCQ) developed by Robert C. Like, MD, MS, Professor and Director of the Center for Healthy Families and Cultural Diversity, Department of Family Medicine and Community Health, Rutgers Robert Wood Johnson Medical School. The CCCQ was used in a project entitled, "Assessing the Impact of Cultural Competency Training Using Participatory Quality Improvement Methods," funded by the Aetna Foundation (http://rwjms.rutgers.edu/departments_institutes/family_medicine/chfcd/grants_projects/aetna.html)

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Executive Summary

In accordance with the NPA framework, OHD's approach endeavored to build the cultural and linguistic skills, awareness, and competence of volunteer dental/ dental hygiene students and oral health professionals.

Nearly all volunteers (98%) had an opportunity to interact with underserved and diverse communities.

An overwhelming majority of volunteers (92%) said their participation in the clinics increased the likelihood they would accept patients from diverse and vulnerable backgrounds in their current or future clinical practices.

Since 2015, the Utah Department of Health (UDOH) Office of Health Disparities (OHD) has been working to improve access to oral health care for disparate communities. A large part of this effort involved OHD's dental day clinics, where, with the help of oral health professionals and student volunteers, patients received immediate care free of charge. In order to "redirect the focus of its dental days from providing temporary services to engaging in efforts to build sustainable components of access to care for underserved populations," OHD used the National Partnership for Action to End Health Disparities (NPA) framework.[1]

In accordance with the NPA framework, OHD's approach endeavored to build the cultural and linguistic skills, awareness, and competence of volunteer dental/ dental hygiene students and oral health professionals. In May 2019, OHD surveyed volunteers to measure the effectiveness of OHD's strategies.

Fifty-five (55) out of 166 volunteers responded to the survey for a 33% response rate. This included dentists, dental hygienists, dental students, and dental hygiene students. Overall, respondents' demographics differed from patient demographics punctuating the opportunity for cross-cultural training and experience.

Key Findings

- In total, respondents reported volunteering 962 hours, which averages to about 17 hours per person.
- Nearly all volunteers (98%) had an opportunity to interact with underserved and diverse communities.
- A majority of volunteers (75%) used interpretation services at the clinics. Fifty-six (56) percent of whom reported it was their first time using either in-person or telephone interpretation.
- Almost all volunteers said the clinics improved their general knowledge of diverse and vulnerable populations (96%) and their knowledge of oral health disparities experienced by these populations (95%).
- Fewer volunteers (29-37%) reported the clinics improved their general knowledge around people with physical or intellectual disabilities.
- Nearly all volunteers (97%) felt the clinics improved their communications skills with underserved groups regarding one or more topics.
- More than 92% of participants reported OHD's dental clinics improved their level of comfort when treating patients from diverse backgrounds.
- Almost every volunteer (91%) said the clinics provided them with opportunities and experiences they would have not received elsewhere.
- An overwhelming majority of volunteers (92%) said their participation in the clinics increased the likelihood they would accept patients from diverse and vulnerable backgrounds in their current or future clinical practices.

[1] Office of Health Disparities. Addressing Oral Health Disparities in Urban Settings: A Strategic Approach to Advance Access to Oral Health Care. Salt Lake City (UT): Utah Department of Health, Office of Health Disparities; January 2018.

Executive Summary

Key Recommendations

- Utah's oral health community could use opportunities to augment the current cross-cultural education and training.
- Opportunities providing care to disparate populations can be venues for both current and future oral health professionals to increase their general knowledge of underserved communities and the oral health disparities they experience.
- More targeted opportunities are needed to increase awareness surrounding the oral health needs of people with physical or intellectual disabilities.
- It is recommended educational institutions, professional organizations such as local dental and dental hygiene associations, and community partners work together to provide these types of experiences for the current and future oral health workforce as it will likely improve their comfort in treating patients from diverse backgrounds.
- Efforts need to be inclusive of all oral health professionals to bolster leadership in the future and current workforce. This means intentionally including professionals with different licenses and from a variety of practices.
- Using the NPA framework is key to directing these opportunities, so they help volunteers in their current or future clinical practices accept patients from diverse and vulnerable backgrounds
- Data collection should be a large component and focus for these types of efforts, as it is vital to evaluating whether the approach is effective at ultimately addressing oral health disparities.

The OHD is pleased to note the survey results overall show advancements in each component of the NPA framework. This provides some evidence that volunteers were not only engaged in short-term care, but also in activities that invested in sustainable practices aimed at addressing oral health disparities. These findings are intended to encourage partners in and around the oral health community to adopt and integrate health equity frameworks into their efforts in order to build capacity in the current and future oral health workforce to address oral health disparities.

Utah's oral health community could use opportunities to augment the current cross-cultural education and training.

Using the NPA framework is key to directing these opportunities so they help volunteers accept patients from diverse and vulnerable backgrounds in their current or future clinical practices.

This provides some evidence that volunteers were not only engaged in short-term care, but also in activities that invested in sustainable practices aimed at addressing oral health disparities.

Introduction

Background

One way to address health disparities in oral health care is through proper training of oral health professionals in cross-cultural education[3] so future professionals can provide culturally and linguistically appropriate services.

Despite significant improvements in oral health, there are still many challenges that need to be tackled to diminish oral health disparities[2] and advance oral health overall. One way to address health disparities in oral health care is through proper training of oral health professionals in cross-cultural education[3] so future professionals can provide culturally and linguistically appropriate services. That being said, cultural competency[4], is defined as "a process in which an understanding of cultural attitudes, values, beliefs, and practices is used to help guide care for an individual, taking into consideration specific history and needs and avoiding the use of stereotypes and personal biases."[5] Many oral health education institutions include cross-cultural education in their curricula aiming to prepare future health care professionals to work in different cultural settings so they can understand and meet the needs of their patients.

By providing practical experiences treating patients from different backgrounds, oral and health care professionals and students can build cultural competence and linguistic skills in working with these populations.

Culturally and linguistically competent oral health professionals creates the ability "to provide care to patients with diverse values, beliefs, and behaviors, including the tailoring of health care delivery to meet patients' social, cultural, and linguistic needs.[6] By providing practical experiences treating patients from different backgrounds, oral and health care professionals and students can build cultural competence and linguistic skills in working with these populations.[7] Thus, they will have the tools to improve quality of care, reducing disparities underserved populations frequently experience.[8,9]

[2] Differences in oral health outcomes (e.g., oral health status, tooth decay, periodontal disease, oral cancer, etc.) "that are closely linked to economic, socio-cultural, environmental, and geographic disadvantage."[1]

[3] Cross-cultural education or training in oral health: Instruction which enhances an individual's understanding of differing cultural beliefs, behaviors, traditions, languages, customs, norms, etc. and how they might affect oral health and providing oral health services. Cross-cultural education/training may be delivered in varying formats.[8,9]

[4] Cultural competency: " . . . the ability of systems to provide care to patients with diverse values, beliefs and behaviors, including the tailoring of health care delivery to meet patients' social, cultural and linguistic needs."[6]

[5] Charbonneau, C.J., Neufeld, M.J., Craig, B.J., & Donnelly, L R. (2009). Increasing cultural competence in the dental hygiene profession. (EVIDENCE FOR PRACTICE). Canadian Journal of Dental Hygiene, 43(6), 297-305.

[6] American Hospital Association. (2019). Becoming a Culturally Competent Health Care Organization. Retrieved from: https://www.aha.org/ahahret-guides/2013-06-18-becoming-culturally-competent-health-care-organization

[7] Doucette, H.J., Maillet, P.J., Brilliant, M.J., Tax, C.L. (2015). Dental hygiene students' perceptions of a cultural competence component in a tobacco dependence education curriculum: A pilot study. Journal of Dental Education, 79(6), 680-685.

[8] Saha, S., Beach, M.C., & Cooper, L.A. (2008). Patient centeredness, cultural competence and healthcare quality. Journal of the National Medical Association, 100(11), 1275-1285. Retrieved from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2824588/?tool=pubmed

[9] Rowland, M.L., Bean, C.Y., & Casamassimo, P.S. (2006). A snapshot of cultural competency education in US dental schools. Journal of Dental Education, 70(9), 982-990.

Introduction

Office of Health Disparities' Dental Day Clinics

The Utah Department of Health (UODH) Office of Health Disparities' (OHD) dental day clinic events are part of the Bridging Communities and Clinics Project, which is an outreach program funded by the Federal Office of Minority Health (OMH), State Partnership Initiative to Address Health Disparities (SPI). In 2015, the OMH awarded the OHD a grant to work on improving access to primary care and oral health to two of Utah's most disparate communities, Salt Lake City's neighborhood of Glendale and the city of South Salt Lake. The OHD developed a partnership with the UDOH Oral Health Program, the UDOH state dental clinic Family Dental Plan, oral health institutions, local school districts, non-profit organizations, and community partners to provide oral health services free of charge for residents of the two geographic areas. Through this effort, OHD held 12 clinics and provided oral health care services to more than 800 individuals.

The OHD developed partnerships to provide oral health services free of charge for residents of the two geographic areas.

In an effort to address the value of cultural and linguistic competency in overcoming health disparities, the OHD provided basic training and hands-on experience to oral health students and professionals during its dental day clinic events held between 2016 and 2019. The training included reviewing cultural considerations for the patient population served as well as best practices for interpretation including specific instructions for telephone interpretation.

In an effort to address the value of cultural and linguistic competency in overcoming health disparities, the OHD provided basic training and hands-on experience to oral health volunteers.

Survey Purpose

The purpose of this survey was to assess how OHD's dental day clinics affected the cultural and linguistic skills, awareness, and competence of participating dental/dental hygiene students and oral health professionals. The survey was also used to identify whether oral health students and professionals felt they were able to adequately care for patients in varying cultural and linguistic environments, felt their experience at OHD's dental days helped further their cultural and linguistic competency, and were interested in furthering their cross-cultural experience by assessing their willingness to participate in future community outreach events.

Applying the NPA Framework

The intent was to "redirect the focus of its dental days from providing temporary services to engaging in efforts to build sustainable components of access to care for underserved populations."

This survey is one effort to measure the effectiveness of OHD's strategies. To that end, the NPA framework guided survey development.

The OHD used the National Partnership for Action to End Health Disparities (NPA) framework to guide its efforts surrounding the dental day clinics. The intent was to "redirect the focus of its dental days from providing temporary services to engaging in efforts to build sustainable components of access to care for underserved populations."[1] This survey is one effort to measure the effectiveness of OHD's strategies. To that end, the NPA framework guided survey development.

For more information on the NPA framework visit minorityhealth.hhs.gov/npa/.

For more information on OHD's approach to its dental day clinics visit health.utah.gov/disparities/data/ohd/SPIWhitePaper2018.pdf.

Source: minorityhealth.hhs.gov/npa/images/priorities.jpg

Applying the NPA Framework

1. Awareness

- One of the main purposes of the OHD's dental day clinics was to provide volunteers unique experiences with underserved populations to increase their knowledge and awareness of oral health disparities in Utah. The survey gauged what type of opportunities volunteers had as well as how those opportunities improved knowledge and awareness.

2. Leadership

- Volunteers' interaction with underserved communities at the dental day clinics was intended to be a stepping stone. These volunteers will be better equipped to lead the current and future oral health workforce in contributing to addressing health disparities. The survey evaluated whether the experience was a unique opportunity not received elsewhere.

3. Health System & Life Experience

- Volunteers at the dental day clinics were able to have hands-on experience improving the health outcomes of underserved populations. The survey asked if they intended to continue serving underserved populations in their current or future practices.

4. Cultural & Linguistic Competency

- OHD trained volunteer oral health students and professional providers to build their skills in offering culturally and linguistically appropriate care to those with different communication and language needs, diverse cultural beliefs, and different levels of literacy.
- A majority of the survey focused on participants' prior cultural and linguistic competency education before OHD's dental day clinics, if they were able to use that training, as well as if the events improved participants' skills and abilities related to communication and culturally responsive care.

5. Data, Research, & Evaluation

- At the dental day clinics, OHD collected contact information with the intention to survey volunteers. The survey demonstrates how these types of dental clinics may benefit volunteers and the clinics' potential in addressing health disparities. The dissemination of information within this report will allow communication between OHD, community members, and stakeholders about the improvements accomplished and further challenges regarding addressing oral health disparities in Utah.

These volunteers will be better equipped to lead the current and future oral health workforce in contributing to addressing health disparities.

OHD trained volunteer oral health students and professional providers to build their skills in offering culturally and linguistically appropriate care to those with different communication and language needs, diverse cultural beliefs, and different levels of literacy.

Survey Results

Response overview

Fifty-five (55) out of 166 volunteers responded to the survey for a 33% response rate.

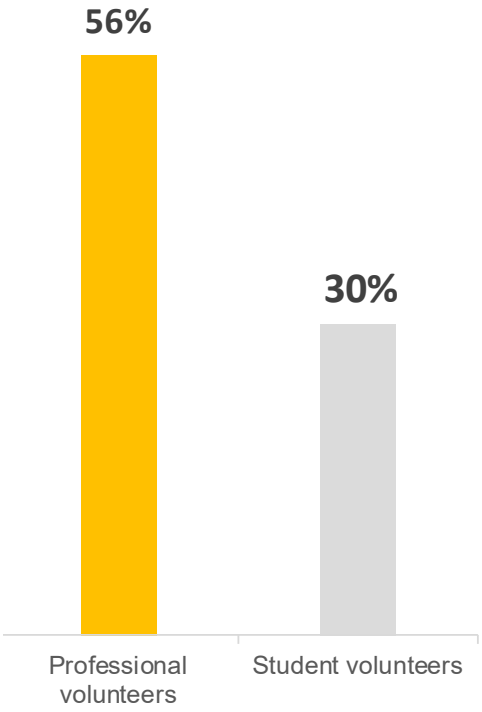
Sixty of the 166 volunteers contacted responded, resulting in a response rate of 36%. Five responses were incomplete and excluded from the final analysis, resulting in a 33% response rate.

Survey participants identified themselves as: dentists (3), dental hygienists (8), dental students (6), dental hygiene students providing care (16), and dental hygiene students volunteering in a dental assistant capacity (22).

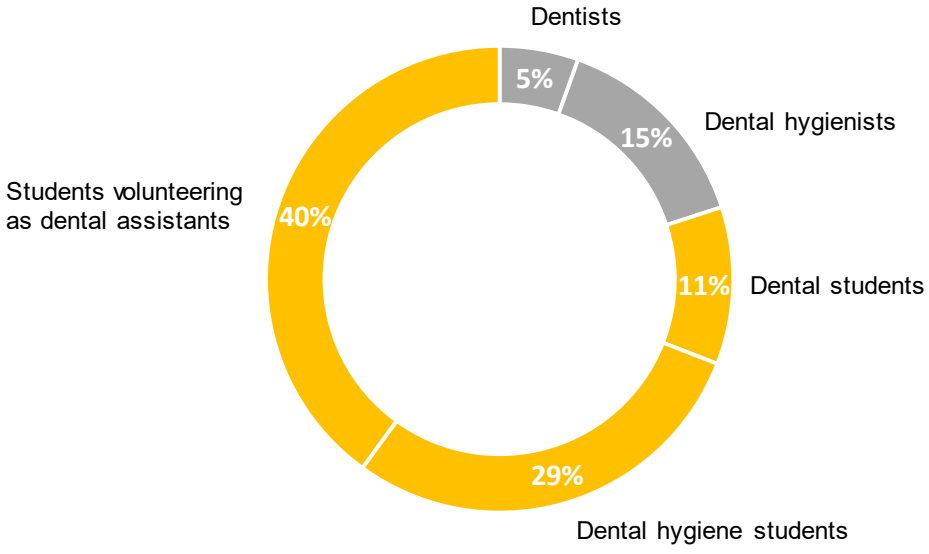
Response rates were highest for dental hygienists (64%) and dentists (60%).

Professionals responded at a much higher rate (56%) when compared with students (30%). Thus, not surprisingly, response rates were highest for dental hygienists (64%) and dentists (60%).

A higher rate of professionals responded to the survey than students.



Student volunteers dominated survey participation when compared with professional volunteers.



Survey Results

Demographics

A majority of survey respondents identified as white, English-speaking only females between the ages of 22-30 (see Table 1). This reflects the high response from dental hygiene students. However, respondents' demographic summaries shifted when stratified by volunteer type. Professionals tended to have an older age range with the majority between 36-65 years old (45%). Many more were male (36%) and more were English speaking only (73%). Dental students tended to have a slightly older age range, were mostly male (67%), and 67% spoke a language other than English.

A majority of survey respondents identified as white, English-speaking only females between the ages of 22-30 .

Respondents' demographic summaries shifted when stratified by volunteer type.

Table 1. Majority of respondents were white, English-speaking only females between 22-30 years old.

Age of participants	# Responses	Percent %
18-21	1	2%
22-25	25	45%
26-30	14	25%
31-35	8	15%
36-65	6	11%
>65	1	2%

Gender	# Responses	%
Male	8	15%
Female	47	85%

Race/Ethnicity	# Responses	%
White	47	85%
Hispanic/Latino	5	9%
American Indian/Alaska Native	1	2%
Asian/Asian American	2	4%

Language other than English	# Responses	%
None	38	69%
Spanish	12	22%
French	1	2%
American Sign Language	2	4%
Portuguese	2	4%
Nepali/Hindi	1	2%
Italian	1	2%

Survey Results

Overall, respondents' demographics did not reflect the demographics of patients served at the OHD's dental day clinics.

Overall, respondents' demographics did not reflect the demographics of patients served at the OHD's dental day clinics. The majority of patients identified with a race/ethnicity other than white (90%) whereas most survey respondents identified as white (85%). Patients were between the ages of 25-61 (62%) and survey respondents were largely 22-30 years old (70%). Finally, many patients spoke a language other than English (63%) and 69% of survey respondents were English-speaking only.

Participation

The OHD hosted 12 dental day clinics. Clinics lasted 10 hours and volunteers typically signed up for one or two four to five hour long shifts.

On average, respondents participated in two to three clinics with overall participation ranging from one to 10 clinics. Respondents reported 962 hours with an average of 17 total volunteer hours and a range of four to 75 hours.

Respondents volunteered

962 hours

The respondents who volunteered the most days and clocked the most hours were also those gaining the hands-on experience interacting with and providing care to patients.

Most survey respondents (69%) participated in one to two events and reported working an average of eight hours; however, the majority of these respondents were dental hygiene students volunteering in a dental assistant capacity. Seventeen (17) volunteers participated in three or more clinics clocking an average of 38 hours, meaning 31% of respondents likely volunteered at multiple clinics for almost a year or for multiple years, as the OHD generally held clinics four times a year. These 17 volunteers were solely (100%) students and professionals who provided care to patients. This means the respondents who volunteered the most days and clocked the most hours were also those gaining the hands-on experience interacting with and providing care to patients.

Survey Results

Interaction with disparate communities

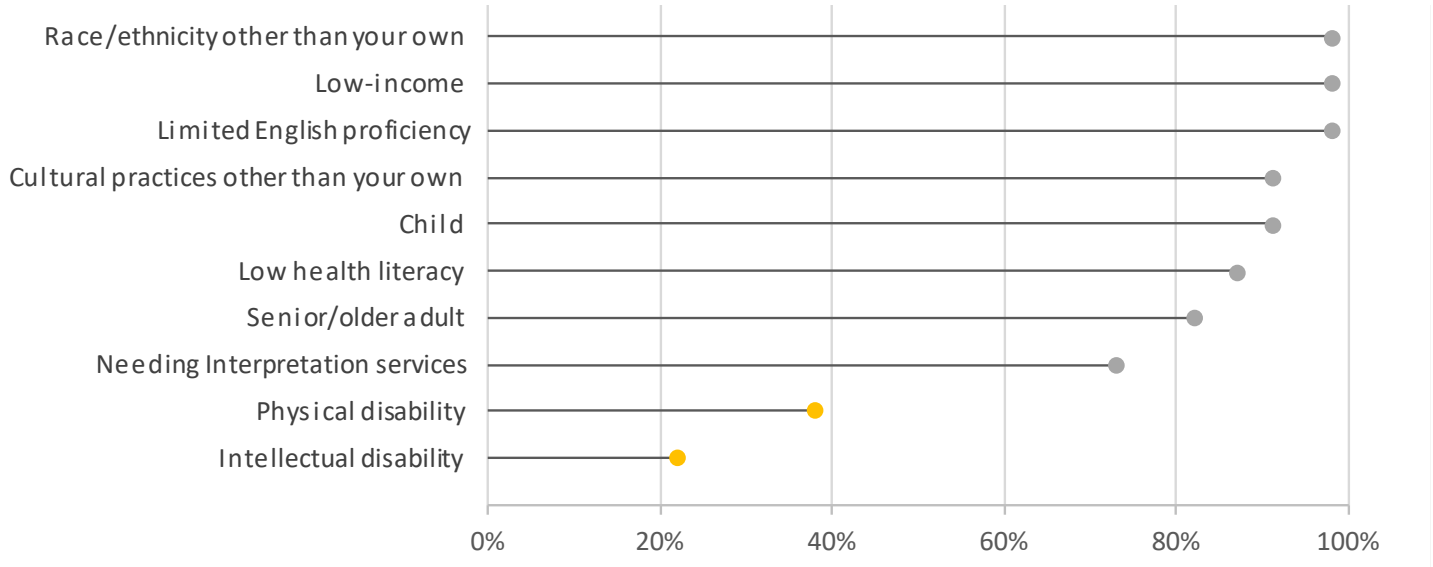
The OHD's dental day clinics served individuals from diverse population groups in two of the most disparate urban cities in Utah, the cities of Glendale and South Salt Lake, including refugees, Hispanic/ Latinos, African Americans, and Pacific Islanders from all ages. Many people were low-income, with low English proficiency and health literacy, and needing interpretation services.

Survey respondents were asked to identify whether they provided care to patients with specific characteristics, including race/ethnicity other than theirs, limited English proficiency, low health literacy, intellectual disability, physical disability, child, senior/older adults, low-income individuals, patients needing interpretation services, and cultural practices other than their own. All but one volunteer had the opportunity to work with four (4) or more diverse groups cited. Many volunteers had the opportunity to work with seven (7) different groups.

As a result of having such a diverse population at the OHD's dental day clinics, volunteers really had an opportunity to gain oral health experience from patients from diverse populations and backgrounds.

Most survey respondents (95%) worked with individuals with a different race/ethnicity, who were low income, and with different cultural practices. Most (87%) reported they provided care to individuals with limited English, or low health literacy, while 73% of participants reported they used interpretation services to care for the patients. Most (80%) also worked with patients across the lifespan from children to seniors or older adults. Fewer survey respondents (22-39%) provided care to individuals with intellectual and physical disabilities.

Fewer survey respondents reported working with individuals with intellectual or physical disabilities.



Survey Results

Use of interpretation services

When in-person interpretation was not available, the OHD provided free telephone interpretation services via an iPad or phone.

Many patients served at the dental day clinics needed interpretation services. Some patients were accompanied by individuals who could provide in-person interpretation. Others were served by staff or volunteers who could provide in-person interpretation. When in-person interpretation was not available, the OHD provided free telephone interpretation services via an iPad or phone.

A majority of the volunteers (75%) had an opportunity to experience using interpretation services at the clinics. Sixty percent (33) said they used in-person interpretation services and 33% (18) said they used telephone interpretation services. A handful of volunteers (10) used both.

75% of volunteers

used interpretation services

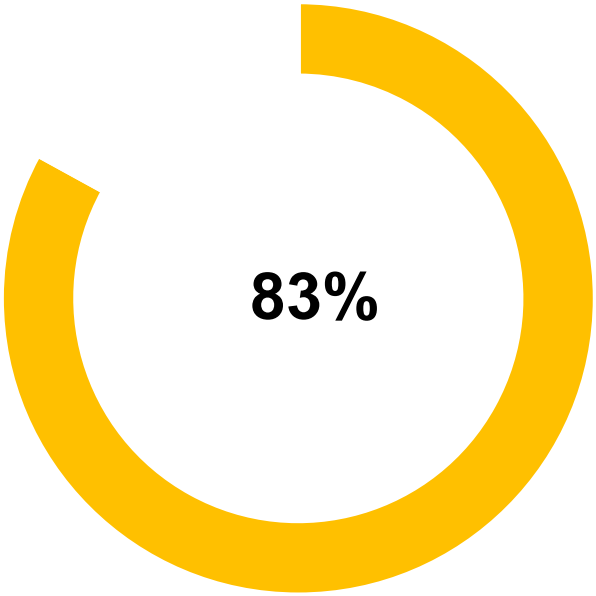
The interpretation experience gained by a majority of volunteers centered on interpretation related to providing and explaining care as opposed to other tasks such as intake paperwork.

More than half (56%) of volunteers who reporting using interpretation services were using either in-person or telephone interpretation for the first time. This was much higher for telephone interpretation (83%) when compared with in-person interpretation (30%). So, many volunteers were using telephone interpretation services for the first time. This means the clinics provided a new opportunity for many volunteers to build skills in using interpretation services, particularly telephone interpretation services.

Of those using interpretation services, 85% were volunteers providing care to patients. This means the interpretation experience gained by a majority of volunteers centered on interpretation related to providing and explaining care as opposed to other tasks such as intake paperwork.

Survey Results

Many volunteering using telephone interpretation services were using them for the first time.



Prior cross-cultural education and training

Most volunteers (91%) had at least some cross-cultural education and training before the OHD clinics. Only five participants did not have any type of training, all of whom were students. Many volunteers (36) had some sort of formal training, while a few participants only had volunteer training (9). Interestingly, some survey respondents (19) had just one venue for cross-cultural training, while some survey respondents (19) indicated they had multiple venues such as educational training and volunteer opportunities.

Overall, volunteers had very limited amounts of prior cross-cultural education or training. About 60% of volunteers reported ten hours or less. Seven (7) volunteers had 11-20 hours, four (4) had 21-40 hours, and six (6) had 40 hours or more.

Volunteers reported their cross-cultural education or training provided them varying levels of preparedness to care for underserved patient needs at the clinics, with 15 feeling it prepared them a little or not at all, 16 reported it prepared them some, and 19 indicated it prepared them quite a bit or a lot.

Volunteers also reported varying levels of use of prior training at the clinics, with 18 reporting a little to no use, 18 indicated their prior training was used some, and 14 responded it was used quite a bit or a lot.

Overall, volunteers had very limited amounts of prior cross-cultural education or training.

Survey Results

From these results, it seems volunteers did not receive prior comprehensive or consistent cross-cultural education and training and generally, the amount was very limited. This may contribute to the feeling of the training not preparing volunteers or the impression that it was not utilized at the clinics. OHD's dental clinics may be providing opportunities that are necessary in contributing to the cross-cultural training and education of Utah's oral health workforce.

Improvements in knowledge

Nearly all the volunteers said the clinics improved their general knowledge of diverse and vulnerable populations (96%) and their knowledge of oral health disparities experienced by these populations (95%).

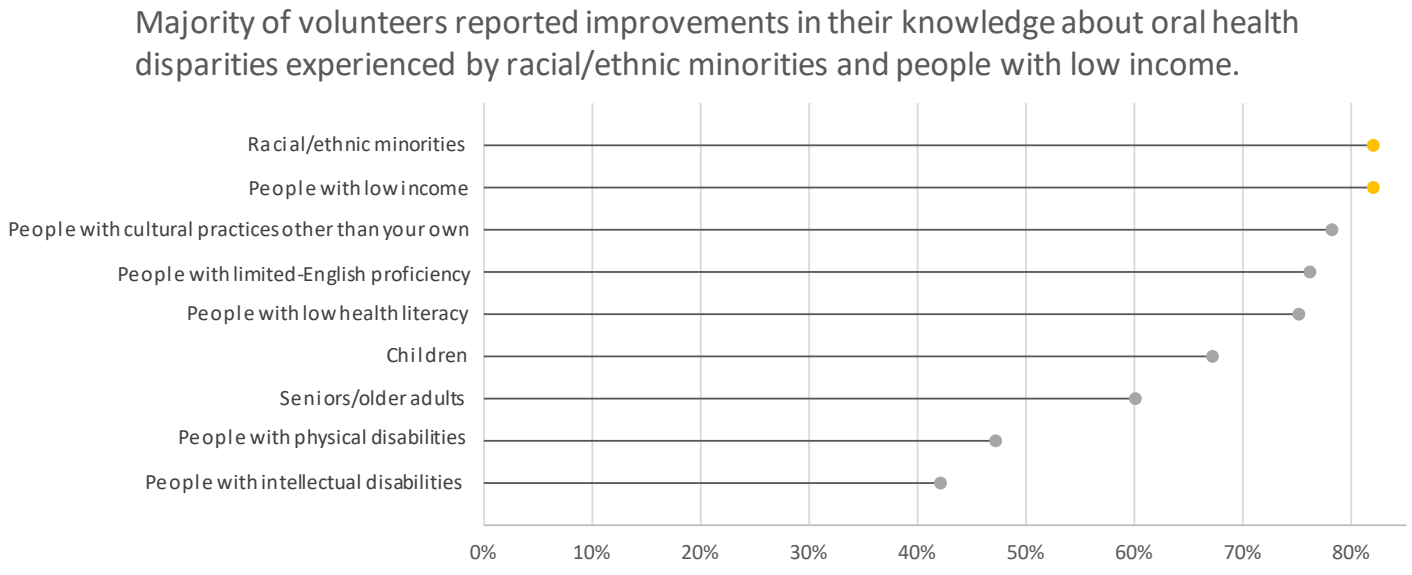
A majority of volunteers (80-84%) reported improvements in general knowledge of racial/ethnicities minorities, people with cultural practices other than their own, people with low income, people with limited-English proficiency, and people with low health literacy.

The outcome was very similar (75-82%) for improvements in knowledge of oral health disparities experienced by these same populations.

About half of the volunteers (55-67%) reported improvements in both general knowledge and oral health disparities regarding children and seniors/older adults.

The fewest amount of volunteers (29-37%) reported improvements in general knowledge for people with physical or intellectual disabilities. However, this increased to 40-47% when specifying improved knowledge of oral health disparities experienced by those with physical or intellectual disabilities.

This may indicate the volunteer population was more familiar with these underserved communities or the dental clinics did not provide opportunities to interact with these populations as compared with the others.



Survey Results

Improvements in skills related to providing culturally and linguistically appropriate services

Almost all volunteers (97%) felt the clinics improved their communications skills with underserved groups regarding one or more topics.

Many volunteers reported volunteering at the clinics improved their ability with regard to patient oral health practices (85%) and instructions for personal care (80%). This was only slightly lower for dental/medical history (71%), treatment plans (73%), and assessing health literacy (71%).

The majority of volunteers reported the clinics improved their ability to care for patients with limited English proficiency (89%) and their ability to identify situations that may require culturally sensitive treatment and communication approaches (78%).

Fewer volunteers reported the clinics improved their abilities for providing treatment regarding culturally sensitive patient care (69%) and dealing with cross-cultural conflicts (60%).

Of those using interpretation services during the clinics, 85% reported their abilities to use either in-person or telephone interpretation services improved.

92% of respondents

reported the OHD's dental day clinics improved their level of comfort when treating patients from diverse backgrounds

A handful of volunteers (8) reported improvements in their abilities, despite not having used at least one of interpretation services during the event. This may demonstrate how valuable the training and observation is to these volunteers, despite no opportunity for hands-on experience.

More than 92% of participants reported the OHD's dental day clinics improved their level of comfort when treating patients from diverse backgrounds; 78% reported the clinics improved their awareness of personal biases or cultural stereotypes; 78% of participants reported the clinics improved their acceptance of different cultures.

Almost all volunteers (97%) felt the clinics improved their communications skills with underserved groups regarding one or more topics.

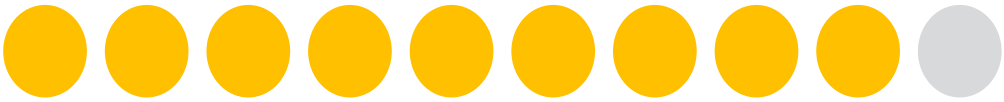
Of those using interpretation services during the clinics, 85% reported their abilities to use either in-person or telephone interpretation services improved.

Survey Results

OHD's dental day clinics as a unique experience

Nearly every volunteer (91%) said the clinics provided them with opportunities and experiences they would have not received elsewhere. When stratified by volunteer type, almost every volunteer within their respective category agreed it was a unique experience. This demonstrates the opportunity not only benefits student volunteers, but professional volunteers as well.

9 out of 10 volunteers said they would not have received these opportunities and experiences elsewhere.



Future care for patients from diverse and vulnerable backgrounds

An overwhelming majority of volunteers (92%) said their participation in the clinics increased the likelihood they would accept patients from diverse and vulnerable

Almost 90% of volunteers had volunteered at other dental events. However, almost 67% said it was rarely and 11% of the volunteers had never volunteered at other events. This demonstrated the clinics provided an initial experience for some individuals and provided some of the only experiences for others. More than 90% of volunteers said the experience increased the likelihood they will volunteer at future dental events, meaning the event was positive in motivating ongoing participation.

An overwhelming majority of volunteers (92%) said their participation in the clinics increased the likelihood they would accept patients from diverse and vulnerable backgrounds in their current or future clinical practices. This finding is reassuring, demonstrating the importance of these types of opportunities and proving the approach is useful in encouraging the oral health workforce to reduce these types of barriers to care.

Survey Results

Open-ended question about volunteers' experiences

Most volunteers said the OHD's dental day clinics provided them with unique experiences they would not receive anywhere else. Respondents varied greatly in their memorable experience at the dental clinics, but many (16) agreed providing care to underserved patients was the greatest experience they had at the OHD clinics.

While many volunteers expressed providing care to underserved patients was the most memorable experience at the OHD clinics, volunteers also reported memorable experiences involved providing culturally sensitive care to patients (5), working with different cultures (6), educating patients (6), seeing grateful patients (6), and caring for kids (4).

16 agreed providing care to underserved patients was the greatest experience they had at the OHD clinics.

What was your most memorable learning experience at OHD's free dental clinic(s)?

"Providing services to people that had severe periodontal disease and have never had a cleaning in their entire life, and you know will never have a chance to have their teeth cleaned again after that event. That is where you are truly making a difference in someone's life."

"The most memorable was being there for people who needed someone to know their health is important and they deserve care."

"Helping to alleviate pain and discomfort for patients that may not have received care otherwise was very memorable. People were very appreciative of the care we provided."

Survey Results

By participating in one of the OHD's dental day clinics, participants were trained on how to be culturally sensitive while caring for patients from different cultures as well as how to provide linguistically appropriate care.

Many survey respondents said they plan to apply the experience they gained at the clinics in their current or future practices, including providing culturally sensitive care to patients (7). A few participants indicated they would be able to better communicate with their patients, as well as be more prepared to use telephone interpretation services.

How do you plan to apply your experiences from OHD's free dental clinic(s) in your current/ future practice?

"I will be more prepared to treat people from different cultures. I will be more understanding and less judgmental."

"Understanding how to treat patients of different cultures and beliefs."

"I will now be more receptive to seeing patients of diverse backgrounds knowing that I can use an interpreter on the iPad to provide proper communication between myself and the patient."

Survey Results

Gaining feedback about how the OHD could have improved the experience of volunteers was intended to benefit other agencies or organizations that might replicate these clinics in the future. Knowing what could improve volunteer experiences is essential for future organizations and agencies in designing an effort that can serve well both underserved communities and the volunteers.

Survey responses varied in relation to what could have improved volunteers' experience at the clinics. Some responses included more training (7), more interpreters (3), better instruments (5), and more organization (4). While there were areas in which the OHD's dental day clinics could have improved to better assist its volunteers, many volunteers (17) agreed the event needed no changes.

How could OHD have improved your experience of working with diverse communities at the free dental clinic(s)?

"I think they did a great job. One thing that would help is by having more interpreters. There are so few it's hard for them to get around in a timely manner. But this is understandable and was very grateful for the interpreters that we there!"

"I do recall seeing a sheet that had some tips and ways to communicate with people of other cultural backgrounds before I began my shift. I would suggest sending that via email to the clinician/student before they arrive so they can be better prepared for who they might see."

"Nothing, this was way better than school."

Key Findings and Analysis within the NPA Framework

For the responding volunteers, overall the OHD's dental day clinics were successful in making advancements in each component of the NPA framework. This demonstrates the OHD was able to shift the focus of the clinics, particularly regarding the volunteers, from short-term care to sustainable efforts aimed at addressing oral health disparities.

Almost all volunteers (98%) had the opportunity to interact with and serve underserved and diverse communities.

The majority of survey participants (91%) reported the OHD's clinics provided them with unique experiences they would not acquire elsewhere.

Most volunteers agreed providing care to underserved patients was the greatest experience they had at the clinics.

1. Awareness

- Almost all volunteers (98%) had the opportunity to interact with and serve underserved and diverse communities.
- A majority of volunteers (80-84%) reported the clinics improved their general knowledge regarding racial/ethnic minorities, people with cultural practices other than their own, people with low income, people with limited-English proficiency, and people with low health literacy.
- The outcomes were very similar (75-82%) for improvements in knowledge of oral health disparities experienced by these same populations.
- Fewer volunteers (29-37%) reported the clinics improved their general knowledge for people with physical or intellectual disabilities.
- However, this increased to 40-46% when specifying improved knowledge of oral health disparities experienced by those with physical or intellectual disabilities.
- More than 92% of participants reported the clinics improved their level of comfort when treating patients from diverse backgrounds.

2. Leadership

- At least 166 volunteers participated in the dental day clinics including dentists, dental hygienists, dental students, and dental hygiene students.
- All types of volunteers responded to the survey. Professionals responded at a 56% response rate and students at a 30% response rate.
- The majority of survey participants (91%) reported the OHD's clinics provided them with unique experiences they would not acquire elsewhere.

3. Health System & Life Experience

- Survey respondents reported 962 total volunteer hours devoted to caring for patients at the dental day clinics, with an average of 17 hours per volunteer.
- Respondents who volunteered the most days and clocked the most hours were also those gaining the hands-on experience interacting with and providing care to patients.
- Most volunteers agreed providing care to underserved patients was the greatest experience they had at the clinics.

Key Findings and Analysis within the NPA Framework

- More than 90% of volunteers said the experience increased the likelihood they will volunteer at future dental events.
- An overwhelming majority of volunteers (92%) said their participation in the clinics increased the likelihood they would accept patients from diverse and vulnerable backgrounds in their current or future clinical practices.

4. Cultural & Linguistic Competency

- Most volunteers (91%) had at least some cross-cultural education or training before the OHD clinics. However, 60% of these had 10 hours or less and the type varied.
- About one third of volunteers (30%) reported their training only prepared them a little or not at all for the clinics and 36% said they used it a little or not at all.
- The majority of survey respondents (75%) gained hands-on experience using interpretation services, whether in-person or telephone.
- More than half (56%) of volunteers who reporting using interpretation services were using either in-person or telephone interpretation for the first time. This was much higher for telephone interpretation (83%) when compared with in-person interpretation (30%).
- Of those using interpretation services during the clinics, 85% reported their abilities to use either in-person or telephone interpretation services improved.
- Many volunteers reported the clinics improved their communication skills related to patient oral health practices (85%), instructions for personal care (80%), dental/medical history (71%), treatment plans (73%), and assessing health literacy (71%).
- The majority of volunteers reported the clinics improved their ability to care for patients with limited English proficiency (89%) and their ability to identify situations that may require culturally sensitive treatment and communication approaches (78%).
- Volunteers also reported the clinics improved their abilities for providing treatment regarding culturally sensitive patient care (69%) and dealing with cross-cultural conflicts (60%).

5. Data, Research, & Evaluation

- This is perhaps the first survey its kind distributed to volunteers involved in these types of dental clinic events.
- The questions in the survey increase understanding of if and how dental volunteer opportunities may contribute to addressing oral health disparities through the NPA framework.

An overwhelming majority of volunteers (92%) said their participation in the clinics increased the likelihood they would accept patients from diverse and vulnerable backgrounds in their current or future clinical practices.

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Recommendations within the NPA Framework

The OHD strongly recommends the efforts follow a framework, such as the NPA, in order to build capacity in the current and future oral health workforce to address oral health disparities.

Opportunities providing care to disparate populations can be venues for both current and future oral health professionals to increase their general knowledge of underserved communities and the oral health disparities they experience.

It is recommended the oral health community mobilize around these efforts because many may not gain these types of experiences any other way.

Overall, the OHD recommends partnerships among educational institutions, professional organizations, public health entities, health care organizations, community partners in offering more offer experiences for the oral health community to provide care to underserved communities. However, the OHD strongly recommends the efforts follow a framework, such as the NPA, in order to build capacity in the current and future oral health workforce to address oral health disparities.

1. Awareness

- Opportunities providing care to disparate populations can be venues for both current and future oral health professionals to increase their general knowledge of underserved communities and the oral health disparities they experience.
- More targeted opportunities are needed to increase awareness surrounding the oral health needs of people with physical or intellectual disabilities.
- It is recommended educational institutions, professional organizations such as local dental and dental hygiene associations, and community partners work together to provide these types of experiences for the current and future oral health workforce as it may likely improve their comfort of treating patients from diverse backgrounds.

2. Leadership

- Efforts need to be inclusive of all oral health professionals and include different levels of licensure and practice as well as the future and current workforce.
- Engaging the whole spectrum will bolster the leadership in the oral health community overall to address health disparities. It will provide a critical opportunity for these professionals to share their expertise with other health professionals and communities in order to lead the effort in overcoming oral health disparities.
- It is recommended the oral health community mobilize around these efforts because many may not gain these types of experiences any other way.

3. Health System & Life Experience

- Opportunities similar to the OHD clinics can allow volunteers to immediately improve the health outcomes of underserved populations, but also open the gateway for future improvements.

Recommendations within the NPA Framework

- Using the NPA framework is key to directing these opportunities so they assist volunteers in accepting patients from diverse and vulnerable background in their current or future clinical practices.

4. Cultural & Linguistic Competency

- Utah's oral health community should use opportunities to augment the current cross-cultural education and training.
- These types of opportunities need to include a formal training component on interpretation services and cultural considerations. This is critical as you may encounter first-time volunteers and volunteers who have limited and non-comprehensive training.
- It is highly recommended organizations arrange for and provide interpretation services so volunteers can gain hands-on experience.
- Providing different modes of interpretation will build a variety of skills for the oral health community to better serve individuals needing these services.
- A strategic approach with specific efforts focused on cultural and linguistic competency may result in the experience improving the communications skills and abilities of volunteers to provide care to underserved communities.

A strategic approach with specific efforts focused on cultural and linguistic competency may result in the experience improving the communications skills and abilities of volunteers to provide care to underserved communities.

5. Data, Research, & Evaluation

- Data collection should be a large component and focus for these types of efforts. It will be crucial to evaluating whether the approach is effective in improving volunteers' awareness, skills, and capacity to provide services to underserved communities as well as if the entire effort is ultimately contributing to addressing oral health disparities.
- Data then needs to be utilized and disseminated to improve and coordinate efforts of the entire oral health community in addressing oral health disparities.

Data collection should be a large component and focus for these types of efforts.

Methodology

Survey Design

Following a cross-sectional design, the OHD created a survey to send to students and professional providers who volunteered at one or more of the OHD's dental day clinics. Email invitations were sent to students and professionals who provided their email addresses asking them to complete an anonymous online survey about their participation at the OHD's clinics in an effort to understand the impact the clinics had on cultural and linguistic competencies on oral health participants. Students and professional providers were given three weeks to complete the survey after which the survey was closed and results were analyzed.

Survey Creation

"This survey has been adapted with permission from the Clinical Cultural Competency Questionnaire (CCCQ) developed by Robert C. Like, MD, MS, Professor and Director of the Center for Healthy Families and Cultural Diversity, Department of Family Medicine and Community Health, Rutgers Robert Wood Johnson Medical School. The CCCQ was used in a project entitled, "Assessing the Impact of Cultural Competency Training Using Participatory Quality Improvement Methods," funded by the Aetna Foundation (http://rwjms.rutgers.edu/departments_institutes/family_medicine/chfcd/grants_projects/aetna.html). [10] The CCCQ questionnaire was used in the study published in the American Dental Education Association: Journal of Dental Education titled "Dental Hygiene Students' Perceptions of a Cultural Competence Component in a Tobacco Dependence Education Curriculum: A Pilot Study."[11] Questions were modified to fit the characteristics of Utah's oral health students and professionals and the goals of

[10]Any results obtained in future projects making use of the CCCQ are solely the responsibility of project investigators and do not necessarily represent the official views of the Aetna Foundation or its affiliates."

[Note: Please be advised that there has generally not been a fee for single use of the entire CCCQ or an adapted version of the tool when undertaken by researchers based at academic institutions, governmental agencies, or community non-profit organizations who are funded by federal or foundation grants, or as part of a fellowship or graduate student projects. If there are any plans to make use of the CCCQ as part of a non-grant funded health care organization or provider cultural competency project, or if there are plans to do ongoing assessments as part of a larger project or make derivative uses of the tool (e.g., in quality improvement/patient safety studies), or if the clinical organization is a for-profit entity, there may be a fee for use. When fees are required, these are negotiable and can either be donated to the Rutgers University Foundation in support of our CHFCD's educational activities or paid directly to the CHFCD. If more extensive use of the tool is being considered, a limited licensing agreement or some kind of memorandum of agreement (MOA) may also need to be developed as the CCCQ is the intellectual property of the Center for Healthy Families and Cultural Diversity/Department of Family Medicine and Community Health/Rutgers Robert Wood Johnson Medical School].

[11] Doucette, H.J., Mailet, P., Brillant, M.G., & Tax, C.L. (2015). Dental Hygiene Students' Perceptions of a Cultural Competence Component in a Tobacco Dependence Education Curriculum: A Pilot Study. Journal of Dental Education, 79(6), 680-685. Retrieved from http://www.jdentaled.org/content/79/6/680#ref-23

Methodology

the survey. The OHD also created additional survey questions bringing the total to 29 questions. Prior to survey administration, questions were reviewed and provided feedback by the OHD staff, the UDOH Oral Health Program, and four school administrators. The finalized survey was uploaded to Survey Monkey. Please contac the OHD for a copy of the survey.

Survey Pool

Eligible oral health students and professional providers included dentists, dental hygienists, dental students, and dental hygiene students involved in care and dental assisting work who provided an email address. Initially 166 volunteers were sent the online survey invitation.

Data Collection

The survey opened on May 18, 2019 and closed on June 8, 2019. Prior to the survey opening, the OHD contacted participating school administers to notify them of the survey dates and encourage them to invite their students to respond to the survey. A copy of the survey, along with a drafted student invitation email were attached. School administrators were sent a similar follow up email each week. The last reminder email included a list of the students and a link to the survey. When the survey opened, the OHD emailed survey invitations to each of the oral health students and professional provider volunteers. After the initial invitation, the OHD worked through returned emails and retried with corrected email addresses. For the student emails that were returned after multiple attempts of correcting the email address, the OHD contacted school administrators who agreed to send the survey invitation to these students. The OHD could not confirm whether three professionals received the survey invitation. The OHD compiled an up-to-date list of email addresses which included 157 contacts who then received weekly reminder emails until the survey closed.

Data Analysis

Analysis was done using excel and Survey Monkey analysis tools. Measures of central tendency, such as mean and median, were calculated.

Methodology

Limitations

1. Many volunteer students provided their student email addresses. Thus, those who already graduated might have not been able to or infrequently access their student emails, limiting the number of participant responses and biasing the sample to current students.
2. The survey was sent at the end of the three years instead of after each event or after a volunteer was no longer volunteering. This may have meant volunteers at the last clinics were more likely to participate in the survey than those who had volunteered in the earlier clinics.
3. The data collected was self-reported. Thus, it may contain potential sources of bias:
    - Recall bias: individuals who participated in the first OHD dental day clinics may not have remembered the event with accuracy.
    - Response bias: individuals who answered the survey may have responded inaccurately or falsely to questions. This type of bias is very common in self-reported surveys.

Utah Office of Health Disparities Oral Health Volunteer Survey 2019