Recovering Smiles

PROJECT EVALUATION REPORT







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This report was prepared by Spokane Regional Health District's (SRHD) Data Center, funded to evaluate the Recovering Smiles project.

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Photo credits (in order of appearance): ©iStock.com/keithferrisphoto (cover) ©bigstock.com/benoitb ©Eastern Washington University ©iStock.com/Roxiller ©bigstock.com/diego cervo ©iStock.com/fanckreporter ©Eastern Washington University ©iStock.com/masaltof ©iStock.com/giambra Spokane Regional Health District's (SRHD) Data Center was contracted by Washington State Department of Social and Health Services (DSHS) to conduct an initial evaluation of the Recovering Smiles program. Recovering Smiles seeks to improve the oral health of individuals in recovery from substance abuse. Working with multiple community partners, Community-Minded Enterprises (CME) took the lead on developing the program in response to needs identified for people recovering from substance abuse and in response to concerns expressed by dental health professionals about serving this population. The program's intention is to eliminate no-shows for appointments and promote appropriate behavior in the dental office and during the patient's visit. Longer-term outcomes of the program intend to reduce the risk of complications from poor oral health through awareness, education, and treatment. Recovering Smiles offers not only oral health care to a population that is working to improve their lives, but also social support and encouragement as they include oral health in their recovery plan.





A stakeholder group was convened to determine what information would be useful and to guide the scope of the evaluation. The purpose for this initial evaluation was to describe activities of, and results from, Recovering Smiles. Included in this evaluation are improvements identified for monitoring and improving the efficacy and effectiveness of the program. Initial questions for the evaluation were:

- How many clients were served and what types of services were provided?
- What were the project results related to the attitudes and beliefs of participating clients related to oral health care?
- What were the project outcomes related to client appointment no-shows (i.e. attendance for scheduled appointments)?

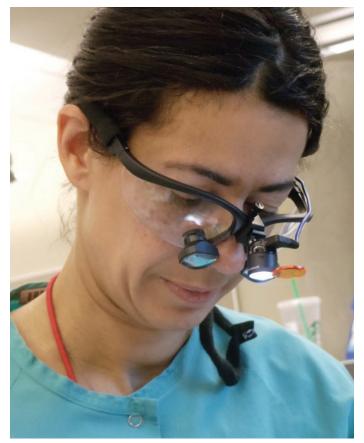
- What were the project results related to the attitudes and beliefs of participating dentists?
- What was the value to participating EWU Dental Hygiene students from participating in the program?
- What was the value to clients from receiving services?



This report provides documentation of a program that was well-received by staff and participants. It provides recommendations for program improvements for providing services and for monitoring outcomes. And it provides suggestions for future evaluation opportunities. The intended audience includes DSHS, other potential funders of the program, staff implementing the program, dental professionals being recruited to participate in providing services, and future evaluation researchers.

Recovering Smiles Activities

The Recovering Smiles program began in May 2013 and continued through December 2014. There were a total of 12 groups during the course of the program. Participation ranged from 5 to 23 individuals per group attending orientation and beginning Recovering Smiles.



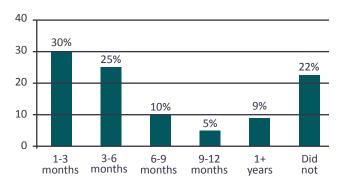
Stacy Underwood, EWU Student Hygienist

Staff from CME managed the administration of the Recovering Smiles program, in coordination with Eastern Washington University (EWU) School of Dental Hygiene, and Spokane County's Renew program, which administered the funding for Access To Recovery (ATR). ATR is an initiative by the Substance Abuse and Mental Health Services Administration (SAMHSA) whose federal funding was administered through Washington State's Division of Behavioral Health and Recovery. The first three groups receiving services from Recovering Smiles were funded by ATR and Empire Health Foundation (EHF). Funding for ATR ended in July 2014. Washington Apple Health (Apple Health), the state's Medicaid program, began covering dental services in January 2014. Apple Health was billed for covered services received through Recovering Smiles, although some private practice dentists who participated in the Recovering Smiles program billed Apple Health for covered services and wrote off remaining charges without expense to patients. Others

billed Apple Health for covered services and established payment plans with patients for remaining service charges.

In 2013, participants were recruited from recovery support housing including Oxford and Reaching Out Advocating Recovery (ROAR) houses and in 2014 from Spokane County-contracted substance abuse treatment programs. In 2013, participants in the Spokane County Behavorial Health Adult Felony Therapeutic Drug Court living in Oxford Houses also engaged in the Recovering Smiles program. This continued into 2014 because Therapeutic Drug Court clients are part of the Spokane County contracted substance abuse treatment programs. Oxford house is a SAMHSA evidence-based program and practice. The Oxford house model provides housing and rehabilitative support for adults who are recovering from alcohol and/or drug use and who want to remain abstinent from use. Six to 15 people may reside in an Oxford house, which is a democratically run, self-supporting, and drug-free home¹. ROAR houses are local faith-based homes for recovery from substance abuse through the Family of Faith Community Church in the city of Spokane². In 2013, participants had to live in an Oxford or ROAR house and be at least 90 days drug-free. Participants in 2014 did not have to live in an Oxford or ROAR house and the drug-free requirement decreased to 60 days. At orientation, the length of time living in an Oxford or ROAR house varied from not living at one of the houses to living at one for more than a year.

To receive Recovering Smiles services, interested individuals would contact Recovering Smiles staff, who would screen for eligibility and schedule those who qualifed to attend a program orientation meeting. Recovering Smiles staff also helped individuals sign up for insurance if necessary, as well as contacting recruited individuals a day before orientation to remind them to go. Recruited participants attended an orientation held at the "Room for Recovery" at the Family of Faith Church, deemed an emotionally-safe place. The space offered a **Recovering Smiles program participants by time living at a ROAR or Oxford House**



central location in Spokane with free parking and access to the local bus line. At orientation, Recovering Smiles staff provided participants information to educate them on oral health, specific to persons in recovery. Participants viewed an informative video introducing them to the EWU Dental Hygiene Clinic, instructing them on how to get there by bus or car, and explaining the program in a reassuring manner. Participants also completed a survey that asked about oral health knowledge and some Recovering Smiles program evaluation questions. The goal of orientation was to increase knowledge of dental care benefits, decrease fears of receiving dental care, and overcome stigmas associated with being a recovering addict or alcoholic in the dental setting. Recovering Smiles staff would call and remind participants about their first diagnostic appointment at EWU to encourage them to attend their appointment, and alleviate anxiety. The diagnostic appointment comprised of radiographs and an exam to determine if a deep cleaning was necessary. The appointment was also to assess the patient's dental restorative needs, the total number of decayed surfaces, and to determine how many teeth required that treatment be referred to a dentist or denturist. The participant would then be scheduled for treatment. Dental hygienists in Washington State have expanded treatment licensing allowing them to perform some restorations.

Specific to treatment, a cleaning was done first to ensure

EWU staff and hygiene students also attended orientation so participants would feel more comfortable receiving dental treatment from them. Participants also completed a medical history form and received a brief oral examination that enabled staff to triage participants. Urgent needs were referred for immediate care, such as abscesses, which are infections of the mouth, face, jaw or throat that begin as a tooth infection or cavity and can be common in people without access to proper and timely dental care.

For those without an urgent need, if dental hygiene students had available appointments, participants

were scheduled during orientation for a diagnostic appointment at EWU. Otherwise, participants were placed on a wait list and were called by students when appointments became available. A participant needed medical clearance from a health care provider if they indicated on their medical history that they had an artificial joint, plates, pins, hepatitis B, hepatitis C, HIV/AIDS, diabetes, or hypertension. These conditions were not exclusionary, but the participant had to be medically-stable or the condition may impact treatment, such as needing prophylactic antibiotics or affecting anesthetic doses. A participant needing medical clearance who did not have their own physician could be scheduled to see a medical provider at Unify Community Health at Northeast Community Center (Unify Northeast), formerly Riverstone Family Health, a community clinic providing medical and dental care. Once medically-cleared, a participant was scheduled for an appointment at EWU.



the participant was periodontally-stable before restorations, extractions, or other invasive dental procedures were performed. Dental conditions requiring more substantial treatment by a dentist were scheduled at Unify Northeast or with participating private dentists. Recovering Smiles and EWU staff facilitated scheduling these initial referral appointments. Recovering Smiles staff was available to help alleviate participants' fears and concerns with phone counseling and other individual support, as needed.

After the initial diagnostic appointment with EWU, Recovering Smiles staff called participants to follow-up with them and asked participants to complete a

satisfaction survey and discuss their first appointment. Although not contractually-required of them after the diagnostic appointment, Recovering Smiles staff continued to talk with, and help, participants with their needs in negotiating oral health care and insurance. If a participant did not show for an appointment or did not call within 48 hours of their appointment, they lost eligibility to continue in the program. In 2013, each participant paid \$5 to CME prior to each appointment. It was felt this minimal monetary contribution invested the participant in the dental care commitment. The payment was held in a dental fund for Oxford and ROAR Houses and was used to help extend ATR funding for specific dental restorations beyond what was offered at EWU Dental Clinic. In January 2014, coverage of dental care became a benefit of Apple Health and, due to Medicaid regulations, necessitated the discontinuation of the \$5 contribution.

Program Preparation for Evaluation

CME and EWU staff each had separate records for tracking participants in the program. For this program evaluation, SRHD Data Center worked with EWU to develop a database structure that could be used for analyzing outcomes. Variable fields were identified and defined. EWU staff abstracted information from their records (text-heavy Excel worksheets containing treatment notes) and from CME records (records with confidential and identifiable information) into the database for evaluation. The evaluation database was an Excel worksheet for ease-of-use by EWU staff. SRHD Data Center staff converted the database for their use in the statistical software Stata.

SRHD Data Center staff reviewed the surveys in use by CME staff and information available in the participant records. This was compared to information program staff expressed an interest in, as well as compared against the goals of the program. A participant survey was developed to collect knowledge, attitude, and behavior information that otherwise was not being collected. CME staff administered the survey to participants at the end of the program. They were given the option of completing the survey over the phone, online, or having a paper survey and a return envelope mailed to them. All were completed over the phone. Another survey was developed by SRHD to collect information from the student hygienists who worked in the program. Hygienists were asked to rate different components of the program and the impact they felt the program had on participants. The survey was an online survey. Students were emailed a link to the survey by their instructor.

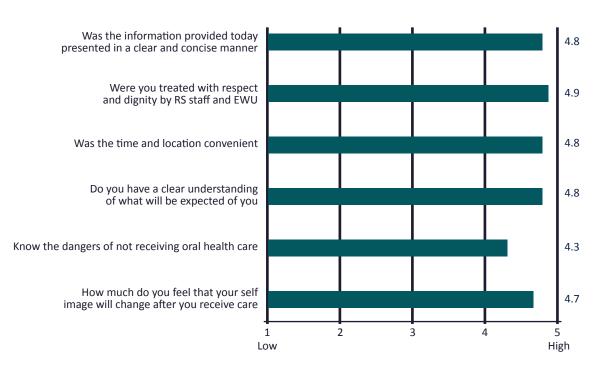
SRHD staff had open-ended conversations with program staff from CME and EWU to provide information about how the program was implemented and provide answers related to participant data, contributing to the context of this report. SRHD Data Center staff also held key informant interviews with CME and EWU program staff to learn more about the program processes to provide context for this report. Other major providers in the Recovering Smiles program were the dentists who treated participants. A key informant interview was conducted with two private practice dentists, as well as the director of Dental Services for Unify. These representatives of dental practices were asked about their experience providing care to Recovering Smiles participants, challenges they experienced, and their motivation and willingness to participate in the project.



Findings

Orientation

There were 177 individuals who attended Recovering Smiles orientation. Nearly all participants (97%) completed a survey to rate features of the orientation. Items were rated on a subjectively defined five-point scale from 1=low to 5=high. 'Delivery of the orientation' received high ratings for convenience, being respectful and clear presentation. 'Knowledge' received a high rating for participants' understanding the expectations of the program, but received a lower rating for knowledge of dangers of not receiving oral health care. Four in five participants rated they felt their self-image would highly change after receiving care. All but one participant reported leaving the orientation with a better understanding of Recovering Smiles. Almost half of participants reported that at the time of orientation they had not seen a dentist in three or more years.

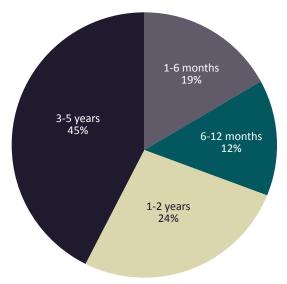


Recovering Smiles orientation rankings

Eligibility

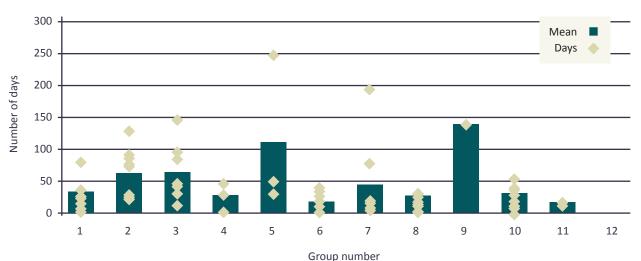
Of the 177 individuals who began Recovering Smiles and attended a Recovering Smiles orientation, 137 (77.4%) were scheduled with an EWU dental hygiene student. Seven were not medically-eligible for care at EWU and were excluded from the program. There were 33 individuals who attended orientation and who were medically-eligible, but never scheduled an appointment with EWU. Among those who were scheduled for an appointment, 117 **(85.4%) retained their eligibility** for Recovering Smiles throughout the program. Most of the 20 individuals who lost their eligibility for Recovering Smiles lost it due to not showing for, or cancelling, appointments. Two participants moved, one was reported as lost coverage from DSHS, and one was identified as not appropriate for the program.





EWU Services

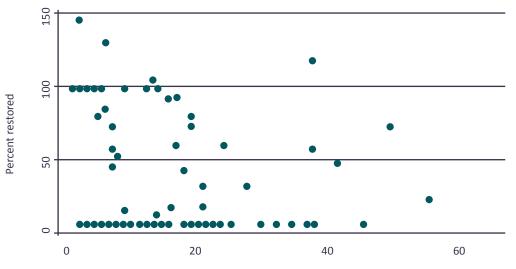
Among the 117 participants who remained eligible for Recovering Smiles, 29% did not complete having their teeth cleaned by EWU hygiene students. The reason for not completing a cleaning at EWU was not clearly abstracted from client records. Another 9% had dentures and did not have teeth to clean. The remaining 62% of eligible participants completed having their teeth cleaned. It sometimes took several visits for EWU dental hygiene students to complete a cleaning. Among the 72 eligible participants who completed a cleaning, it took an average of 42 days from first visit to cleaning completion. The minimum number of days was zero, meaning the cleaning was completed at the first visit. The highest number of days was 243, which was an outlier compared to the number of days for other participants.



Time for completion of cleaning among eligible participants

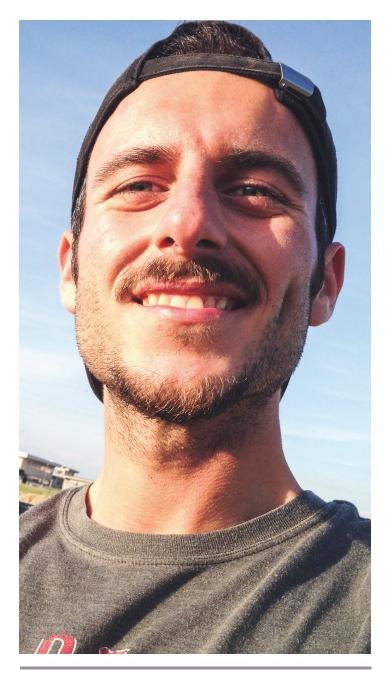
Excluding individuals with dentures, there were 95 eligible participants with recorded information for the number of decayed surfaces and how many were restored by EWU dental hygiene students. Thirteen percent of participants had zero decayed surfaces. The average number of decayed surfaces was 14, with a range from 0 to 56. Among those with decay, more than half had treatment needs more complex than a dental hygienist could restore, such that 55% did not have any restorations completed by an EWU dental hygiene student. Students restored all decayed surfaces among 17% of eligible participants with decay. The remaining 28% of participants had varying levels of restoration, which was not associated with the number of decayed surfaces (p>0.05).

Eighty-five percent of eligible participants were referred to a dentist for further, more substantial, dental treatment that could not be completed at the EWU clinic. Those not



Restoration completed at EWU by amount of decay

Number of decayed surfaces



Before Recovering Smiles I didn't know all the aspects of oral health and why it's important to take care of your mouth and teeth. After attending an orientation I learned the importance of taking care of my gums, brushing flossing and how it affects my heart, brain and visk of diabetes and all the health visks of poor oral health can cause. It was educational and helped me start my journey, I am working with my dentwist and oral surgeon to see what the best treatment plan will be for me. - Jessie Smith, patient referred needed dental treatments that could be accomplished at EWU. Some were still receiving treatment from EWU hygiene students as of December 31, 2014.

Information about where a participant was scheduled with a dentist after their initial EWU appointment and the outcome of their treatment was not linked to, or provided with the participant data used for evaluation. Efforts to receive this information during the evaluation were unsuccessful. The scheduling process was completed primarily by Recovering Smiles program staff at CME and by EWU for the final two groups, leading to inconsistencies in documentation. While Recovering Smiles staff made efforts to take paper notes about participants, it is unclear what was documented throughout the process of referring patients for treatment and if treatment was received. It is also unclear the amount of contact and support that was provided for individual patients, which is assumed to have varied for each participant.

Of the 137 individuals who completed orientation for Recovering Smiles and scheduled an appointment with a hygienist at EWU, 115 completed an evaluation after the first appointment of the services they received (84% response rate). Service was rated on a scale from 1=low to 5=high. All services received high ratings.

Evaluation After First Visit at EWU	Average Rating (1-5)
Recovering Smiles Program Staff	
Courtesy/attitude of staff	4.97
Overall services you received	4.86
EWU	
Courtesy/attitude of faculty	4.92
Courtesy/attitude of student	4.96
Cleanliness of dental hygiene clinic	4.98
Quality of overall care you received	4.85
How well were your questions an- swered	4.88
How Well Did Dental Hygiene Student Ex	kplain:
Your gum and tooth condition	4.77
The treatment that you need	4.77
The risks and benefits of treatment/ non-treatment	4.77
The work in which you can have done at EWU	4.77

Participant Survey

A participant survey was conducted over the phone in December 2014 and January 2015. It collected program outcome, participant attitude, and behavior information after allowing time for participants to continue in their oral health treatment and care. Of the 137 Recovering Smiles participants who scheduled an appointment with EWU, 84 completed the survey for a response rate of 61%.

Program Outcomes

The Recovering Smiles program not only sought to treat dental decay, it sought to do so in a way that would have a lasting positive impact on participants. Half of participants reported the program improved their selfimage 'a lot'. Most reported feeling 'a lot' like someone cared about them. More than half reported being highly-comfortable going to a dentist office for care. Four in five participants reported having 'a lot' of knowledge for maintaining good oral health. Participants rated their oral health poorly before Recovering Smiles and positively after.

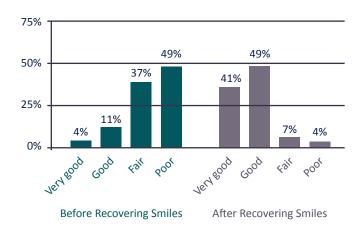
Attitude

Participants have a good attitude about oral health care; 80% reported oral health as very important to overall health. Two in three participants reported keeping their natural teeth as very important. The proportion rating keeping natural teeth as very important decreased as the number of teeth lost due to decay increased. The majority of participants (85%) reported they are 'likely' or 'very likely' to go for regular dental check-ups.

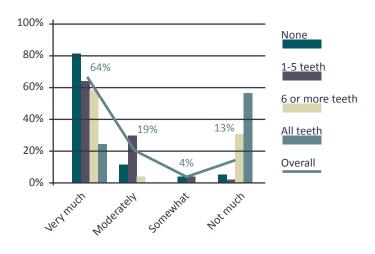
Oral Health Care

One in three participants reported 'always' or 'often' having dental pain in the last year. Only 13% did not have pain in the prior year. After treatment through the Recovering Smiles program, one in five report needing periodontal maintenance treatment for continued good oral health. There was a shift in where participants would go for oral health care after participating in Recovering Smiles. A higher proportion reported they would seek care at oral health facilities. There was a decrease in those reporting they would go to a medical facility for oral health care including no one reporting they would seek care for oral health services at an emergency room. Affordability (67%) and lack of dental insurance (44%) were the highest reported barriers to getting dental care.

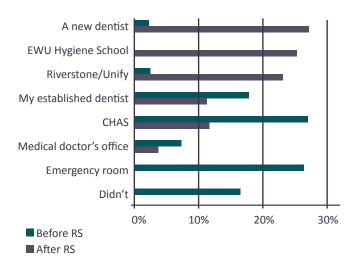
How would you rate your oral health?



Importance of keeping natural teeth by number of teeth lost from decay







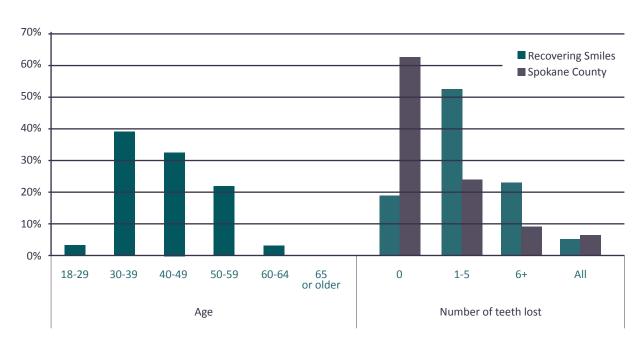
Behavior

The majority of participants reported having adopted good oral hygiene habits. Most brushed and flossed daily. Four in five participants drank two or more glasses of water per day. Using sugar-free gum or hard candy was not a habit being widely used.

	2+x/day	1x/day	1x/wk	1x/mo	<1/mo	
Brush your teeth	53%	46%	0%	1%	0%	
Use dental floss	16%	60%	9%	5%	11%	
Drink a glass of water	80%	17%	1%	1%	1%	— ——
Use mouthwash	10%	49%	11%	7%	22%	
Chew sugar-free gum	1%	5%	6%	5%	83%	
Suck sugar-free hard candy	0%	2%	6%	10%	82%	

Demographics

Survey respondents participated in Recovering Smiles ranging from January 2013 to November 2014. Most respondents had Apple Health (74%), 20% did not have insurance, and 6% had other insurance. Respondents were mainly between 30 and 59 years of age, male (61%), and smoked cigarettes (67%). Four in five respondents had lost at least one tooth due to dental decay. Comparatively, among adults in Spokane County, 62% reported they had not lost any teeth from dental decay³. This demonstrates that Recovering Smiles participants have a different oral health state than other adults in the county. This suggests that participants have higher treatment needs.



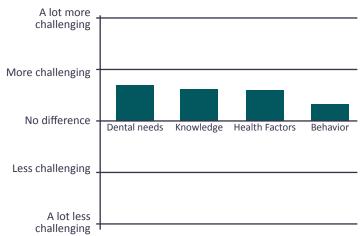
Respondent age and dentition status

Student Survey

The aforementioned survey among EWU dental hygiene students was electronic in format and conducted in January 2015. Responses were received from 23 students. All students reported they liked working in the Recovering Smiles program; 39% 'liked', 61% 'liked a lot'. None of the students reported feeling uncomfortable when working with Recovering Smiles clients and 65% reported feeling very comfortable. Students reported being successful in affecting the oral health status, attitude, and comfort of Recovering Smiles clients.

Compared to other clients EWU dental hygiene students worked with, they reported the Recovering Smiles clients were more challenging for their dental needs, knowledge of oral health, and health factors. Behavior was also found to be more challenging, but to a slightly lesser extent.

In general, EWU dental hygiene students rated the Recovering Smiles project favorably. The majority of students felt it was easy to work within the structure of the program, to provide dental treatment, and to communicate with clients. One in five students reported difficulty in providing treatment and with communicating with clients. Scheduling clients had the highest proportion of students rating it 'difficult' (39%) and 'very difficult' (9%).



Recovering Smiles client challenges

(compared to other clients)



Stacy Underwood, EWU Student Hygienist

Stacy (photo above) tells vs her Recovering Smiles client "had good homecare, but was not seeing a dentist for financial reasons. She valued dental work and knew she needed a cleaning since it had been five plus years since she had been to a dentist. She was very thankful for her dental treatment. She would not have been able to afford to go on her own and this program allowed her to."

How much do you feel you affected Recovering Smiles clients in the following areas:	A lot	Moderately	Somewhat	Not much	
Improved their oral health	48%	39%	9%	4%	— — — —
Improved their self-image	48%	44%	4%	4%	— — — —
Made them feel like someone cared about them	65%	26%	9%	0%	— —
Helped them be comfortable going to a dental office for care	57%	35%	9%	0%	
Helped them understand the importance of good oral health	30%	65%	4%	0%	

Dentist Interviews

Key informant interviews were conducted with two private practice dentists and the Unify director of Dental Services. These representatives of dental practices were asked about their experience providing care to Recovering Smiles participants, challenges they experienced, their motivation and willingness to participate in the project.

Expectations

When asked about the expectations that dentists had for working with participants of the Recovering Smiles program, one dentist shared that they had no expectations for the patient and that they had previous experience in working with patients from many different backgrounds. They stated that each patient is different no matter what his or her background is and that each one is treated the same when they come in. They stated that the Recovering Smiles patient was pleasant, showed up on time, and met all of the requirements needed for treatment. The dentist stated, "It went as well as I could have hoped for."

Other dentists felt that working with patients receiving Apple Health coverage could potentially have financial challenges for their practice. They expected some challenges with state reimbursement such as length of time to get reimbursed and the partial coverage of services. They also anticipated that patients would sometimes not show up for appointments, which is a gap in their schedule that otherwise could have been filled.

Yet, each dentist interviewed felt it was easier to treat Recovering Smiles participants than other Apple Health-covered participants because of their commitment to their own health and recovery. Dentists indicated that Recovering Smiles participants did what was asked of them, showed up for their appointments, and that many patients followed through with treatment recommendations. The dentists also shared that the involvement of Recovering Smiles program staff in the process - by providing records, imaging, and supporting the patients - made it easier for the dental practice staff.

Challenges

Each interviewed dentist expressed that there were no challenges in treating the Recovering Smiles participants. One stated that "working with Recovering Smiles patients was better than most state-funded cases." Another echoed the same idea by stating, "There are often many no-shows (with state-funded), and that was not a problem with Recovering Smiles patients. It was much easier to work with Recovering Smiles patients than other Medicaid patients."

Challenges for dental practices around accepting Apple

Health insurance included the amount of administrative work to submit claims and exclusions of coverage. Challenges with seeing Apple Health patients were dealt with by no longer accepting new patients with Apple Health insurance. One practice no longer takes any Apple Health participants besides those from the Recovering Smiles program. Unify Northeast is no longer taking any new adult patients due to their high patient load and their long waiting lists to receive intensive care. They are continuing to treat existing patients that were participants of the Recovering Smiles program.

Ability to Continue to See Future Patients

Each dentist interviewed was willing to continue to see participants from the Recovering Smiles program, ranging from approximately two to 10 per month. One dentist was willing to open up his clinic on evenings and Saturdays to treat patients. One dentist shared, "I would take as many as I can, and have colleagues that I could help people see if I couldn't see them." Working with Apple Health reimbursement is challenging. Another shared that because of the limitations of taking Apple Health they cap the number of patients they can see to two to three per month, "There is a lot of pro bono work or having to write things off because they aren't covered or (the state) limits the reimbursement. We could not do that as our entire practice, but we can do some because of our commitment to EWU. "

Motivation for Participating in the Recovering Smiles Program

Dentists interviewed all shared their support for the Recovering Smiles program and their willingness to continue to see patients. One dentist shared,

"There are only a few dentists willing to take state patients, if I don't do it, who else is going to? If everyone said we don't want to do it, they have nowhere to go. I'm their last hope. Someone needs to do it, so why not me?"

Another dentist had an affiliation with EWU as a professor and teaches at the university. The practice was willing to participate in providing care for Recovering Smiles patients because of the dentist's commitment to the EWU dental program. Dentists were also more willing to participate because EWU and CME program staff made it easier to see patients who were a part of this program, and wanting to support the commitment made by the patients in their own recovery.

Opportunities for Improvement

The program evaluation identified several opportunities for improving the Recovering Smiles program. They center on processes of implementing and managing the program. Changes could improve communication, the ability to report program data, and improve effectiveness and efficiency of the program.

Scheduling Orientation

Fourteen individuals attended orientation for Recovering Smiles group 9 on July 1, 2014. Six of those (43%) were never scheduled with a dental hygiene student at EWU. Among those who did receive an appointment, one lost eligibility to participate. Among the others, one had dentures and did not require a cleaning and only one individual completed a cleaning by December 31, 2014. EWU staff reported that students were unable to provide appointments at the July orientation because many of the students already had a full summer appointment schedule and their time in the clinic ended August 1, 2014. EWU students were out of school from August 2, 2014 returning September 23, 2014. EWU staff reported it was difficult to reach participants after summer to schedule them with a hygiene student. Group 10 had orientation September 16, 2014 and many were scheduled for a first appointment with an EWU hygiene student on September 23, 2014. Out of 14 eligible participants in group 10, only three did not

complete a cleaning by December 31, 2014. A **recommendation** is to avoid scheduling a new group in July when participants would potentially have to wait a couple of months for an appointment.

Data Collection

Recovering Smiles program staff and EWU each developed their own method for tracking participation and information about participants. The data structure was not suitable for data analysis and program evaluation. Participant information was abstracted from the separate information systems into an Excel spreadsheet with defined process and outcome fields. Some data cleaning remained even after abstraction. The definitions of some fields were not interpreted similarly between the information abstractor and the data analyst. There were also several indicators that were unable to be analyzed due to inconsistencies in information within spreadsheets and paper files, such as notes about participant care, frequency of contact with program staff, and the status of referral appointments for the more substantial care needed for 85% of participants. A **recommendation** is to develop a shared data collection system designed for monitoring the program, participants, and providing program evaluation measures.



Scheduling Appointments

While Recovering Smiles had a high retention rate, participants not showing for an appointment with EWU or canceling their appointment late was frustrating for the hygiene students and ended the participant's eligibility in the program. Despite this, some students continued to try and reschedule those individuals as those patients were still able to receive services from EWU and met the criteria students needed for their academic evaluations. Still, being able to reach and/or reschedule individuals was difficult. Recovering Smiles participants are transitioning to a state of substance abuse recovery and may be transitory in finding stable housing and employment. This transition to recovery may impact availability of a consistent phone number and availability and willingness to answer a phone call or text. A recommendation is to continue to collect multiple methods of contact information for participants, including a secondary contact person, email, social network contact information, and maintaining a shared contact list to aid in the process of scheduling.

Dental Treatment Referrals

Apple Health insurance covers adult dental care, yet there remain challenges to receiving services using this insurance. Unify Northeast is among the few dental practices in the county that accepts Apple Health insurance. Yet, due to the influx of patients when Apple Health began covering adult dental services, Unify Northeast is not taking new adult patients and requires a two to four month waiting time for intensive services including extractions and root canals. Each of the private practice dentists interviewed for this evaluation were willing to continue to see patients because of the small number from the program that they were providing care for and the investment the patients had in their health and recovery. They also found the facilitation support of CME and EWU in providing patient records and insurance information to be a strength of working with the Recovering Smiles program and its patients. This

facilitation resulted in less administrative time needed for Recovering Smiles participants than other Apple Health-covered patients, which in turn was easier on dentists. Both private practice dentists interviewed also commented that Recovering Smile patients were more likely to show up to their appointments and follow through with their recommendations than other Apple Health patients. Because of the limited number of dental providers accepting new clients with Apple Health insurance and the long wait times for treatment at some of the participating practices, it is **recommended** that the program focus on recruiting private practice dentists who are willing to take a small number of Recovering Smiles patients.

Program Management

The evaluation process identified a disconnection between the administrative data of Recovering Smiles program staff and the oral health status information of EWU. The manner of managing program data worked for Recovering Smiles staff and EWU staff independently, but was challenging when combining data for program evaluation. Information was collected using different formats, interpretations, and definitions. Some program information was not reported for evaluation and it was unclear who was collecting and monitoring this information, such as to which dentist a participant was referred, how referral treatment was progressing, and the number and quality of program staff interactions with participants. A recommendation is to identify clear roles and responsibilities for the complete program process from recruitment to completion of treatment, as well as for who is collecting and managing which data. Using a shared database would assist in collecting information with clear definitions and structure. The program would also benefit from a logic model to define the components of the project and link them to program outcomes. These recommendations would allow for better program evaluation and continuous quality improvement.

Before coming to Recovering smiles, I was down on myself with no self esteem and had a hard time finding a job because the first thing they noticed was my mouth. EW and Recovering Smiles has made my journey through this easier for me than I thought possible. They showed me all the compassion in the world, guided me and offered support, which I never had before. Today, I have an opportunity to have my self esteem shine through and show what a recovering smile looks like.

- Autry Stills, patient

Potential Future Evaluation and Research

This evaluation of Recovering Smiles was a descriptive report of participants who met the criteria for the program. Data that was not available for evaluation that would be worthwhile for future program description and research include:

- Completion of dental treatment for which they were referred. A process for accessing this information and linking it to Recovering Smiles program data would be needed.
- Functional capacity of the dentition.
- Physical health conditions. A medical history was accomplished to determine medical clearance of participants, but the information was not available for this evaluation. This would be useful in assessing linkages to other health conditions and how oral health care impacts other medical issues.
- Measures of impairment from oral health status, such as social interactions, nutritional choices, or employment challenges.

Potential future research could look at populations outside of the Recovering Smiles criteria. Comparison groups could be identified using administrative records for Apple Health or recruited and followed prospectively. A possible recruitment site is the emergency department since one-fourth of Recovering Smiles participants reported having sought care at an emergency room for oral health problems. Other sites that might have individuals with neglected oral health care due to lack of stable and monetary resources are homeless shelters or food banks. Comparisons could look at completion of oral health treatment and use of preventive services. Other topics for comparison are possible and would be defined by the needs of the study.

The structure of the Recovering Smiles program was intended to help participants be comfortable in seeking oral health care and to be compliant with the treatment plan. Non-compliance resulted in the participant being ineligible to continue in the program. While Recovering Smiles had an 85% retention rate, there might be ways to improve upon that. Potential future research could include qualitative analysis to identify reasons participants became ineligible. Another option would be to identify a data source that contains predictors of non-compliance and develop a model to predict non-compliance. Alternatively, the method of judgmental bootstrapping could be used for prediction⁴. This method uses an expert's judgment, or rule, to determine an outcome. In this case, Recovering Smiles program staff identify measures they felt indicate a participant would be non-compliant. The prediction "rules" would then be compared to actual data.

A longitudinal study could be considered to track Recovering Smiles participants over time. Apple Health administrative data could be used to measure use of preventive appointments and types of treatment received. A more detailed process could include case reviews of dental records to identify oral health needs that went unmet.

Future inferential analysis that could be considered is to compare certain measures of success for the program by characteristics of the participants.

Measures of Success

- Eligibility retention
- Completion of cleaning
- Rating of oral health (or difference from before to after)
- Rating of impairment (or difference from before to after)

Characteristics

- Length of sobriety
- Type of insurance
- Level of edentulism
- Use of tobacco
- Dentition functional capacity
- Physical health symptoms

Conclusion

Recovering Smiles is a program that facilitates dental treatment for people in recovery from substance abuse. These individuals have a high need for oral health care. The program helps participants integrate oral health care into their recovery plan through education about oral health, support to decrease fears or obstacles to getting oral health care, and scheduling and providing reminders about appointments.

Participants reported positive changes in their rating of their oral health and reported a positive attitude about oral health importance and maintenance. There was a change in where participants would seek care for oral health complaints. After participating in the program, none of the participants reported that they would seek care at an emergency room. Participants favorable rated the service received from Recovering Smiles program staff and EWU hygiene students.

Recovering Smiles program staff are genuinely excited about the positive impact they are having on the participants. EWU hygiene students reported that participants were more challenging in some way to work with compared to other clients. They also reported a high level of having positively impacted participants in several ways.

There were some difficulties in scheduling participants with dentists and knowing the outcome of treatment. There was success when scheduling a few clients with a dentist. This seemed like a manageable model for a private dental business. The administrative support provided by Recovering Smiles improved the feasibility of dental practices accepting some Recovering Smiles participants.

This evaluation report demonstrates the need for and benefits from the Recovering Smiles program. Some program changes were identified to improve certain processes, and possible future research or evaluation topics were listed.



APPENDIX

About the Recovering Smiles Program

Pilot Timeline: March 1, 2013-February 28, 2014

Program Budget: \$40,000

Target Population: Medicaid eligible adult individuals in outpatient substance abuse treatment centers approved by Spokane County Community Services and enrolled in Access to Recovery services.

Program Partners:

- Community-Minded Enterprises
- Eastern Washington University Dental Hygiene Clinic
- Access to Recovery-State of Washington
- Spokane County Community Services
- Riverstone Dental Clinic-Yakima Valley Farm Workers
- SOC Adult Outpatient Treatment Centers
- Spokane County Dental Society
- Volunteers Recovery Center and Spokane County Drug Court

Program Orientation and Training Components

- Short introductory video to the EWU Dental hygiene Clinic that includes a visual orientation and introduction to their processes.
- Setting the appointment
- Common dental fears (de-myth the dental hygiene process)
- Communication techniques with the hygienist.
- Health value gained by regularly visiting a hygiene clinic.
- Description of services offered at the EWU Dental Clinic
- Comprehensive exam
- 3 levels of cleaning
- Fluoride treatment
- x-rays
- sealants
- filling (silver and tooth colored)
- Referral to the IDEA dental clinic for more intensive restoration
- Payment voucher process

Services Provided by EWU Dental Hygiene Program

- Students and EWU faculty members attended at the orientations to complete a health history, and establish a relationship with the patients to address fears about the oral exam process
- Services provided at the EWU hygiene Clinic: comprehensive oral exam, three levels of cleaning, fluoride treatment, full x-rays, sealants, fillings.
- Coaching patients throughout their series of visits at EWU Hygiene clinic.
- Referring clients to a pool of private dentists for more complicated restoration.
- Assistance transitioning the patient to the private dentist by meeting them at their first visit to the dentist.

Services Provided by Community-Minded Enterprises

- Coordination with the Spokane County contracted treatment agencies and Access to Recovery for referrals of individuals into the program.
- Scheduling, registration and conducting the Recovering Smiles orientations.
- Enrolling all Medicaid eligible individuals into Medicaid.
- Coordination of paperwork for individuals accepted into the program.
- Working with each individual to successfully schedule their first appointment at EWU and address questions and fears of the oral exam process.
- Follow-up phone calls to each individual to make sure the first appointment was successful and address additional questions.
- Coordination of reporting and evaluation requirements with EWU Hygiene Program.
- Outreach, presentations and follow-up marketing to continue to secure a pool of private dentists willing to serve individuals referred by the EWU Dental Hygiene program under Recovering Smiles.

Program Flow

- 1. Client has completed 60 days of treatment and is referred to Recovering Smiles.
- 2. Recovering Smiles schedules the individual into an Orientation and Education session conducted at a neutral location called the Recovery Room. This encourages the client to begin their recovery journey and learn

to navigate services outside of the treatment agency. CME signs individuals up for Medicaid if they are uninsured.

- 3. At Orientation, individual completes a health history and paperwork needed to access the program. They are introduced to the EWU hygienists and view a video that walks them through the process of using the EWU clinic. The purpose of the video is to lower their fear about attending the EWU clinic. The rules of the program are reviewed and client agrees to continue in the program.
- 4. After the orientation, Recovering Smiles staff reviews the paperwork, attendance sheets and verifies with ATR staff that they are eligible for services. Then they contact each person who attended the Orientation to work with them to schedule their first appointment and answer any questions they might have.
- 5. Client attends first appointment and is assigned a hygienist who will work with them through all their appointments.
- 6. At the completion of the first appointment, Recovering Smiles staff calls the individual and conducts a follow-up interview to process their experience and answer any questions.
- 7. Once the client successfully completes the first appointment, they are expected to secure additional ap-

pointments to the clinic or the referral dentist. At any time in this process, they can call a Recovering Smiles staff to ask more questions or discuss positive strategies with scheduling issues. The goal of this program is to empower the individual to continue on their own with dental appointments and understand the rules for rescheduling an appointment.

8. If the client needs a referral to a participating dentist, the hygienist student will work with them to secure the first appointment. The hygienist student will meet the individual at the dentist's office and act as a guide and mentor for the first appointment.

Intended Outcomes

- 90% of Recovering Smiles participants maintain their appointments or reschedule appointments according to the rules of the clinic and dentist.
- 100% of Recovering Smiles participants are cooperative with the staff at the clinic and referred dentist.
- A dental pool for Recovering Smiles is developed and maintained.
- Recovering Smiles participants have increased knowledge of the importance of oral health and its impact on their physical health.
- RS participants acknowledge oral health goals within their personal substance abuse treatment plan.

Number of Days from First Visit to Completion of Cleaning Among Participants Who Did Not Lose Eligibility for Recovering Smiles (RS).								
Recovering Smiles Group	Participants	Mean	Minimum	Maximum				
1	8	32	0	78				
2	11	61	16	128				
3	8	61	14	147				
4	3	26	0	49				
5	3	105	25	243				
6	6	17	1	35				
7	8	46	10	192				
8	12	24	1	123				
9	1	133	133	133				
10	9	31	3	62				
11	3	15	11	19				
12	0	-	-	-				
Total	Total 72 42 0 243							

Time to Completing Dental Cleaning



Client Project Evaluation

We are glad to have helped you with your oral health needs through the Recovering Smiles project. Please take a few minutes to tell us about your experience.

1. How would you rate the importance of oral health to your overall health?	Very much 79.8%	Moderately 16.7%	Somewhat 3.6%	Not much 0.0%
2. How important is it to you to keep your natural teeth?	Very much 64.3%	Moderately 19.0%	Somewhat 3.6%	Not much 13.1%
3. How much has participating in Recovering Smi	iles affected the	e followina:		
	A lot	Moderately	Somewhat	Not much
Improved my self-image	51.2%	34.5%	8.3%	6.0%
Felt like someone cared about me	85.7%	11.9%	1.2%	1.2%
I am comfortable going to a dental office for care	60.7%	28.6%	10.7%	0.0%
I know how to maintain good oral health	78.6%	20.2%	1.2%	0.0%
4. How would you rate your oral health:				
	Very good	Good	Fair	Poor
Before Recovering Smiles	3.6%	10.7%	36.9%	48.8%
After Recovering Smiles	40.5%	48.8%	7.1%	3.6%
5. In the last year, how often did you have dental pain?	Always 6.0%		netimes Rarely 8.9% 25.3%	
6. Where would you most likely seek care for oral health problems BEFORE Recovering Smiles?		-	ost likely seek AFTER Reco	
18.1% My established dentist	10.8% My e	stablished den	tist	
2.4% A new dentist	26.5% A nev	w dentist		
7.2% Medical doctor's office	3.6% Medi	cal doctor's off	ice	
26.5% Emergency room	0.0% Emer	rgency room		
0.0% EWU Hygiene school	25.3% EWU	J Hygiene scho	ol	
26.5% CHAS	10.8% CHA	S		
2.4% Riverstone/Unify	22.9% River	rstone/Unify		
16.9% Didn't				
8. How likely are you to go for regular dental check-ups?	Very likely 38.6%	Likely 45.8%	Unlikely 14.5%	Very unlikely 1.2%
9. Do you need periodontal maintenance treatment?	Yes 19.0%	No 42.9%	Don't know 38.1%	

10. How often do you:

2+ times per day	1 time per day	Once a week	Once a mont	Less than once h per month
53.0%	45.8%	0.0%	1.2%	0.0%
15.9%	59.8%	8.5%	4.9%	11.0%
9.9%	49.4%	11.1%	7.4%	22.2%
79.5%	16.9%	1.2%	1.2%	1.2%
1.2%	4.8%	6.0%	4.8%	83.1%
0.0%	2.4%	6.0%	9.6%	81.9%
history to the	dental profes	sionals?	97.6% Ye	es, all
loping an appro	priate treatme	ent plan.)	1.2% Sc	ome of it
			1.2% No)
ntal care? (ma	ark all that ann	ly)		
		• /	- dentiet	
		•	ie dentist	
			0	
isurance		-		
		c nours not suita	adie	
Smiles?	16. Are y	/ou:		
	60.7% N	Vale 39	9.3% Female	
id you have	17. How	many perma	nent teeth h	ave vou had
es?				
	19.3%	None		
	53.0% 1	I-5 teeth		
	22.9%	6 or more teeth		
	4.8%	All teeth		
	19 Do v	ou omoko oia	arattaa2	
	(
	32.9%			
	15.9% 9.9% 79.5% 1.2% 0.0% history to the loping an appro	15.9% 59.8% 9.9% 49.4% 79.5% 16.9% 1.2% 4.8% 0.0% 2.4% history to the dental professes aloping an appropriate treatment 26.2% I don 21.4% I don 21.4% I don 21.4% I don switch needed 7.1% I don 7.1% Clinic Smiles? 16. Are y 60.7% 19.3% 19.3% 19.3% 122.9% 6 4.8% 4 4.8%	15.9% 59.8% 8.5% 9.9% 49.4% 11.1% 79.5% 16.9% 1.2% 1.2% 4.8% 6.0% 0.0% 2.4% 6.0% history to the dental professionals? 10ping an appropriate treatment plan.) ental care? (mark all that apply) 26.2% I don't like to go to the 21.4% 24.4% I don't like shots 100't know where to 30.0% nsurance 6.0% I don't have transpor 7.1% Smiles? 16. Are you: 60.7% 60.7% Male 38 17. How many permate removed because 19.3% None 53.0% 1-5 teeth 22.9% 6 or more teeth 4.8% All teeth 18. Do you smoke cig	15.9% 59.8% 8.5% 4.9% 9.9% 49.4% 11.1% 7.4% 79.5% 16.9% 1.2% 1.2% 1.2% 4.8% 6.0% 4.8% 0.0% 2.4% 6.0% 9.6% history to the dental professionals? 97.6% Yet loping an appropriate treatment plan.) 97.6% Yet 1.2% I don't like to go to the dentist 1.2% No ental care? (mark all that apply) 26.2% I don't like shots 1.2% No swhen needed 7.1% I don't like to go to the dentist 21.4% I don't have transportation 7.1% Clinic hours not suitable Smiles? 16. Are you: 60.7% Male 39.3% Female lid you have es? 17. How many permanent teeth hor emoved because of cavities? 19.3% None 53.0% 1-5 teeth 22.9% 6 or more teeth

Please provide any additional comments you have.





Thank You. Please mail back in the self-addressed stamped envelope.

Comments from Recovering Smiles Participants

Please provide any additional comments you have.

Really appreciate the help and caring staff. EWU hygienist was really nice and made me feel comfortable.

Enjoyed the program and the people

Thanks for the help

Really appreciate Recovering Smile helping out the person in recovery.

Sobriety made it difficult to get dental care. Q12. Could not stay sober long enough.

Outstanding program. Thankful for opportunity.

RS is awesome

RS has made me more confident and feel like there is hope for people in recovery to get better oral health.

Its a really great program and help the recovering community get back on track.

I think it's definitely a great program, getting started was great and helps got the foot in the door, without worrying about how much its going to cost right away. I highly recommend RS.

I love the program, they are great people, student is awesome, I appreciate the services I have recieved.

I'm so glad that RS program is here, for adults. They have limited services available and that it is for people in recovery. Oral health is important to stay healthy and some people just don't know and need ehlp to get started.

I think its a very good program and needs to be available to more people. Maore frequent orientations would be awesome. It is a positive program. In jail they took my spacers so I am now without two front teeth.

Getting into Riverstone was very difficult and due to that I lost 3 teeth that I could have possibly saved. They got backed up with WAH clients and couldn't see me.

RS did not help me with my oral health. After my cleaning my teeth are very sensitive and felt like it was a very aggresive cleaning. Its been six months and symptoms are still present. It was a traumatic experience. Don't know if I would return.

It was totally professional and an awesome program. This program has helped me learn and take care of my teeth and myself.

It was very helpful and I appreciated everything.

Appreciate the program and everything it provides.

Thank you.

The program was awesome

Great program

This has been a great program.

Overall, I had a great experience working with these clients. I am concerned that many will continue to have unmet (recurrent) oral health needs because it is up to them to pay for follow-up hygiene care at 3 to 6 month intervals.

Recovering Smiles Student Hygienist Survey



Project Evaluation

We are glad you participated in the Recovering Smiles project. Please take a few minutes to tell us about your experience.

1. How would you rate the following aspects of the Recovering Smiles project.

		Very easy	Easy	Difficult	Very difficult
	Scheduling clients	8.7%	43.5%	39.1%	8.7%
	Working in the structure of the program	18.2%	77.3%	4.5%	0.0%
	Providing dental treatment to clients	9.1%	72.7%	18.2%	0.0%
	Communicating with clients	9.1%	72.7%	18.2%	0.0%
2.	How comfortable were you working with Recovering Smiles clients?	Very comfortable	Comfortable	Uncomfortable	Very uncomfortable
		65.2%	34.8%	0.0%	0.0%

3. How much do you feel you affected Recovering Smiles clients in the following areas:

	A lot	Moderately	Somewhat	Not much
Improved their oral health	47.8%	39.1%	8.7%	4.3%
Improved their self-image	47.8%	43.5%	4.3%	4.3%
Made them feel like someone cared about them	65.2%	26.1%	8.7%	0.0%
Helped them be comfortable going to a dental office for care	56.5%	34.8%	8.7%	0.0%
Helped them understand the importance of good oral health	30.4%	65.2%	4.3%	0.0%

4. Compared to other clients, how challenging were Recovering Smiles clients?

		A lot more challenging	More challenging	No difference	Less challenging	A lot less challenging
	For their dental needs	21.7%	60.9%	17.4%	0.0%	0.0%
	For their behavior	4.3%	30.4%	65.2%	0.0%	0.0%
	For their knowledge of oral health	4.3%	52.2%	43.5%	0.0%	0.0%
	For health factors	8.7%	52.2%	39.1%	0.0%	0.0%
5.	How much did you like working in the Smiles program?	Recovering	Liked a lot 60.9%	Liked 39.1%	Disliked 0.0%	Disliked a lot 0.0%

6. Some people have special needs when receiving dental care. What unexpected circumstances did you encounter when working with Recovering Smiles clients?

Please provide any additional comments you have.

Comments from Dental Hygiene Students

Some people have special needs when receiving dental care. What unexpected circumstances did you encounter when working with Recovering Smiles clients?

None really.

Work scheduled kept some from being able to come in for their cleaning appointments. Some late cancels and no shows.

I worked with a patient who did not have a phone, so I was always having to call his neighbor to schedule appointments. It was tricky because the client never would call me back to confirm, so I was always just hoping he'd show up. He did for two of his appointments, except he was always a half hour late. Then he didn't show for his last appointment.

In general, they need a larger "space bubble" - takes a lot more for them to trust your care.

Recovering addicts do not seem to get numb as easily as most people

None.

They have a lot of dental fear. One was terrified of getting anesthetic which was very challenging and dramatic about everything. One was very self-conscious because of the rampant decay and extremely sensitive-couldn't even prove without anesthetic but luckily he had no fear of anesthetic. Late canceling appointments was a huge issue.

Addictive personalities

Trying to get the patient numb was difficult due to prior drug use.

Please provide any additional comments you have.

Some are very hard to get ahold of. So maybe working something out along those lines.

The only issue I had was numerous cancellations or late arrivals.

Overall, I love the Recovering Smiles program! I think it is such a wonderful opportunity for those who are trying to get back on their feet and get their lives back get the dental care they need. I definitely think this program should continue. However, it would be great if something could be done to lessen the cancellation rate for these clients and to better the ability to reach them.

With both recovering smiles clients' I was in contact with, I had trouble getting them to show up for appointments due to a variety of reasons. I was never able to complete treatment due to the clients' no showing or canceling last minute.

Love this program and the patients I was able to provide care to. They were some of the most appreciative patients I have had during the program and thanked many members of the clinic at every appointment.

GREAT program!

This is a great program. The RS clients have all been very respectful and grateful for the treatment they receive. As a student I am thankful for the experience of working with these individuals.

Some of my comments may reflect one Recovering Smiles patient in particular. She was very difficult to work with and schedule. However, overall I loved working with these patients. I think it was a great experience and really prepared me for life in the field after school.

These people are trying to get their life together and have a hard time following through with their care. They also often have complex dental needs that we couldn't provide for them in our clinic which was very hard to see.

I think this program is wonderful. It was just difficult sometimes to get the clients back into our clinic after their 1st cleaning with us. I had hard even getting some of them to call me back or answer their phones.

Overall, I had a great experience working with these clients. I am concerned that many will continue to have unmet (recurrent) oral health needs because it is up to them to pay for follow-up hygiene care at 3 to 6 month intervals.

^{1.} www.oxfordhouse.org

^{2.} http://www.ffcc.us/services.htm

^{3.} Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System, supported in part by Centers for Disease Control and Prevention, Cooperative Agreement U58/SO000047-2 (2012).

^{4.} Armstrong, J. (2001). Judgmental Bootstrapping: Inferring Experts' Rules for Forecasting. In Principles of Forecasting (pp. 171-192). Springer.



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