

Dental Public Health Activity Descriptive Report

Practice Number: 54005
Submitted By: Department of Oral Medicine, University of Washington School of Dentistry
Submission Date: March 2007
Last Reviewed: July 2017
Last Updated: July 2017

SECTION I: PRACTICE OVERVIEW		
Name of the Dental Public Health Activity: Dental Education in the Care of Persons with Disabilities (DECOD) Program, University of Washington School of Dentistry		
Public Health Functions: Assurance – Population-based Interventions Assurance – Access to Care and Health System Interventions		
Healthy People 2020 Objectives: OH-3 Reduce the proportion of adults with untreated dental decay OH-7 Increase the proportion of children, adolescents, and adults who used the oral health care system in the past year		
State: WA	Federal Region:	Key Words for Searches: Persons with disabilities, persons with special health care needs, developmental disabilities, acquired disabilities, oral health care, access to dental care, provider training, dental education
Abstract: The Dental Education in the Care of Persons with Disabilities (DECOD) program at the University of Washington School of Dentistry has been in existence since 1974. The DECOD program is a pre- and post-doctoral training program which provides: 1) Direct oral health care for persons with disabilities, 2) Training of oral health care professions students in the care of patients with disabilities and 3) training of oral health care professionals in the care of patients with disabilities.		
<ol style="list-style-type: none"> 1. Direct Care The DECOD Program primarily serves adults with developmental disabilities and select acquired disabilities in a seven-chair dental clinic. The DECOD Program also serves older adults in two nursing home settings. This program is a major resource for patients with qualifying disabilities that are not able to access dental care in the community, whether due to the patient’s level of support needs or the lack of availability of appropriate services in the community. 2. Training of Oral Health Care Professions Students A major goal of the DECOD Program is to increase access to care for persons with disabilities by assuring a competent and willing oral health care workforce that can meet the needs of this population in private and community practice settings. Historically, patients with special health care needs have had difficulty finding appropriate dental care. According to Oral Health in America: A Report of the Surgeon General, the “availability of dental providers trained to serve special needs populations” complicates “addressing the needs of this population.” This is in part due to limited training of dental and dental hygiene students in the care of patients with disabilities during their pre-doctoral education. The DECOD Program trains dental students at the University of Washington via didactics and a series of clinical rotations with 8-10 sessions in the DECOD Clinic during their 3rd year and 7 sessions during their 4th year. First and second year dental students participate in didactics in the care of patients with special needs as part of the DECOD Program. The DECOD Program also 		

collaborates with 5 dental hygiene schools for dental hygiene student rotations. Collaboration with hygiene schools is an essential part of the DECOD Program as patients with developmental disabilities experience disproportionately high rates periodontal disease and oral hygiene problems are one of the top 10 limiting secondary conditions for this population. DECOD also offers other opportunities for student training, including shadowing experiences for pre-dental students and rotations for Oral Medicine graduate students, dental hygiene masters students, dental assisting students, and pharmacy students.

3. Training of Oral Health Professionals

While many patients with developmental disabilities can be treated in traditional dental settings with appropriately trained dental providers, some patients have advanced needs that require advanced care. The DECOD Program provides a Fellowship Training Program and offers training for General Practice Residents in special care dentistry. The Fellowship training program provides practicing dentists, dental hygienists and dental assistants with the opportunity for advanced clinical training in the care of patients with disabilities. This program currently provides 4 weeks of clinical training in addition to directed self-study didactics. The DECOD Program collaborates with the UW General Practice Residency Program to offer a year-long training program with an emphasis in special care dentistry for a second-year GPR resident. This residency program offers extensive clinical experiences in the care of patients with disabilities, as well as rotations in hospital dentistry, geriatric dentistry, and participation in the interdisciplinary UW Leadership and Education in Neurodevelopmental and Related Disabilities (LEND) Program.

Program Outcomes

The program outcomes for FY 2016 are outlined below:

1. Number of patients seen: 3,148 (Medicaid recipients with developmental disabilities)
2. Number of patient visits: 6,296 (for Medicaid recipients with developmental disabilities), 249 (for Medicaid recipients with acquired disabilities), 187 (for non-Medicaid recipients with disabilities)
3. Number of dental students trained: 62 (1st year), 62 (2nd year), 68 (3rd year), 68 (4th year)
4. Number of dental hygiene students trained: 113 (2nd year)
5. Number of fellows trained: 5 (3 dentists, 1 hygienist, 1 dental assistant)
6. Number of residents trained: 1 (2nd Year General Practice Resident)
7. Number of other trainees: 2 (Oral Medicine Graduate Students)

Additional program outcomes:

1. Student willingness to treat: Qualitative research ongoing on student willingness to treat and experiences treating this population beyond graduation.

Program Expenses and Funding

The DECOD Program employs 2 full time dentists, 2 part time dentists, 1 full time dental hygienist, 1 part time dental hygienist, 3 full time dental assistants, and 1 full time patient care coordinator. The funding of the program is provided by Medicaid reimbursement for dental services as well as support from the Department of Social and Health Services (DSHS) in Washington State, which provides an additional reimbursement per patient visit. In FY 2016, the budget was approximately 710,000.

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SECTION II: PRACTICE DESCRIPTION

History of the Practice:

Dental Education in Care of Persons with Disabilities (DECOD) is a special program of the University of Washington School of Dentistry that treats persons with developmental and acquired disabilities and prepares dental professionals to manage and treat the oral health needs of these populations.

Funding for the DECOD program was originally provided by the Robert Wood Johnson Foundation in 1974. The Robert Wood Johnson Foundation provided start-up funding for several such programs at dental schools in the U.S. However, there were no subsequent "national" funding sources of any magnitude from private or governmental sources to continue these programs. The DECOD program at the University of Washington School of Dentistry has since flourished and gained National and International recognition.

There have been distinct phases of the DECOD program, each with a different primary focus for the program. These phases have been the result of program growth, building upon previous stages, program needs for expansion of education at the pre-doctoral level, and the visions of the various DECOD Directors over time. The phases include:

1. Initial material development and research. (1970s-1980s)
2. Clinical training with national and international scope. (1980s-1990s)
3. Long distance training through the use of videotapes and modules. (mid 1990s)
4. Clinical training for undergraduate dental and dental hygiene students. (2000s)
5. Clinical training for undergraduate dental and dental hygiene students in addition to re-establishing national clinical training of fellows, a new year-long residency training program, and re-establishing research in special care dentistry. (2010s)

In its early years, the DECOD program developed a didactic curriculum through the use of Self-Directed Modules of written materials for continuing education purposes. In addition, the program emphasis was on research to advance the understanding of appropriate interventions for special patient care. As the program grew so did its scope and a fellowship program began to train practicing dentists both in the U.S and abroad. In the mid 1990's, a grant allowed for the development of the distance learning program through use of videotapes to reach a greater number of dental professionals. The 36-hour videotape series was sent to every dental school in the U.S., Puerto Rico, and Canada in 2000 without charge. The DECOD program's primary focus then changed to training of undergraduate dental students and dental hygiene students in care of persons with disabilities. The program continues to train undergraduate dental and dental hygiene students and is expanding post-graduate training and re-establishing a research program in special care dentistry.

DECOD has participated in a variety of extramural clinical activities outside of the UW School of Dentistry main campus. Past outreach activities included delivery of care at Heritage House Assisted Living, Seattle Medical Rehabilitation Center, and homebound service through the use of portable dental equipment. DECOD previously traveled outside of the Seattle metropolitan area, including Bremerton and Snohomish, WA as well as in remote areas of the state (Walla Walla, Clarkston, Centralia and Mt. Vernon, WA). DECDO previously collaborated with Northwest Medical Teams, Int. using mobile dentistry vans to deliver off-site care. Currently DECOD provides care for older adults at clinics within Providence Mt St Vincent and Keiro Northwest Rehabilitation and Care Center.

Justification of the Practice:

Access to care for persons with severe disabilities is limited in Washington State. Poor reimbursement rates for dental services through the Washington State Medicaid program and lack of dental

professionals trained and willing to accept persons with disabilities in their practices contribute to the access problem. Many patients of the program travel 3-4 hours for dental care at the DECOD Clinic.

Inputs, Activities, Outputs and Outcomes of the Practice:

Program Objectives

The three main objectives of the DECOD program are:

1. To train dental professionals including dental, dental hygiene and dental assisting students and practicing oral health professionals to care for persons with disabilities;
2. To provide a community service to persons with disabilities having difficulty receiving adequate dental care, and
3. To conduct research in this field.

Program Faculty, Staff & Volunteers

The DECOD program faculty include two full-time faculty dentists at the DECOD Clinic and two part time faculty dentists at the nursing home clinics. The program staff includes three full-time dental assistants, one full-time hygienist, one part-time hygienist and one full-time patient care coordinator.

Volunteer affiliate faculty members are also involved in providing support services. The University of Washington, School of Dentistry also makes volunteer opportunities available to pre-dental students wishing to learn more about the care of patients with disabilities.

Education & Training

The DECOD program offers several instruction formats in the dental management of persons with disabilities:

The pre-doctoral curriculum includes education in the care of patients with disabilities in all four years:

- 1st year: Lecture and ½ day clinical rotation in the DECOD Clinic as part of the Early Clinical Immersion course. The lecture is given to the entire 1st year class and 50% of the class completes the DECOD rotation while the other 50% complete a geriatric dentistry rotation.
- 2nd year: Students receive lectures from DECOD instructors and guest lecturers and participate in small group activities as part of the Foundations of Dental Medicine course. Instruction in this area includes the care of patients with autism, cerebral palsy, Down syndrome, intellectual disability, traumatic brain injury and spinal cord injury. Additional instruction occurs in the area of consent and autonomy, behavioral facilitation techniques, medical immobilization and communication for patients with communication disorders. Students also learn about ableism, person-first and identity-first language, different models of disability, and the World Health Organization International Classification of Functioning, Disability and Health.
- 3rd year: Students rotate through DECOD Clinic 8-10 sessions and participate in lectures and small group activities with DECOD faculty. They complete a DECOD portfolio case and present ICF Profiles for patients of multiple clinics from the Oral Medicine and Diagnosis and Treatment Planning Clerkships.
- 4th year: Students complete a seven ½-day block in the DECOD Clinic. They complete a competency assessment in the care of patients with special needs. There is also a 4th year selective course where students can either provide additional care in DECOD or participate as a teaching assistant for 3rd year students in the care of patients with disabilities.

The DECOD Fellowship:

The DECOD Fellowship is a 4-week clinical fellowship along with directed self-study to prepare practicing dentists, dental hygienists and dental assistants to provide advanced care for patients with developmental disabilities.

The 2nd Year General Practice Residency:

DECOD collaborates with the UW Department of Oral Surgery General Practice Residency Program to offer a 12-month training program for a second year post-graduate resident in the care of patients with disabilities. Residents receive 12-months of clinical training with DECOD, primarily in

the DECOD Clinic. They also have experiences with the operating room dentistry and the care of medically complex inpatients at the University of Washington Medical Center, geriatric dentistry and participate in the Leadership in Education in Neurodevelopmental Disabilities (LEND) fellowship at the University of Washington.

Educational Materials

Educational Materials have been developed and include:

1. **Fact Sheets:** A series of fact sheets were developed on a variety of conditions, including ADHD, anxiety, asthma, autism, cerebral palsy, cleft lip and palate, congenital cardiac disorders, depression, diabetes, Down syndrome, epilepsy, hearing impairment, HIV, intellectual disability and traumatic brain injury. There are separate fact sheets for medical providers and parents or caregivers in addition to adult dental care, pediatric dental care, and medical care related to each of these conditions. The fact sheets are available online:
2. **Video Lecture Series:** The DECOD Video Lecture Series was created to enable Oral Health Care Providers to learn about dental care for persons with disabilities from a large faculty of experts, and to participate in this learning experience in the comfort of their own office or home. Each video presentation includes a lecture outline and study questions to guide your learning. This video series needs updating to meet the technology needs of today's learners. The video series is not currently available.
3. **Self-Directed Modules:** These modules were designed for the dental professional who would like to treat patients with special needs or gain more knowledge in this field. This series was offered either as a self-directed course of study or to be completed in preparation for on-site clinical fellowship. Continuing Dental Education was previously available via a correspondence course and by completing a multiple choice examination. These modules need updating and are not currently available.

Patient Population

The patients served by the DECOD Clinic include adults with developmental and select acquired disabilities. The majority of the patients have developmental disabilities (e.g., cerebral palsy, Down syndrome, autism and intellectual disability); the remaining have acquired disabilities (e.g. traumatic brain injury, multiple sclerosis, and stroke). The Department of Health determines which disabilities qualify for the program. The majority of patients receive Medicaid dental benefits. The DECOD Program also provides care to older adults in nursing home settings.

Clinical Services

DECOD is a major resource for Washington citizens with developmental disabilities. The DECOD program provides comprehensive dental treatment, including hygiene services, restorative care, endodontic treatment, removable prosthodontic care, and oral surgery procedures.

The program follows the philosophy that in order to maintain dental health, all patients should receive periodic examinations and cleanings in the program. This is the means for close monitoring of the patient's oral condition over time. It is not feasible or desirable for frequent hospitalizations when performing examinations and cleanings. For those patients who are unable to be safely and effectively treated for their restorative needs, they are referred to UW Advanced General Dentistry for general anesthesia care. When referred, the wait time for dental care under general anesthesia can be up three to five years. Therefore, the DECOD program makes every attempt to manage patients through facilitation techniques in the clinic setting. These may include the use of behavioral supports, medication to reduce anxiety, and/or medical immobilization and protective stabilization. When medical immobilization is indicated, consent must be obtained and the least restrictive alternative possible to achieve safe and appropriate care is utilized. With family and/or caregiver agreement, less than 5% of our patient population must be referred for care.

Medicaid, some private insurance programs, and self-payment are accepted.

Clinical Service Sites

DECOD Clinic: A seven-chair dental clinic within the UW School of Dentistry. This clinic operates full time, year-round.

Keiro Dental Clinic: A two-chair dental clinic within Keiro Northwest Rehabilitation and Care Center. This clinic operates on the 2nd and 4th Thursday of each month and is staffed by a part-time DECOD faculty member and one of the DECOD Clinic's dental hygienists.

Mt St Vincent Dental Clinic: A two-chair dental clinic within Providence Mt St Vincent. This clinic operates every Tuesday and is staffed by a part-time DECOD faculty member and one of the DECOD Clinic's dental assistants.

Outputs & Service Units

The DECOD program provides over 6,000 patient visits per year to persons with disabilities. During fiscal year 2016, the DECOD Program provided clinical rotations and experiences to 135 pre-doctoral dental students, 1 elective student, 2 graduate students, 3 fellows, and 1 dental resident.

Outcomes

Patients with developmental disabilities are often treated in a hospital operating room setting under general anesthesia. This is the most expensive means of providing dental treatment and is not without inherent risks. It is the philosophy of the DECOD Program to provide truly ongoing and comprehensive care to its patients. This can only be achieved in an outpatient setting with frequent oversight. More than 95 percent of DECOD patients are able to receive care for their dental care needs in the outpatient clinical setting. It is DECOD's outpatient care approach which leads to a more long-term favorable patient health outcome.

Evaluation

A qualitative research study on graduates' perceptions of the curriculum and contextual factors related to the care of persons with disabilities is ongoing. This research project uses the theory of planned behavior and social cognitive career theory as conceptual frameworks for examining graduates' interests and behaviors related to the care of patients with disabilities in practice.

Budget Estimates and Formulas of the Practice:

Services are billed to the Washington State Medicaid system. This includes reimbursement for adult dental care. In addition, the program has a contract with the Department of Social and Health Services (DSHS) providing supplemental support for the program. The annual budget is approximately \$710,000. It is through the generous support of the State of Washington that the DECOD program remains a viable enterprise.

Lessons Learned and/or Plans for Improvement:

DECOD sees a high proportion of patients whose disabilities affect their ability to receive dental care. The treatment of this population and education of others to treat this population is rewarding and challenging. Matching the level of the learner to the patient, and flexibility in re-assigning patients is essential to maintaining effective and safe care with such a diverse patient population and diverse population of learners and providers. Some patients need more consistency with providers while others enjoy seeing a variety of learners in the clinic setting. This must also be taken into account for patient scheduling.

Maintaining financial stability of special patient care programs can be challenging as well. This population requires more resources (for example, more dental assistants than traditionally used in a dental school setting) and reimbursement is generally low as the majority of patients are Medicaid recipients. Additionally, more high-producing advanced procedures are often not possible in this population due to patient tolerance and other patient care factors. DECOD has relied on the support of the Department of Health for supplemental reimbursement. Support from the Chair of the Department of Oral Medicine and the Dean of the UW School of Dentistry also help make this program successful.

The DECOD Program via collaboration with the UW General Practice Residency Program was able to fill GPR-2 residency positions with emphasis in special care dentistry for the 2015-2016 and 2016-2017 residency years; however, a position for the 2017-2018 residency year remains unfilled. Training

those at the residency or specialty level will be essential to develop the next workforce of providers willing and prepared to care for those with more advanced needs.

Additionally, training of dental assistants and dental assisting students in the care of patients with disabilities is an important future goal in order to round out the well-trained special care dentistry team.

Available Information Resources:

DECOD Clinic Website: <https://dental.washington.edu/decod/>

DECOD Program Website: <https://dental.washington.edu/dept-oral-med/academics/decod-program/>

General Practice Residency Information: <https://dental.washington.edu/dept-oms/gpr/structure/#DECOD>

Fact Sheets: <https://dental.washington.edu/dept-oral-med/special-needs/patients-with-special-needs/>

SECTION III: PRACTICE EVALUATION INFORMATION

Impact/Effectiveness

How has the practice demonstrated impact, applicability, and benefits to the oral health care and well-being of certain populations or communities (i.e., reference scientific evidence, outcomes of the practice and/or evaluation results)?

The Surgeon General released the Report of the Surgeon General's Conference on Health Disparities and Mental Retardation "Closing the Gap: A National Blueprint to Improve the Health of Persons with Mental Retardation." One of the goals is to "train health care providers in the care of adults and children with mental retardation" (now intellectual disability). The DECOD program provides such training to dental and dental hygiene students and practicing dentists and dental hygienists to build capacity in the dental workforce. The program provides varying levels and formats to train students and dental professionals. The DECOD program provides more than 6,000 dental visits per year to persons with disabilities.

Efficiency

How has the practice demonstrated cost and resource efficiency where expenses are appropriate to benefits? How has the practice demonstrated realistic and reasonable staffing and time requirements? Provide unit cost analysis or cost-benefit analysis if appropriate.

By being housed within a University setting, DECOD is able to have students and fellows provide treatment to minimize costs. The post-graduate fellow trainees pay a fee for the training program and to receive continuing education credits. DECOD has several affiliate faculty members that volunteer their time serving DECOD as well. The General Practice Resident salary is funded by Graduate Medical Education funds.

DECOD provides outpatient services to persons with developmental and acquired disabilities and minimize the need for their patients to be treated in the OR under general anesthesia. OR cases are costly treatment. Maintaining outpatient visits improves patient care efficiency by allowing monitoring, early diagnosis of dental problems, and timely treatment of oral disease.

Demonstrated Sustainability

How has the practice showed sustainable benefits and/or how has the practice been sustainable within populations/communities and between states/territories? What mechanisms have been built into the practice to assure sustainability?

The DECOD Program was initiated in 1974 and has been ongoing for more than 40 years. Its sustainability requires billing for dental services and additional state support. The University of Washington School of Dentistry strongly supports the DECOD program. The University of Washington is committed to educating dental practitioners who have the commitment, competence and compassion to meet the needs of all people with disabilities and/or other special health care needs.

The DECOD Program's viability is incumbent on Washington state offering the optional Adult Medicaid dental reimbursement program as well other state support. State support for DECOD by legislators continues to grow as the program is touted as a model for other states and dental schools. Strong advocacy groups exist in Washington State and they have been instrumental in carrying the message for patient care and training for those with special needs to those in State government. The groups range from organized dentistry, oral health coalitions, advocates for persons with mental retardation and others. This state has been remarkably clear that care for the most vulnerable is of the highest priority and the DECOD Program is an essential component of that commitment.

Collaboration/Integration

How has the practice built effective partnerships/collaborations among various organizations and integrated oral health with other health projects and issues? What are the traditional, non-traditional, public and private partnerships/collaborations established by the practice for integration, effectiveness, efficiency and sustainability?

The DECOD program has developed effective partnerships with facilities and entities seeking dental services for their clients with disabilities and training for their oral health professionals students in the care of patients with disabilities. These partnerships include Keiro Northwest Rehabilitation and Care Center, Providence Mt St Vincent, Seattle Central College, Pima Medical Institute, Lake Washington Institute of Technology, Pierce College, and Shoreline Community College.

Objectives/Rationale

How has the practice addressed HP 2020 objectives, met the National Call to Action to Promote Oral Health, and/or built basic infrastructure and capacity for state/territorial/community oral health programs?

Patients with developmental disabilities experience high rates of untreated dental decay and have difficulty accessing the oral health care system. The DECOD program addresses the following HP 2020 objectives:

- OH-3 Reduce the proportion of adults with untreated dental decay
- OH-7 Increase the proportion of children, adolescents and adults who used the oral health care system in the past year

The DECOD program also responds to the National Call to Action to Promote Oral Health, Action 4: Increase Oral Health Workforce Diversity, Capacity, and Flexibility.