



Dental Public Health Activities & Practices

Practice Number: 35007
Submitted By: Rose F. Kennedy University Center for Excellence in Developmental Disabilities (UCEDD), Albert Einstein College of Medicine
Submission Date: March 2007
Last Updated: March 2007

SECTION I: PRACTICE OVERVIEW		
Name of the Dental Public Health Activity: Rose F. Kennedy University Center for Excellence in Developmental Disabilities – Special Care Dentistry Fellowship Program		
Public Health Functions: Assurance – Population-based Interventions Assurance – Oral Health Communications Assurance – Building Linkages and Partnerships for Interventions Assurance – Building State and Community Capacity for Interventions Assurance – Access to Care and Health System Interventions		
Healthy People 2010 Objectives: 6-10 Increase proportion of health & wellness & treatment programs & facilities that provide full access for people with disabilities. 21-2 Reduce untreated dental decay in children and adults 21-5a Reduce gingivitis among adults 21-5b Reduce periodontal disease among adults 21-11 Increase utilization of dental services for those in long-term facilities		
State: New York	Federal Region: Northeast Region II	Key Words for Searches: Developmental disabilities, oral health care, access to care, professional training, special health care needs, special needs
Abstract: It is well documented that the special needs population has difficulty accessing dental services on a timely basis. The Rose F. Kennedy University Center for Excellence in Developmental Disabilities (UCEDD) dental program provides: (1) clinical dental services to patients with developmental disabilities, (2) training in special care dentistry to postgraduate dental residents and fellows, and (3) outreach to patients and caregivers in promoting oral health maintenance procedures and practices. The dental program is an integral service and training component of the broader Kennedy Center, which serves as a tertiary referral center for children with genetic and developmental anomalies. The Special Care Dentistry Fellowship Program, incorporated into the dental program, is one of only a few programs nationally that provides comprehensive training in all aspects of special care dentistry from training in genetics through the provision of treatment under general anesthesia. The dental clinic has logged 5,100 patient encounters in FY 2005 at a cost of \$1,180,897 (approximately \$231 per visit). The dental program is presently documenting it's mode of operation so that others may replicate this model of dental care delivery.		
Contact Persons for Inquiries:		
Maureen Munnely Romer, DDS, MPA, Director, Special Care Dentistry, Rose F. Kennedy University Center for Excellence in Developmental Disabilities, Albert Einstein College of Medicine, 1410 Pelham Parkway South, Bronx, NY 10461, Phone: 718-430-8528, Fax: 718-892-2296, Email: mromer@aecom.yu.edu		
Arnold Birenbaum, PhD, Associate Director, Rose F. Kennedy University Center for Excellence in Developmental Disabilities, Albert Einstein College of Medicine, 1410 Pelham Parkway South, Bronx, NY 10461, Phone: 718-430-8523, Fax: 718-892-2296, Email: birenbau@aecom.yu.edu		

SECTION II: PRACTICE DESCRIPTION

History of the Practice:

In the early part of the twentieth century, people with developmental disabilities received health services in large public institutions. As time progressed, there were few resources available for people with developmental disabilities to access healthcare in general and dental care in particular.

In 1965, to help alleviate the shortage of practitioners willing and able to care for developmentally disabled patients, Dr. Harold Diner began providing dental treatment to children with developmental disabilities as part of the general dental program at the Bronx Municipal Hospital Center (BMHC, now Jacobi Hospital).

In 1970, the Rose F. Kennedy Center for Research in Mental Retardation and Human Development of the Albert Einstein College of Medicine opened on the grounds of BMHC. Dr. Diner was given the opportunity to open a dental clinic for special needs children and begin a new pediatric dentistry residency program at the center. This program would incorporate a significant component of training and care for the population of special needs patients.

A one-year Clinical Fellowship in Special Patient Dental Care was also incorporated into the dental program. This fellowship was originally intended for graduates of pediatric dentistry residencies to enhance their skills in treating special needs children. Over time, the fellowship became opened to any dentist with an interest in learning to provide care to patients with developmental disabilities.

In 1988, the pediatric dentistry residency program was discontinued and the fellowship program was expanded to include three FTE fellows. Training expanded to include treatment of adults with developmental disabilities. This decision was based on the realization that adults with disabilities living in community settings faced severe barriers to accessing dental care.

The Kennedy Center dental program and its Special Care Dentistry Fellowship are components of the Rose F. Kennedy University Center for Excellence in Developmental Disabilities (UCEDD). A UCEDD is an interdisciplinary treatment and training facility for persons with developmental and intellectual disabilities. More information about UCEDDs can be obtained at <http://www.aucd.org/template/page.cfm?id=24>.

Justification of the Practice:

Although many people with developmental disabilities can be treated in the traditional dental setting, a large number of these individuals have difficulty accessing dental services. Factors contributed to this scarcity of services include a lack of sufficient caregivers trained in the complexities of treating patients with developmentally disabilities and inadequate compensation from private and public insurance programs for treating special needs patients requiring additional time and management for treatment. Across the nation, Special Care Dentistry (SCD) Fellowship programs, General Practice Residency (GPR), and pediatric dentistry programs are addressing the need to train dentists who are competent to treat persons with disabilities in the community and in the hospital.

Currently, there are close to 300,000 individuals with developmental disabilities residing in New York State. Only a small number (approximately 2,000) reside in large institutional facilities. The vast majority lives in our communities, either in group residences or with family. Dentistry is consistently cited as an unmet health care need in this population. There is a high need in the state for more dentists with training to care for individuals with development disabilities living in the community.

Inputs, Activities, Outputs and Outcomes of the Practice:

The dental program at Rose F. Kennedy Center has been in existence over forty years and has trained hundreds of residents and fellows who then open their practices in many different states and countries. The program has an IV/IM sedation program that treats over 300 patients a year.

Patients travel from as far as Long Island and Upstate New York for this unique service. Additionally, the clinic's close proximity to a large hospital permits easy referral for treatment in the operating room when appropriate.

Dental Program Major Activities

The Rose F. Kennedy UCEDD dental program provides the following major activities:

1. Clinical dental services to patients with developmental disabilities,
2. Training in special care dentistry for postgraduate dental residents and fellows, and
3. Outreach to patients and their caregivers in oral health maintenance procedures and practices.

Program Inputs, Outputs, Activities and Outcomes

The following table provides an overview of the dental program's inputs, outputs, activities and outcomes.

Rose F. Kennedy University Center for Excellence in Developmental Disabilities Dental Program	
INPUTS	
Professional Staff	3 general dentists
	3 pediatric dentists
	1 oral surgeon
	2 dental anesthesiologists
	1 orthodontist
	1 endodontist
	1 dental hygienist
	1 special care dental fellow
	3 FTE dental residents
	Other residents from 6 postgraduate programs* who take rotations at the Kenny Center
	1 clinic manager
Auxiliary Staff	3 dental assistants
	1 receptionist
	1 billing specialist
Funding	Medicaid revenue
	MCH grant
	New York City Contract
OUTPUTS	
Dentist training	One special care dental fellow and 46 residents trained per year (includes pediatric dentistry and general practice residents who take rotations at Kennedy Center from 6 postgraduate programs)
Service units	5,000+ patient visits annually
Products developed	Oral health educational programs for direct care staff
	Oral health educational programs for patients
	Educational programs for general practice and pediatric dental residents
	Oral health educational programs for dental schools

	Collaborated with the New York State Office of Mental Retardation and Developmental Disabilities (OMRDD) Task Force on Special Dentistry to create an online provider directory of special care dentists in New York State for providers, families and people with disabilities.
ACTIVITIES	
Operations	4 chair dental clinic within multidisciplinary outpatient neurodevelopmental center
Education	Clinical training of special care dentistry fellows and dental residents from 6 postgraduate programs
	Technical assistance to various agencies
OUTCOMES	
Promotion of an interdisciplinary training and service delivery infrastructure that is oriented to comprehensive care for persons with disabilities	
Increased dental workforce capacity to serve persons with disability, through special training programs (fellowship and resident training)	
Development of a specialized program that accepts referrals from community dentists and agencies throughout the metropolitan area	
Community based training program that Increases the oral health knowledge of care providers	
Increased collaboration among dental residency programs in the metropolitan area	

Educational Activities

The teaching component of the dental clinic provides an environment where all aspects of dental care for persons with medical, developmental, and/or behavioral disabilities is taught to postgraduate dental professionals; not only the Special Care Dentistry fellow, but also pediatric dentistry and general practice residents who take rotations at Kennedy Center. Training involves both clinical and didactic components. Some of the pediatric dentistry residents spend 20% of their clinical time at the Kennedy Center (approximately 800 hours of clinical training). The general practice residents receive 96 hours of training. All the residents and the Special Care Dentistry fellow receive over 60 hours of didactic training in special care dentistry.

The clinic provides services for infants, children, adolescents, and adults with problems that include physical, developmental, language, and learning disabilities. The clinical curriculum includes a comprehensive approach to those problem areas that require advanced and sophisticated treatment modes.

Special Care Dentistry Fellowship

The Fellowship in Special Care Dentistry is a comprehensive, one-year, full-time, postdoctoral level program. It is designed to provide an intensive program in the management of medically complex and behaviorally difficult patients. To be eligible for the fellowship program at the Rose F. Kennedy UCEDD, an applicant must be a graduate of an American or Canadian dental school with a current New York State license. Dentists licensed in another state can achieve licensure by credential in New York. Candidates must submit an application along with an official Dental School transcript, two professional letters of recommendation, and a personal letter stating the applicant's reasons for seeking the advanced training, special interests, plans for the future, and any other relevant information. Special consideration is given to graduates of dental general practice residencies or specialty programs, but all applicants are considered. Letters announcing the availability of the program are sent to all GPR programs in the New York metropolitan area and to unmatched applicants of pediatric dentistry residency programs. The program usually receives 15-20 applicants for the program per year. The stipend is commensurate with residencies in the New York metropolitan area, with variation due to PGY level.

Curriculum

Extensive multidisciplinary exposure to those areas that are of importance to the dentist treating patients with special needs is essential to a training program such as this. The clinic is

university based and consequently provides frequent and close interaction with other members of the public health and developmental disabilities community.

By the end of the training period, the trainee (residents and fellow) will have acquired knowledge and experience in:

1. A wide range of developmental disabilities and acute and chronic medical disorders, with an emphasis on how they may impact the individual's ability to access adequate dental care.
2. A wide range of treatment modifications, adjunctive procedures, and specialized management modalities to facilitate delivery of dental care to patients with special needs.
3. A wide range of out-patient pharmacologic sedation modalities.
4. Advanced restorative measures in children and adults.
5. Interceptive and corrective orthodontic treatment measures.
6. The recognition and treatment of unusual dental conditions, which are either genetically or locally imposed.
7. Oral pathology.
8. Minor oral surgical procedures.
9. Current dental research activity.

Additionally, trainees who complete the Fellowship will:

1. Have acquired a much more advanced level of knowledge and experience in the above areas.
2. Be able to carry out research efforts directed towards improving the methods of providing treatment to the MR/DD population.
3. Be able to act as a source of expert information to community programs, parents/guardians, and other dental and medical professionals.

Specific Competency Objectives Upon Completion of Training

By the end of the training period, the trainee will be able to:

1. State the etiology and prevalence of various common and uncommon medical, developmental, psychiatric, and behavioral disorders.
2. List common pharmacologic agents used in the medical management of these conditions and their systemic effects.
3. Describe significant oral and systemic manifestations of handicapping conditions.
4. Be aware of major national and local advocacy and support services available in the community.
5. List and know the proper use of various specialized equipment that may be needed to facilitate the dental management of individuals with disabilities.
6. Describe the relevance of professional or other appropriate consultations in the treatment of individuals with disabilities and obtain further evaluations when necessary.
7. Be familiar with and obtain experience in various forms of light and deep conscious sedation, general anesthetic, and emergency management modalities and medications. Be familiar with and obtain experience in physiologic monitoring and electronic monitoring equipment and record keeping necessary for sedation and GA cases. Be familiar with and obtain experience in using emergency medical equipment and drugs.
8. Know the legal requirements concerning consent for dental treatment in New York State and be able to obtain all necessary consents.
9. Take a comprehensive health history, obtain medical or other needed consultations, and evaluate and diagnose existing oral conditions.

10. Develop an appropriate treatment plan based on the health and psychosocial history, incorporating pertinent management factors such as methods of anxiety and pain control, optimum time and length of appointments, and use of support persons.
11. Develop and implement an individual program for preventive care, given the specific problems presented by a patient with a disability.
12. Demonstrate proper transport, transfer, and positioning of patients.
13. Demonstrate appropriate verbal and nonverbal communication skills in the treatment of patients.
14. Perform specialized dental procedures such as modified radiographic, restorative, prosthetic, or other specialized techniques, when appropriate.
15. Make an appropriate decision concerning the management of a patient with non-compliant behavior.

Budget Estimates and Formulas of the Practice:

Rose F. Kennedy University Center for Excellence in Developmental Disabilities Dental Program Costs for Fiscal Year 2005	
Salaries	\$ 635,145
Fringe benefits	\$ 196,894
Supplies	\$ 47,000
Lab costs	\$ 16,400
Repair	\$ 13,100
Rent	\$ 65,511
Malpractice	\$ 11,847
Administrative costs	\$ 195,000
Total costs	\$ 1,180,897

With 5,100 encounters (patient visits) in fiscal year 2005, the average cost per encounter is \$231.

Lessons Learned and/or Plans for Improvement:

Lessons learned:

1. Having protocols for obtaining consent, medical history and insurance information helps to facilitate treatment.
2. Having affiliation with hospitals facilitates referral for patient requiring treatment in OR.
3. Having appropriately staffed clinic (i.e., with practitioners in different specialties) allows most treatment to be completed in a single outpatient facility and offers more opportunities for training the fellows and residents.
4. Having affiliation with a number of postgraduate dental programs permits expansion of training opportunities and increases the number of practitioners able and willing to treat patients with special needs in the community, thus improving access to care.

Plans for improvement:

The Rose F. Kennedy UCEDD dental clinic is both a training center and a service provider. Because of the dental clinic's expertise, it has become a tertiary level referral center for patients with developmental disabilities. Consequently, the dental clinic needs additional financial and in human resources. Focus areas for improvement include:

- Larger and more comfortable treatment and training facility.
- More specialty faculty.
- More sedation appointments per week.

Available Information Resources:

- Curriculum guidelines for training in special care dentistry (available upon request to Dr. Romer at mromer@aecom.yu.edu)
- Training objectives for clinical fellows and residents (available upon request to Dr. Romer at mromer@aecom.yu.edu)
- Forms developed by NY State OMRDD Taskforce on Special Dentistry, available at www.omr.state.ny.us include: (1) Medical History, and (2) Behavioral History

SECTION III: PRACTICE EVALUATION INFORMATION

Impact/Effectiveness

Clinical dental program: The dental program meets the oral health care needs of special needs patients in the New York metropolitan area in accessing dental services. The dental program provides over 5,100 dental patient visits in fiscal year 2005, including 300 visits providing patients with dental care provided under IV and/or IM sedation.

SCD fellowship: The special care dentistry fellowship program and the general practice and pediatric resident training programs increase the number of dentists who have advanced training in serving patients with disabilities. The fellowship program has operated for approximately 30 years, and during that time has graduated approximately 50 fellows. These fellows have served special needs patients in their practices and also teach other dentists in the U.S. and foreign countries. The fellowship program has an international reputation as an exemplary training program.

Efficiency

Clinical dental program: The Rose F. Kennedy UCEDD dental program is cost-efficient because a significant number of patients can be treated on an out-patient basis, rather than the more costly hospital operating room setting. The cost of taking a patient to the operating room for dental treatment in New York State is between \$3,000 and \$7,000. The Medicaid fee for anesthesia in a hospital ambulatory care setting in NYS is \$1,400. This is in contrast to Kennedy's actual per visit cost of \$231 for outpatient visits. The Kennedy program also represents an efficient use of public Medicaid funds for patients able to obtain outpatient dental treatment without having general anesthesia.

SCD fellowship: The fellowship is an integral part of the Kennedy dental program. The fellow works side by side with the residents and attendings in the same facility and serves the same patient population. The seamless integration of the fellowship with the on-going dental program achieves both administrative and financial efficiencies that could not be realized if the fellowship was a stand-alone program.

Demonstrated Sustainability

Clinical dental program: The dental clinic has demonstrated its sustainability by being in operation for the past 30 years. Many patients have been treated for well over a decade. The dental program provides sustainable benefits by building a dental workforce with special training to care for patients with special needs. Three of the dental program's current attendings were residents and clinical fellows in the program during the late 1980s. The long term operation of the program can be attributed to several factors: a critical mission in serving a chronically neglected population; competent leadership, embodied mainly by Dr. Diner's long and distinguished tenure as the program director; and stable financing from a combination of patient fees (primarily Medicaid), Federal MCH Block grant funding, and contractual support from the City of New York.

SCD fellowship: The fellowship program also has a credible record of sustainability. The program was founded in 1975 and it has continued uninterrupted to this day. The program has graduated approximately 50 fellows. The sustainability of the fellowship program can be attributed to the same factors as the dental program itself: a critical mission, strong leadership, and a stable funding stream. The fellowship is funded as a specific line item in the MCH grant, specifically for advanced training.

Collaboration/Integration

Clinical dental program: The dental program is a model of integration, both within the Rose F. Kennedy UCEDD, and with the community outside the Kennedy facility. Because the UCEDD is a multi-disciplinary treatment center, the dental program benefits from close collaboration with medical colleagues who serve patients with a wide range of disabilities. Residents from six different

general practice and pediatric dental residency programs rotate through and are trained at the Kennedy dental program. The dental program has trained hundreds of dentists over the past forty years who have gone on to practice in many different states and countries. Patients are referred from over a dozen state and voluntary service agencies. The program offers outreach and educational programs to schools, residential agencies and day habilitation programs on a regular basis. The program collaborates with the Bronx Mental Retardation Council on outreach programs. Additionally, several of the program's doctors are members of the New York State Surrogate Decision Making Committee that facilitates consent for medical treatment for patients without guardians.

SCD fellowship: The special care dentistry fellow collaborates with medical colleagues within the UCEDD and with the general practice and pediatric residents who also receive training at the Kennedy Center. The fellowship program is designed to be fully integrated with the general dental program.

Objectives/Rationale

Clinical dental program: The Kennedy Center dental program addresses two Healthy People 2010 objectives: Objective 6-10, to increase the proportion of health and wellness and treatment programs and facilities that provide full access for people with disabilities; and Objective 21-11, to increase utilization of dental services for those in long-term facilities.

The dental program also supports the Surgeon General's Call to Action to Promote Oral Health to:

- Implement strategies to overcome barriers in oral health disparities need to engage all groups, particularly those most vulnerable, in the development of oral health care programs that work to eliminate health disparities and aim to Identify and reduce disease and disability as well as improve access to oral health care.
- Increase Oral Health Workforce Diversity, Capacity, and Flexibility to meet patient needs.

SCD fellowship: The fellowship addresses the same Healthy People 2010 objectives as does the general dental program by developing a dental workforce with advanced competencies and the Surgeon General's Call to Action to Promote Oral Health by increasing workforce capacity and flexibility to meet patient needs.

Extent of Use Among States

Clinical dental program: There are other UCEDDs in the U.S., but not all have dental programs. Among those that do have dental programs, not all offer service programs as comprehensive as the one at Kennedy. It is not known if other UCEDD dental programs have similar broad training initiatives as the Kennedy Center. In collaboration with a dental public health resident from North Bronx Healthcare Network, the Kennedy program is currently writing a description and analysis of the dental program and plans to publish and disseminate as a reference for other agencies.

SCD fellowship: There are two similar special care dentistry fellowship programs in New York State (Stony Brook Hospital and Helen Hayes Hospital); it is not known how many similar programs exist in other states.