

Dental Public Health Activity Descriptive Report

Practice Number: 28008
Submitted By: University of Missouri Kansas City School of Dentistry
Submission Date: September 2015
Last Updated: September 2015

SECTION I: PRACTICE OVERVIEW		
Name of the Dental Public Health Activity: Emergency Department Diversion Project		
Public Health Functions: Assessment – Acquiring Data Assessment – Use of Data Policy Development – Collaboration and Partnership for Planning and Integration Assurance – Population-based Interventions 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 2020 Objectives: OH-3 Reduce the proportion of adults with untreated dental decay OH-4 Reduce the proportion of adults who have ever had a permanent tooth extracted because of dental caries or periodontal disease OH-11 Increase the proportion of patients who receive oral health services at Federally Qualified Health Centers each year OH-14 Increase the proportion of adults who receive preventive interventions in dental offices		
State: Missouri	Federal Region:	Key Words for Searches: Access to care, planning with partners, emergency department, emergency department referral, Non-traumatic dental conditions
Abstract:		
<p>Background: The national trend for patients who have dental pain and lack a primary care dentist is to access Emergency Departments (ED) for treatment for their oral health issue. Missouri data (ref*) follows these same trends and a study done in the Kansas City metro area of Jackson County MO Emergency Departments found similar data (ref*). The major concern with this model is that the majority of EDs do not have the ability to treat these patients beyond pain and infection control.</p> <p>Methods: With the assistance of the local program MARC (Mid-America Regional Council), an Oral Health Access Committee was formed to look at ways to improve oral health access for area residence. The urgency of Emergency Department visitation for oral pain was significant, so the committee chose to conduct a pilot project to address this issue. The hospital ED with the highest number of oral health pain visits based on ICD-9 codes was chosen to start the ED diversion project. The main concern identified by patients who visited the ED for oral health pain was their inability to find a dentist or dental clinic to receive follow-up care in a timely manner.</p> <p>The purpose of the pilot project was to provide a clinic site for patients to receive treatment with-in 24-48 hours for their pain and prevent repeat visits to the ED for the same condition. A program was set-up that allows the ED to make a reservation in a dental clinic the following day. The 4 initial clinics included UMKC School of Dentistry, Sam Rodgers Health Center, Cabot Westside Clinic and Seton Center. Each clinic site determines what times and the number of slots that they will hold for the patients referred from the ED. The patient’s first and last initials are entered into the online appointment calendar and each clinic will then access that web site each morning to confirm the appointments.</p>		

Results:

The number of referrals made during the 3 (maybe 4) month pilot period was 300 patients seen in the ED. Show rates from the referrals to the dental clinics were 28% (low to high %). The demographics show close to a 50/50 gender breakdown in visits. The age group with the highest number of visits was the 18-29 year olds (33%) followed by 50-59 year olds (24%). Race/Ethnicity breakdown showed Blacks with the highest number of visits (54%) followed by White/Caucasian (31%). The majority of procedures performed at the dental clinics were oral surgery (73% extractions).

Conclusion:

A total of 300 patients were given an appointment from the ED for treatment of their oral health pain that could not be treated in the ED. Due to no-show rates, capacity still exists for patients to be seen and treated. Future plans are to expand the number of ED's in the Kansas City metro area, additional dental clinics and possible private practice providers to improve access to care.

The online referral program is an Excel data base format this is password protected between the ED and the participating dental clinics. The program is called Sign Up Genius and was purchased by TMC Emergency Department for approximately \$100. A MARC staff personal maintains the data base monthly as part of their commitment to the community. Thus cost of this program is minimal except for the Sign Up Genius online program and personal time.

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SECTION II: PRACTICE DESCRIPTION**History of the Practice:**

The program was developed by the Oral Health Access group (local oral health coalition in the Kansas City Metro area) to address a need that was identified in an earlier project. The University of Missouri Kansas City (UMKC) School of Dentistry Department of Dental Public Health was asked to assess the amount of patients using the emergency department (ED) for dental related pain in the Kansas City metro area from 2001 – 2006. One outcome from that study was the feedback from patients that they could not navigate the oral health care system to receive dental care, especially in a timely manner to address their dental pain.

Justification of the Practice:

The initial study in the Kansas City metro area found a progressive increase in the number of patients using the ER for non-traumatic dental pain (Hong,L;Ahmed A; McCunniff M; Liu Y; Cai J; Hoff G; Secular trends in hospital emergency department visits for dental care in Kansas City, Missouri, 2001-2006. Public Health Rep. 2011; 126 (2): 210-9). Further studies found similar results in many communities throughout the United States (Okunseri et. al.; Patient characteristics and trends in non-traumatic dental condition visits to emergency departments in the United States; Clin Cosmet Investig Dent. 2012;4:1-7) (McCormick AP et al; Reducing the burden of dental patients on the busy hospital emergency department; J Oral Maxillofac Surg; 2013;71(3):475-8). This program was established with the intent to get those patients seen in the ED into a dental home and not have to depend on the ED for treatment of their dental pain. Initial data has shown a decrease in the number of patients returning to the ED for dental related pain.

Inputs, Activities, Outputs and Outcomes of the Practice:

An online program was purchased by Truman Medical Center Hospital (Sign Up Genius) to serve as the referral web site. Since the program is not setup to be HIPPA compliant, only first and last initials of the patients are placed in the data base. The program was made accessible to all 4 dental clinics to review online. Once the patients was seen and evaluated in the ED, they were given the choice to pick one of the 4 clinic locations. Specific times were listed that was available for each clinic and any open slot without any initial was open for that patient. Dental clinic appoints were guaranteed for that patient as long as they showed for the appointment within the allotted time. Patients were then given the discharge instructions on the clinic locations and other pertinent information to bring with them to the dental appointment. Only the patients first and last initial was entered into the program by the ED. Patients were instructed to bring their discharge paperwork with them to confirm their ED visit along with the patient initials in the program. Once the patient was at the dental clinic, they followed the normal protocol established for all active patients in that clinic.

Physicians were also encouraged not to give pain medication that lasted longer than the time it would take to get the patient into the dental clinic. Antibiotics were given as needed.

Budget Estimates and Formulas of the Practice:

Cost of the program was approximately \$100/year. Administration of the online program was completed by Mid-America Regional Council (MARC) staff personal. The amount of time devoted to this project was approximately 5 hours/month. Oversight of the program is through the UMKC School of Dentistry Department of Dental Public Health and is included in the department staff time. Estimated operational cost for the program is approximately \$1000.00/year.

Lessons Learned and/or Plans for Improvement:

The online program used for this pilot program is not the ideal program to use for this activity. A better solution would be to use a HIPPA compliant program. This would allow the ED to place patient specific information into the secure data base for better communication to the dental clinics. Options are being explored at this time for a program of this type but no specific program has been identified at this time.

Available Information Resources:

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 program is still in the pilot phase, but feedback from the ED physicians has been positive as well as the patient satisfaction surveys. Review of the hospital data base has shown the return rate for the initial patients who were seen in the ED during this time is less than a 1% return visits for oral pain. Estimated (from the ED Director) return visits by patients for oral pain prior to the study were 5-10%. However, additional studies need to be conducted to see if patients are receiving definitive care or using other local ED's for pain relief.

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.

Cost benefit analysis has not been run on the current program. Staffing time from both the ED and dental clinics has not been an issue since it is included in their normal duties.

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 program has been sustainable with little funding support to this point. However, the program would benefit from a full time coordinator to assure consistency in the protocol and increasing exposure to other ED sites and clinic sites. Another pilot program in the Kansas City metro area is currently working with 3 ED's and a program navigator to increase patient visits to dental clinics. This position was funded from a local foundation for 1 year at the cost of \$75,000 (\$45,000 for the program navigator and \$30,000 to METRO Care organization-program to help place patients into a medical home: Metrocarekc.org). Oral health has not been a focus for organizations in the Kansas City metro area that work to place patients into a medical home. This position is to focus only on oral health. Also this position is working to establish a referral network in the private practice community along with the community health center clinics.

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 original partnership began with the local regional council for the Kansas City metro area (MARC) and local oral health coalition. Local foundations continue to express interest in expanding the program, which will be the next step for the program. The goal of this project is to have a full time patient navigator in place that will work with all the local EDs, community health centers and dental offices.

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?

The ultimate goal of this program is to provide a system that will allow patients the ability to access dental care, both preventive and emergency care in a dental home rather than using resources from local EDs that do not have the capacity or expertise to treat non traumatic dental pain.

Another goal is to have an Electronic Medical Record (EMR) protocol/system that will give all providers the ability to review the patients history related to their oral pain. This program would not only give patients a system to access a dental home but also may give providers the opportunity to "hot spot" areas of the metro area that are showing trends related to systemic diseases and oral health problems.