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Letter to the Editor

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Non-Traumatic Dental Issues in Hospital Emergency Rooms: Solutions and Strategies

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INTRODUCTION

Patients with dental pain have been increasingly accessing hospital emergency departments (EDs) to manage acute episodes of dental neglect.[1] These patients typically receive antibiotics and pain management medications in the ED,[2] but lack awareness of where and how to locate dental treatment offices or clinics to resolve the issue. This report focuses on innovative models that reduce ED costs, improve dental quality and bring community stakeholders together for the purpose of public benefit. Template steps are offered for those considering how to begin an ED referral program in their community.

While prevention programs may be numerous and accessible within a geographic area, patients frequently delay oral health services until there is an urgent need or may be unaware of service locations. Many health center dental departments report a 35-40%[3] missed appointment rate for adults with attempts at reducing barriers (transportation, health literacy and case management) to basic dental care.

As typical dental expenditures represent 2% of an overall state Medicaid budget,[4] it is that 2% which is frequently eliminated as state legislators respond to budgetary pressures. Comprehensive adult dental benefits (including preventive and restorative treatments) now exist in fewer than half of the U.S. states. The result of these cutbacks often leads to an increase in emergency room (ER) traffic for dental pain patients.[5]

There have been several studies and much discussion regarding hospital ED usage for patients suffering from dental pain. An estimated $1.6 billion in healthcare costs[6] has been attributed to those who use hospital EDs as a first stop for urgent dental needs, despite Medicaid expansion.[7]

While insightful baseline data for such discussions has been somewhat limited by usual ED International Classification of Diseases (ICD) coding protocols, there are positive examples of innovation, which engage community partners to reduce unnecessary ED use by guiding patients into non-hospital settings, such as dental clinics or private offices.

While community health centers are mandated to provide emergency dental services, many dental departments within health centers are unaware of the volume of patients seen at the local hospital ED. Direct communication may be non-existent, with patients receiving a referral sheet in the ED listing a phone number to call for continuing care.

Models of ER referral offer template opportunities for replication in any location. These models are effective in reducing ED usage for dental pain which reduces costs and improves quality as patients are treated in appropriate settings.

Program Example #1: Community leaders met in the city of Muskegon, Michigan in 2009 to discuss steps to replicate the successful "Dentist's Partnership" program, which began in

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Battle Creek, Michigan (Calhoun County) in 2007. The Calhoun County program, with an annual budget of $130,000, saw the combination of patients volunteering at nonprofit agencies in exchange for dental care reduce ED visits by 72% and generating a return on investment of 32.2% for every dollar invested over a six-year period.[8]

The Muskegon Community Health Project (MCHP) needs assessment revealed that unmet dental needs were a top priority for uninsured citizens. Beginning in 2014 with 10 dentists, grant donations of $60,000 for a care coordination administrator with associated office equipment, over 70 patients were seen in the first year of the program.

By the conclusion of 2016, 21 dentists were participating in the program, over 290 patients were treated, who, in exchange for care, donated 10,806 hours of community service. The dollar amount of care rendered was $270,150 and volunteer service was performed at 17 non-profit organizations. For every dollar invested in the Muskegon Volunteer for Dental Care (MVDC), the community sees over a $3.00 return.

Several aspects of this program contribute to its success. Care coordination benefits both patients and dentists, who render care in their own offices. Dentists who choose to participate sign a letter of commitment to the program, as patients sign a letter acknowledging their responsibilities.

Each patient who participates in the MVDC program must attend an oral health education class and have individual oral health training, including tobacco cessation, with a dental hygienist who is their link to ongoing care (Chart 1) (Table 1).

Chart 1: The Treatment and Educational Pathways of the MVDC.

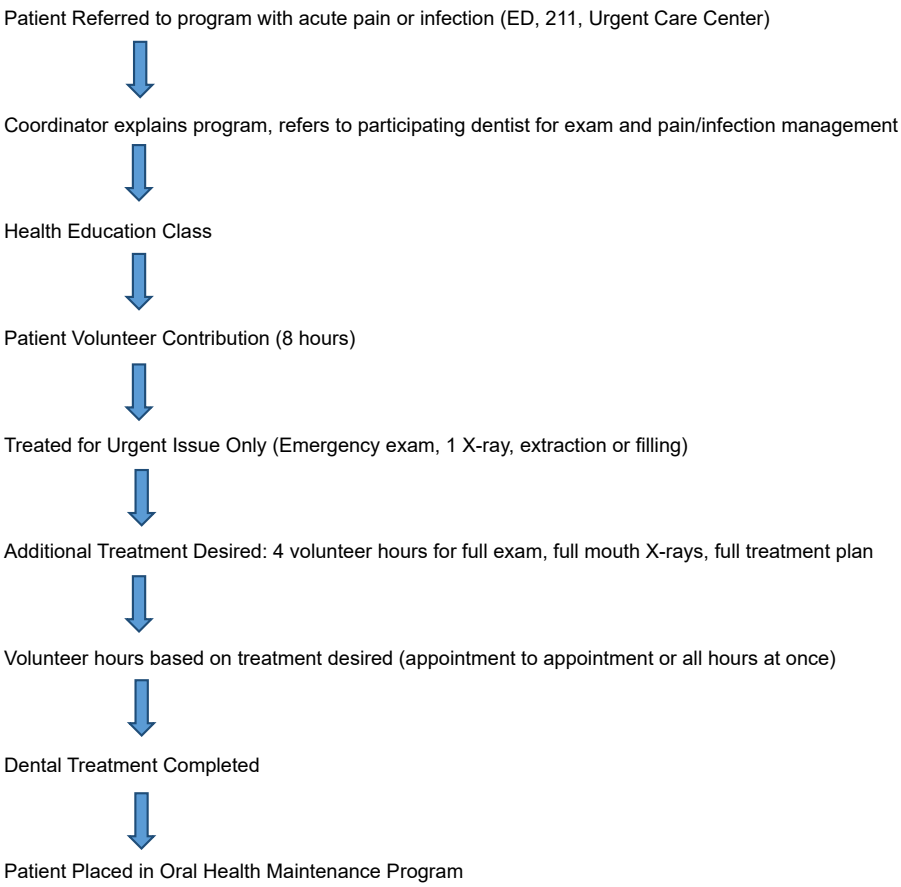

Table 1: Muskegon Volunteer for Dental Care ER Referral Program.

	Annual ED non-traumatic dental visits	Financial impact	Patient Satisfaction and Volunteer Hours Provided
Before the program began (2012)	683	No dental treatment rendered No participating dentists	0% patient satisfaction No volunteer hours for non-profits
Outcomes (since 2012)	151	$270,000 value delivered by 21 dentists	90% patient satisfaction 10,806 hours volunteered

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Program Example #2: Voucher or "Golden Ticket" Program

This model resolves the acute ED visit, with the patient being referred for necessary care. The case management within this program is less than the previously discussed model (Example 1) and there is no patient volunteerism. The limited menu of services includes a dental exam, X ray, infection and pain management with an accompanying tooth extraction.

Two examples of this model are currently in operation. Since 2012, Catholic Charities Effingham, Illinois has been the "connector" between St. Anthony's Memorial Hospital, and participating private dental offices. Catholic Charities contributes by supplying staff to work with adults 18 years of age and older to assist in managing dental emergencies with case management assistance. Participating dentists receive a flat fee per patient to cover necessary clinical procedures.

The program was developed after a community needs assessment, with access to dental care identified as a top priority. The hospital's investment in the program was $38,647 in FY 14/15 and $32,214 in FY 15/16. Number of ED visits went from 135 patients in 1st Q FY 14/15 to 94 patients by 3rd Q FY 15/16.

Patients reported an improvement in overall quality of life and fewer work absences after receiving dental services. Additional options are being pursued for expanded treatment services and working with a local dental hygiene clinic for preventive services.

Another voucher ED Referral initiative is ongoing in Springfield, Missouri between two hospital EDs and a local Federally Qualified Health Center, Jordan Valley Community Health Center (JVCHC). This model began with a pilot program, which focused on patient integration into a dental environment in order to reduce inappropriate use of hospital EDs.

Mercy and CoxHealth Hospitals experienced 4,090 dental pain patients in their EDs, accounting for $6.8 million dollars of costs in fiscal year 2014. Using care coordinators, the hospitals began faxing a voucher to JVCHC for every ED patient who presented with dental pain, with the patient being able to walk in during dental clinic hours for treatment.

This program was designed to offer patients quality access to dental care, an opportunity for continuing care within the health center and establishment of a dental home. This initiative was funded by the Missouri Foundation for Health and began in November of 2015. By July 30, 2016, a total of 1,801 patients have been referred (Chart 2).

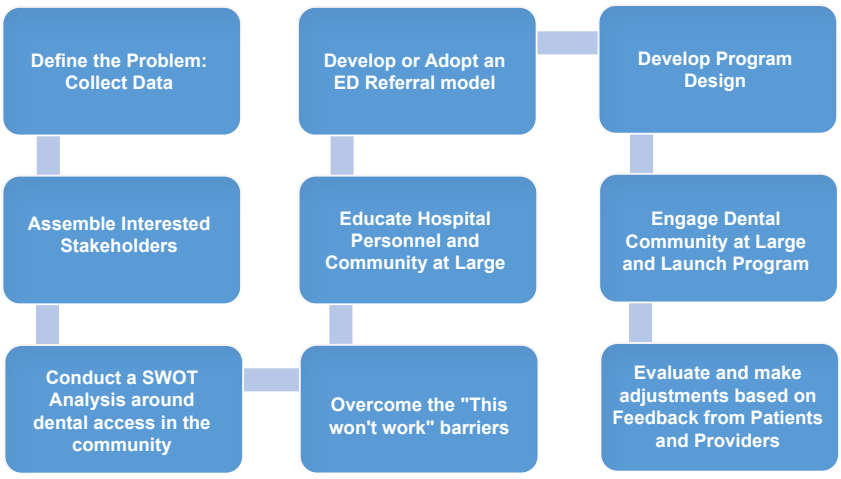
CONCLUSION

Models of ED Referral in the planning stage share several key steps in program development. These steps have proven successful in constructing programs which seek to connect care communities as hospitals often seek to partner with dental entities as a means to link oral health services to underserved patients who may have additional comorbidities.

Communication may begin with a health center dental director providing dental information to hospital staff and designing a triage document for ED physicians. Discussing health center dental department can be extremely valuable to hospital staff. Connecting a dental "face" with a name improves the comfort level of hospital staff making dental referrals.

Community efforts must be collective in designing an ED program. Oral surgeons, united way, hospital community outreach personnel, hospital nursing staff, service groups (Rotary, Kiwanis), teachers, school nurses, the community action agency, local small business groups and local foundations all can provide input into a community needs regarding oral health.

Chart 2: Basic Steps Suggested to Begin an ED Referral Program.



SWOT: Strengths, Weaknesses,Opportunities, Threats

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