

A Best Practice Approach Report describes a public health strategy, assesses the strength of evidence on the effectiveness of the strategy, and uses practice examples to illustrate successful/innovative implementation.

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Best Practice Approach Emergency Department Referral Programs for Non-traumatic Dental Conditions

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Summary of Evidence Supporting Emergency Department Referral Programs for Non-traumatic Dental Conditions

Research	+++
Expert Opinion	+++
Field Lessons	+++
Theoretical Rationale	+++

See Attachment A for details.

I. Description

A. Emergency Department Use for Dental-Related Conditions

Emergency departments (EDs) play a vital role in the health care system - they are accessible to all individuals irrespective of their ability to pay for care and are open 24 hours a day, seven days a week. Although EDs are strategically located to serve as an interface between the public and the health care system, their use for dental-related conditions, especially non-traumatic dental conditions (NTDCs), is a growing dental public health concern.

Oral health contributes to both general health and overall well-being. Oral conditions are closely linked to systemic diseases, therefore inadequate access to comprehensive and quality dental health services could potentially lead to poor general and oral health outcomes; thus the need to explore appropriate actions to reduce or eliminate ED use for NTDCs.

NTDC visits to EDs have cost, practice, and program implications, which may contribute to prolonged waiting time and overcrowding in some EDs.¹⁻⁹ This concern presents an important opportunity to explore essential functions of dental public health that include assessment, implementation, and evaluation, along with research and program findings to identify new insights that could lead to innovative solutions. These solutions must be linked to effective community-based program practices backed by robust public policy and research from various communities and states.

It should be noted that severe maxillofacial injuries due to trauma and odontogenic infections may require emergency department visits and could be life-threatening. Such cases are best managed by maxillofacial surgeons either in emergency departments or in dental settings. This report does not apply to these types of injuries, but only to non-traumatic dental conditions.

Non-traumatic Dental-related Visits and Emergency Departments

Visits to EDs for NTDCs, which would ordinarily not require care in EDs, are considered "inappropriate" usage by healthcare advocates, clinicians and researchers. However, such visits may be a reflection of an individual's inability to access regular dental care in the community. These NTDCs arise from common dental conditions such as tooth decay and periodontal disease. Evidence shows that dental disease is best managed in dental settings where consistent care can be provided. Most importantly, the care provided for these NTDCs in EDs is often limited to prescribing analgesics and/or antibiotics to address the signs and symptoms, but rarely the cause of the disease.¹⁰⁻¹²

Most EDs do not have adequate diagnostic equipment to evaluate and provide an accurate diagnosis of presenting dental conditions. Typically, EDs do not have staff trained to diagnose dental disease and provide definitive dental treatment, such as extractions or endodontic care. In many cases, the need for an ED visit might have been avoided by regular dental office visits for preventive and treatment services that might reduce progression to a more severe form of dental disease.^{1, 8, 11, 13}

Individuals seeking care in EDs for NTDCs do so for multiple reasons including the severity of symptoms or the time of day that they occur.^{8,14} Other possible reasons include challenges accessing dental care, and financial and personal barriers. For Medicaid enrollees, geographic maldistribution or shortage of dentists, inadequate numbers of dentists accepting Medicaid enrollees, and low provider reimbursement rates can be barriers.¹⁵⁻¹⁶ In addition, many individuals appear to lack knowledge about the appropriate use of EDs for dental care ^{3, 5, 6}

Despite reasons provided by individuals for their use of emergency departments for dental care, these visits have severe cost implications and are of concern to policymakers, organized dentistry and dental insurance companies.

Ambulatory Care-Sensitive Conditions

The mouth, including the teeth and surrounding soft tissues, serves as the gateway to the body. NTDCs are similar to or are among the list of "ambulatory care-sensitive conditions" (ACSCs), for which timely and effective outpatient care could have prevented or minimized the need for hospital-based services.¹³ ED use for addressing ACSCs and the association with increased wait time in overcrowded EDs has received considerable attention from the medical community.¹⁷

Non-traumatic dental conditions or ambulatory care-sensitive conditions are best managed in a patient-centered healthcare home, described as a medical and/or dental care delivery system in which patients receive comprehensive, culturally and linguistically appropriate care and have an ongoing relationship with a medical and/or dental provider.¹⁸ Emergency department visits for non-traumatic dental conditions do not provide definitive treatment, but only palliative care.

Oral Health Disparities and Emergency Department Use for Non-traumatic Dental Conditions

An important concern regarding ED use for NTDCs is the potential link with oral health disparities.¹ Studies have documented that racial/ethnic minority groups and Medicaid enrollees are more likely to use EDs for NTDCs.¹⁻⁸ *The Surgeon General's Report: Oral Health in America* published in 2000 documented the magnitude of oral and craniofacial dental diseases and the availability of safe and effective measures to prevent common dental diseases. This report also detailed inadequate access to dental care, profound and consequential oral health disparities within the U.S., and how the mouth reflects general health and well-being.¹⁶ The report concluded with a "Call to Action," requesting a change in perception among policymakers, healthcare providers, and the public so as to improve the oral health of all Americans.¹⁶

In 2002, the Institute of Medicine's Report, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care,* documented how a large proportion of the U.S. population suffers from higher rates of disease burden, inadequate access to care and poor health status.¹⁹ In 2011, the Institute of Medicine's Report, *Advancing Oral Health in America*, recognized tooth decay as a common chronic disease occurring across the life span.²⁰ The report documented a set of *New Oral Health Initiatives* to be adopted by the Department of Health and Human Services and used in support of *Healthy People 2020*.²⁰ Some of the organizing principles for such initiatives include:

- Establishing high-level accountability
- Emphasizing disease prevention
- Improving oral health literacy and cultural competence

- Reducing oral health disparities
- Exploring new models for payment and delivery of care
- Promoting collaboration among private and public stakeholders²⁰

These reports recognize the need for action and strongly recommend the promotion of public-private partnerships aimed at improving dental infrastructure and the oral health of all Americans, as well as reducing or eliminating oral health disparities.

B. Trends in Emergency Department Use for Non-traumatic Dental Conditions

Magnitude of the Problem

To characterize the burden of ED use for NTDCs, a thorough synthesis of the literature was performed for the assessment, development, and implementation of best practice models to mitigate the problem. Data from the National Hospital Ambulatory Medical Care Survey (NHAMCS) for 1997 to 2000 show that 0.7% of all ED visits, estimated at 4.1 million visits, received a dental-related discharge diagnostic code from ED providers.¹⁰ NHAMCS data for 1994 to 2007 show that the prevalence of NTDC visits to EDs increased from approximately 26% to 38%.⁶

For 2001 to 2008, NHAMCS data indicated that all ED visits increased by approximately 13%; however, visits for dental conditions increased by more than 41%.²¹ Additionally, NHAMCS data for 2009 and 2010 for 20-29 year olds show that the average annual increase in ED toothache visits was 6%.²² Furthermore, the 2006 Nationwide Emergency Department sample shows that 403,149 ED visits had a primary diagnosis for dental diseases such as pulpal and periapical diseases. ²³ Nationally, these reports clearly document an increase over time in NTDC visits to EDs.

State and local ED visit data also show an increase in dental-related complaints.^{14, 24-30} For example, Ladrillo et. al., used data from Texas Children's Hospital in Houston from January 1997 to December 2001 to report that 73.4% (809 out of 1,102) children in their study presented to EDs for NTDCs and 68% of such complaints resulted from tooth decay.¹⁴ Similar findings were documented in a 2000 study by Graham et. al., of patients seen in the ED for NTDCs at Children's Medical Center in Dallas during 1996-1997.²⁶

Population Groups Most Affected and Recurrent Emergency Department Users

In a study that analyzed all Medicaid dental claims in Wisconsin from 2001 through 2003 and that focused on identifying factors associated with the use of EDs for NTDC visits, Native Americans, people residing in dental Health Professional Shortage Areas (HPSAs), and adults had significantly higher risks of usage.³ As of June 2014, the Health Resources and Services Administration (HRSA) reported approximately 4,900 dental HPSAs in the United States, based on a dentist to population ratio of 1:5,000.³¹

Lee et. al., used data from 2001 through 2008 collected from the NHAMCS that showed the increasing trend in ED use for dental care is most pronounced among people aged 18 to 44 years, African-Americans and the uninsured.²¹ For example, African Americans are two times more likely to visit an ED for NTDCs.¹⁻⁸

Overall, there is consistent documentation at the local, state and national levels that young adults and Medicaid enrollees are more likely to use the ED for NTDCs.^{1-8,21-22}

Repeat ED visits are another problem. In a study published in 2011 based on Wisconsin Medicaid claims data of 24 million enrollees who made NTDC visits to EDs and physician offices, 6.5% were estimated to be frequent users of emergency departments.³ Frequent users were defined as enrollees who made recurrent NTDC-related visits to EDs or physician offices at the rate of almost four times per year.³

Low-income and uninsured adults and racial/ethnic minorities are more likely to seek care in emergency departments for non-traumatic dental conditions.

C. Implications for Practice, Policy and Cost

The Federal Emergency Medical Treatment and Active Labor Act

In 1986, the Federal Emergency Medical Treatment and Active Labor Act (EMTALA) was passed by Congress. EMTALA made it mandatory that all people presenting to EDs be seen regardless of their ability to pay or possession of insurance coverage. This law makes it mandatory that, at the very least, a medical screening examination must be provided in EDs to determine if a medical emergency exists.^{32,33}

"Medical emergency" in this Act is defined as "a medical condition manifesting itself by acute symptoms of sufficient severity (including severe pain) such that the absence of immediate medical attention could reasonably be expected to result in:

- placing the health of the individual (or, with respect to a pregnant woman, the health of the woman or her unborn child) in serious jeopardy,
- serious impairment to bodily functions, or
- serious dysfunction of any bodily organ or part to provide care for stabilization" ^{32, 33}

"The term *"to stabilize*" means to provide such medical treatment of the condition as may be necessary to assure, within reasonable medical probability, that no material deterioration of the condition is likely to result from or occur during the transfer of the individual from a facility."^{32,33}

This particular Act is one of the reasons that virtually every ED visit for NTDCs results in at least a prescription for antibiotics and/or pain medication.

The Federal Emergency Medical Treatment and Active Labor Act makes it mandatory that all people, regardless of ability to pay, who seek care at emergency departments receive at least a screening exam to determine if a medical emergency exits.

State Policies Implicated in Emergency Department Use for Non-traumatic Dental Conditions

It is important to recognize that state policies can contribute to increases in ED use for NTDCs. As of July 2015, at least two peer-reviewed articles document the impact of state Medicaid policy changes that eliminated adult dental coverage.^{34, 35} A 1996 Maryland study showed a 21.8% increase in the rate of ED visits for NTDCs by Medicaid enrollees after elimination of adult dental benefits.³⁴ This increase in visits occurred at the same time that Medicaid enrollees' overall ED visits for any health reason were decreasing.³⁴ A 2015 study documented a significant and immediate increase in dental ED visits after California eliminated comprehensive adult dental coverage in 2009. The study period from 2006-2011 documented an increase of 1,800 additional ED visits for NTDCs per year.³⁵ Effective programs and strategies to reduce ED use for dental care require close collaboration with state Medicaid and other related agencies.

Expenditures Associated with Emergency Department Use for Non-traumatic Dental Conditions

While many reports have attempted to quantify the cost implications associated with ED use for NTDCs, these studies are limited by the complexity associated with how ED charges are computed and the lack of standardization of coding for the NTDC visits. Most published reports and studies have relied on self-reports, while others rely on diagnostic codes from the International Classification of Disease, Clinical Modification, 9th Edition (ICD-9-Code). These codes are generally used by emergency physicians who have limited training in dental diagnosis and management and may not reflect an appropriate or consistent charge for conditions. As a result, the true cost of care delivered to patients for NTDCs in EDs is not well documented or understood. ED costs vary depending on the severity of the condition, the part of the country where one resides, and whether payment is by private insurance, public program or self-pay. Some historical and current information related to ED costs or charges for NTDC visits include:

- Pettinato et. al., (2000) reported the following:
 - Outpatient charges for dental care ranged from \$233-\$2,357 (median charge \$398) in 1996
 - \$175-\$1,073 (median charge \$235) in 1997
 - \$178-\$1,161 (median charge \$226) in 1998³⁶

- Okunseri et. al., (2008) reported that a reduction in the number of NTDC visits over a three-year period could result in an estimated savings of more than \$6.1 million dollars for Wisconsin dental Medicaid.¹
- A 2009 report by the California Healthcare Foundation indicated the median charge for an ED visit for a NTDC was \$660 and median reimbursed was \$172, however this varied widely.³⁷
- Elangovan et. al., (2010) estimated that about \$33.3 million was charged by hospital EDs for the treatment of periodontal conditions. ³⁸
- Allareddy et. al., (2014) indicated the mean ED charge per visit was approximately \$760 (adjusted to 2010 dollars), and the overall charges for NTDC in EDs across the U.S. during their three year study was \$2.7 billion.³⁹
- Singhal et. al., (2015) reported the mean annual costs associated with dental ED visits increased by 68% following the elimination of adult comprehensive insurance coverage in California in 2009.³⁵

The high cost associated with emergency department use for non-traumatic dental conditions makes it imperative to identify efficient and cost-effective programs/strategies to help integrate current and potential emergency department users into primary care settings.

D. Programs for Reducing Emergency Department Use for Non-traumatic Dental Conditions

While studies have attempted to document the burden of ED use for NTDCs with cost implications at the state or national level, it is important that programs and strategies to reduce such costs be pursued to improve health outcomes. This is particularly significant for racial and ethnic minorities, low-income adults and Medicaid enrollees, who are more likely to use the ED as their usual source for dental care.

Framework for Reducing Emergency Department Use for Non-traumatic Dental Conditions

Local and state health departments are required to identify resources to address public health concerns in their states. Below is a conceptual framework that draws from a logic model built around individual decision-making related to ED use.^{40,42,43}

Figure 1: Conceptual Framework for Reducing Emergency Department Use for Nontraumatic Dental Conditions



Figure 1 highlights options open to a patient with or without insurance or a dental home, for pathways to an ED for NTDCs. Patients can opt to:

- Self-medicate or self-care
- Go to a dental setting for care
- Go to the ED for care

Patients may choose to utilize an ED after receiving dental care in a primary care setting due to complications following dental treatment during office hours or after self-care fails. The cycle could continue with a repeat visit to the ED.

This framework recognizes the three core public health functions of assessment, policy development, and assurance. These include recognizing the problem (assessment), proposing programs that address the problem (policy development), and implementing those programs (assurance).

1. Assessment of Emergency Department Use for Non-traumatic Dental Conditions

Assessment is the first core function of public health. Public health experts understand that dental disease is influenced by social determinants, such as poverty, discrimination, homelessness, and substance abuse.⁴⁴ Therefore, the establishment of a state and/or community-based oral health assessment and surveillance system that captures valid data on ED use for NTDCs is essential for identifying the extent of the problem, monitoring, communicating findings and evaluating the effectiveness of existing programs.

Examples of Non-traumatic Dental Condition Assessment Activities:

- Assess and document the oral health needs of the community especially nontraumatic dental conditions.
- Analyze data and identify possible determinants of non-traumatic dental condition visits to emergency departments.
- Implement a surveillance system to identify and compare program and policy implications related to non-traumatic dental condition visits to emergency departments.
- Monitor outcomes of emergency department visits for non-traumatic dental conditions, such as disease reduction or use of the community dental care system.

2. Policy Development to Address Emergency Department Use for Non-traumatic Dental Conditions

Policy development is the second core function of public health and serves as a tool for stakeholders to address a public health problem. Policy development steps addressing this issue include the following:

- Identify how the use of EDs for dental care impacts public health and the community
- Identify individuals or groups to develop appropriate evidence-based policy solutions
- Conduct research to identify policy opportunities
- Establish a policy development /intervention process and draft the policy
- Adopt the policy and communicate it to all stakeholders
- Assess the policy for impact over time

Addressing reasons why individuals seek a specific source of care is important in the policy development process. Figure 2 addresses the relevance of one policy option--a referral program. According to Uscher-Pines et. al.,⁴⁰ (2013), causal factors are predictors of the use of a specific source of care. Figure 2 is a modified conceptual framework related to a possible causal pathway to ED use for NTDCs.

Figure 2: Conceptual Framework Identifying Potential Factors Related to the Causal Pathway of Emergency Department Use for Non-traumatic Dental Conditions



To address oral health issues, including NTDC visits to EDs, it is crucial to develop action plans, programs and policies through a collaborative process with stakeholders such as local and state dental organizations, private dental practices, community/dental public health programs, local and state oral health coalitions, local and state public health departments, Medicaid programs, and dental managed care organizations.

Examples of Non-traumatic Dental Condition Policy Development Activities:

- Health departments can provide leadership while relying upon the advice and expertise of an oral health coalition or advisory committee in addressing the oral health needs of their states including the problem of emergency department use for dental care.
- Local/community partnerships and diverse stakeholders can identify relevant policies and implement proven referral solutions to the problem of emergency department use for non-traumatic dental conditions.
- Stakeholders can explore the potential impact of adult dental coverage in Medicaid and Medicare.

3. Assurance to Address Emergency Department Use for Non-traumatic Dental Conditions

Assurance is the third core function of public health. This function is focused on activities related to public and policymaker education; promoting and complying with local, state and federal regulations and laws; and supporting new insights and innovative and effective programs. Assurance activities include:

- Educating and empowering oral health stakeholders, including ED staff, policy makers and community partners regarding the problem of NTDC visits to EDs
- Informing the public about community-based options for dental care
- Promoting and enforcing policies that are capable of improving access to dental care including those related to reducing the use of EDs for NTDCs
- Continuing to support research and existing programs that demonstrate reduction in ED use for NTDCs
- Ensuring the dental workforce is adequate to address the community's oral health needs

Examples of Non-traumatic Dental Condition Assurance Activities:

- Link individuals without a dental home to sources for dental care in the community including ensuring the availability, accessibility and acceptability of dental care.
- Evaluate cost benefits and cost effectiveness of emergency department referral programs for dental care.

4. Interprofessional Education and Care

Another important concept is the integration of oral health into primary care practice. A number of reports have been issued on this topic: <u>Returning the Mouth to the Body: Integrating Oral</u> <u>Health & Primary Care (2012)</u>; <u>Interprofessional Study of Oral Health in Primary Care (2014)</u>; <u>Integration of Oral Health with Primary Care in Health Centers: Profiles of Five Innovative</u> <u>Models</u>; <u>The Need for Defining a Patient–Centered Dental Home Model in the Era of the Affordable</u> <u>Care Act (2015)</u>. This creates an opportunity for shared vision that could lead to systems change to address access to dental care and possibly the reduction of ED use for NTDCs. To achieve this model of integration, HRSA developed the Integration of Oral Health and Primary Care Practice Initiative (IOHPCP) with three inter-related components.⁴⁵

- Oral health core clinical competencies appropriate for primary care clinicians
- Delineation of the interdependent elements that would influence the implementation and adoption of the core competencies into primary care practice

• Outline of the basis for implementation strategies and translation into primary care practice in safety-net settings

E. Additional Approaches to Reducing Emergency Department Use for Non-traumatic Dental Conditions

The following are actions that could help to improve access to dental care and reduce ED use for NTDCs:

- Increase community health centers' capacity, efficiency, and productivity to allow more people to access dental care
- Improve coverage and access to comprehensive primary dental care for Medicaid eligible adults
- Create access to comprehensive primary dental care for seniors enrolled in Medicare.
- Encourage and promote use of primary dental care settings for regular preventive and treatment services
- Promote effective federal-state-local partnerships. For example, work with state oral health coalitions to gather and analyze ED data and utilize findings to implement sustainable programs that reduce the use of EDs for NTDCs
- Coordinate state and public investments to improve access to regular and emergency dental care
- Support workforce development that creates improved access to dental care by increasing the racial and ethnic minority workforce to match local demographics
- Build capacity to support quality program referrals and innovation
- Intergovernmental strategies:
 - Credentialing and licensure of providers to allow for ease of geographic mobility
 - Increasing the number of participating Medicaid providers by streamlining Medicaid credentialing, using Medicaid electronic submissions, reducing the number of procedures requiring prior authorization, and establishing a helpline for Medicaid providers to ensure timely response to immediate needs
- Implement case management, care coordination and patient navigation support systems

F. Summary

This report provides 1) a summary of literature that documents the burden of ED use for NTDCs including the associated expenditures and implications, link with oral health disparities, most likely and recurrent users, and the impact of policy changes on ED use for NTDCs, and 2) suggested strategies to address these issues.

As described in this narrative, dental visits to hospital EDs represent an emerging challenge to the health care system. The causes are multifaceted, thus requiring a variety of multi-level strategies to decrease ED visits and provide the appropriate dental care. There are models that have been developed to address local and state conditions that provide a source of key principles based on the

dental public health approach of assessment, policy development, and assurance. The judicious application of these principles and experiences can be used to develop strategies that address specific needs of populations using the resources that are available for that community or region.

Several examples of assessment programs are provided, but these efforts can be hampered by incomplete information that is primarily due to the absence of studies using consistent identification for NTDC visits in EDs. ASTDD has also developed a companion report available on the ASTDD website that provides a more detailed analysis of the literature on data collection methodologies that have been used for reporting ED visits for NTDCs. Policy development is necessary to assemble sufficient resources and strategies for disease prevention, community support, dental care financing, and establishment of appropriate ED referral programs. A variety of assurance activities have been provided that focus on regular dental care, case management, community and hospital dental clinics, and the integration of oral health into primary care practices.

The development of ED referral programs should not only reduce the use of hospital EDs for NTDCs, but should also spawn more strategies for disease prevention and affordable care that will lead to quality oral health as the norm for all. The dental community cannot be expected to accomplish reductions in ED visits for NTDCs by itself, but must collaborate with multiple identified partners to address the determinants of oral health and implement successful interventions to prevent dental disease, mitigate its impact, and increase access to affordable, quality dental care.

II. Guidelines & Recommendations from Authoritative Sources

The following provide guidelines and recommendations from a number of authoritative resources.

A. Dental Quality Alliance

The Dental Quality Alliance is a group of stakeholders working together to develop performance measures for oral health care. These measures are expected to be used to assess improvements in oral health outcomes and safety through a consensus-building process. In addition, the measures are expected to foster professional accountability, transparency and value in oral health. Recently, the DQA provided documentation on the measures for Ambulatory Care Sensitive Emergency Department Visits for Dental Caries in Children.

Available at:

http://www.ada.org/~/media/ADA/Science%20and%20Research/Files/NQF2689 DQA EDVisitsforDen talCaries Specifications.ashx

B. American Dental Association Action for Dental Health

The American Dental Association through its *Action for Dental Health: Dentists Making a Difference* campaign has developed a number of resources on referral programs related to emergency department use for dental care. One is the emergency room referral toolkit and a Ten Steps outline for

creating dental referral programs. These referral programs and other specialty clinic emergency department referral models are available at:

http://www.ada.org/~/media/ADA/Public%20Programs/Files/ADH%20PDFs/10 Steps to an ER-Dental Referral Program Wisconsi.ashx

C. American College of Emergency Physicians Clinical Policy: Critical Issues in the Prescribing of Opioids for Adult Patients in the Emergency Department

This guideline is the result of the efforts of the American College of Emergency Physicians, in consultation with the Centers for Disease Control and Prevention, and the Food and Drug Administration. The critical questions addressed in this clinical policy are: (1) In the adult ED patient with non-cancer pain for whom opioid prescriptions are considered, what is the utility of state prescription drug monitoring programs in identifying patients who are at high risk for opioid abuse? (2) In the adult ED patient with acute low back pain, are prescriptions for opioids more effective during the acute phase than other medications? (3) In the adult ED patient for whom opioid prescription is considered appropriate for treatment of new-onset acute pain, are short-acting schedule II opioids more effective than short-acting schedule III opioids? (4) In the adult ED patient with an acute exacerbation of non-cancer chronic pain, do the benefits of prescribing opioids on discharge from the ED outweigh the potential harms?

http://www.acep.org/workarea/DownloadAsset.aspx?id=88197

D. American Academy of Emergency Medicine Model Emergency Department Pain Treatment Guidelines

The American Academy of Emergency Medicine has created guidelines for treating non-cancer pain. This document is a guideline and is not meant to replace the individual judgment of the treating physician who is in the best position to determine the needs of the individual patient. Narcotic pain medication is discouraged for certain conditions including:

- a. Back pain whether acute or chronic
- b. Routine dental pain
- c. Migraines
- d. Chronic abdominal or pelvic pain and gastroparesis

The complete document is available at: <u>http://www.aaem.org/publications/news-releases/model-emergency-department-pain-treatment-guidelines</u>

E. Lansing Area Consortium Emergency Department Chronic Pain and Dental Pain Practice Guidelines and Management

The Lansing Area Consortium ED chronic pain and dental pain practice guidelines and management goals are to: (1) Maximize patient safety; (2) Provide uniform practice in chronic pain and dental pain treatment; (3) Maintain some adaptability for individual case management; (4) Minimize inappropriate narcotic use; (5) Be consistent with State of Michigan Prescribing Guidelines and similar policies already implemented in Jackson, Battle Creek and Eaton Rapids.

Available at:

http://www.communityhealthplans.org/IHP/html/HealthEducation/Chronic Pain Manage/ED%20Guide line%20Chronic%20Pain%20Management%20Revised%2010-25.pdf

F. Department of Emergency Medicine and the Institute for Health Policy and Health Services Research University of Cincinnati College of Medicine-Effect of Education and Guidelines for Treatment of Uncomplicated Dental Pain on Patient and Provider Behavior

Using extensive input from regional dentists and oral surgeons, and after reviewing the dental literature, guidelines for the ED management of uncomplicated odontalgia were written for physician and patient use. The guidelines, which emphasize appropriate community dental clinic referrals and the use of nonsteroidal anti-inflammatory drugs, were developed to reflect community standard of care.

Available at:

http://www.researchgate.net/publication/8255196 Effect of education and guidelines for treatment of uncomplicated dental pain on patient and provider behavior

III. Research Evidence

The evidence for the development of this document has come from studies based on claims data from various state Medicaid programs, national databases, self-reported data and chart reviews from local hospitals and clinics.

IV. Best Practice Criteria

The ASTDD Best Practices Project has selected five best practice criteria to guide state and community oral health programs in developing their best practices. For these criteria, initial review standards are provided to help evaluate the strengths of a program or practice focused on ED referral programs for NTDCs. These reported successful programs should be viewed in the context of the community environment, infrastructure, resources, workforce compositions and state dental Medicaid coverage. Readers are encouraged to carefully review the different practice descriptions and modify them to fit their community and state resources.

1. Impact / Effectiveness

Impact and effectiveness will be best measured based on the proportion of patients who benefit from the referral and diversion program in a year, and the percent reduction over time periods before and after implementation of best practice criteria, and reduction in ED costs associated with NTDCs. Additional information may be gleaned from other sources, such as visits to dental schools, community dental clinics, and mobile clinics with specific inquiries about the referrals from EDs. Additional sources include clinic patient questionnaires inquiring about other treatment options available to patients at the time of visit.

2. Efficiency

An important aspect in assessing the efficiency of ED referral programs is the possible impact of the Emergency Medical Treatment and Labor Act (EMTALA). Referral programs may negatively impact the objectives of EMTALA as "stabilization" is not clearly defined and, therefore, patients presenting with NTDCs are required to be seen. Emergency physicians should re-examine their protocols with a view to having effective triage protocols for NTDCs. This is likely one of the main reasons ED care for NTDCs often include a prescription for pain medication and antibiotics. An effective program should have a reasonable timeframe for definitive dental care to be provided upon referral of a patient from an ED to a dental setting.

3. Demonstrated Sustainability

Sustainability of referral and diversion programs will largely depend upon commitment by all stakeholders. It will also depend on whether the programs utilize all available resources including community dental clinics, dental school clinics, and private offices. Funding and reimbursement issues will be instrumental in ensuring sustainability, and volunteerism will continue to be an important aspect in addressing appropriate and definitive care delivery.

4. Collaboration / Integration

Collaboration with dental, medical and community organizations (both civic and governmental) will be a key factor for success. Community leaders and health care leaders can be helpful in promoting the types of dental care and support systems available to both the general public and health care workers (nurse call-in lines, social workers, case managers, etc.)

5. Objectives / Rationale

The overall goal of this project is to provide real-world, community-based examples of programs deemed to be successful at reducing the number of NTDCs visits to EDs for dental care. These programs have also led to improved access to dental care especially for those who are otherwise unable to access appropriate preventive and treatment services. Some of the objectives include developing appropriate resources for alternatives to EDs, identifying resources, promotion and education of patients and engaging in medico-dental collaboration for ease of referral and management of dental disease in underserved communities.

V. State Practice Examples

The following practice examples illustrate various elements or dimensions of the best practice approach *Emergency Department Referral Programs for Non-traumatic Dental Conditions.* These reported success stories should be viewed in the context of the particular state, as well as the program's environment, infrastructure and resources. Readers are encouraged to review the practice descriptions and adapt ideas to their states and programs.

A. Summary Listing of Practice Examples

Table 1 provides a listing of programs and activities submitted by states. Each practice name is linked to a detailed description.

Table 1. State Practice Examples Illustrating Strategies and Interventions forEmergency Department Referral Programs for Non-traumatic Dental Conditions			
#	Practice Name	State	Practice #
1.	Dental Access Program	Maryland	23012
2.	Children's Dental Services	Minnesota	26005
3.	Emergency Department Diversion Project	Missouri	28008
4.	Swedish Community Specialty Clinic and Golden Ticket Program	Washington	54009
5.	Smiles for Life Adult Dental Screening and Referral Program	West Virginia	55004

B. Highlights of Practice Examples

Highlights of state practice examples are listed below.

MD Dental Access Program (Practice #23012)

In striving to meet the region's most pressing problems, partners in the Maryland Mountain Health Alliance (MHA) focus on assisting low-income adults to find the oral health care they need, and educating local providers as to the benefits of integrating oral health screenings into the primary care setting. MHA has established an ED referral/deferral program with two area hospitals, through which patients seeking dental assistance in the ED are asked to sign a release form allowing the hospital to send their patient contact information to the MHA's community health workers for follow-up.

MN <u>Children's Dental Services</u> (Practice #26005)

Children's Dental services (CDS) reduces oral-related visits to the ED by having walk-in and emergency appointments available Monday-Saturday. The availability of emergency care through CDS clinics, and more intensive hospital-based dental treatment options for young children, helps reduce the number of families that repeatedly return to the ED for chronic oral health pain.

MO <u>Emergency Department Diversion Project</u> (Practice #28008)

The purpose of this pilot project was to provide a clinic site for patients to receive treatment within 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 four initial clinics included University of Missouri Kansas City School of Dentistry, Sam Rodgers Health Center, Cabot Westside Clinic and Seton Center. Each clinic site determines what times and the number of slots they will hold for the patients referred from the ED.

WA Swedish Community Specialty Clinic and Golden Ticket Program (Practice #54009)

When a patient with a non-traumatic dental condition presents at the ED (e.g., there is a non-life threatening abscess/infection or there is pain without visible infection), the patient is given a referral sheet (the golden ticket) from the ED physician. The 'golden ticket' directs them to the closest FQHC where they are prioritized in the next morning's walk-in emergency dental clinic. This program has no cost beyond volunteer dentist time educating the ED physicians on the process and networking with the closest FQHC.

WV Smiles for Life Adult Dental Screening and Referral Program (Practice #55004)

Provides a means for adults 18 and over who meet income guidelines to obtain "most needed" dental treatment. Program goals are to provide a safety- net for the uninsured and underinsured of the region, while reducing the number of hospital ED visits for dental pain and infection.

VI. Acknowledgements

This report is the result of efforts by the ASTDD Best Practices Committee to identify and provide information on developing successful practices that address ED referral and diversion programs for dental care.

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VII. Attachments

ATTACHMENT A

Strength of Evidence Supporting Best Practice Approaches

The ASTDD Best Practices Committee takes a broad view of evidence to support best practice approaches for building effective state and community oral health programs. The Committee evaluated evidence in four categories: research, expert opinion, field lessons and theoretical rationale. Although all best practice approaches reported have a strong theoretical rationale, the strength of evidence from research, expert opinion and field lessons fall within a spectrum. On one end of the spectrum are <u>promising best practice approaches</u>, which may be supported by little research, a beginning of agreement in expert opinion, and very few field lessons evaluating effectiveness. On the other end of the spectrum are <u>proven best practice</u> <u>approaches</u>, ones that are supported by strong research, extensive expert opinion from multiple authoritative sources, and solid field lessons evaluating effectiveness.



<u>Research</u>

- + The majority of available studies in dental public health or other disciplines reporting effectiveness.
- ++ The majority of descriptive reviews of scientific literature supporting effectiveness.
- +++ The majority of systematic reviews of scientific literature supporting effectiveness.

Expert Opinion

- An expert group or general professional opinion supporting the practice.
- ++ One authoritative source (such as a national organization or agency) supporting the practice.
- +++ Multiple authoritative sources (including national organizations, agencies or initiatives) supporting the practice.

Field Lessons

- Successes in state practices reported without evaluation documenting effectiveness.
- ++ Evaluation by a few states separately documenting effectiveness.
- +++ Cluster evaluation of several states (group evaluation) documenting effectiveness.

Theoretical Rationale

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+++ Only practices which are linked by strong causal reasoning to the desired outcome of improving oral health and total well-being of priority populations will be reported on this website.

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