

Nebraska

State Oral Health

**Hospital Emergency Department Use for Non-Traumatic
Dental Conditions Report, 2009 - 2016**

EMERGENCY →



NEBRASKA

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DEPT. OF HEALTH AND HUMAN SERVICES

— **2019** —



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List of Abbreviations

ASTDD	Association of State and Territorial Dental Directors
BSS	Basic Screening Survey
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
CMS-416	Centers for Medicare and Medicaid Services Form Number 416
CSTE	Council of State and Territorial Epidemiologists
EPSDT	Early and Periodic Screening, Diagnostic, and Treatment
FQHCs	Federally Qualified Health Center
HCAN	Health Care Association Nebraska
HDD	Hospital Discharge Data
HPTS	Health Professionals Tracking Services
HRSA	Health Resources and Services Administration
MCAH	Maternal Child Adolescent Health
MCNA	Managed Care of North America, Inc.
NADS	Nebraska Adult Tobacco Survey
NDA	Nebraska Dental Association
NCR	Nebraska Cancer Registry
NDE	Nebraska Department of Education
NE-OHSS	Nebraska Oral Health Surveillance System
NMP	Nebraska Medicaid Program
NOHSS	National Oral Health Surveillance System
NOHWS	Nebraska Oral Health Workforce Surveys
NSCH	National Survey of Children's Health
OOHD	Office of Oral Health and Dentistry
WFRS	Water Fluoridation Reporting System

Introduction

Hospital emergency department (ED) use for non-traumatic dental conditions (NTDCs) has dramatically increased across the United States over the past decade. Previous nationwide studies¹⁻³ have shown a constant rise in the ED use among adults aged between 18 to 44 years, uninsured, and low-income individuals. Among all medical conditions, the proportion of ED visits for NTDCs has also been increasing. Many Americans with acute dental pain and chronic oral infections are not accessing definitive treatment at traditional dental offices but are now seeking urgent care at hospital EDs, which is an ineffective and very expensive, last resort way to address their needs. By law, EDs are required to see patients even if they are unable to pay. In a 2014 Action for Dental Health Report,⁴ the American Dental Association estimated that there were more than 2.1 million NTDC ED visits in the U.S. costing our health care system and tax payers more than 2.7 billion USD. Very few emergency departments have dentists on their staff, therefore ED dental patients rarely receive actual long-term corrective care for the cause of their pain. Usually they get medication, such as pain relievers and antibiotics that provide only temporary relief. Many of these dental patients then return to the ED multiple times, when their symptoms begin to reappear.

Nebraska Background

The DHHS Office of Oral Health and Dentistry identified this same disturbing trend in Nebraska and documented it within the 2016 State Oral Health Assessment Report.⁵ Tracking ten years of dental data from public and private hospitals through the Nebraska Hospital Association, the report found that yearly dental ED visits dramatically rose to 81% from 2003-2013 and costs for these visits increased more than four times.

A more in depth study published in 2016,⁶ looked at Nebraska ED charges for 9,943 dental visits from 2011 to 2013. Adult, female, age 25-44, low-income and uninsured were identified as high-risk for ED visits. Two-thirds of the visits occurred during the weekdays. Dental caries and pulpal lesions were the conditions most frequently identified followed by periodontal disease. The mean ED charge per dental visit was \$934 (compared to the average U.S. dental office visit of \$180 to \$211) and the total ED charges were \$9.3 million USD.

The 2015-2016 Nebraska Oral Health Basic Screening Survey of Young Children⁷ found that 64% of Third Grade children had already experienced dental disease compared to 52% of U.S. Third Grade children. Decay experience was more pronounced for rural children (81.4%) than urban children (54.6%). Also, urban children had more access to preventive services (60.3%) compared to rural (48.6%) mostly due to large preventive programs started by the dental colleges with OPS and LPS Schools.

The 2012-2016 Nebraska Behavioral Risk Surveillance Survey⁸ found that 47.3% of adults age 45-64 had at least one tooth extracted due to tooth decay or gum disease. That ratio was higher for rural adults (53.5%) compared to urban adults (43.8%), and more rural adults aged 65 and older had lost all of their teeth (17.7%) compared to urban elders at 11.9%). Also, 71.0% of urban adults had their teeth cleaned in the past year compared to 59.8% of rural adults.

Most dental disease conditions are preventable, but patients often avoid the dentist due to cost barriers or limited insurance coverage. It is important to understand that regularly accessing educational, preventive and corrective dental care is critical to

reducing acute dental conditions and thus lowering the rates of ED dental visits and revisits. The American Dental Association recommends people visit their dentist at least twice a year. The CDC Healthy People 2020 national oral health objective #7 is to “increase the proportion of children, adolescents, and adults who used the oral health care system in the past year.”⁹ In 2007, only 44.5% of U.S. people aged 2 years and over had a single dental visit in the past year. By 2014, this percent had dropped to 43.2% indicating the vital need for individuals to establish permanent dental homes to access regular dental care to prevent and treat disease.¹⁰ This care includes receiving continual preventive, corrective and (if needed) emergency services from their dentist and their dental team on an on-going basis. When people do not see a regular dental provider, they do not get the early diagnosis and interventions that can halt or slow the progress of most oral diseases. Maintaining optimal oral health through regular dental care is one of the keys to reducing the need for more invasive urgent dental treatment and to lowering the high costs associated with Emergency Department visits for NTDCs.

Objectives

The objective of this new 2019 report is two-fold. First, we will provide patient – related characteristics of hospital NTDC ED visits in Nebraska for the years 2009-2016. Second, we will map the number of dental-related ED visits with the distribution of dentists’ practice locations in Nebraska and ED facilities by county. The findings from this study will have important implications for dental public health programs and dental care providers. We anticipate that these results would help implement more community based preventive oral health programs and increase access to corrective care services among underserved Nebraskans.

Methods

Data source

Nebraska Hospital Discharge Data¹¹ was used to query for non-traumatic dental conditions between 2009 and 2016. Nebraska Hospital Discharge Data was procured from the Nebraska Hospital Association as it contains patient and hospital-related variables including age, sex, insurance coverage, disposition status, patient location, and charges. Dentists' practice locations and ED facility sites were obtained from the Health Professionals Tracking Services, College of Public Health, University of Nebraska Medical Center and the Office of Rural Health, Nebraska Department of Health and Human Services.

Measures

All hospital-based Nebraska ED visits by patients with NTDCs between 2009 and 2016 were selected based on the ICD-9 and ICD-10 diagnostic codes (see Appendix 1 for list of diagnoses). Previously dental ED data was tracked through ICD-9 coding, but as of October 2015**, the Association of State and Territorial Dental Directors (ASTDD) recommended ICD-10 codes be used, which are slightly different and can lower ED visit numbers and limit comparability. Patient demographic characteristics such as age, sex, insurance status, patient location, and charges were also examined.

Outcomes

The primary outcome is the number of dental-related ED visits per 10,000 population. Also, hospital charges refer to the charges that the hospital levied to patients and not the cost of care provided to patients or the amount of reimbursement for services rendered.

Analytical strategy

The Nebraska Office of Oral Health followed the directive of 2017 ASTDD Guidance on Assessing Emergency Department Data for Non-Traumatic Dental Conditions.¹² This manual developed a standardized framework that should be used by states to examine their EDs visits for NTDCs. An individual ED visit was used as the unit of analysis and descriptive statistics were used to summarize the data.

Results

Patient characteristics

The number of ED visits for NTDCs per year increased by 27% from 6,870 in 2009 to 8,751 in 2014 whereas the number of unique patients increased by 30% from 4,055 in 2009 to 5,263 in 2013 (see Table 1). Due to the adoption of ICD-10 diagnoses starting October 2015, the number of ED visits in 2015 and 2016 have limited comparability with those between 2009 and 2014.

Most of the ED visits were made by those between 26 to 45 year old (average 45%), followed by those between 18 to 25 years of age (20%). Between 2011 and 2016, the proportion of ED visits for those 65 years and older increased substantially from 4.3% to 7.3%. ED visits made by children were found to be around 15%. About 55% of ED visits were made by females. Approximately 64% of the total ED visits for NTDCs were made by urban residents in Nebraska where the majority of the EDs and dental providers are located.

Medicaid enrollees visiting the ED for NTDC increased significantly from 13.3% in 2015 to 34.5% in 2016. However, ED visits by those enrolled in private insurance went down from 56.5% in 2015 to 31.1%. The mean ED charges increased substantially

from \$695 in 2009 to \$1,375. Also, the total ED charges increased from \$4.7 million in 2009 to \$10 million in 2016.

The ED problem can get much worse in more populated states. In 2018, Texas also surveyed their 2016 Hospital Discharge Data for NTDCs and found they are facing an emerging crisis with over 122,000 ED dental visits at an average charge of \$1,853/visit for a total cost to their health care system of \$226 million USD.¹³

Geographic analysis

The distribution of population-based estimates of dental ED visits by county in Nebraska are found in Map 1. Map 2 shows the ED facilities and dentists in Nebraska by county. **Map 1** indicates that there are certain central counties (McPherson, Wheeler, Knox and Saline) that had very high ED visits (greater than 100 visits per 10,000 population) for dental conditions. Similarly, other central and western counties (such as Box Butte, Lincoln, Keya Paha, Rock, Adams, Gage and Dodge) also had higher ED rates (51-100 visits per 10,000 population). Those counties (such as Cedar, Dixon, Arthur, Loup, Garfield, Grant, Hooker, Frontier etc.) that had the lowest ED rates (less than 25 visits per 10,000 population) are often found in counties with no ED facilities.

As seen in **Map 2**, most of the practicing dentists are located within cities, predominantly on the eastern part of the state. Additionally, most of the ED facilities are also located in the eastern part of the state, thereby, rendering the rural residents from counties such as McPherson, Rock, Wheeler and Knox to travel long distances to use ED for NTDCs. Despite lack of EDs in rural counties, one-third of the total statewide ED visits are made by rural residents.

Conclusion

This report has confirmed that Nebraska is experiencing the same rapid trend increase in the use of EDs for NTDCs as the rest of the nation. Expenses are also escalating, up to 10 million USD in 2016. The 2009-2016 report found patients who were between 26 and 45 years of age, Caucasian, female, Medicaid enrollees, uninsured, and urban residents made the highest proportions of ED visits for dental conditions in Nebraska. However, because there are fewer primary-level dental clinics in rural areas, rural patients had higher proportion of ED visits for preventable and NTDCs.

As with other medical conditions, those that live in rural communities often have a much harder time accessing providers than other groups of Americans. In 2017, Nebraska listed 52 of 93 counties (56%) as general dentist shortage areas and 20 counties had no full-time dental services¹⁴....see **Map 3**. In 2016, the majority (62.5%) of active general dentists with a primary practice location in Nebraska (1,081) were located in urban areas (Douglas, Lancaster and Sarpy counties), while only 37.5% practiced in rural areas¹⁵. Dentists have a disproportionate presence in suburbs where those who most need access to care are often found in inner cities and rural communities.

Recommendations

Convene a stakeholders meeting to have an open discussion addressing the need to reduce ED NTDC use in Nebraska. Invite representatives from the Nebraska Dental Association, the Nebraska Dental Hygiene Association, the Nebraska Hospital Association, the Nebraska Medicaid program, the Nebraska DHHS Office of Oral Health, the UNMC College of Dentistry, the Creighton University School of Dentistry, the DHHS Dental Advisory Committee and others to discuss potential partnership solutions.

Consider a statewide awareness campaign that would educate the general population and communities about the relationship between dental health and total health. Emphasize the importance of establishing permanent dental homes and accessing regular preventive care. Inform high risk counties and hospitals about the need to establish ED dental care coordination and referral programs within their communities to connect people to existing local dental resources.

If only 43.2% of Americans visit their dentist each year, then the majority are not accessing the traditional dental health care system that has been designed to provide them with early interventions to control dental disease. Therefore, we need to integrate more of these preventive and educational dental services into non-traditional settings within their communities, for example children's centers, school sites and older adult facilities. There is an urgent need to increase funding to develop more community-based dental public health programs, like "Oral Health Access for Young Children" and "Nebraska Teeth Forever" that can reduce dental disease by 25-50%⁵ with fluoride varnish, dental sealants, and silver diamine fluoride. Increase utilization of all of our existing oral health workforce to include public health hygienists and community health workers and continue efforts to expand community water fluoridation in Nebraska.

Increase access to restorative services that focus on vulnerable populations to reduce these ED visits. Work with Medicaid programs to increase adult benefits, reimbursement rates, reduce administrative barriers, expand preventive services and increase dental provider participants. Increase the utilization of community dental screenings to connect people to proper local dental resources. And support community health centers and the free and charitable clinics that offer care to the underserved.

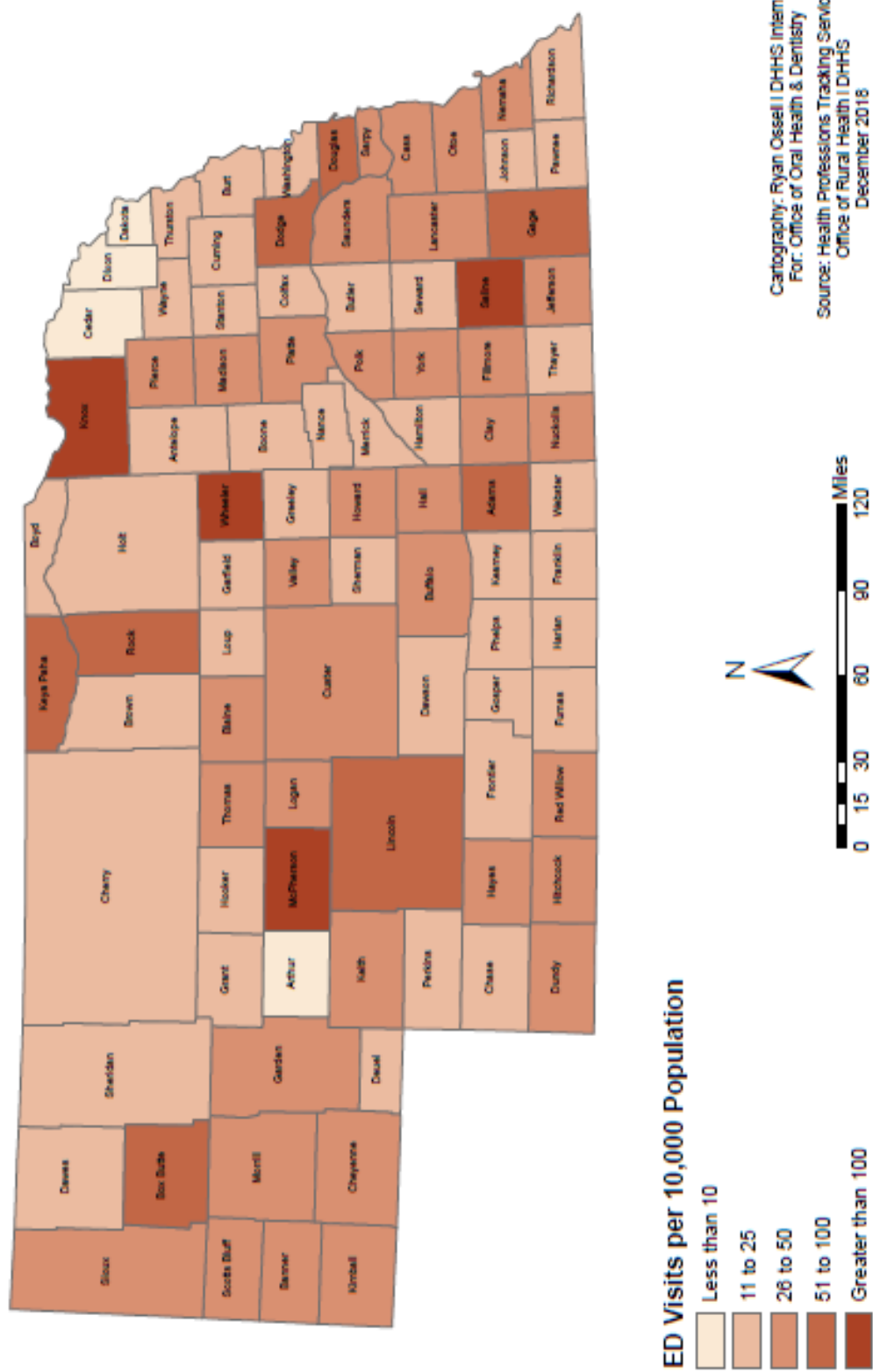
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Table 1: Non-Traumatic Dental-related ED visits in Nebraska stratified by patient characteristics, 2009-2016.

YEAR	2009	2010	2011	2012	2013	2014	2015**	2016**
# of Visits	6870	7421	8420	8205	8687	8751	8213	7290
# of Patients	4055	4358	4747	5055	5263	4983	4275	4198
Age, years–N (%)								
0-17	1235 (17.98)	1329 (17.91)	1266 (15.04)	1132 (13.8)	1010 (11.63)	1108 (12.66)	1191 (14.5)	1159 (15.9)
18-25	1532 (22.3)	1564 (21.08)	1832 (21.76)	1765 (21.51)	1722 (19.82)	1590 (18.17)	1387 (16.89)	1159 (15.9)
26-45	2836 (41.28)	3105 (41.84)	3784 (44.94)	3746 (45.66)	4184 (48.16)	4262 (48.7)	3736 (45.49)	3169 (43.47)
46-64	922 (13.42)	1039 (14)	1177 (13.98)	1208 (14.72)	1312 (15.1)	1300 (14.86)	1344 (16.36)	1273 (17.46)
65+	345 (5.02)	384 (5.17)	361 (4.29)	354 (4.31)	459 (5.28)	491 (5.61)	555 (6.76)	530 (7.27)
Mean	31	31	31	32	33	34	35	34
Median	28	29	29	29	30	31	32	32
Gender– N (%)								
Female	3781 (55.04)	4025 (54.24)	4583 (54.5)	4526 (55.16)	4770 (54.93)	4887 (55.88)	4641 (56.54)	4211 (57.78)
Male	3087 (44.93)	3395 (45.75)	3826 (45.5)	3679 (44.84)	3913 (45.07)	3858 (44.11)	3567 (43.46)	3077 (42.22)
Charge of Visits								
Mean (SD)	\$694.93	\$761.84	\$870.86	\$914.94	\$1,047.77	\$1,098.67	\$1,209.88	\$1,375.15
(Min, Max)	14.2 -16680.4	15.35 - 23927.6	57.22 - 25427.11	60.08 - 25622.93	82.5 - 35592.19	50797 - 76166.89	87 – 67400.45	87 – 42980.3
Median	\$372.05	\$385.36	\$419.00	\$430.03	\$463.60	\$485.00	\$504.44	\$558.65
Total	\$4,774,151.32	\$5,653,603.47	\$7,332,673.90	\$7,507,099.25	\$9,101,968.94	\$9,614,452.65	\$10,304,635.53	\$10,024,870.61
Residency– N(%)								
Urban	4258 (61.98)	4620 (62.26)	5548 (65.89)	5377 (65.53)	5828 (67.09)	5766 (65.89)	5461 (66.49)	4577 (62.78)
Rural	2612 (38.02)	2801 (37.74)	2872 (34.11)	2828 (34.47)	2859 (32.91)	2985 (34.11)	2752 (33.51)	2713 (37.22)
Primary Payer – N (%)								
Blue Cross Blue Shield	857 (12.47)	881 (11.87)	909 (10.8)	819 (9.98)	844 (9.72)	954 (10.9)	1082 (13.17)	1009 (13.84)
Medicare	641 (9.33)	718 (9.68)	743 (8.82)	777 (9.47)	924 (10.64)	992 (11.34)	1054 (12.83)	999 (13.7)
Commercial Insurance	1553 (22.61)	1703 (22.95)	2149 (25.52)	2314 (28.2)	3161 (36.39)	3347 (38.25)	3555 (43.29)	1255 (17.22)
Medicaid	1743 (25.37)	1777 (23.95)	1560 (18.53)	1360 (16.58)	1218 (14.02)	963 (11)	1094 (13.32)	2516 (34.51)
Worker's Compensation	6 (0.09)	6 (0.08)	13 (0.15)	15 (0.18)	15 (0.17)	18 (0.21)	8 (0.1)	16 (0.22)
Champus/Champva	123 (1.79)	150 (2.02)	156 (1.85)	175 (2.13)	144 (1.66)	167 (1.91)	170 (2.07)	141 (1.93)
Other Federal and State Programs	16 (0.23)	3 (0.04)	11 (0.13)	4 (0.05)	14 (0.16)	13 (0.15)	27 (0.33)	9 (0.12)
Uninsured	1931 (28.11)	2183 (29.42)	2878 (34.18)	2741 (33.41)	2367 (27.25)	2297 (26.25)	1223 (14.89)	664 (9.11)
Other	NA	NA	NA	NA	NA	NA	NA	681 (9.34)

Emergency Department (ED) Visits for Non-Traumatic Dental Conditions by County (2009-2016)



ED Visits per 10,000 Population

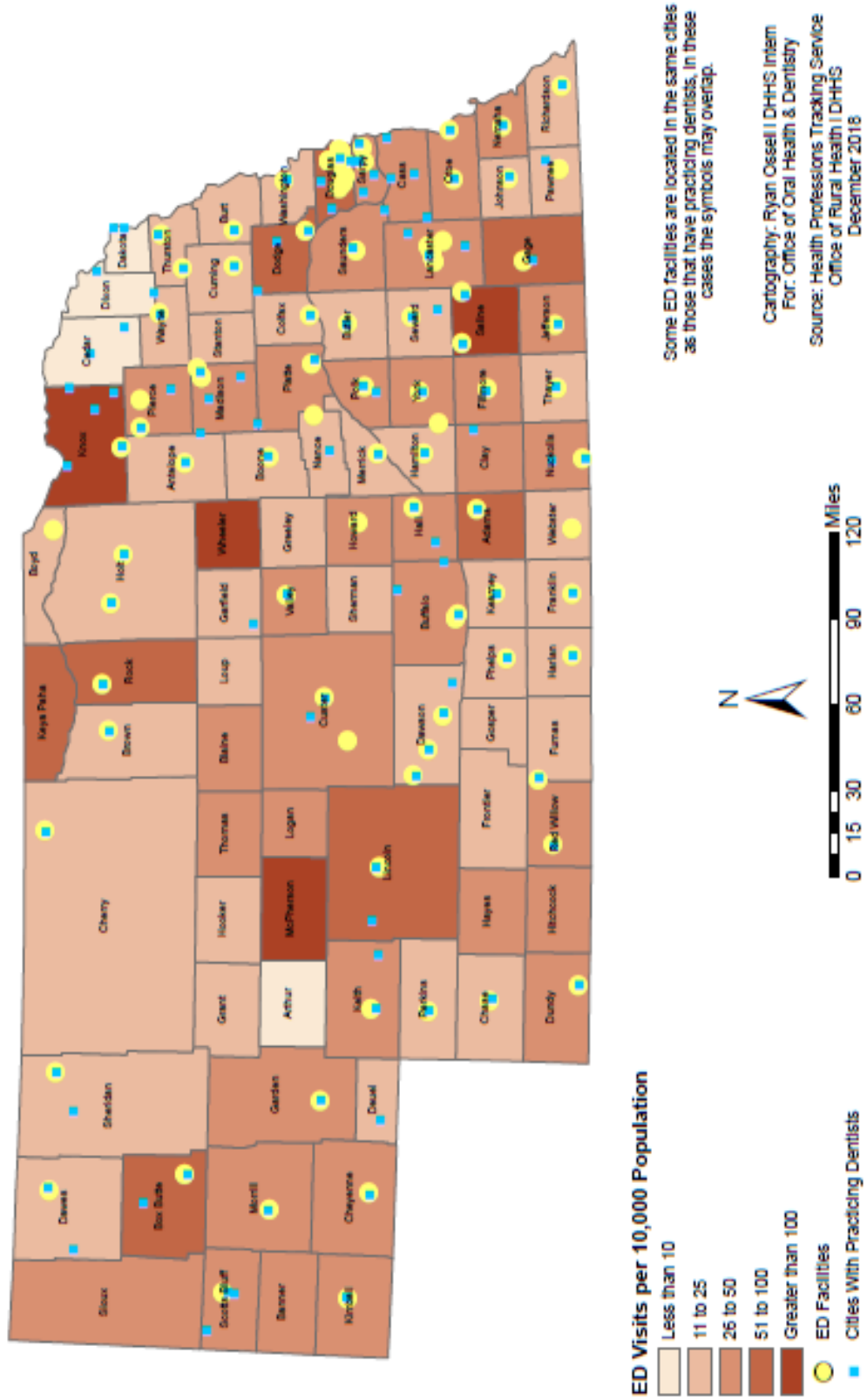
- Less than 10
- 11 to 25
- 26 to 50
- 51 to 100
- Greater than 100

N

Miles
0 15 30 60 90 120

Cartography: Ryan Osseil | DHHS Intern
For: Office of Oral Health & Dentistry
Source: Health Professions Tracking Service
Office of Rural Health | DHHS
December 2018

Emergency Department (ED) Visits for Non-Traumatic Dental Conditions and Cities With Practicing Dentists (2009-2016)



Average **7,982** visits/year

Average **4,617** patients/year

Number of emergency room visits have dramatically increased over time, for example, **4,829** in 2003** to **8,213** in 2015.

EMERGENCY ROOM



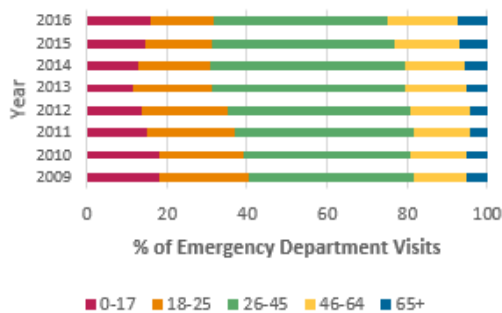
In 2014, only 43.2% of Americans visited their dentists at least once a year!

-CDC HP 2020 OH-7

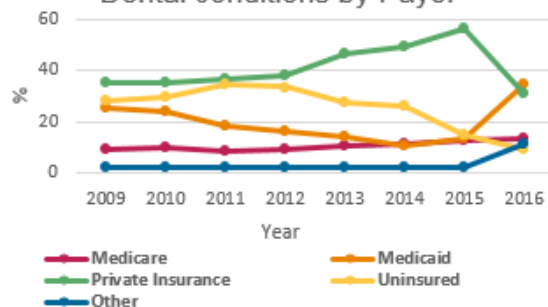
Total costs of emergency room visits for dental conditions were about **\$10 Million** in 2016 which is much higher than **\$1.4 Million** in 2003**

Average cost per emergency room visit for dental conditions was **\$712** in 2012** which has significantly risen to **\$1,375** in 2016

Emergency Department Visits for Dental Conditions by Age



Emergency Department Visits for Dental conditions by Payer



*Quarter 4 of 2015 and 2016 data uses diagnoses by ICD-10 that may limit comparability with ICD-9 diagnoses for previous years.



55% of emergency department visits were made by females



45% of emergency department visits were made by 26-45 year olds



15% of emergency department visits were made by children



32 of 105 emergency departments are located in rural Nebraska

Average number of emergency room visits made by rural residents was **2,803** per year

Source: Hospital Discharge Data, Nebraska Hospital Association, 2009-2016; ** 2016 Nebraska State Oral Health Assessment Report using ICD-9 codes

Appendix 1: The ICD-9 and ICD-10 Codes for Defining Non-Traumatic Dental Condition

ICD- 9 Description	ICD-9 Code	ICD-10 Code	ICD-10 Description (if different)
Anodontia	5200	K000	
Supernumerary teeth	5201	K001	
Abnormalities of size and form of teeth	5202	K002	
Mottled teeth	5203	K003	
Disturbances of tooth formation	5204	K004	
Hereditary disturbances in tooth structure, not elsewhere classified	5205	K005	
Disturbances in tooth eruption	5206	K006	Disturbances in tooth eruption
Disturbances in tooth eruption	5206	K010	Embedded teeth
Disturbances in tooth eruption	5206	K011	Impacted teeth
Teething syndrome	5207	K007	Teething syndrome
Other specified disorders of tooth development and eruption	5208	K008	Other specified disorders of tooth development
Unspecified disorder of tooth development and eruption	5209	K009	Disorder of tooth development, unspecified
Dental caries, unspecified	52100	K029	Dental caries, unspecified
Dental caries limited to enamel	52101	K0261	Dental caries on smooth surface limited to enamel
Dental caries extending into dentine	52102	K0262	Dental caries on smooth surface penetrating into dentine
Dental caries extending into pulp	52103	K0263	Dental caries on smooth surface penetrating into pulp
Arrested dental caries	52104	K023	Arrested dental caries
Odontoclasia	52105	K0389	Other specified diseases of hard tissues of teeth
Dental caries pit and fissure	52106	K0251	Dental caries pit and fissure surface limited to enamel
Dental caries of smooth surface	52107	K0261	Dental caries on smooth surface limited to enamel
Dental caries of smooth surface	52107	K0262	Dental caries on smooth surface penetrating into dentine
Dental caries of smooth surface	52107	K0263	Dental caries on smooth surface penetrating into pulp
Dental caries of root surface	52108	K027	Dental root caries
Other dental caries	52109	K029	Dental caries, unspecified
Excessive dental attrition, unspecified	52110	K030	Excessive attrition of teeth
Excessive attrition, limited to enamel	52111	K030	Excessive attrition of teeth
Excessive attrition, extending into dentine	52112	K030	Excessive attrition of teeth
Excessive attrition, extending into pulp	52113	K030	Excessive attrition of teeth
Excessive attrition, localized	52114	K030	Excessive attrition of teeth
Excessive attrition, generalized	52115	K030	Excessive attrition of teeth
Abrasion of teeth, unspecified	52120	K031	Abrasion of teeth
Abrasion, limited to enamel	52121	K031	Abrasion of teeth
Abrasion, extending into dentine	52122	K031	Abrasion of teeth
Abrasion, extending into pulp	52123	K031	Abrasion of teeth
Abrasion, localized	52124	K031	Abrasion of teeth
Abrasion, generalized	52125	K031	Abrasion of teeth
Erosion, unspecified	52130	K032	Erosion of teeth
Erosion, limited to enamel	52131	K032	Erosion of teeth
Erosion, extending into dentine	52132	K032	Erosion of teeth

Erosion, extending into pulp	52133	K032	Erosion of teeth
Erosion, localized	52134	K032	Erosion of teeth
Erosion, generalized	52135	K032	Erosion of teeth
Pathological resorption, unspecified	52140	K033	Pathological resorption of teeth
Pathological resorption, internal	52141	K033	Pathological resorption of teeth
Pathological resorption, external	52142	K033	Pathological resorption of teeth
Other pathological resorption	52149	K033	Pathological resorption of teeth
Hypercementosis	5215	K034	
Ankylosis of teeth	5216	K035	
Intrinsic posteruptive color changes of teeth	5217	K037	Intrinsic posteruptive color changes of hard tissues of teeth
Cracked tooth	52181	K0381	
Other specific diseases of hard tissues of teeth	52189	K0389	
Unspecified disease of hard tissues of teeth	5219	K039	Disease of hard tissues of teeth, unspecified
Pulpitis	5220	K040	
Necrosis of the pulp	5221	K041	
Pulp degeneration	5222	K042	
Abnormal hard tissue formation in pulp	5223	K043	
Acute apical periodontitis of pulpal origin	5224	K044	
Periapical abscess without sinus	5225	K047	
Chronic apical periodontitis	5226	K045	
Periapical abscess with sinus	5227	K046	
Radicular cyst	5228	K048	
Other and unspecified diseases of pulp and periapical tissues	5229	K0490	Unspecified diseases of pulp and periapical tissues
Other and unspecified diseases of pulp and periapical tissues	5229	K0499	Other diseases of pulp and periapical tissues
Acute gingivitis, plaque induced	52300	K0500	
Acute gingivitis, non-plaque induced	52301	K0501	
Chronic gingivitis, plaque induced	52310	K0510	
Chronic gingivitis, non-plaque induced	52311	K0511	
Gingival recession, unspecified	52320	K060	Gingival recession
Gingival recession, minimal	52321	K060	Gingival recession
Gingival recession, moderate	52322	K060	Gingival recession
Gingival recession, severe	52323	K060	Gingival recession
Gingival recession, localized	52324	K060	Gingival recession
Gingival recession, generalized	52325	K060	Gingival recession
Aggressive periodontitis, unspecified	52330	K0520	
Aggressive periodontitis, localized	52331	K0521	
Aggressive periodontitis, generalized	52332	K0522	
Acute periodontitis	52333	K0520	
Chronic periodontitis, unspecified	52340	K0530	
Chronic periodontitis, localized	52341	K0531	
Chronic periodontitis, generalized	52342	K0532	
Periodontosis	5235	K0540	
Accretions on teeth	5236	K036	Deposits (accretions) on teeth
Other specified periodontal diseases	5238	K055	Other periodontal diseases
Other specified periodontal diseases	5238	K061	Gingival enlargement
Unspecified gingival and periodontal disease	5239	K056	Periodontal disease, unspecified
Major anomalies of jaw size, unspecified anomaly	52400	M2600	Unspecified anomaly of jaw size

Major anomalies of jaw size, maxillary hyperplasia	52401	M2601	Maxillary hyperplasia
Major anomalies of jaw size,	52402	M2603	Mandibular hyperplasia
Major anomalies of jaw size, maxillary hypoplasia	52403	M2602	Maxillary hypoplasia
Major anomalies of jaw size, mandibular hypoplasia	52404	M2604	Mandibular hypoplasia
Major anomalies of jaw size, macrogenia	52405	M2605	Macrogenia
Major anomalies of jaw size, microgenia	52406	M2606	Microgenia
Excessive tuberosity of jaw	52407	M2607	
Major anomalies of jaw size, other specified anomaly	52409	M2609	Other specified anomalies of jaw size
Anomalies of relationship of jaw to cranial base, unspecified anomaly	52410	M2610	Unspecified anomaly of relationship of jaw-cranial base relationship
Anomalies of relationship of jaw to cranial base, maxillary asymmetry	52411	M2611	Maxillary asymmetry
Anomalies of relationship of jaw to cranial base, other jaw asymmetry	52412	M2612	Other jaw asymmetry
Anomalies of relationship of jaw to cranial base, other specified anomaly	52419	M2619	Other specified anomalies of jaw-cranial base relationship
Unspecified anomaly of dental arch relationship	52420	M2620	
Malocclusion, Angle's class I	52421	M2621 1	
Malocclusion, Angle's class II	52422	M2621 2	
Malocclusion, Angle's class III	52423	M2621 3	
Open anterior occlusal relationship	52424	M2622 0	
Open posterior occlusal relationship	52425	M2622 1	
Excessive horizontal overlap	52426	M2623	
Reverse articulation	52427	M2624	
Anomalies of interarch distance	52428	M2625	
Other anomalies of dental arch relationship	52429	M2629	
Unspecified anomaly of tooth position of fully erupted teeth	52430	M2630	Unspecified anomaly of tooth position of fully erupted tooth or teeth
Crowding of teeth	52431	M2631	Crowding of fully erupted teeth
Excessive spacing of teeth	52432	M2632	Excessive spacing of fully erupted teeth
Horizontal displacement of teeth	52433	M2633	Horizontal displacement of fully erupted tooth or teeth
Vertical displacement of teeth	52434	M2634	Vertical displacement of fully erupted tooth or teeth
Rotation of tooth/teeth	52435	M2635	Rotation of fully erupted tooth or teeth
Insufficient interocclusal distance of teeth (ridge)	52436	M2636	Insufficient interocclusal distance of fully erupted teeth (ridge)
Excessive interocclusal distance of teeth	52437	M2637	Excessive interocclusal distance of fully erupted teeth
Other anomalies of tooth position	52439	M2639	Other anomalies of tooth position of fully erupted tooth or teeth
Malocclusion, unspecified	5244	M264	

Dentofacial functional abnormality, unspecified	52450	M2650	Dentofacial functional abnormalities, unspecified
Abnormal jaw closure	52451	M2651	
Limited mandibular range of motion	52452	M2652	
Deviation in opening and closing of the mandible	52453	M2653	
Insufficient anterior guidance	52454	M2654	
Centric occlusion maximum intercuspation discrepancy	52455	M2655	
Non-working side interference	52456	M2656	
Lack of posterior occlusal support	52457	M2657	
Other dentofacial functional abnormalities	52459	M2659	
Temporomandibular joint disorders, unspecified	52460	M2660	Temporomandibular joint disorder, unspecified
Temporomandibular joint disorders, unspecified	52460	M2669	Other specified disorders of temporomandibular joint
Temporomandibular joint disorders, adhesions and ankylosis (bony or fibrous)	52461	M2661	Adhesions and ankylosis of temporomandibular joint
Temporomandibular joint disorders, arthralgia of temporomandibular joint	52462	M2662	Arthralgia of temporomandibular joint
Temporomandibular joint disorders, articular disc disorder (reducing or non-reducing)	52463	M2663	Articular disc disorder of temporomandibular joint
Temporomandibular joint sounds on opening and/or closing the jaw	52464	M2669	Other specified disorders of temporomandibular joint
Other specified temporomandibular joint disorders	52469	M2669	Other specified disorders of temporomandibular joint
Dental alveolar anomalies, unspecified alveolar anomaly	52470	M2670	Unspecified alveolar anomaly
Alveolar maxillary hyperplasia	52471	M2671	
Alveolar mandibular hyperplasia	52472	M2672	
Alveolar maxillary hypoplasia	52473	M2673	
Alveolar mandibular hypoplasia	52474	M2674	
Vertical displacement of alveolus and teeth	52475	M2679	Other specified alveolar anomaly
Occlusal plane deviation	52476	M2679	Other specified alveolar anomaly
Other specified alveolar anomaly	52479	M2679	Other specified alveolar anomaly
Anterior soft tissue impingement	52481	M2681	
Posterior soft tissue impingement	52482	M2682	
Other specified dentofacial anomalies	52489	M264	Malocclusion, unspecified
Other specified dentofacial anomalies	52489	M2689	Other dentofacial anomalies
Unspecified dentofacial anomalies	5249	M269	Dentofacial anomaly, unspecified
Exfoliation of teeth due to systemic causes	5250	K080	
Acquired absence of teeth, unspecified	52510	K08109	Complete loss of teeth, unspecified cause, unspecified class
Loss of teeth due to periodontal disease	52512	K08429	Partial loss of teeth due to periodontal diseases, unspecified class
Loss of teeth due to caries	52513	K08439	Partial loss of teeth due to caries unspecified class
Other loss of teeth	52519	K08499	Partial loss of teeth due to other unspecified cause, unspecified class
Unspecified atrophy of edentulous alveolar ridge	52520	K0820	

Minimal atrophy of the mandible	52521	K0821	
Moderate atrophy of the mandible	52522	K0822	
Severe atrophy of the mandible	52523	K0823	
Minimal atrophy of the maxilla	52524	K0824	
Moderate atrophy of the maxilla	52525	K0825	
Severe atrophy of the maxilla	52526	K0826	
Retained dental root	5253	K083	
Complete edentulism, unspecified	52540	K08109	Complete loss of teeth, unspecified cause, unspecified class
Complete edentulism, class I	52541	K08101	Complete loss of teeth, unspecified cause, class I
Complete edentulism, class II	52542	K08102	Complete loss of teeth, unspecified cause, class II
Complete edentulism, class III	52543	K08103	Complete loss of teeth, unspecified cause, class III
Complete edentulism, class IV	52544	K08104	Complete loss of teeth, unspecified cause, class IV
Partial edentulism, unspecified	52550	K08409	Partial loss of teeth, unspecified cause, unspecified class
Partial edentulism, class I	52551	K08401	Partial loss of teeth, unspecified cause, class I
Partial edentulism, class II	52552	K08402	Partial loss of teeth, unspecified cause, class II
Partial edentulism, class III	52553	K08403	Partial loss of teeth, unspecified cause, class III
Partial edentulism, class IV	52554	K08404	Partial loss of teeth, unspecified cause, class IV
Unspecified unsatisfactory restoration of tooth	52560	K0850	Unsatisfactory restoration of tooth, unspecified
Open restoration margins	52561	K0851	Open restoration margins of tooth
Unrepairable overhanging of dental restorative materials	52562	K0852	
Fractured dental restorative material without loss of material	52563	K08530	
Fractured dental restorative material with loss of material	52564	K08531	
Contour of existing restoration of tooth biologically incompatible with oral health	52565	K0854	
Allergy to existing dental restorative material	52566	K0855	
Poor aesthetics of existing restoration	52567	K0856	Poor aesthetic of existing restoration of tooth
Other unsatisfactory restoration of existing tooth	52569	K0859	Other unsatisfactory restoration of tooth
Osseointegration failure of dental implant	52571	M2761	
Post-osseointegration biological failure of dental implant	52572	M2762	
Post-osseointegration mechanical failure of dental implant	52573	M2763	
Other endosseous dental implant failure	52579	M2769	
Other specified disorders of the teeth and supporting structures	5258	K088	Other specified disorders of teeth and supporting structures
Other specified disorders of the teeth and supporting structures		M2679	Other specified alveolar anomalies

Unspecified disorder of the teeth and supporting structures	5259	K089	Disorder of teeth and supporting structures, unspecified
Developmental odontogenic cysts	5260	K090	
Fissural cysts of jaw	5261	K091	Developmental (nonodontogenic) cysts of oral region
Other cysts of jaws	5262	M2749	
Central giant cell (reparative) granuloma	5263	M271	Giant cell granuloma, central
Inflammatory conditions of jaw	5264	M272	
Alveolitis of jaw	5265	M273	
Perforation of root canal space	52661	M2751	Perforation of root canal space due to endodontic treatment
Endodontic overfill	52662	M2752	
Endodontic underfill	52663	M2753	
Other periradicular pathology associated with previous endodontic treatment	52669	M2759	
Exostosis of jaw	52681	M278	Other specified diseases of jaws
Other specified diseases of the jaws	52689	M278	Other specified diseases of jaws
Unspecified disease of the jaws	5269	M279	Disease of the jaws, unspecified
Atrophy of salivary gland	5270	K110	
Hypertrophy of salivary gland	5271	K111	
Sialoadenitis	5272	K1120	Sialoadenitis, unspecified
Abscess of salivary gland	5273	K113	
Fistula of salivary gland	5274	K114	
Sialolithiasis	5275	K115	
Mucocele of salivary gland	5276	K116	
Disturbance of salivary secretion	5277	K117	Disturbances of salivary secretion
Disturbance of salivary secretion	5277	R682	Dry mouth, unspecified
Other specified diseases of the salivary glands	5278	K118	Other diseases of salivary glands
Unspecified disease of the salivary glands	5279	K119	Disease of the salivary glands, unspecified
Stomatitis and mucositis, unspecified	52800	K122	Cellulitis and abscess of mouth
Stomatitis and mucositis, unspecified	52800	K1230	Oral mucositis (ulcerative), unspecified
Mucositis (ulcerative) due to antineoplastic therapy	52801	K1231	Oral mucositis (ulcerative) due to antineoplastic therapy
Mucositis (ulcerative) due to antineoplastic therapy	52801	K1233	Oral mucositis (ulcerative) due to radiation
Mucositis (ulcerative) due to other drugs	52802	K1232	Oral mucositis (ulcerative) due to other drugs
Other stomatitis and mucositis (ulcerative)	52809	K121	Other forms of stomatitis
Other stomatitis and mucositis (ulcerative)	52809	K1239	Other oral mucositis (ulcerative)
Cancrum oris	5281	A690	Necrotizing ulcerative stomatitis
Oral aphthae	5282	K120	Recurrent oral aphthae
Cellulitis and abscess of oral soft tissues	5283	K122	Cellulitis and abscess of mouth
Cysts of oral soft tissues	5284	K098	Other cysts of oral region, not elsewhere classified
Diseases of lips	5285	K130	
Leukoplakia of oral mucosa, including tongue	5286	K1321	
Minimal keratinized residual ridge mucosa	52871	K1322	

Excessive keratinized residual ridge mucosa	52872	K1323	
Other disturbances of oral epithelium, including tongue	52879	K1329	
Oral submucosal fibrosis, including of tongue	5288	K135	Oral submucosal fibrosis
Other and unspecified diseases of the oral soft tissues	5289	K1370	Unspecified lesions of oral mucosa
Other and unspecified diseases of the oral soft tissues	5289	K1379	Other lesions of oral mucosa
Glossitis	5290	K140	
Geographic tongue	5291	K141	
Median rhomboid glossitis	5292	K142	
Hypertrophy of tongue papillae	5293	K143	
Atrophy of tongue papillae	5294	K144	
Plicated tongue	5295	K145	
Glossodynia	5296	K146	
Other specified conditions of the tongue	5298	K148	Other diseases of the tongue
Unspecified condition of the tongue	5299	K149	Disease of tongue, unspecified
Jaw pain	78492	R6884	
Nonspecific abnormal findings in saliva	7924	R859	Unspecified abnormal finding in specimens from digestive organs and abdominal cavity
Fitting and adjustment of dental prosthetic device	V523	Z463	Encounter for fitting and adjustment of dental prosthetic device
Fitting and adjustment of orthodontic devices	V534	Z464	Encounter for fitting and adjustment of orthodontic device
Orthodontics aftercare	V585	Z464	Encounter for fitting and adjustment of orthodontic device
Dental examination	V722	Z0120	Encounter for dental examination and cleaning without abnormal findings
Dental examination	V723	Z0121	Encounter for dental examination and cleaning with abnormal findings