



GUIDANCE ON ASSESSING EMERGENCY DEPARTMENT DATA FOR NON-TRAUMATIC DENTAL CONDITIONS JULY 2017 (LAST UPDATE JULY 2022)

Due to the technical nature of this topic, this information will be most helpful to dental directors, data analysts, epidemiologists and statisticians.

Does your state want to assess the use of emergency departments for non-traumatic dental conditions?

If yes, then you probably have questions about data sources, indicators of interest, diagnostic codes, analysis methods, target populations and potential predictive factors. The purpose of this document is to provide a standardized framework for how state oral health programs (SOHPs) should evaluate and document the use of emergency departments (EDs) for non-traumatic dental conditions (NTDCs). By following this guidance, SOHPs will be able to compare their ED data to information from other states and to assess trends in ED use over time. While the focus of this guidance is the generation of state specific estimates using statewide ED discharge databases, the recommended codes and analysis techniques can be used for databases that are specific to a local community (e.g., hospital service area) or target population (e.g., Medicaid). This guidance is an abbreviated version of the ASTDD report, [Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments](#). If you need more detailed information, including previously published research, please refer to [Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments](#) and its companion report, [Methods of Assessing Non-Traumatic Dental Care in Emergency Departments](#). For a listing of related research publications, see, [Methods in Assessing Non-Traumatic Dental Care in Emergency Departments Publications Update](#) (updated periodically).

Where do I get state specific ED discharge data?

In general, there are two sources for state specific ED data: (1) the [State Emergency Department Databases](#) (SEDD) and (2) other state ED databases (for states not participating in SEDD).

State Emergency Department Databases

The SEDD are a set of databases and software tools developed for the Agency for Healthcare Research and Quality's [Healthcare Cost and Utilization Project](#) (HCUP). The SEDD capture emergency visits at hospital-affiliated EDs that do not result in hospitalization. The SEDD files include all patients, regardless of payer, providing a unique view of ED care in a state over time. As of September 2021, [42 states](#) (including District of Columbia) participate in the SEDD. The SEDD contain a large number of clinical and non-clinical variables included in a hospital discharge abstract, such as:

- All-listed diagnoses and procedures
- Patient demographic characteristics (e.g., sex, age and, for some states, race)
- Expected payment source
- Total charges.

Variables included in the SEDD are not always available for all states; refer to [Availability of Data Elements by Year](#) for additional information on which variables are available for your state. SEDD releases can be purchased through the [HCUP Central Distributor](#). Costs vary by state (at this publication ranging from \$35 to \$3,200). Data for earlier years often cost less than the most recent available data.

Other State ED Databases

If your state does not participate in the SEDD, there may be another source for statewide ED data. ASTDD recommends that SOHPs discuss the issue of use of EDs for NTDCs with your state health officer and determine if SEDD or another state ED discharge database is available for analysis. The recommendations and methods presented in this document should be generally applicable to both SEDD and non-SEDD state ED discharge databases.

To assure comparability between states, ASTDD recommends that all states use the ICD codes listed in the Appendices.

What diagnostic codes should we use?

Based on the ICD diagnostic codes, ASTDD has created two subcategories for **ED visit due to an oral condition**: (1) non-traumatic dental condition (NTDC) – the focus of most research and (2) caries, periodontal or associated preventive procedures (CPP), an optional category for focus on more common procedures. NTDC includes caries, periodontal disease, erosion, occlusal anomalies, cysts, impacted teeth, teething, and all other non-traumatic conditions associated with the oral cavity. Diagnoses that are deemed due to trauma are excluded from this definition. CPP includes only those conditions directly associated with dental caries, periodontal disease, or preventive procedures associated with these diseases that are routinely provided in a primary general dental clinic setting. CPP would include diagnoses related to dental caries, gingival and periodontal conditions, loss of teeth (not due to trauma), endodontic conditions, and caries and periodontal related preventive procedures. The codes for NTDC are a subset of all oral and facial related codes, and the codes for CPP are a subset of the NTDC codes. Note: The ASTDD recommended ICD-10 NTDC code set (Appendix 1) aligns closely with the Dental Quality Alliance (DQA) NTDC code set for their Ambulatory Care Sensitive Emergency Department Visits for Non-Traumatic Dental Conditions in Adults measure but contains some additional codes that the DQA definition does not.

IMPORTANT NOTE: On October 1, 2015, the United States transitioned from using ICD-9 to ICD-10 code sets. The SEDD databases are annual, calendar-year files. The introduction of ICD-10 on October 1 means that the 2015 databases include a combination of codes: nine months of the data with ICD-9 codes (01-01-2015 to 09-30-2015) and three months of data with ICD-10 codes (10-01-2015 to 12-31-2015). Therefore, for 2015, code sets determining ED oral condition visit outcomes will include both ICD-9 and ICD-10 codes. NOTE: The comparability of estimates across the ICD-9 to ICD-10 transition is uncertain and may potentially over- or under-estimate various indicators. ASTDD recommends keeping your analysis distinct to either ICD-9 or ICD-10, and using caution when comparing across the transition. If you do want to do comparisons or assess trends across the transition, refer to the downloadable crosswalk file ([click here](#)) for a listing of oral codes and the specific ICD-9 and corresponding ICD-10 codes for NTDC and CPP. Subsequently, new ICD-10 codes were added. A full listing of original and added ICD-10 oral health related codes is provided in Appendix 1. The NTDC and CPP subsets of codes are indicated in this table as well. If you want the ICD-10 oral and facial related codes and codes for NTDC and CPP as an Excel spreadsheet for easier use in data analysis you can use the downloadable crosswalk file mentioned previously ([click here](#)).

Should I use the reason for visit codes or the diagnostic codes?

The SEDD databases contain codes for reason for visit, often referred to as presenting complaint(s), plus codes for ED physician's diagnoses, which may not necessarily match the patient's reason(s) for visit. For example, a patient may have a presenting complaint of "chest pain" while the physician's diagnosis is "hiatal hernia." Since reason for visit and diagnosis provide valuable yet potentially different (patient vs. physician) information on ED use for NTDCs, ASTDD has developed indicators that assess both types of codes (refer to Table 1). Using both types of indicators can be especially important for ED discharge data having an oral related reason for visit without a corresponding oral related diagnostic code (or vice versa). NOTE: Some ED discharge databases may not contain code(s) for reason for visit.

Should I evaluate first listed diagnosis or any listed diagnosis?

An ED record may include multiple diagnostic codes. The first listed diagnosis is often considered to be the “primary” or most important diagnosis by the physician. For example, a patient may have a first listed diagnosis of a non-oral medical condition or a trauma related oral condition such as “dislocation of the jaw” and a second listed diagnosis of “unspecified gingival and periodontal disease.” If only the first listed diagnosis is included in the analysis, this patient would not be classified as having an ED visit for a NTDC. If all listed diagnoses are considered, this patient would be classified as having an ED visit for a NTDC. By using all diagnoses, untreated dental conditions presenting at an ED can be tracked, even if the condition was not the primary diagnosis for the ED visit. ASTDD has developed indicators that assess both first listed diagnosis and any listed diagnosis (refer to Table 1)

What oral health indicators should we evaluate?

Analyzing an ED database will allow you to evaluate a multitude of oral health indicators. Because the total number of indicators can be overwhelming, ASTDD has developed a core or foundational set of five indicators to include in a state ED-NTDC surveillance system. We encourage states to expand their ED-NTDC surveillance to include a wider variety of indicators and predictors based on the needs and resources of the individual state. For information on other potential indicators and predictors, refer to [Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Department](#). If you are interested in expanding your ED-NTDC surveillance system beyond the core set of five indicators and recommended predictors, Appendix 2 provides information on optional factors/analyses that you may want to consider.

Recommended indicators (refer to Table 1 for additional detail):

1. ED visit for NTDC based on **first listed** diagnosis
2. ED visit for NTDC based on **any listed** diagnosis
3. ED visit for NTDC based on **first listed reason for visit**
4. ED visit for NTDC based on **any listed reason for visit**
5. ED visit for NTDC based on **any listed diagnosis and/or any listed reason for visit (most inclusive)**.

Recommended reporting and stratification variables (refer to Table 2 for additional detail):

- For each of the five recommended indicators, ASTDD suggests that states report, **at a minimum**:
 - Count – number of ED visits associated with specific outcome in a given year
 - Rate per 100,000 population using [Census Bureau population estimates](#)
 - Count divided by population multiplied by 100,000
 - It may not be possible to calculate rate per 100,000 population when data are stratified by primary payer or race/ethnicity
 - Rate per 10,000 ED visits
 - Count divided by total ED visits multiplied by 10,000
 - Total charges associated with each indicator (use SEDD variable – TOTCHG)
- States, **at a minimum**, should report overall estimates plus estimates stratified by:
 - Age (< 20, 20-44, 45-64, 65+)
 - These age groups were selected because population estimates are readily available from the U.S. Census. As part of an expanded ED-NTDC surveillance system, states may opt to generate estimates for smaller age groupings.
 - Primary payer (Medicare, Medicaid, private insurance, uninsured, other)
 - NOTE: Information on the number of individuals with each payer type is not readily available. Because of this, it may not be possible to generate rate per 100,000 population.
 - Race/ethnicity if available (white, black, Hispanic, Asian/Pacific Islander, Native American, other)
 - NOTE: The SEDD coding for race does not align with the U.S. Census coding for race. Because of this, it is not possible to generate rate per 100,000 population.

Table 1: Recommended ED-NTDC indicators and the appropriate SEDD data elements

Indicator	SEDD Data Element, ICD-9	SEDD Data Element, ICD-10	Comments/Notes
1. NTDC 1 st diagnosis	DX1	I10_DX1	Include 1 st listed diagnosis only
2. NTDC any diagnosis	DXn	I10_DXn	Include all listed diagnoses
3. NTDC 1 st reason visit	DX_Visit_Reason1	I10_Visit_Reason1	Include 1 st listed reason only
4. NTDC any reason visit	DX_Visit_Reasonn	I10_Visit_Reasonn	Include all listed reasons
5. NTDC any diagnosis/visit	DXn & DX_Visit_Reasonn	I10_DXn & I10_Visit_Reasonn	Include all listed diagnoses & reasons

Table 2: Recommended ED-NTDC analysis and stratification factors with SEDD data element names

Description	SEDD Data Element	Comments/Notes
Total Charges	TOTCHG	Generally, TOTCHG does not include professional fees and non-covered charges. Refer to SEDD's state specific notes for additional detail.
Age	AGE or AGEGROUP	Most states report age while some may only report by age group.
Primary payer	PAY1	To ensure uniformity across states, PAY1 combines detailed categories into more general groups. Refer to SEDD's state specific notes for additional detail.
Race/ethnicity (if available)	RACE	HCUP coding includes race/ethnicity in one data element (RACE). If the state supplied race and ethnicity in separate data elements, ethnicity takes precedence over race in setting the HCUP value for race. Race is not available for all states. Refer to SEDD's state specific notes .

What statistical software package and program code should I use?

Any statistical software package can be used. If you are using a SEDD database, the HCUP Central Distributor provides load programs for SAS, SPSS and Stata. Refer to Appendix 3 for sample SAS code.

Limitations and general issues to be aware of:

- Some individuals may seek care for NTDCs at urgent care clinics rather than hospital-based EDs. ED discharge databases such as SEDD do not include information from urgent care clinics.
- SEDD ED discharge databases include information on patients that were discharged from the ED, but do not include information on patients that presented at the ED and were subsequently admitted to the hospital. Information about patients initially seen in the ED and then admitted to the hospital is included in the [State Inpatient Databases \(SID\)](#). SID can be used by states interested in assessing the increment of oral condition ED visits resulting in hospital admission.
- Some patients may live in one state but seek ED care in a bordering state; the resident state ED database will not capture information on patients obtaining cross-state care. If a state wants to determine the extent of cross-state care, the ED discharge database for the neighboring state can be evaluated using the SEDD variable for patient state (PSTATE).
- Many ED datasets use unique identifiers associated with an ED visit, not a specific person. Because of this, repeat visits by a person cannot be identified and the extent of repeat visits to EDs for the same oral problem cannot be quantified. Check individual states to determine if linking variables (VisitLink, DaysToEvent –see Appendix 2) are available to assess repeat visits.
- Drug-seeking behavior may result in oral pain given as the reason for visit, skewing the picture of true oral care in EDs.
- Refer to [Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments](#) for a more complete description of limitations and concerns.

Where can I get additional help?

ASTDD may be able to help you with your analysis process. Please contact us if you have any questions.

Association of State & Territorial Dental Directors
Michael Manz, Surveillance Consultant, mmanz@astdd.org
Kathy Phipps, Data and Surveillance Coordinator, kathyhipps1234@gmail.com

Acknowledgements

Supported by a generous grant from the DentaQuest Foundation. Contents are solely the responsibility of the authors and do not necessarily represent the official views of the DentaQuest Foundation. ASTDD would like to thank Michael Manz for researching and preparing ASTDD's non-traumatic dental care in emergency department reports. In addition, ASTDD would like to thank Emanuel Alcala, Krishna Aravamudhan, Marlene Bengiamin, John Capitman, Donna Carden, Amber Costantino, Mary Foley, Donald Hayes, Renee Joskow, Rich Manski, Lynn Mouden, Junhie Oh, Kathy Phipps, Eli Schwarz, Scott L. Tomar, and David A. Williams for their assistance in the development and review of the original guidance document, Julie Frantsve-Hawley, Eric Tranby, Madhuli Thakkar, Madhurima Gadgil, Pam Owens, and Marguerite Barrett for input on ICD code updating, and Beverly Isman and Chris Wood for their editing skills.

References and additional resources

- [Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments](#)
- [Methods of Assessing Non-Traumatic Dental Care in Emergency Departments](#)
- [Overview of the State Emergency Department Databases](#)
- [Methods in Assessing Non-Traumatic Dental Care in Emergency Departments Publications Update](#)

APPENDIX 1
ICD-10 ORAL RELATED CODES AND THE RECOMMENDED CODES FOR DEFINING NTDC AND CPP
(INCLUDING UPDATES THROUGH AUGUST, 2024)

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
A690	any	NTDC		Necrotizing ulcerative stomatitis	
A691	any	NTDC		Other Vincent’s infections	
B002	any	NTDC	CPP	Herpesviral gingivostomatitis and pharyngotonsillitis	
B084	any	NTDC	CPP	Enteroviral vesicular stomatitis with exanthem	
B0861	any	NTDC	CPP	Bovine stomatitis	
B370	any	NTDC	CPP	Candidal stomatitis	
B3783	any	NTDC	CPP	Candidal cheilitis	
K00	any	NTDC		Disorders of tooth development and eruption	
K000	any	NTDC		Anodontia	
K001	any	NTDC		Supernumerary teeth	
K002	any	NTDC		Abnormalities of size and form of teeth	
K003	any	NTDC	CPP	Mottled teeth	
K004	any	NTDC		Disturbances in tooth formation	
K005	any	NTDC		Hereditary disturbances in tooth structure	
K006	any	NTDC		Disturbances in tooth eruption	
K007	any	NTDC	CPP	Teething syndrome	
K008	any	NTDC		Other disorders of tooth development	
K009	any	NTDC		Disorder of tooth development, unspecified	
K01	any	NTDC		Embedded and impacted teeth	
K010	any	NTDC		Embedded teeth	
K011	any	NTDC		Impacted teeth	
K02	any	NTDC	CPP	Dental caries	
K023	any	NTDC	CPP	Arrested dental caries	
K025	any	NTDC	CPP	Dental caries on pit and fissure surface	
K0251	any	NTDC	CPP	Dental caries on pit and fissure surface limited to enamel	
K0252	any	NTDC	CPP	Dental caries on pit and fissure surface penetrat into dentin	
K0253	any	NTDC	CPP	Dental caries on pit and fissure surface penetrat into pulp	
K026	any	NTDC	CPP	Dental caries on smooth surface	
K0261	any	NTDC	CPP	Dental caries on smooth surface limited to enamel	
K0262	any	NTDC	CPP	Dental caries on smooth surface penetrating into dentin	
K0263	any	NTDC	CPP	Dental caries on smooth surface penetrating into pulp	
K027	any	NTDC	CPP	Dental root caries	
K029	any	NTDC	CPP	Dental caries, unspecified	
K03	any	NTDC	CPP	Other diseases of hard tissues of teeth	
K030	any	NTDC	CPP	Excessive attrition of teeth	
K031	any	NTDC	CPP	Abrasion of teeth	
K032	any	NTDC	CPP	Erosion of teeth	
K033	any	NTDC		Pathological resorption of teeth	
K034	any	NTDC		Hypercementosis	
K035	any	NTDC		Ankylosis of teeth	
K036	any	NTDC	CPP	Deposits [accretions] on teeth	
K037	any	NTDC	CPP	Posteruptive color changes of dental hard tissues	
K038	any	NTDC	CPP	Other specified diseases of hard tissues of teeth	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
K0381	any	NTDC	CPP	Cracked tooth	
K0389	any	NTDC	CPP	Other specified diseases of hard tissues of teeth	
K039	any	NTDC	CPP	Disease of hard tissues of teeth, unspecified	
K04	any	NTDC	CPP	Diseases of pulp and periapical tissues	
K040	any	NTDC	CPP	Pulpitis	
K0401	any	NTDC	CPP	Reversible pulpitis	
K0402	any	NTDC		Irreversible pulpitis	
K041	any	NTDC		Necrosis of pulp	
K042	any	NTDC	CPP	Pulp degeneration	
K043	any	NTDC		Abnormal hard tissue formation in pulp	
K044	any	NTDC	CPP	Acute apical periodontitis of pulpal origin	
K045	any	NTDC	CPP	Chronic apical periodontitis	
K046	any	NTDC		Periapical abscess with sinus	
K047	any	NTDC		Periapical abscess without sinus	
K048	any	NTDC		Radicular cyst	
K049	any	NTDC		Other and unspecified diseases of pulp and periapical tissues	
K0490	any	NTDC		Unspecified diseases of pulp and periapical tissues	
K0499	any	NTDC		Other diseases of pulp and periapical tissues	
K05	any	NTDC	CPP	Gingivitis and periodontal diseases	
K050	any	NTDC	CPP	Acute gingivitis	
K0500	any	NTDC	CPP	Acute gingivitis, plaque induced	
K0501	any	NTDC	CPP	Acute gingivitis, non-plaque induced	
K051	any	NTDC	CPP	Chronic gingivitis	
K0510	any	NTDC	CPP	Chronic gingivitis, plaque induced	
K0511	any	NTDC	CPP	Chronic gingivitis, non-plaque induced	
K052	any	NTDC	CPP	Aggressive periodontitis	
K0520	any	NTDC	CPP	Aggressive periodontitis, unspecified	
K0521	any	NTDC	CPP	Aggressive periodontitis, localized	
K05211	any	NTDC	CPP	Aggressive periodontitis, localized, slight	
K05212	any	NTDC	CPP	Aggressive periodontitis, localized, moderate	
K05213	any	NTDC	CPP	Aggressive periodontitis, localized, severe	
K05219	any	NTDC	CPP	Aggressive periodontitis, localized, unspecified severity	
K0522	any	NTDC	CPP	Aggressive periodontitis, generalized	
K05221	any	NTDC	CPP	Aggressive periodontitis, generalized, slight	
K05222	any	NTDC	CPP	Aggressive periodontitis, generalized, moderate	
K05223	any	NTDC	CPP	Aggressive periodontitis, generalized, severe	
K05229	any	NTDC	CPP	Aggressive periodontitis, generalized, unspecified severity	
K053	any	NTDC	CPP	Chronic periodontitis	
K0530	any	NTDC	CPP	Chronic periodontitis, unspecified	
K0531	any	NTDC	CPP	Chronic periodontitis, localized	
K05311	any	NTDC	CPP	Chronic periodontitis, localized, slight	
K05312	any	NTDC	CPP	Chronic periodontitis, localized, moderate	
K05313	any	NTDC	CPP	Chronic periodontitis, localized, severe	
K05319	any	NTDC	CPP	Chronic periodontitis, localized, unspecified severity	
K0532	any	NTDC	CPP	Chronic periodontitis, generalized	
K05321	any	NTDC	CPP	Chronic periodontitis, generalized, slight	
K05322	any	NTDC	CPP	Chronic periodontitis, generalized, moderate	
K05323	any	NTDC	CPP	Chronic periodontitis, generalized, severe	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
K05329	any	NTDC	CPP	Chronic periodontitis, generalized, unspecified severity	
K054	any	NTDC	CPP	Periodontitis	
K0540	any	NTDC	CPP		
K055	any	NTDC	CPP	Other periodontal diseases	
K056	any	NTDC	CPP	Periodontal disease, unspecified	
K06	any	NTDC	CPP	Other disorders of gingiva and edentulous alveolar ridge	
K060	any	NTDC	CPP	Gingival recession	2018
K0601	any	NTDC	CPP	Gingival recession, localized	2018
K06010	any	NTDC	CPP	Localized gingival recession, unspecified	2018
K06011	any	NTDC	CPP	Localized gingival recession, minimal	2018
K06012	any	NTDC	CPP	Localized gingival recession, moderate	2018
K06013	any	NTDC	CPP	Localized gingival recession, severe	2018
K0602	any	NTDC	CPP	Gingival recession, generalized	2018
K06020	any	NTDC	CPP	Generalized gingival recession, unspecified	2018
K06021	any	NTDC	CPP	Generalized gingival recession, minimal	2018
K06022	any	NTDC	CPP	Generalized gingival recession, moderate	2018
K06023	any	NTDC	CPP	Generalized gingival recession, severe	2018
K061	any	NTDC	CPP	Gingival enlargement	
K062	any			Gingival & edentulous alveolar ridge lesions associated with trauma	
K063	any	NTDC		Horizontal alveolar bone loss	
K068	any	NTDC		Other specified disorders of gingiva and edentulous alveolar ridge	
K069	any	NTDC		Disorder of gingiva and edentulous alveolar ridge, unspecified	
K08	any	NTDC		Other disorders of teeth and supporting structures	
K080	any	NTDC		Exfoliation of teeth due to systemic causes	
K081	any	NTDC	CPP	Complete loss of teeth	
K0810	any	NTDC	CPP	Complete loss of teeth, unspecified cause	
K08101	any	NTDC	CPP	Complete loss of teeth, unspecified cause, class I	
K08102	any	NTDC	CPP	Complete loss of teeth, unspecified cause, class II	
K08103	any	NTDC	CPP	Complete loss of teeth, unspecified cause, class III	
K08104	any	NTDC	CPP	Complete loss of teeth, unspecified cause, class IV	
K08109	any	NTDC	CPP	Complete loss of teeth, unspecified cause, unspecified class	
K08111	any			Complete loss of teeth due to trauma, class I	
K08112	any			Complete loss of teeth due to trauma, class II	
K08113	any			Complete loss of teeth due to trauma, class III	
K08114	any			Complete loss of teeth due to trauma, class IV	
K08119	any			Complete loss of teeth due to trauma, unspecified class	
K0812	any	NTDC	CPP	Complete loss of teeth due to periodontal diseases	
K08121	any	NTDC	CPP	Complete loss of teeth due to periodontal disease, class I	
K08122	any	NTDC	CPP	Complete loss of teeth due to periodontal disease, class II	
K08123	any	NTDC	CPP	Complete loss of teeth due to periodontal disease, class III	
K08124	any	NTDC	CPP	Complete loss of teeth due to periodontal disease, class IV	
K08129	any	NTDC	CPP	Complete loss of teeth due to periodontal disease, unspecified class	
K0813	any	NTDC	CPP	Complete loss of teeth due to caries	
K08131	any	NTDC	CPP	Complete loss of teeth due to caries, class I	
K08132	any	NTDC	CPP	Complete loss of teeth due to caries, class II	
K08133	any	NTDC	CPP	Complete loss of teeth due to caries, class III	
K08134	any	NTDC	CPP	Complete loss of teeth due to caries, class IV	
K08139	any	NTDC	CPP	Complete loss of teeth due to caries, unspecified class	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
K0819	any	NTDC	CPP	Complete loss of teeth due to other specified cause	
K08191	any	NTDC	CPP	Complete loss of teeth due to other specified cause, class I	
K08192	any	NTDC	CPP	Complete loss of teeth due to other specified cause, class II	
K08193	any	NTDC	CPP	Complete loss of teeth due to other specified cause, class III	
K08194	any	NTDC	CPP	Complete loss of teeth due to other specified cause, class IV	
K08199	any	NTDC	CPP	Complete loss of teeth due to other specified cause, unspecified class	
K082	any	NTDC		Atrophy of edentulous alveolar ridge	
K0820	any	NTDC		Unspecified atrophy of edentulous alveolar ridge	
K0821	any	NTDC		Minimal atrophy of the mandible	
K0822	any	NTDC		Moderate atrophy of the mandible	
K0823	any	NTDC		Severe atrophy of the mandible	
K0824	any	NTDC		Minimal atrophy of maxilla	
K0825	any	NTDC		Moderate atrophy of the maxilla	
K0826	any	NTDC		Severe atrophy of the maxilla	
K083	any	NTDC		Retained dental root	
K084	any	NTDC	CPP	Partial loss of teeth	
K0840	any	NTDC	CPP	Partial loss of teeth, unspecified cause	
K08401	any	NTDC	CPP	Partial loss of teeth, unspecified, class I	
K08402	any	NTDC	CPP	Partial loss of teeth, unspecified, class II	
K08403	any	NTDC	CPP	Partial loss of teeth, unspecified, class II	
K08404	any	NTDC	CPP	Partial loss of teeth, unspecified, class IV	
K08409	any	NTDC	CPP	Partial loss of teeth, unspecified cause, unspecified class	
K08411	any			Partial loss of teeth due to trauma, class I	
K08412	any			Partial loss of teeth due to trauma, class II	
K08413	any			Partial loss of teeth due to trauma, class III	
K08414	any			Partial loss of teeth due to trauma, class IV	
K08419	any			Partial loss of teeth due to trauma, unspecified class	
K0842	any	NTDC	CPP	Partial loss of teeth due to periodontal diseases	
K08421	any	NTDC	CPP	Partial loss of teeth due to periodontal diseases, class I	
K08422	any	NTDC	CPP	Partial loss of teeth due to periodontal diseases, class II	
K08423	any	NTDC	CPP	Partial loss of teeth due to periodontal diseases, class III	
K08424	any	NTDC	CPP	Partial loss of teeth due to periodontal diseases, class IV	
K08429	any	NTDC	CPP	Partial loss of teeth due to periodontal disease, unspecified class	
K0843	any	NTDC	CPP	Partial loss of teeth due to caries	
K08431	any	NTDC	CPP	Partial loss of teeth due to caries, class I	
K08432	any	NTDC	CPP	Partial loss of teeth due to caries, class II	
K08433	any	NTDC	CPP	Partial loss of teeth due to caries, class II	
K08434	any	NTDC	CPP	Partial loss of teeth due to caries, class III	
K08439	any	NTDC	CPP	Partial loss of teeth due to caries, unspecified class	
K0849	any	NTDC	CPP	Partial loss of teeth due to other specified cause	
K08491	any	NTDC	CPP	Partial loss of teeth due to other specified cause, class I	
K08492	any	NTDC	CPP	Partial loss of teeth due to other specified cause, class II	
K08493	any	NTDC	CPP	Partial loss of teeth due to other specified cause, class III	
K08494	any	NTDC	CPP	Partial loss of teeth due to other specified cause, class IV	
K08499	any	NTDC	CPP	Partial loss of teeth due to other cause, unspecified class	
K0850	any	NTDC	CPP	Unsatisfactory restoration of tooth, unspecified	
K0851	any	NTDC	CPP	Open restoration margins of tooth	
K0852	any	NTDC	CPP	Unrepairable overhanging of dental restorative materials	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
K0853	any	NTDC	CPP	Fractured dental restorative material	
K08530	any	NTDC	CPP	Fractured dental restorative material without loss of material	
K08531	any	NTDC	CPP	Fractured dental restorative material with loss of material	
K08539	any	NTDC	CPP	Fracture dental restorative material, unspecified	
K0854	any	NTDC	CPP	Contour of existing restoration of tooth biologically incompatible with oral health	
K0855	any	NTDC	CPP	Allergy to existing dental restorative material	
K0856	any	NTDC	CPP	Poor aesthetic of existing restoration of tooth	
K0859	any	NTDC	CPP	Other unsatisfactory restoration of tooth	
K088	any	NTDC	CPP	Other specified disorders of teeth and supporting structures	
K0881	any			Primary occlusal trauma	
K0882	any			Secondary occlusal trauma	
K0889	any	NTDC	CPP	Other specified disorders of teeth and supporting structures	
K089	any	NTDC	CPP	Disorder of teeth and supporting structures, unspecified	
K09	any	NTDC		Cysts of oral region, not elsewhere classified	
K090	any	NTDC		Developmental odontogenic cysts	
K091	any	NTDC		Developmental (nonodontogenic) cysts of oral region	
K098	any	NTDC		Other cyst of oral region, not elsewhere classified	
K099	any	NTDC		Cyst of oral region, unspecified	
K11	any	NTDC		Diseases of salivary glands	
K110	any	NTDC		Atrophy of salivary gland	
K111	any	NTDC		Hypertrophy of salivary gland	
K112	any	NTDC		Sialoadenitis	
K1120	any	NTDC		Sialodenitis, unspecified	
K1121	any	NTDC		Acute sialoadenitis	
K1122	any	NTDC		Acute recurrent sialoadenitis	
K1123	any	NTDC		Chronic sialoadenitis	
K113	any	NTDC		Abscess of salivary gland	
K114	any	NTDC		Fistula of salivary gland	
K115	any	NTDC		Sialolithiasis	
K116	any	NTDC		Mucocele of salivary gland	
K117	any	NTDC		Disturbances of salivary secretion	
K118	any	NTDC		Other diseases of salivary glands	
K119	any	NTDC		Disease of salivary gland, unspecified	
K12	any	NTDC		Stomatitis and related lesions	
K120	any	NTDC		Recurrent oral aphthae	
K121	any	NTDC		Other forms of stomatitis	
K122	any	NTDC		Cellulitis and abscess of mouth	
K123	any	NTDC		Oral mucositis (ulcerative)	
K1230	any	NTDC		Oral mucositis (ulcerative), unspecified	
K1231	any	NTDC		Oral mucositis (ulcerative), due to antineoplastic therapy	
K1232	any	NTDC		Oral mucositis (ulcerative), due to other drugs	
K1233	any	NTDC		Oral mucositis (ulcerative), due to radiation	
K1239	any	NTDC		Other oral mucositis (ulcerative)	
K13	any	NTDC		Other diseases of lip and oral mucosa	
K130	any	NTDC		Disease of lips	
K131	any	NTDC		Cheek and lip biting	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
K132	any	NTDC		Leukoplakia and other disturbances of oral epithelium, including tongue	
K1321	any	NTDC		Leukoplakia and other disturbances of oral epithelium, including tongue	
K1322	any	NTDC		Minimal keratinized residual ridge mucosa	
K1323	any	NTDC		Excessive keratinized residual ridge mucosa	
K1324	any	NTDC		Leukokeratosis nicotina palati	
K1329	any	NTDC		Other disturbances of oral epithelium, including tongue	
K133	any	NTDC		Hairy leukoplakia	
K134	any	NTDC		Granuloma and granuloma-like lesions of oral mucosa	
K135	any	NTDC		Oral submucous fibrosis	
K136	any	NTDC		Irritative hyperplasia of oral mucosa	
K137	any	NTDC		Other and unspecified lesions of oral mucosa	
K1370	any	NTDC		Unspecified lesions of oral mucosa	
K1379	any	NTDC		Other lesions of oral mucosa	
K14	any	NTDC		Glossitis	
K140	any	NTDC		Glossitis	
K141	any	NTDC		Geographic tongue	
K142	any	NTDC		Median rhomboid glossitis	
K143	any	NTDC		Hypertrophy of tongue papillae	
K144	any	NTDC		Atrophy of tongue papillae	
K145	any	NTDC		Plicated tongue	
K146	any	NTDC		Glossodynia	
K148	any	NTDC		Other diseases of tongue	
K149	any	NTDC		Disease of tongue, unspecified	
M26	any	NTDC		Dentofacial anomalies [including malocclusion]	
M260	any	NTDC		Major anomalies of jaw size	
M2600	any	NTDC		Unspecified anomaly of jaw size	
M2601	any	NTDC		Maxillary hyperplasia	
M2602	any	NTDC		Maxillary hypoplasia	
M2603	any	NTDC		Mandibular hyperplasia	
M2604	any	NTDC		Mandibular hypoplasia	
M2605	any	NTDC		Macrogenia	
M2606	any	NTDC		Microgenia	
M2607	any	NTDC		Excessive tuberosity of jaw	
M2609	any	NTDC		Other specified anomalies of jaw size	
M261	any	NTDC		Anomalies of jaw-cranial base relationship	
M2610	any	NTDC		Unspecified anomaly of jaw-cranial base relationship	
M2611	any	NTDC		Maxillary asymmetry	
M2612	any	NTDC		Other jaw asymmetry	
M2619	any	NTDC		Other specified anomalies of jaw-cranial base relationship	
M262	any	NTDC		Anomalies of dental arch relationship	
M2620	any	NTDC		Unspecified anomaly of dental arch relationship	
M2621	any	NTDC		Malocclusion, Angle's class	
M26211	any	NTDC		Malocclusion, Angle's class I	
M26212	any	NTDC		Malocclusion, Angle's class II	
M26213	any	NTDC		Malocclusion, Angle's class III	
M26219	any	NTDC		Malocclusion, Angle's class unspecified	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
M2622	any	NTDC		Open occlusal relationship	
M26220	any	NTDC		Open anterior occlusal relationship	
M26221	any	NTDC		Open posterior occlusal relationship	
M2623	any	NTDC		Excessive horizontal overlap	
M2624	any	NTDC		Reverse articulation	
M2625	any	NTDC		Anomalies of interarch distance	
M2629	any	NTDC		Other anomalies of dental arch relationship	
M263	any	NTDC		Anomalies of tooth position of fully erupted tooth or teeth	
M2630	any	NTDC		Unspecified anomaly of tooth position of fully erupted tooth/teeth	
M2631	any	NTDC		Crowding of fully erupted teeth	
M2632	any	NTDC		Excessive spacing of fully erupted teeth	
M2633	any	NTDC		Horizontal displacement of fully erupted tooth or teeth	
M2634	any	NTDC		Vertical displacement of fully erupted tooth or teeth	
M2635	any	NTDC		Rotation of fully erupted tooth or teeth	
M2636	any	NTDC		Insufficient interocclusal distance of fully erupted teeth	
M2637	any	NTDC		Excessive interocclusal distance of fully erupted teeth	
M2639	any	NTDC		Other anomalies of tooth position of fully erupted tooth/teeth	
M264	any	NTDC		Malocclusion, unspecified	
M265	any	NTDC		Dentofacial functional abnormalities	
M2650	any	NTDC		Dentofacial function abnormalities, unspecified	
M2651	any	NTDC		Abnormal jaw closure	
M2652	any	NTDC		Limited mandibular range of motion	
M2653	any	NTDC		Deviation in opening and closing of the mandible	
M2654	any	NTDC		Insufficient anterior guidance	
M2655	any	NTDC		Centric occlusion maximum intercuspation discrepancy	
M2656	any	NTDC		Non-working side interference	
M2657	any	NTDC		Lack of posterior occlusal support	
M2659	any	NTDC		Other dentofacial functional abnormalities	
M266	any	NTDC		Temporomandibular joint disorders	
M2660	any	NTDC		Temporomandibular joint disorder, unspecified	
M26601	any	NTDC		Right temporomandibular joint disorder, unspecified	
M26602	any	NTDC		Left temporomandibular joint disorder, unspecified	
M26603	any	NTDC		Bilateral temporomandibular joint disorder, unspecified	
M26609	any	NTDC		Unspecified TMJ joint disorder, unspecified side	
M2661	any	NTDC		Adhesions and ankylosis of temporomandibular joint	
M26611	any	NTDC		Adhesions and ankylosis of right temporomandibular joint	
M26612	any	NTDC		Adhesions and ankylosis of left temporomandibular joint	
M26613	any	NTDC		Adhesions and ankylosis of bilateral temporomandibular joint	
M26619	any	NTDC		Adhesions and ankylosis of TMJ joint, unspecified side	
M2662	any	NTDC		Arthralgia of temporomandibular joint	
M26621	any	NTDC		Arthralgia of right temporomandibular joint	
M26622	any	NTDC		Arthralgia of left temporomandibular joint	
M26623	any	NTDC		Arthralgia of bilateral temporomandibular joint	
M26629	any	NTDC		Arthralgia of temporomandibular joint, unspecified side	
M2663	any	NTDC		Articular disc disorder of temporomandibular joint	
M26631	any	NTDC		Articular disc disorder of right temporomandibular joint	
M26632	any	NTDC		Articular disc disorder of left temporomandibular joint	
M26633	any	NTDC		Articular disc disorder of bilateral temporomandibular joint	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
M26639	any	NTDC		Articular disc disorder of TMJ joint, unspecified side	
M2664	any	NTDC		Arthritis of temporomandibular joint	2021
M26641	any	NTDC		Arthritis of right temporomandibular joint	2021
M26642	any	NTDC		Arthritis of left temporomandibular joint	2021
M26643	any	NTDC		Arthritis of bilateral temporomandibular joint	2021
M26649	any	NTDC		Arthritis of unspecified temporomandibular joint	2021
M2665	any	NTDC		Arthropathy of temporomandibular joint	2021
M26651	any	NTDC		Arthropathy of right temporomandibular joint	2021
M26652	any	NTDC		Arthropathy of left temporomandibular joint	2021
M26653	any	NTDC		Arthropathy of bilateral temporomandibular joint	2021
M26659	any	NTDC		Arthropathy of unspecified temporomandibular joint	2021
M2669	any	NTDC		Other specified disorders of temporomandibular joint	
M267	any	NTDC		Dental alveolar anomalies	
M2670	any	NTDC		Unspecified alveolar anomaly	
M2671	any	NTDC		Alveolar maxillary hyperplasia	
M2672	any	NTDC		Alveolar mandibular hyperplasia	
M2673	any	NTDC		Alveolar maxillary hypoplasia	
M2674	any	NTDC		Alveolar mandibular hypoplasia	
M2679	any	NTDC		Other specified alveolar anomalies	
M268	any	NTDC		Other dentofacial anomalies	
M2681	any	NTDC		Anterior soft tissue impingement	
M2682	any	NTDC		Posterior soft tissue impingement	
M2689	any	NTDC		Other dentofacial anomalies	
M269	any	NTDC		Dentofacial anomaly, unspecified	
M27	any	NTDC		Other diseases of jaws	
M270	any	NTDC		Developmental disorders of jaws	
M271	any	NTDC		Giant cell granuloma, central	
M272	any	NTDC		Inflammatory conditions of jaws	
M273	any	NTDC		Alveolitis of jaws	
M274	any	NTDC		Other and unspecified cysts of jaw	
M2740	any	NTDC		Unspecified cyst of jaw	
M2749	any	NTDC		Other cyst s of jaw	
M275	any	NTDC		Periradicular pathology associated with previous endodontic treatment	
M2751	any	NTDC	CPP	Perforation of root canal space due to endodontic treatment	
M2752	any	NTDC	CPP	Endodontic overfill	
M2753	any	NTDC	CPP	Endodontic underfill	
M2759	any	NTDC	CPP	Other periradicular pathology associated with preventive endodontic treatment	
M276	any	NTDC		Endosseous dental implant failure	
M2761	any	NTDC	CPP	Osseointegration failure of dental implant	
M2762	any	NTDC	CPP	Post-osseointegration of biological failure of dental implant	
M2763	any	NTDC	CPP	Post-osseointegration mechanical failure of dental implant	
M2769	any	NTDC	CPP	Other endosseous dental implant failure	
M278	any	NTDC		Other specified diseases of jaws	
M279	any	NTDC		Disease of jaws, unspecified	
M350C	any	NTDC	CPP	Sjogren syndrome with dental involvement	2022
M7911	any	NTDC		Myalgia of mastication muscle	2019

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
R682	any	NTDC		Dry mouth, unspecified	
R6884	any	NTDC	CPP	Jaw pain	
S014	any			Open wound of cheek and temporomandibular area	
S0140	any			Unspecified open wound of cheek and temporomandibular area	
S01401	any			Unspecified open wound of right cheek and temporomandibular area	
S01401A	any			Unspecified open wound of right cheek and temporomandibular area, initial encounter	
S01401D	any			Unspecified open wound of right cheek and temporomandibular area, subsequent encounter	
S01401S	any			Unspecified open wound of right cheek and temporomandibular area, sequela	
S01402	any			Unspecified open wound of left cheek and temporomandibular area	
S01402A	any			Unspecified open wound of left cheek and temporomandibular area, initial encounter	
S01402D	any			Unspecified open wound of left cheek and temporomandibular area, subsequent encounter	
S01402S	any			Unspecified open wound of left cheek and temporomandibular area, sequela	
S01409	any			Unspecified open wound of unspecified cheek and temporomandibular area	
S01409A	any			Unspecified open wound of unspecified cheek and temporomandibular area, initial encounter	
S01409D	any			Unspecified open wound of unspecified cheek and temporomandibular area, subsequent encounter	
S01409S	any			Unspecified open wound of unspecified cheek and temporomandibular area, sequela	
S0141	any			Laceration without foreign body of cheek and temporomandibular area	
S01411	any			Laceration without foreign body of right cheek and temporomandibular area	
S01411A	any			Laceration without foreign body of right cheek and temporomandibular area, initial encounter	
S01411D	any			Laceration without foreign body of right cheek and temporomandibular area, subsequent encounter	
S01411S	any			Laceration without foreign body of right cheek and temporomandibular area, sequela	
S01412	any			Laceration without foreign body of left cheek and temporomandibular area	
S01412A	any			Laceration without foreign body of left cheek and temporomandibular area, initial encounter	
S01412D	any			Laceration without foreign body of left cheek and temporomandibular area, subsequent encounter	
S01412S	any			Laceration without foreign body of left cheek and temporomandibular area, sequela	
S01419	any			Laceration without foreign body of unspecified cheek and temporomandibular area	
S01419A	any			Laceration without foreign body of unspecified cheek and temporomandibular area, initial encounter	
S01419D	any			Laceration without foreign body of unspecified cheek and temporomandibular area, subsequent encounter	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S01419S	any			Laceration without foreign body of unspecified cheek and temporomandibular area, sequela	
S0142	any			Laceration with foreign body of cheek and temporomandibular area	
S01421	any			Laceration with foreign body of right cheek and temporomandibular area	
S01421A	any			Laceration with foreign body of right cheek and temporomandibular area, initial encounter	
S01421D	any			Laceration with foreign body of right cheek and temporomandibular area, subsequent encounter	
S01421S	any			Laceration with foreign body of right cheek and temporomandibular area, sequela	
S01422	any			Laceration with foreign body of left cheek and temporomandibular area	
S01422A	any			Laceration with foreign body of left cheek and temporomandibular area, initial encounter	
S01422D	any			Laceration with foreign body of left cheek and temporomandibular area, subsequent encounter	
S01422S	any			Laceration with foreign body of left cheek and temporomandibular area, sequela	
S01429	any			Laceration with foreign body of unspecified cheek and temporomandibular area	
S01429A	any			Laceration with foreign body of unspecified cheek and temporomandibular area, initial encounter	
S01429D	any			Laceration with foreign body of unspecified cheek and temporomandibular area, subsequent encounter	
S01429S	any			Laceration with foreign body of unspecified cheek and temporomandibular area, sequela	
S0143	any			Puncture wound without foreign body of cheek and temporomandibular area	
S01431	any			Puncture wound without foreign body of right cheek and temporomandibular area	
S01431A	any			Puncture wound without foreign body of right cheek and temporomandibular area, initial encounter	
S01431D	any			Puncture wound without foreign body of right cheek and temporomandibular area, subsequent encounter	
S01431S	any			Puncture wound without foreign body of right cheek and temporomandibular area, sequela	
S01432	any			Puncture wound without foreign body of left cheek and temporomandibular area	
S01432A	any			Puncture wound without foreign body of left cheek and temporomandibular area, initial encounter	
S01432D	any			Puncture wound without foreign body of left cheek and temporomandibular area, subsequent encounter	
S01432S	any			Puncture wound without foreign body of left cheek and temporomandibular area, sequela	
S01439	any			Puncture wound without foreign body of unspecified cheek and temporomandibular area	
S01439A	any			Puncture wound without foreign body of unspecified cheek and temporomandibular area, initial encounter	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S01439D	any			Puncture wound without foreign body of unspecified cheek and temporomandibular area, subsequent encounter	
S01439S	any			Puncture wound without foreign body of unspecified cheek and temporomandibular area, sequela	
S0144	any			Puncture wound with foreign body of cheek and temporomandibular area	
S01441	any			Puncture wound with foreign body of right cheek and temporomandibular area	
S01441A	any			Puncture wound with foreign body of right cheek and temporomandibular area, initial encounter	
S01441D	any			Puncture wound with foreign body of right cheek and temporomandibular area, subsequent encounter	
S01441S	any			Puncture wound with foreign body of right cheek and temporomandibular area, sequela	
S01442	any			Puncture wound with foreign body of left cheek and temporomandibular area	
S01442A	any			Puncture wound with foreign body of left cheek and temporomandibular area, initial encounter	
S01442D	any			Puncture wound with foreign body of left cheek and temporomandibular area, subsequent encounter	
S01442S	any			Puncture wound with foreign body of left cheek and temporomandibular area, sequela	
S01449	any			Puncture wound with foreign body of unspecified cheek and temporomandibular area	
S01449A	any			Puncture wound with foreign body of unspecified cheek and temporomandibular area, initial encounter	
S01449D	any			Puncture wound with foreign body of unspecified cheek and temporomandibular area, subsequent encounter	
S01449S	any			Puncture wound with foreign body of unspecified cheek and temporomandibular area, sequela	
S0145	any			Open bite of cheek and temporomandibular area	
S01451	any			Open bite of right cheek and temporomandibular area	
S01451A	any			Open bite of right cheek and temporomandibular area, initial encounter	
S01451D	any			Open bite of right cheek and temporomandibular area, subsequent encounter	
S01451S	any			Open bite of right cheek and temporomandibular area, sequela	
S01452	any			Open bite of left cheek and temporomandibular area	
S01452A	any			Open bite of left cheek and temporomandibular area, initial encounter	
S01452D	any			Open bite of left cheek and temporomandibular area, subsequent encounter	
S01452S	any			Open bite of left cheek and temporomandibular area, sequela	
S01459	any			Open bite of unspecified cheek and temporomandibular area	
S01459A	any			Open bite of unspecified cheek and temporomandibular area, initial encounter	
S01459D	any			Open bite of unspecified cheek and temporomandibular area, subsequent encounter	
S01459S	any			Open bite of unspecified cheek and temporomandibular area, sequela	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S015	any			Open wound of lip and oral cavity	
S0150	any			Unspecified open wound of lip and oral cavity	
S01501	any			Unspecified open wound of lip	
S01501A	any			Unspecified open wound of lip, initial encounter	
S01501D	any			Unspecified open wound of lip, subsequent encounter	
S01501S	any			Unspecified open wound of lip, sequela	
S01502	any			Unspecified open wound of oral cavity	
S01502A	any			Unspecified open wound of oral cavity, initial encounter	
S01502D	any			Unspecified open wound of oral cavity, subsequent encounter	
S01502S	any			Unspecified open wound of oral cavity, sequela	
S0151	any			Laceration of lip and oral cavity without foreign body	
S01511	any			Laceration without foreign body of lip	
S01511A	any			Laceration without foreign body of lip, initial encounter	
S01511D	any			Laceration without foreign body of lip, subsequent encounter	
S01511S	any			Laceration without foreign body of lip, sequela	
S01512	any			Laceration without foreign body of oral cavity	
S01512A	any			Laceration without foreign body of oral cavity, initial encounter	
S01512D	any			Laceration without foreign body of oral cavity, subsequent encounter	
S01512S	any			Laceration without foreign body of oral cavity, sequela	
S0152	any			Laceration of lip and oral cavity with foreign body	
S01521	any			Laceration with foreign body of lip	
S01521A	any			Laceration with foreign body of lip, initial encounter	
S01521D	any			Laceration with foreign body of lip, subsequent encounter	
S01521S	any			Laceration with foreign body of lip, sequela	
S01522	any			Laceration with foreign body of oral cavity	
S01522A	any			Laceration with foreign body of oral cavity, initial encounter	
S01522D	any			Laceration with foreign body of oral cavity, subsequent encounter	
S01522S	any			Laceration with foreign body of oral cavity, sequela	
S0153	any			Puncture wound of lip and oral cavity without foreign body	
S01531	any			Puncture wound without foreign body of lip	
S01531A	any			Puncture wound without foreign body of lip, initial encounter	
S01531D	any			Puncture wound without foreign body of lip, subsequent encounter	
S01531S	any			Puncture wound without foreign body of lip, sequela	
S01532	any			Puncture wound without foreign body of oral cavity	
S01532A	any			Puncture wound without foreign body of oral cavity, initial encounter	
S01532D	any			Puncture wound without foreign body of oral cavity, subsequent encounter	
S01532S	any			Puncture wound without foreign body of oral cavity, sequela	
S0154	any			Puncture wound of lip and oral cavity with foreign body	
S01541	any			Puncture wound with foreign body of lip	
S01541A	any			Puncture wound with foreign body of lip, initial encounter	
S01541D	any			Puncture wound with foreign body of lip, subsequent encounter	
S01541S	any			Puncture wound with foreign body of lip, sequela	
S01542	any			Puncture wound with foreign body of oral cavity	
S01542A	any			Puncture wound with foreign body of oral cavity, initial encounter	
S01542D	any			Puncture wound with foreign body of oral cavity, subsequent encounter	
S01542S	any			Puncture wound with foreign body of oral cavity, sequela	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0155	any			Open bite of lip and oral cavity	
S01551	any			Open bite of lip	
S01551A	any			Open bite of lip, initial encounter	
S01551D	any			Open bite of lip, subsequent encounter	
S01551S	any			Open bite of lip, sequela	
S01552	any			Open bite of oral cavity	
S01552A	any			Open bite of oral cavity, initial encounter	
S01552D	any			Open bite of oral cavity, subsequent encounter	
S01552S	any			Open bite of oral cavity, sequela	
S018	any			Open wound of other parts of head	
S0180	any			Unspecified open wound of other part of head	
S0180XA	any			Unspecified open wound of other part of head, initial encounter	
S0180XD	any			Unspecified open wound of other part of head, subsequent encounter	
S0180XS	any			Unspecified open wound of other part of head, sequela	
S0181	any			Laceration without foreign body of other part of head	
S0181XA	any			Laceration without foreign body of other part of head, initial encounter	
S0181XD	any			Laceration without foreign body of other part of head, subsequent encounter	
S0181XS	any			Laceration without foreign body of other part of head, sequela	
S0182	any			Laceration with foreign body of other part of head	
S0182XA	any			Laceration with foreign body of other part of head, initial encounter	
S0182XD	any			Laceration with foreign body of other part of head, subsequent encounter	
S0182XS	any			Laceration with foreign body of other part of head, sequela	
S019	any			Open wound of unspecified part of head	
S0190	any			Unspecified open wound of unspecified part of head	
S0190XA	any			Unspecified open wound of unspecified part of head, initial encounter	
S0190XD	any			Unspecified open wound of unspecified part of head, subsequent encounter	
S0190XS	any			Unspecified open wound of unspecified part of head, sequela	
S0191	any			Laceration without foreign body of unspecified part of head	
S0191XA	any			Laceration without foreign body of unspecified part of head, initial encounter	
S0191XD	any			Laceration without foreign body of unspecified part of head, subsequent encounter	
S0191XS	any			Laceration without foreign body of unspecified part of head, sequela	
S0192	any			Laceration with foreign body of unspecified part of head	
S0192XA	any			Laceration with foreign body of unspecified part of head, initial encounter	
S0192XD	any			Laceration with foreign body of unspecified part of head, subsequent encounter	
S0192XS	any			Laceration with foreign body of unspecified part of head, sequela	
S0240C	any			Maxillary fracture, right side	2017
S0240CA	any			Maxillary fracture, right side, initial encounter for closed fracture	2017
S0240CB	any			Maxillary fracture, right side, initial encounter for open fracture	2017

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0240CD	any			Maxillary fracture, right side, subsequent encounter for fracture with routine healing	2017
S0240CG	any			Maxillary fracture, right side, subsequent encounter for fracture with delayed healing	2017
S0240CK	any			Maxillary fracture, right side, subsequent encounter for fracture with nonunion	2017
S0240CS	any			Maxillary fracture, right side, sequela	2017
S0240D	any			Maxillary fracture, left side	2017
S0240DA	any			Maxillary fracture, left side, initial encounter for closed fracture	2017
S0240DB	any			Maxillary fracture, left side, initial encounter for open fracture	2017
S0240DD	any			Maxillary fracture, left side, subsequent encounter for fracture with routine healing	2017
S0240DG	any			Maxillary fracture, left side, subsequent encounter for fracture with delayed healing	2017
S0240DK	any			Maxillary fracture, left side, subsequent encounter for fracture with nonunion	2017
S0240DS	any			Maxillary fracture, left side, sequela	2017
S02401	any			Maxillary fracture, unspecified	
S02401A	any			Maxillary fracture, unspecified, initial encounter for closed fracture	
S02401B	any			Maxillary fracture, unspecified, initial encounter for open fracture	
S02401D	any			Maxillary fracture, unspecified, subsequent encounter for fracture with routine healing	
S02401G	any			Maxillary fracture, unspecified, subsequent encounter for fracture with delayed healing	
S02401K	any			Maxillary fracture, unspecified, subsequent encounter for fracture with nonunion	
S02401S	any			Maxillary fracture, unspecified, sequela	
S0242	any			Fracture of alveolus of maxilla	
S0242XA	any			Fracture of alveolus of maxilla, initial encounter for closed fracture	
S0242XB	any			Fracture of alveolus of maxilla, initial encounter for open fracture	
S0242XD	any			Fracture of alveolus of maxilla, subsequent encounter for fracture with routine healing	
S0242XG	any			Fracture of alveolus of maxilla, subsequent encounter for fracture with delayed healing	
S0242XK	any			Fracture of alveolus of maxilla, subsequent encounter for fracture with nonunion	
S0242XS	any			Fracture of alveolus of maxilla, sequela	
S025	any			Fracture of tooth (traumatic)	
S025XXA	any			Fracture of tooth (traumatic), initial encounter for closed fracture	
S025XXB	any			Fracture of tooth (traumatic), initial encounter for open fracture	
S025XXD	any			Fracture of tooth (traumatic), subsequent encounter for fracture with routine healing	
S025XXG	any			Fracture of tooth (traumatic), subsequent encounter for fracture with delayed healing	
S025XXK	any			Fracture of tooth (traumatic), subsequent encounter for fracture with nonunion	
S025XXS	any			Fracture of tooth (traumatic), sequela	
S026	any			Fracture of mandible	
S0260	any			Fracture of mandible, unspecified	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S02600	any			Fracture of unspecified part of body of mandible	
S02600A	any			Fracture of unspecified part of body of mandible, initial encounter for closed fracture	
S02600B	any			Fracture of unspecified part of body of mandible, initial encounter for open fracture	
S02600D	any			Fracture of unspecified part of body of mandible, subsequent encounter for fracture with routine healing	
S02600G	any			Fracture of unspecified part of body of mandible, subsequent encounter for fracture with delayed healing	
S02600K	any			Fracture of unspecified part of body of mandible, subsequent encounter for fracture with nonunion	
S02600S	any			Fracture of unspecified part of body of mandible, sequela	
S02601	any			Fracture of unspecified part of body of right mandible	2017
S02601A	any			Fracture of unspecified part of body of right mandible, initial encounter for closed fracture	2017
S02601B	any			Fracture of unspecified part of body of right mandible, initial encounter for open fracture	2017
S02601D	any			Fracture of unspecified part of body of right mandible, subsequent encounter for fracture with routine healing	2017
S02601G	any			Fracture of unspecified part of body of right mandible, subsequent encounter for fracture with delayed healing	2017
S02601K	any			Fracture of unspecified part of body of right mandible, subsequent encounter for fracture with nonunion	2017
S02601S	any			Fracture of unspecified part of body of right mandible, sequela	2017
S02602	any			Fracture of unspecified part of body of left mandible	2017
S02602A	any			Fracture of unspecified part of body of left mandible, initial encounter for closed fracture	2017
S02602B	any			Fracture of unspecified part of body of left mandible, initial encounter for open fracture	2017
S02602D	any			Fracture of unspecified part of body of left mandible, subsequent encounter for fracture with routine healing	2017
S02602G	any			Fracture of unspecified part of body of left mandible, subsequent encounter for fracture with delayed healing	2017
S02602K	any			Fracture of unspecified part of body of left mandible, subsequent encounter for fracture with nonunion	2017
S02602S	any			Fracture of unspecified part of body of left mandible, sequela	2017
S02609	any			Fracture of mandible, unspecified	
S02609A	any			Fracture of mandible, unspecified, initial encounter for closed fracture	
S02609B	any			Fracture of mandible, unspecified, initial encounter for open fracture	
S02609D	any			Fracture of mandible, unspecified, subsequent encounter for fracture with routine healing	
S02609G	any			Fracture of mandible, unspecified, subsequent encounter for fracture with delayed healing	
S02609K	any			Fracture of mandible, unspecified, subsequent encounter for fracture with nonunion	
S02609S	any			Fracture of mandible, unspecified, sequela	
S0261	any			Fracture of condylar process of mandible	
S0261XA	any			Fracture of condylar process of mandible, initial encounter for closed fracture	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0261XB	any			Fracture of condylar process of mandible, initial encounter for open fracture	
S0261XD	any			Fracture of condylar process of mandible, subsequent encounter for fracture with routine healing	
S0261XG	any			Fracture of condylar process of mandible, subsequent encounter for fracture with delayed healing	
S0261XK	any			Fracture of condylar process of mandible, subsequent encounter for fracture with nonunion	
S0261XS	any			Fracture of condylar process of mandible, sequela	
S02610	any			Fracture of condylar process of mandible, unspecified side	2017
S02610A	any			Fracture of condylar process of mandible, unspecified side, initial encounter for closed fracture	2017
S02610B	any			Fracture of condylar process of mandible, unspecified side, initial encounter for open fracture	2017
S02610D	any			Fracture of condylar process of mandible, unspecified side, subsequent encounter for fracture with routine healing	2017
S02610G	any			Fracture of condylar process of mandible, unspecified side, subsequent encounter for fracture with delayed healing	2017
S02610K	any			Fracture of condylar process of mandible, unspecified side, subsequent encounter for fracture with nonunion	2017
S02610S	any			Fracture of condylar process of mandible, unspecified side, sequela	2017
S02611	any			Fracture of condylar process of right mandible	2017
S02611A	any			Fracture of condylar process of right mandible, initial encounter for closed fracture	2017
S02611B	any			Fracture of condylar process of right mandible, initial encounter for open fracture	2017
S02611D	any			Fracture of condylar process of right mandible, subsequent encounter for fracture with routine healing	2017
S02611G	any			Fracture of condylar process of right mandible, subsequent encounter for fracture with delayed healing	2017
S02611K	any			Fracture of condylar process of right mandible, subsequent encounter for fracture with nonunion	2017
S02611S	any			Fracture of condylar process of right mandible, sequela	2017
S02612	any			Fracture of condylar process of left mandible	2017
S02612A	any			Fracture of condylar process of left mandible, initial encounter for closed fracture	2017
S02612B	any			Fracture of condylar process of left mandible, initial encounter for open fracture	2017
S02612D	any			Fracture of condylar process of left mandible, subsequent encounter for fracture with routine healing	2017
S02612G	any			Fracture of condylar process of left mandible, subsequent encounter for fracture with delayed healing	2017
S02612K	any			Fracture of condylar process of left mandible, subsequent encounter for fracture with nonunion	2017
S02612S	any			Fracture of condylar process of left mandible, sequela	2017
S0262	any			Fracture of subcondylar process of mandible	
S0262XA	any			Fracture of subcondylar process of mandible, initial encounter for closed fracture	
S0262XB	any			Fracture of subcondylar process of mandible, initial encounter for open fracture	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0262XD	any			Fracture of subcondylar process of mandible, subsequent encounter for fracture with routine healing	
S0262XG	any			Fracture of subcondylar process of mandible, subsequent encounter for fracture with delayed healing	
S0262XK	any			Fracture of subcondylar process of mandible, subsequent encounter for fracture with nonunion	
S0262XS	any			Fracture of subcondylar process of mandible, sequela	
S02620	any			Fracture of subcondylar process of mandible, unspecified side	2017
S02620A	any			Fracture of subcondylar process of mandible, unspecified side, initial encounter for closed fracture	2017
S02620B	any			Fracture of subcondylar process of mandible, unspecified side, initial encounter for open fracture	2017
S02620D	any			Fracture of subcondylar process of mandible, unspecified side, subsequent encounter for fracture with routine healing	2017
S02620G	any			Fracture of subcondylar process of mandible, unspecified side, subsequent encounter for fracture with delayed healing	2017
S02620K	any			Fracture of subcondylar process of mandible, unspecified side, subsequent encounter for fracture with nonunion	2017
S02620S	any			Fracture of subcondylar process of mandible, unspecified side, sequela	2017
S02621	any			Fracture of subcondylar process of right mandible	2017
S02621A	any			Fracture of subcondylar process of right mandible, initial encounter for closed fracture	2017
S02621B	any			Fracture of subcondylar process of right mandible, initial encounter for open fracture	2017
S02621D	any			Fracture of subcondylar process of right mandible, subsequent encounter for fracture with routine healing	2017
S02621G	any			Fracture of subcondylar process of right mandible, subsequent encounter for fracture with delayed healing	2017
S02621K	any			Fracture of subcondylar process of right mandible, subsequent encounter for fracture with nonunion	2017
S02621S	any			Fracture of subcondylar process of right mandible, sequela	2017
S02622	any			Fracture of subcondylar process of left mandible	2017
S02622A	any			Fracture of subcondylar process of left mandible, initial encounter for closed fracture	2017
S02622B	any			Fracture of subcondylar process of left mandible, initial encounter for open fracture	2017
S02622D	any			Fracture of subcondylar process of left mandible, subsequent encounter for fracture with routine healing	2017
S02622G	any			Fracture of subcondylar process of left mandible, subsequent encounter for fracture with delayed healing	2017
S02622K	any			Fracture of subcondylar process of left mandible, subsequent encounter for fracture with nonunion	2017
S02622S	any			Fracture of subcondylar process of left mandible, sequela	2017
S0263	any			Fracture of coronoid process of mandible	
S0263XA	any			Fracture of coronoid process of mandible, initial encounter for closed fracture	
S0263XB	any			Fracture of coronoid process of mandible, initial encounter for open fracture	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0263XD	any			Fracture of coronoid process of mandible, subsequent encounter for fracture with routine healing	
S0263XG	any			Fracture of coronoid process of mandible, subsequent encounter for fracture with delayed healing	
S0263XK	any			Fracture of coronoid process of mandible, subsequent encounter for fracture with nonunion	
S0263XS	any			Fracture of coronoid process of mandible, sequela	
S02630	any			Fracture of coronoid process of mandible, unspecified side	2017
S02630A	any			Fracture of coronoid process of mandible, unspecified side, initial encounter for closed fracture	2017
S02630B	any			Fracture of coronoid process of mandible, unspecified side, initial encounter for open fracture	2017
S02630D	any			Fracture of coronoid process of mandible, unspecified side, subsequent encounter for fracture with routine healing	2017
S02630G	any			Fracture of coronoid process of mandible, unspecified side, subsequent encounter for fracture with delayed healing	2017
S02630K	any			Fracture of coronoid process of mandible, unspecified side, subsequent encounter for fracture with nonunion	2017
S02630S	any			Fracture of coronoid process of mandible, unspecified side, sequela	2017
S02631	any			Fracture of coronoid process of right mandible	2017
S02631A	any			Fracture of coronoid process of right mandible, initial encounter for closed fracture	2017
S02631B	any			Fracture of coronoid process of right mandible, initial encounter for open fracture	2017
S02631D	any			Fracture of coronoid process of right mandible, subsequent encounter for fracture with routine healing	2017
S02631G	any			Fracture of coronoid process of right mandible, subsequent encounter for fracture with delayed healing	2017
S02631K	any			Fracture of coronoid process of right mandible, subsequent encounter for fracture with nonunion	2017
S02631S	any			Fracture of coronoid process of right mandible, sequela	2017
S02632	any			Fracture of coronoid process of left mandible	2017
S02632A	any			Fracture of coronoid process of left mandible, initial encounter for closed fracture	2017
S02632B	any			Fracture of coronoid process of left mandible, initial encounter for open fracture	2017
S02632D	any			Fracture of coronoid process of left mandible, subsequent encounter for fracture with routine healing	2017
S02632G	any			Fracture of coronoid process of left mandible, subsequent encounter for fracture with delayed healing	2017
S02632K	any			Fracture of coronoid process of left mandible, subsequent encounter for fracture with nonunion	2017
S02632S	any			Fracture of coronoid process of left mandible, sequela	2017
S0264	any			Fracture of ramus of mandible	
S0264XA	any			Fracture of ramus of mandible, initial encounter for closed fracture	
S0264XB	any			Fracture of ramus of mandible, initial encounter for open fracture	
S0264XD	any			Fracture of ramus of mandible, subsequent encounter for fracture with routine healing	
S0264XG	any			Fracture of ramus of mandible, subsequent encounter for fracture with delayed healing	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0264XK	any			Fracture of ramus of mandible, subsequent encounter for fracture with nonunion	
S0264XS	any			Fracture of ramus of mandible, sequela	
S02640	any			Fracture of ramus of mandible, unspecified side	2017
S02640A	any			Fracture of ramus of mandible, unspecified side, initial encounter for closed fracture	2017
S02640B	any			Fracture of ramus of mandible, unspecified side, initial encounter for open fracture	2017
S02640D	any			Fracture of ramus of mandible, unspecified side, subsequent encounter for fracture with routine healing	2017
S02640G	any			Fracture of ramus of mandible, unspecified side, subsequent encounter for fracture with delayed healing	2017
S02640K	any			Fracture of ramus of mandible, unspecified side, subsequent encounter for fracture with nonunion	2017
S02640S	any			Fracture of ramus of mandible, unspecified side, sequela	2017
S02641	any			Fracture of ramus of right mandible	2017
S02641A	any			Fracture of ramus of right mandible, initial encounter for closed fracture	2017
S02641B	any			Fracture of ramus of right mandible, initial encounter for open fracture	2017
S02641D	any			Fracture of ramus of right mandible, subsequent encounter for fracture with routine healing	2017
S02641G	any			Fracture of ramus of right mandible, subsequent encounter for fracture with delayed healing	2017
S02641K	any			Fracture of ramus of right mandible, subsequent encounter for fracture with nonunion	2017
S02641S	any			Fracture of ramus of right mandible, sequela	2017
S02642	any			Fracture of ramus of left mandible	2017
S02642A	any			Fracture of ramus of left mandible, initial encounter for closed fracture	2017
S02642B	any			Fracture of ramus of left mandible, initial encounter for open fracture	2017
S02642D	any			Fracture of ramus of left mandible, subsequent encounter for fracture with routine healing	2017
S02642G	any			Fracture of ramus of left mandible, subsequent encounter for fracture with delayed healing	2017
S02642K	any			Fracture of ramus of left mandible, subsequent encounter for fracture with nonunion	2017
S02642S	any			Fracture of ramus of left mandible, sequela	2017
S0265	any			Fracture of angle of mandible	
S0265XA	any			Fracture of angle of mandible, initial encounter for closed fracture	
S0265XB	any			Fracture of angle of mandible, initial encounter for open fracture	
S0265XD	any			Fracture of angle of mandible, subsequent encounter for fracture with routine healing	
S0265XG	any			Fracture of angle of mandible, subsequent encounter for fracture with delayed healing	
S0265XK	any			Fracture of angle of mandible, subsequent encounter for fracture with nonunion	
S0265XS	any			Fracture of angle of mandible, sequela	
S02650	any			Fracture of angle of mandible, unspecified side	2017

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S02650A	any			Fracture of angle of mandible, unspecified side, initial encounter for closed fracture	2017
S02650B	any			Fracture of angle of mandible, unspecified side, initial encounter for open fracture	2017
S02650D	any			Fracture of angle of mandible, unspecified side, subsequent encounter for fracture with routine healing	2017
S02650G	any			Fracture of angle of mandible, unspecified side, subsequent encounter for fracture with delayed healing	2017
S02650K	any			Fracture of angle of mandible, unspecified side, subsequent encounter for fracture with nonunion	2017
S02650S	any			Fracture of angle of mandible, unspecified side, sequela	2017
S02651	any			Fracture of angle of right mandible	2017
S02651A	any			Fracture of angle of right mandible, initial encounter for closed fracture	2017
S02651B	any			Fracture of angle of right mandible, initial encounter for open fracture	2017
S02651D	any			Fracture of angle of right mandible, subsequent encounter for fracture with routine healing	2017
S02651G	any			Fracture of angle of right mandible, subsequent encounter for fracture with delayed healing	2017
S02651K	any			Fracture of angle of right mandible, subsequent encounter for fracture with nonunion	2017
S02651S	any			Fracture of angle of right mandible, sequela	2017
S02652	any			Fracture of angle of left mandible	2017
S02652A	any			Fracture of angle of left mandible, initial encounter for closed fracture	2017
S02652B	any			Fracture of angle of left mandible, initial encounter for open fracture	2017
S02652D	any			Fracture of angle of left mandible, subsequent encounter for fracture with routine healing	2017
S02652G	any			Fracture of angle of left mandible, subsequent encounter for fracture with delayed healing	2017
S02652K	any			Fracture of angle of left mandible, subsequent encounter for fracture with nonunion	2017
S02652S	any			Fracture of angle of left mandible, sequela	2017
S0266	any			Fracture of symphysis of mandible	
S0266XA	any			Fracture of symphysis of mandible, initial encounter for closed fracture	
S0266XB	any			Fracture of symphysis of mandible, initial encounter for open fracture	
S0266XD	any			Fracture of symphysis of mandible, subsequent encounter for fracture with routine healing	
S0266XG	any			Fracture of symphysis of mandible, subsequent encounter for fracture with delayed healing	
S0266XK	any			Fracture of symphysis of mandible, subsequent encounter for fracture with nonunion	
S0266XS	any			Fracture of symphysis of mandible, sequela	
S0267	any			Fracture of alveolus of mandible	
S0267XA	any			Fracture of alveolus of mandible, initial encounter for closed fracture	
S0267XB	any			Fracture of alveolus of mandible, initial encounter for open fracture	
S0267XD	any			Fracture of alveolus of mandible, subsequent encounter for fracture with routine healing	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0267XG	any			Fracture of alveolus of mandible, subsequent encounter for fracture with delayed healing	
S0267XK	any			Fracture of alveolus of mandible, subsequent encounter for fracture with nonunion	
S0267XS	any			Fracture of alveolus of mandible, sequela	
S02670	any			Fracture of alveolus of mandible, unspecified side	2017
S02670A	any			Fracture of alveolus of mandible, unspecified side, initial encounter for closed fracture	2017
S02670B	any			Fracture of alveolus of mandible, unspecified side, initial encounter for open fracture	2017
S02670D	any			Fracture of alveolus of mandible, unspecified side, subsequent encounter for fracture with routine healing	2017
S02670G	any			Fracture of alveolus of mandible, unspecified side, subsequent encounter for fracture with delayed healing	2017
S02670K	any			Fracture of alveolus of mandible, unspecified side, subsequent encounter for fracture with nonunion	2017
S02670S	any			Fracture of alveolus of mandible, unspecified side, sequela	2017
S02671	any			Fracture of alveolus of right mandible	2017
S02671A	any			Fracture of alveolus of right mandible, initial encounter for closed fracture	2017
S02671B	any			Fracture of alveolus of right mandible, initial encounter for open fracture	2017
S02671D	any			Fracture of alveolus of right mandible, subsequent encounter for fracture with routine healing	2017
S02671G	any			Fracture of alveolus of right mandible, subsequent encounter for fracture with delayed healing	2017
S02671K	any			Fracture of alveolus of right mandible, subsequent encounter for fracture with nonunion	2017
S02671S	any			Fracture of alveolus of right mandible, sequela	2017
S02672	any			Fracture of alveolus of left mandible	2017
S02672A	any			Fracture of alveolus of left mandible, initial encounter for closed fracture	2017
S02672B	any			Fracture of alveolus of left mandible, initial encounter for open fracture	2017
S02672D	any			Fracture of alveolus of left mandible, subsequent encounter for fracture with routine healing	2017
S02672G	any			Fracture of alveolus of left mandible, subsequent encounter for fracture with delayed healing	2017
S02672K	any			Fracture of alveolus of left mandible, subsequent encounter for fracture with nonunion	2017
S02672S	any			Fracture of alveolus of left mandible, sequela	2017
S0269	any			Fracture of mandible of other specified site	
S0269XA	any			Fracture of mandible of other specified site, initial encounter for closed fracture	
S0269XB	any			Fracture of mandible of other specified site, initial encounter for open fracture	
S0269XD	any			Fracture of mandible of other specified site, subsequent encounter for fracture with routine healing	
S0269XG	any			Fracture of mandible of other specified site, subsequent encounter for fracture with delayed healing	

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0269XK	any			Fracture of mandible of other specified site, subsequent encounter for fracture with nonunion	
S0269XS	any			Fracture of mandible of other specified site, sequela	
S030	any			Dislocation of jaw	
S030XXA	any			Dislocation of jaw, initial encounter	
S030XXD	any			Dislocation of jaw, subsequent encounter	
S030XXS	any			Dislocation of jaw, sequela	
S0300	any			Dislocation of jaw, unspecified side	2017
S0300XA	any			Dislocation of jaw, unspecified side, initial encounter	2017
S0300XD	any			Dislocation of jaw, unspecified side, subsequent encounter	2017
S0300XS	any			Dislocation of jaw, unspecified side, sequela	2017
S0301	any			Dislocation of jaw, right side	2017
S0301XA	any			Dislocation of jaw, right side, initial encounter	2017
S0301XD	any			Dislocation of jaw, right side, subsequent encounter	2017
S0301XS	any			Dislocation of jaw, right side, sequela	2017
S0302	any			Dislocation of jaw, left side	2017
S0302XA	any			Dislocation of jaw, left side, initial encounter	2017
S0302XD	any			Dislocation of jaw, left side, subsequent encounter	2017
S0302XS	any			Dislocation of jaw, left side, sequela	2017
S0303	any			Dislocation of jaw, bilateral	2017
S0303XA	any			Dislocation of jaw, bilateral, initial encounter	2017
S0303XD	any			Dislocation of jaw, bilateral, subsequent encounter	2017
S0303XS	any			Dislocation of jaw, bilateral, sequela	2017
S032	any			Dislocation of tooth	
S032XXA	any			Dislocation of tooth, initial encounter	
S032XXD	any			Dislocation of tooth, subsequent encounter	
S032XXS	any			Dislocation of tooth, sequela	
S034	any			Sprain of jaw	
S034XXA	any			Sprain of jaw, initial encounter	
S034XXD	any			Sprain of jaw, subsequent encounter	
S034XXS	any			Sprain of jaw, sequela	
S0340	any			Sprain of jaw, unspecified side	2017
S0340XA	any			Sprain of jaw, unspecified side, initial encounter	2017
S0340XD	any			Sprain of jaw, unspecified side, subsequent encounter	2017
S0340XS	any			Sprain of jaw, unspecified side, sequela	2017
S0341	any			Sprain of jaw, right side	2017
S0341XA	any			Sprain of jaw, right side, initial encounter	2017
S0341XD	any			Sprain of jaw, right side, subsequent encounter	2017
S0341XS	any			Sprain of jaw, right side, sequela	2017
S0342	any			Sprain of jaw, left side	2017
S0342XA	any			Sprain of jaw, left side, initial encounter	2017
S0342XD	any			Sprain of jaw, left side, subsequent encounter	2017
S0342XS	any			Sprain of jaw, left side, sequela	2017
S0343	any			Sprain of jaw, bilateral	2017
S0343XA	any			Sprain of jaw, bilateral, initial encounter	2017
S0343XD	any			Sprain of jaw, bilateral, subsequent encounter	2017
S0343XS	any			Sprain of jaw, bilateral, sequela	2017
S0993	any			Unspecified injury of face	2016

ICD- 10 Code	Any Oral Code	NTDC	CPP	ICD-10 Code Description	Post 2015 Update (Year)
S0993XA	any			Unspecified injury of face, initial encounter	2016
S0993XD	any			Unspecified injury of face, subsequent encounter	2016
S0993XS	any			Unspecified injury of face, sequela	2016
Z012	any	NTDC	CPP	Encounter for dental examination and cleaning	
Z0120	any	NTDC	CPP	Encounter for dental examination and cleaning without abnormal findings	
Z0121	any	NTDC	CPP	Encounter for dental examination and cleaning with abnormal findings	
Z463	any	NTDC	CPP	Encounter for fitting and adjustment of dental prosthetic device	
Z464	any	NTDC	CPP	Encounter for fitting and adjustment of orthodontic device	

APPENDIX 2

OPTIONAL FACTORS/ANALYSES THAT MAY BE INCLUDED IN AN EXPANDED ED-NTDC SURVEILLANCE SYSTEM

Optional Indicators

1. ED visit for CPP based on ***first listed*** diagnosis
2. ED visit for CPP based on ***any listed*** diagnosis
3. ED visit for CPP based on ***first listed reason for visit***
4. ED visit for CPP based on ***any listed reason for visit***
5. ED visit for CPP based on ***any listed diagnosis and/or any listed reason for visit***
6. ED visit for any oral condition based on ***first listed*** diagnosis
7. ED visit for any oral condition based on ***any listed*** diagnosis
8. ED visit for any oral condition based on ***first listed reason for visit***
9. ED visit for any oral condition based on ***any listed reason for visit***
10. ED visit for any oral condition based on ***any listed diagnosis and/or any listed reason for visit***

Optional Indicator	SEDD Data Element, ICD-9	SEDD Data Element, ICD-10	Comments/Notes
1. CPP 1 st diagnosis	DX1	I10_DX1	Include 1 st listed diagnosis only
2. CPP any diagnosis	DXn	I10_DXn	Include all listed diagnoses
3. CPP 1 st reason visit	DX_Visit_Reason1	I10_Visit_Reason1	Include 1 st listed reason only
4. CPP any reason visit	DX_Visit_Reasonn	I10_Visit_Reasonn	Include all listed reasons
5. CPP any diagnosis/visit	DXn & DX_Visit_Reasonn	I10_DXn & I10_Visit_Reasonn	Include all listed diagnoses & reasons
6. Any oral 1 st diagnosis	DX1	I10_DX1	Include 1 st listed diagnosis only
7. Any oral any diagnosis	DXn	I10_DXn	Include all listed diagnoses
8. Any oral 1 st reason visit	DX_Visit_Reason1	I10_Visit_Reason1	Include 1 st listed reason only
9. Any oral any reason visit	DX_Visit_Reasonn	I10_Visit_Reasonn	Include all listed reasons
10. Any oral any diagnosis/visit	DXn & DX_Visit_Reasonn	I10_DXn & I10_Visit_Reasonn	Include all listed diagnoses & reasons

Optional Stratification Factors and Analyses

Factors/Analyses	SEDD Data Element Name	Notes/Comments
Sex	FEMALE	
Marital status	MARITALSTATUSUB04	
Geographic location	ZIP or ZIP3	Patient zip code can be used to define geographic locations
Homelessness	Homeless	Not available for all states.
Weekend admission	AWEEKEND	
Income	ZIPINC_QRTL	ZIPINC_QRTL provides a quartile classification of the estimated median household income of residents in the patient's ZIP Code. The quartiles are identified by values of 1 to 4, indicating the poorest to wealthiest populations. These values are derived from ZIP Code-demographic data obtained from Claritas. Because these estimates are updated annually, the value ranges for the ZIPINC_QRTL categories vary by year.
Revisit by same patient	VisitLink & DaysToEvent	The VisitLink data element is one of two data elements that are supplemental information created for HCUP States for which there are encrypted person identifiers. The visit linkage variable (VisitLink) can be used in tandem with the timing variable (DaysToEvent) to study multiple hospital visits for the same patient across hospitals and time while adhering to strict privacy regulations. Not available for all states.
Trends over time		Generate indicators for multiple years to determine if ED visits due to NTDC have increased, decreased or remained the same.

APPENDIX 3 SAMPLE SAS CODE

General Information

To assist states with the process of generating the ED-NTDC indicators, ASTDD is providing sample SAS code. If you are using SPSS or Stata you will need to modify the code accordingly. **IMPORTANT: All states should review and revise the sample code to meet their individual needs.** States may have multiple SEDD files for a given year, but the data needed for the recommended ED-NTDC indicators are in the core file. Following are instructions on how to load the core file into your statistical package.

- Go to the HCUP website: <https://www.hcup-us.ahrq.gov/db/state/sedddbdocumentation.jsp>
- Scroll down to “File Specifications and Load Programs”. Click on the load program link for the statistical software package you will be using (SAS, SPSS, Stata). This example uses SAS.
 - Select the state and year you want to download
 - For the database option select SEDD
 - Click “Find”
 - A set of load programs for your state and year will appear at the bottom of the page
 - Select “Core SAS load program” and save to your hard drive
- After saving the load program, insert the correct file address and name for your state “core.asc” file in the code line at the beginning of the Data Step
- Run the load program and the core.asc file will be loaded into SAS

```
*****  
* Data Step *  
*****  
DATA AZ_SEDDOC_2014_CORE;  
INFILE 'AZ_SEDD_2014_CORE.ASC' FIRSTOBS=3 LRECL = 1006;  
*** Variable attribute ***  
ATTRIB  
AGE LENGTH=3  
LABEL="Age in years at admission"
```

Sample SAS Code

NOTE: Before using this code you should change the “set” file name to match the name and location of your data file. **All states should review and revise the sample code to meet their individual needs.**

Coding for recommended indicator #1, ED visit for NTDC based on **first listed diagnosis. This coding is for **pre-2015** data sets with ICD-9 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included.*

```
data StateCore; set StateCore;  
NTDC_dx1=0; *set variable to 0 and then change to 1 if first DX variable has an NTDC code;  
if DX1 in ('101', '5200', '5201', '5202', '5203', '5204', '5205', '5206', '5207', '5208', '5209', '52100', '52101', '52102', '52103',  
'52104', '52105', '52106', '52107', '52108', '52109', '52110', '52111', '52112', '52113', '52114', '52115', '52120', '52121',  
'52122', '52123', '52124', '52125', '52130', '52131', '52132', '52133', '52134', '52135', '52140', '52141', '52142', '52149',  
'5215', '5216', '5217', '52181', '52189', '5219', '5220', '5221', '5222', '5223', '5224', '5225', '5226', '5227', '5228', '5229',  
'52300', '52301', '52310', '52311', '52320', '52321', '52322', '52323', '52324', '52325', '52330', '52331', '52332', '52333',  
'52340', '52341', '52342', '5235', '5236', '5238', '5239', '52400', '52401', '52402', '52403', '52404', '52405', '52406', '52407',  
'52409', '52410', '52411', '52412', '52419', '52420', '52421', '52422', '52423', '52424', '52425', '52426', '52427', '52428',  
'52429', '52430', '52431', '52432', '52433', '52434', '52435', '52436', '52437', '52439', '5244', '52450', '52451', '52452',  
'52453', '52454', '52455', '52456', '52457', '52459', '52460', '52461', '52462', '52463', '52464', '52469', '52470', '52471',  
'52472', '52473', '52474', '52475', '52476', '52479', '52481', '52482', '52489', '5249', '5250', '52510', '52512', '52513',  
'52519', '52520', '52521', '52522', '52523', '52524', '52525', '52526', '5253', '52540', '52541', '52542', '52543', '52544',  
'52550', '52551', '52552', '52553', '52554', '52560', '52561', '52562', '52563', '52564', '52565', '52566', '52567', '52569',  
'52571', '52572', '52573', '52579', '5258', '5259', '5260', '5261', '5262', '5263', '5264', '5265', '52661', '52662', '52663',  
'52669', '52681', '52689', '5269', '5270', '5271', '5272', '5273', '5274', '5275', '5276', '5277', '5278', '5279', '52800', '52801',  
'52802', '52809', '5281', '5282', '5283', '5284', '5285', '5286', '52871', '52872', '52879', '5288', '5289', '5290', '5291', '5292',  
'5293', '5294', '5295', '5296', '5298', '5299', '78492', 'V523', 'V534', 'V585', 'V722', 'V723')  
then NTDC_dx1=1;  
run;
```

Coding for recommended indicator #1, ED visit for NTDC based on **first listed diagnosis. This coding is for **post-2015** data sets with ICD-10 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included.*

```
data StateCore; set StateCore;
NTDC_dx1=0; *set variable to 0 and then change to 1 if first I10_DX variable has an NTDC code;
If I10_DX1 in ('A690', 'A691', 'B002', 'B084', 'B0861', 'B370', 'B3783', 'K00', 'K000', 'K001', 'K002', 'K003', 'K004', 'K005',
'K006', 'K007', 'K008', 'K009', 'K01', 'K010', 'K011', 'K02', 'K023', 'K025', 'K0251', 'K0252', 'K0253', 'K026', 'K0261', 'K0262',
'K0263', 'K027', 'K029', 'K03', 'K030', 'K031', 'K032', 'K033', 'K034', 'K035', 'K036', 'K037', 'K038', 'K0381', 'K0389', 'K039',
'K04', 'K040', 'K0401', 'K0402', 'K041', 'K042', 'K043', 'K044', 'K045', 'K046', 'K047', 'K048', 'K049', 'K0490', 'K0499', 'K05',
'K050', 'K0500', 'K0501', 'K051', 'K0510', 'K0511', 'K052', 'K0520', 'K0521', 'K05211', 'K05212', 'K05213', 'K05219', 'K0522',
'K05221', 'K05222', 'K05223', 'K05229', 'K053', 'K0530', 'K0531', 'K05311', 'K05312', 'K05313', 'K05319', 'K0532', 'K05321',
'K05322', 'K05323', 'K05329', 'K054', 'K0540', 'K055', 'K056', 'K06', 'K060', 'K0601', 'K06010', 'K06011', 'K06012', 'K06013',
'K0602', 'K06020', 'K06021', 'K06022', 'K06023', 'K061', 'K063', 'K068', 'K069', 'K08', 'K080', 'K081', 'K0810', 'K08101',
'K08102', 'K08103', 'K08104', 'K08109', 'K0812', 'K08121', 'K08122', 'K08123', 'K08124', 'K08129', 'K0813', 'K08131',
'K08132', 'K08133', 'K08134', 'K08139', 'K0819', 'K08191', 'K08192', 'K08193', 'K08194', 'K08199', 'K082', 'K0820', 'K0821',
'K0822', 'K0823', 'K0824', 'K0825', 'K0826', 'K083', 'K084', 'K0840', 'K08401', 'K08402', 'K08403', 'K08404', 'K08409',
'K0842', 'K08421', 'K08422', 'K08423', 'K08424', 'K08429', 'K0843', 'K08431', 'K08432', 'K08433', 'K08434', 'K08439',
'K0849', 'K08491', 'K08492', 'K08493', 'K08494', 'K08499', 'K0850', 'K0851', 'K0852', 'K0853', 'K08530', 'K08531', 'K08539',
'K0854', 'K0855', 'K0856', 'K0859', 'K088', 'K0889', 'K089', 'K09', 'K090', 'K091', 'K098', 'K099', 'K11', 'K110', 'K111', 'K112',
'K1120', 'K1121', 'K1122', 'K1123', 'K113', 'K114', 'K115', 'K116', 'K117', 'K118', 'K119', 'K12', 'K120', 'K121', 'K122', 'K123',
'K1230', 'K1231', 'K1232', 'K1233', 'K1239', 'K13', 'K130', 'K131', 'K132', 'K1321', 'K1322', 'K1323', 'K1324', 'K1329', 'K133',
'K134', 'K135', 'K136', 'K137', 'K1370', 'K1379', 'K14', 'K140', 'K141', 'K142', 'K143', 'K144', 'K145', 'K146', 'K148', 'K149',
'M26', 'M260', 'M2600', 'M2601', 'M2602', 'M2603', 'M2604', 'M2605', 'M2606', 'M2607', 'M2609', 'M261', 'M2610',
'M2611', 'M2612', 'M2619', 'M262', 'M2620', 'M2621', 'M26211', 'M26212', 'M26213', 'M26219', 'M2622', 'M26220',
'M26221', 'M2623', 'M2624', 'M2625', 'M2629', 'M263', 'M2630', 'M2631', 'M2632', 'M2633', 'M2634', 'M2635', 'M2636',
'M2637', 'M2639', 'M264', 'M265', 'M2650', 'M2651', 'M2652', 'M2653', 'M2654', 'M2655', 'M2656', 'M2657', 'M2659',
'M266', 'M2660', 'M26601', 'M26602', 'M26603', 'M26609', 'M2661', 'M26611', 'M26612', 'M26613', 'M26619', 'M2662',
'M26621', 'M26622', 'M26623', 'M26629', 'M2663', 'M26631', 'M26632', 'M26633', 'M26639', 'M2664', 'M26641',
'M26642', 'M26643', 'M26649', 'M2665', 'M26651', 'M26652', 'M26653', 'M26659', 'M2669', 'M267', 'M2670', 'M2671',
'M2672', 'M2673', 'M2674', 'M2679', 'M268', 'M2681', 'M2682', 'M2689', 'M269', 'M27', 'M270', 'M271', 'M272', 'M273',
'M274', 'M2740', 'M2749', 'M275', 'M2751', 'M2752', 'M2753', 'M2759', 'M276', 'M2761', 'M2762', 'M2763', 'M2769',
'M278', 'M279', 'M350C', 'M7911', 'R682', 'R6884', 'Z012', 'Z0120', 'Z0121', 'Z463', 'Z464')
then NTDC_dx1=1;
run;
```

Coding for recommended indicator #2, ED visit for NTDC based on **any listed diagnosis. This coding is for **pre-2015** data sets with ICD-9 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included. NOTE: SEDD has variables for up to 25 diagnoses.*

```
data StateCore; set StateCore;
array DX{25} DX1--DX25;
NTDC_dx_any=0; *set variable to 0 and then change to 1 if any DX variables have an NTDC code;
Do i=1 to 25;
if DX{i} in (insert ICD-9 codes listed for recommended indicator #1)
then NTDC_dx_any=1;
end;
run;
```

Coding for recommended indicator #2, ED visit for NTDC based on **any listed diagnosis. This coding is for **post-2015** data sets with ICD-10 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included. NOTE: SEDD has variables for up to 25 diagnoses.*

```
data StateCore; set StateCore;
array DX{25} I10_DX1—I10_DX25;
NTDC_dx_any=0; *set variable to 0 and then change to 1 if any I10_DX variables have an NTDC code;
Do i=1 to 25;
if DX{i} in (insert ICD-10 codes listed for recommended indicator #1)
then NTDC_dx_any=1;
end; run;
```

Coding for recommended indicator #3, ED visit for NTDC based on **first listed reason for visit. This coding is for **pre-2015** data sets with ICD-9 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included.*

```
data StateCore; set StateCore;
NTDC_RsnVis1=0;
If DX_Visit_Reason1 in (insert ICD-9 codes listed for recommended indicator #1)
then NTDC_RsnVis1=1;
run;
```

Coding for recommended indicator #3, ED visit for NTDC based on **first listed reason for visit. This coding is for **post-2015** data sets with ICD-10 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included.*

```
data StateCore; set StateCore;
NTDC_RsnVis1=0;
If I10_Visit_Reason1 in (insert ICD-10 codes listed for recommended indicator #1)
then NTDC_RsnVis1=1;
run;
```

Coding for recommended indicator #4, ED visit for NTDC based on **any listed reason for visit. This coding is for **pre-2015** data sets with ICD-9 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included. NOTE: SEDD has variables for up to 3 reasons for visit.*

```
data StateCore; set StateCore;
array rsn{3} DX_Visit_Reason1--DX_Visit_Reason3;
NTDC_RsnVis_any=0; *set variable to 0 and then change to 1 if any DX_Visit_ReasonN variables have an NTDC code;
Do i=1 to 3;
if rsn{i} in (insert ICD-9 codes listed for recommended indicator #1)
then NTDC_RsnVis_any=1;
end;
run;
```

Coding for recommended indicator #4, ED visit for NTDC based on **any listed reason for visit. This coding is for **post-2015** data sets with ICD-10 diagnostic codes. For 2015 datasets, both ICD-9 and ICD-10 codes should be included. NOTE: SEDD has variables for up to 3 reasons for visit.*

```
data StateCore; set StateCore;
array rsn{3} I10_Visit_Reason1—I10_Visit_Reason3;
NTDC_RsnVis_any=0; *set variable to 0 and then change to 1 if any I10_Visit_ReasonN variables have an NTDC code;
Do i=1 to 3;
if rsn{i} in (insert ICD-10 codes listed for recommended indicator #1)
then NTDC_RsnVis_any=1;
end;
run;
```

**Coding for recommended indicator #5, ED visit for NTDC based on any listed diagnosis and/or any listed reason for visit.*

```
data StateCore; set StateCore;
NTDC_DXorRsn=0;
if NTDC_dx_any=1 or NTDC_RsnVis_any=1 then NTDC_DXorRsn=1;
run;
```

**To generate counts for the five indicators.*

```
proc freq data = StateCore;
tables NTDC_dx1 NTDC_dx_any NTDC_RsnVis1 NTDC_RsnVis_any NTDC_DXorRsn;
run;
```

**To generate rate per 100,000 population. NOTE: This is not SAS code.*

(indicator count/population estimate) * 100,000
Example: First diagnosis NTDC count is 36,188, state population estimate is 4,400,477
Rate of ED NTDC visits per 100,000 population = (36,188 / 4,400,477) * 100,000 = 822.4 per 100,000 population

**To generate rate per 10,000 ED visits. NOTE: This is not SAS code.*

(indicator count / total ED visit count) * 10,000
Example: First diagnosis NTDC count is 36,188, total ED visit count is 2,036,780
rate of ED NTDC per 10,000 ED visits = (36,188 / 2,036,780) * 10,000 = 177.7 per 10,000 ED visits

**To generate total charges, use the following SAS code. The first diagnosis indicator is used in this example.*

```
proc means data=StateCore mean median min max stddev sum;
var totchg;
where NTDC_dx1=1;
run;
```

**For recommended stratified analyses by age group, race/ethnicity, and primary payer, use variables AGE, PAY1, and RACE.*

```
data StateCore; set StateCore;
if age lt 20 then agecat=1;
if age ge 20 and age lt 45 then agecat=2;
if age ge 45 and age lt 65 then agecat=3;
if age ge 65 then agecat=4;
run;

PROC FORMAT; *to format primary payer, race, and new age category variables;
value agec 1='<20 years' 2='20-44 years' 3='45-64 years' 4='65 or more years';
value pay 1='Medicare' 2='Medicaid' 3='Private' 4='Self Pay' 5='No charge' 6='Other';
value rac 1='white' 2='black' 3='Hispanic' 4='Asian/PacIs' 5='NatAmer' 6='Other';
value yn 0='No' 1='Yes';
run;
```

**Example - stratified analysis for NTDC first diagnosis indicator.*

```
proc freq data=StateCore;
tables agecat pay1 race;
where NTDC_dx1=1;
format agecat agec. pay1 pay. race rac.;
run;
```

**Example - to compare NTDC=yes vs. NTDC=no stratified analysis for NTDC first diagnosis.*

```
proc freq data=StateCore;  
tables NTDC_dx1*(agecat pay1 race);  
format agecat agec. pay1 pay. race rac. NTDC_dx1 yn.;  
run;
```

APPENDIX 4
ACRONYMS USED IN THIS DOCUMENT

ASTDD	Association of State and Territorial Dental Directors
CPP	Conditions associated with caries, periodontal disease or associated preventive procedures
ED	Emergency department
HCUP	Healthcare cost and utilization project (https://www.hcup-us.ahrq.gov/)
ICD-9	International Classification of Diseases, Ninth Revision
ICD-10	International Classification of Diseases, Tenth Revision
NTDC	Non-traumatic dental condition
SEDD	State emergency department databases (https://www.hcup-us.ahrq.gov/seddooverview.jsp)
SID	State inpatient databases (https://www.hcup-us.ahrq.gov/sidoverview.jsp)
SOHP	State oral health program