



**Health Evidence Review
Commission's
Oral Health Advisory Panel**

**November 28, 2016
10:00 AM - 1:00 PM**

**Clackamas Community College
Wilsonville Training Center, Room 210
29373 SW Town Center Loop E, Wilsonville, Oregon,
97070**

Section 1.0

Call to Order

AGENDA
ORAL HEALTH ADVISORY PANEL (OHAP)
November 28, 2015
10:00 am-1:00 pm

Wilsonville Training Center, Room 210

(All agenda items are subject to change and times listed are approximate)

#	Time	Item	Presenter
1	10:00	Call to Order, Review of Minutes	Gary Allen
2	10:05	Purpose of Meeting	Darren Coffman
3	10:10	Multisector intervention: early childhood caries prevention	Cat Livingston
4	10:45	Previously discussed issues: 1) Guideline note 17 PREVENTIVE DENTAL CARE 2) Guideline note 34 ORAL SURGERY	Ariel Smits
5	11:30	2018 Biennial review: 1) Dental implant repair, maintenance, and removal 2) Other	Ariel Smits
6	12:45	Other Business	
7	12:55	Public Comment	
8	1:00	Adjournment	Gary Allen

MINUTES

Health Evidence Review Commission's Oral Health Advisory Panel (OHAP)

Clackamas Community College
Wilsonville Training Center, Room 211
September 8, 2016
8:30-10:00 AM

Members Present: Gary Allen, DMD, Chair; Bruce Austin, DMD; Deborah Loy (via phone); Mike Shirtcliff, DMD; Lori Lambright; Karen Nolan; Eli Schwarz, DDS, MPH, PhD; Len Barozzini, DDS.

Members Absent: Lynn Ironside; Patricia Parker, DMD.

Staff Present: Darren Coffman; Ariel Smits, MD, MPH.

Also Attending: Sarah Wetherspoon, OHA (via phone); Charles Rosson, Kaiser Permanente; Cathleen Olesitse, CareOregon Dental; Laura McKeane, All Care Health; Molly Johnson and Dayna Steringer, Advantage Dental.

Roll Call/Minutes Approval/Staff Report

The meeting was called to order at 8:05 am and roll was called. The minutes from the 2015 OHAP meeting were reviewed and no corrections or concerns were raised.

Coffman reviewed the charge of OHAP and the organizational structure within HERC. Loy requested that the extracted list of dental lines be reviewed for the current biennial review for possible line reprioritization, and also review of the procedure code placement. HERC staff will send out the extracted dental lines to the OHAP group via email for review prior to the next OHAP meeting.

➤ **Topic: 2017 CDT code placements**

Discussion:

- 1) D0414: the suggested placement is identical to similar code D0415 and was felt to be appropriate
- 2) D0600: agreed that this procedure is experimental
- 3) D1575: no discussion
- 4) D4346: no discussion
- 5) D6081: There was robust discussion regarding this at the August DCO meeting. Allen stated that interventions necessary to save the current dental situation (implant or

- not) should be covered. Austin stated that this procedure would affect the health of surrounding teeth and bones. Loy stated that providers were concerned about provider liability for treatment of an implant when they did not place the implant initially. The group response was that it is not always possible to get the patient back to the original provider and the responsibility of the current provider is to the patient and their health. Shirtcliff stated that he agreed with Allen to try to improve overall mouth health. The group felt that there was a need to discuss overall coverage of implant codes, and determine what should be covered -- cleaning, maintenance, removal, and/or other procedures. HERC staff was directed to pull implant-related CDT codes to review as a whole set to determine what should be covered. Included in this discussion should be coverage of placement of implants, as these are now becoming standard of care in dentistry and may be more cost effective than a partial denture. The next OHAP meeting should also consider implant line reprioritization. The question arose as to whether removal of an implant should be considered medical (i.e. extraction of a foreign body) or dental. HERC staff indicated that bridges are also not currently covered. If implant placement and/or repair is considered for coverage, then bridge repair codes and possibly creation codes should also be considered. Coffman indicated that partial or complete coverage of implants and/or bridges raised the concern for cost increase. The group decided that D6081 should be placed on line 622 with other implant codes for now, and an OHAP meeting should be convened later this year to discuss implants and bridges as a biennial review item. The October DCO meeting will discuss this, then the next OHAP meeting will be planned for late November or early December 2016. Any changes to implant and/or bridge coverage will be discussed at the January HERC meeting and have implementation planned for January 2018.
- 6) D6085: this code is similar to D6081 above. Will place on line 622 for now and will include at next meeting for biennial review discussion of dental implant coverage.
 - 7) D9311: There was discussion about how this code and D9991-D9994 (below) could be implemented, as dental does not use ICD-10 codes and therefore the Ancillary File would be difficult for dental use. HSD staff indicated that MMIS would have to demonstrate that other covered CDT codes were billed with the visit. Schwartz was concerned that these ancillary services are not included in the DCO capitation rate, but feels that this would be very useful and should be supported. Shirtcliff asked who should be responsible for these types of services: dental, behavioral health, medical, public health? Loy stated that the system needs to get away from paying solely for dental procedures, needs additional/other payment system to fund these case management services. Smits indicated that case management services were rarely paid as an individual service in the medical world.
 - 8) D9991-D9994: Decision was made to put in the Ancillary File. HSD will work on who can use them, how they can be billed, and other operational rules. These codes will be made open for encounter purposes but unlikely to be reimbursed for now.

Actions:

- 1) See Appendix A for spreadsheet of code placements

➤ **Topic: GN17 Preventive Dental Care**

Discussion: Tabled until November OHAP meeting

➤ **Topic: GN43 Oral Surgery – Extraction of Third Molars**

Discussion: Smits introduced the summary of the issue. Allen was concerned about the vagueness of the current guideline note. Others agreed that the current guideline is too vague and the rules based on this guideline were hard to interpret. Loy indicated that the proposed guideline was much improved.

Allen addressed the proposed wording about requiring two or more episodes of pericoronitis. He indicated that there are other interventions other than extraction for pericoronitis.

Austin asked about inclusion of unrestorable caries as an indication for extraction. Allen replied that the wording that the tooth can't be maintained would cover that situation. Shirtcliff inquired about the case of a painful erupted third molar, when the pain was excruciating or unmanageable. Schwartz replied that the correct path to take is to follow the evidence. The problem this guideline is attempting to solve is when the teeth are taken out preventively without pain or other pathology. Shirtcliff requested that intractable pain be added to the guideline as an indication for extraction. Allen was concerned about how to define intractable pain. Allen thought that Health Partners Minnesota had a guideline about third molar extraction that addressed pain. He will look for that guideline and see if there is language in it that could be adopted regarding when painful third molars should be extracted. . There was also a question about what to do in the situation when an orthodontist requested extraction as part of braces—the answer was not to cover this.

Allen will get the Minnesota guideline he mentioned, and staff will rework the guideline and send around for email approval of OHAP group, and will tentatively bring to the October VBBS meeting for approval.

Actions:

- 1) HERC staff will work with Dr. Allen to revise guideline and will send to OHAP group with tentative plan to get email approval prior to the October, 2016 VBBS meeting. Otherwise discussion will continue at the November/December OHAP meeting.

➤ **Topic: Removal of tori and excision of hyperplastic tissue**

Discussion: OHAP felt that the proposed changes were an excellent idea. There was some discussion about the increase in cost associated with covering removal of this type of tissue. The counterargument was that there is increased cost in the preparation of dentures when this type of tissue is not removed. HSD will look into the cost of adding these services; if significant, then these changes may have implementation delayed.

Actions:

- 1) Remove D7970 (Excision of hyperplastic tissue-per arch) from line 349 DENTAL CONDITIONS (EG. SEVERE CARIES, INFECTION) Treatment: ORAL SURGERY (I.E. EXTRACTIONS AND OTHER INTRAORAL SURGICAL PROCEDURES and add to line 457 DENTAL CONDITIONS (EG. MISSING TEETH, PROSTHESIS FAILURE) Treatment: REMOVABLE PROSTHODONTICS (E.G. FULL AND PARTIAL DENTURES, RELINES)
- 2) Add D7472 (Removal of torus palatinus) and D7473 (Removal of torus mandibularis) to line 457 and remove from the Services Recommended for Non-Coverage table
- 3) Adopt a new guideline regarding D7970, D7472 and D7473 as shown below:

GUIDELINE NOTE XXX REMOVAL OF TORI AND EXCISION OF HYPERPLASTIC TISSUE

Line 457

D7472 and D7473, and D7970 are included on this line only when used in conjunction with making a prosthesis.

➤ **Topic: Implant removal and debridement**

Discussion: Delayed until November/December OHAP discussion regarding implants

➤ **Public Comment:**

No additional public comment was received.

➤ **Issues for next meeting:**

- 1) Preventive dental guideline
- 2) Biennial review of implants and dental bridges

➤ **Next meeting:**

- TBD, plan a late November or early December 2016 meeting

➤ **Adjournment**

The meeting was adjourned at 10:12 AM.

Appendix A

2017 CDT Code Placement Recommendations

[Insert Excel spreadsheet for code placement recommendations here]

DRAFT

Appendix A
2017 CDT Code Placement Recommendations

CDT Code	Nomenclature	Suggested Code Placement	Comments
D0414	laboratory processing of microbial specimen to include culture and sensitivity studies, preparation and transmission of written report	Diagnostic	HSD will not open for payment
D0600	non-ionizing diagnostic procedure capable of quantifying, monitoring and recording changes in structure of enamel, dentin, and cementum	Services Recommended for Non-Coverage	Experimental
D1575	distal shoe space maintainer - fixed - unilateral	57 PREVENTIVE DENTAL SERVICES	HSD recommends making either/or with D1510 (SPACE MAINTAINER-FIXED UNILATERAL) and use the same limitations as apply to D1510. Rules to be devised by HSD.
D4346	scaling in presence of generalized moderate or severe gingival inflammation – full mouth, after oral evaluation	57 PREVENTIVE DENTAL SERVICES	Make either/or with D4355 (FULL MOUTH DEBRIDEMENT TO ENABLE COMPREHENSIVE EVALUATION AND DIAGNOSIS) and use the same limitations as apply to D4355. Rules to be devised by HSD.
D6081	scaling and debridement in the presence of inflammation or mucositis of a single implant, including cleaning of the implant surfaces, without flap entry and closure	622 DENTAL CONDITIONS (EG. MISSING TEETH) Treatment IMPLANTS (I.E. IMPLANT PLACEMENT AND ASSOCIATED CROWN OR PROSTHESIS)	Further discussion on implants at next OHAP meeting
D6085	provisional implant crown	622 DENTAL CONDITIONS (EG. MISSING TEETH) Treatment IMPLANTS (I.E. IMPLANT PLACEMENT AND ASSOCIATED CROWN OR PROSTHESIS)	Further discussion on implants at next OHAP meeting
D9311	consultation with medical health care professional	Ancillary	HSD will need to make rules; will not open for payment until rules are finalized.
D9991	dental case management – addressing appointment compliance barriers.	Ancillary	See D9311
D9992	dental case management – care coordination	Ancillary	See D9311
D9993	dental case management – motivational interviewing	Ancillary	See D9311
D9994	dental case management – patient education to improve oral health literacy	Ancillary	See D9311

Section 2.0

New Discussion Items

MULTISECTOR INTERVENTION SCOPE STATEMENT:

EARLY CHILDHOOD CARIES PREVENTION

Population description	Children under 6
Intervention(s)	<p>Counseling/education, risk assessment, water fluoridation, topical fluoride (e.g. varnish, rinses), fluoride supplementation, toothbrushing programs (with fluoridated or nonfluoridated toothpaste), silver diamine fluoride, flossing, xylitol for pregnant and postpartum women, combinations of the interventions. Interventions may be offered in a variety of settings</p> <p><i>Intervention exclusions: Sealants (due to age of population)</i></p>
Comparator(s)	No routine dental care, usual care, other interventions or combinations of interventions. Interventions offered in other settings (schools, child care, primary care, dental settings, WIC)
Outcome(s) (up to five)	<ol style="list-style-type: none">1. Prevention of caries in primary and permanent teeth measured by: (a) caries increment (change from baseline in the decayed, missing, and filled surface index (DMFS)) and prevented fraction (PF) of DMFS in deciduous tooth surfaces and permanent teeth or (b) severe early childhood caries (S-ECC)2. Reduction in extractions and pulpal therapy3. Overall visits (e.g. emergency department, outpatient dental, surgeries, and hospitalizations)4. Missed school and work days5. Harms related to treatment
Key questions	<ol style="list-style-type: none">1. What is the comparative effectiveness of the interventions on preventing early childhood caries?2. Does the effectiveness vary by:<ol style="list-style-type: none">a. Setting or program typeb. Agec. Baseline riskd. Underlying comorbidities (e.g. craniofacial abnormalities, autism)e. Primary or secondary teeth

MULTISECTOR INTERVENTION SCOPE STATEMENT:

EARLY CHILDHOOD CARIES PREVENTION

Contextual questions	<ol style="list-style-type: none">1. What is the cost-effectiveness of the interventions to prevent early childhood caries?2. If risk assessment is effective, which tools are evidence-based?
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Scoping references

1. American Academy of Pediatric Dentistry, 2008 Definition of Early Childhood Caries. http://www.aapd.org/assets/1/7/D_ECC.pdf
2. American Academy of Pediatric Dentistry, 2014. Policy on Early Childhood Caries (ECC): Classifications, Consequences, and Preventive Strategies. http://www.aapd.org/media/policies_guidelines/p_eccclassifications.pdf
3. CDC: The Community Guide. <http://www.thecommunityguide.org/oral/caries.html>
4. U.S. Preventive Services Task Force *Final Recommendation Statement: Dental Caries in Children from Birth Through Age 5 Years: Screening*. December 2014. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/dental-caries-in-children-from-birth-through-age-5-years-screening>

Section 3.0

Guidelines

1) GN17 Preventive Dental Care

GN17 allows additional fluoride treatment for “a child at high risk for dental caries” and “high risk adults.” Dr. Allen would like to better define what is meant by high risk.

CDT codes representing risk

D0601 Caries risk assessment and documentation with a finding of low risk

D0602 moderate risk

D0603 high risk

See materials from Gary Allen regarding the definition of “high risk” in the meeting packet (AAPD caries risk assessment guideline, Twetman et al 2015, Azarpazhooh 2010).

HERC staff recommendation:

- 1) Discuss better definition of “high risk” in GN17

GUIDELINE NOTE 17, PREVENTIVE DENTAL CARE

Lines 3,57

Dental cleaning is limited to once per 12 months for adults and twice per 12 months for children up to age 19 (D1110, D1120). More frequent dental cleanings may be required for certain higher risk populations. Additionally, assessment (D0191) may be performed once per 12 months for adults and twice per 12 months for children up to age 19.

Fluoride varnish (D1206) is included on Line 3 for use with children 18 and younger during well child preventive care visits. Fluoride treatments (D1206 and D1208) are included on Line 57 PREVENTIVE DENTAL SERVICES for use with adults and children during dental visits. The total number of fluoride applications provided in all settings is not to exceed four per twelve months for a child at high risk for dental caries and two per twelve months for a child not at high risk. The number of fluoride treatments is limited to once per 12 months for average risk adults and up to four times per 12 months for high risk adults.

2) GN34 Oral Surgery

GN34 currently limits removal of impacted teeth (CDT D7220, D7230, D7240, D7241, D7250) to “symptomatic dental pain, infection, bleeding or swelling.” This guideline applies to line 349 DENTAL CONDITIONS (EG. SEVERE CARIES, INFECTION) Treatment: ORAL SURGERY (I.E. EXTRACTIONS AND OTHER INTRAORAL SURGICAL PROCEDURES). Dr. Allen suggests substituting working from the 2000 NICE guideline on impacted wisdom teeth.

From Dr. Allen:

My rationale is that “symptomatic” is a relative term and is common in all developing third molars and should not be considered as a reason for extraction when OTC pain meds can be recommended for the intermittent episodes of discomfort. In addition, our current guideline and rules do not say anything about dental caries, external resorption or associated pathology such as odontogenic cysts. I also like that the NICE guideline addresses pericoronitis and limits

extractions to recurrent cases of pericoronitis. There are non-invasive treatment options for pericoronitis that should be considered before extraction when patients first present.

From **NICE 2000** Guidance on the Extraction of Wisdom Teeth (study may be found here: <https://www.nice.org.uk/guidance/ta1/resources/guidance-on-the-extraction-of-wisdom-teeth-63732983749>)

1. Surgical removal of impacted third molars should be limited to patients with evidence of pathology. Such pathology includes unrestorable caries, non-treatable pulpal and/or periapical pathology, cellulitis, abscess and osteomyelitis, internal/external resorption of the tooth or adjacent teeth, fracture of tooth, disease of follicle including cyst/tumour, tooth/teeth impeding surgery or reconstructive jaw surgery, and when a tooth is involved in or within the field of tumour resection.
2. Specific attention is drawn to plaque formation and pericoronitis. Plaque formation is a risk factor but is not in itself an indication for surgery. The degree to which the severity or recurrence rate of pericoronitis should influence the decision for surgical removal of a third molar remains unclear. The evidence suggests that a first episode of pericoronitis, unless particularly severe, should not be considered an indication for surgery. Second or subsequent episodes should be considered the appropriate indication for surgery.

This guideline was discussed at the October, 2016 OHAP meeting. Severe or intractable pain was suggested as an additional criteria for removal. There has been considerable discussion amongst OHAP member and HERC staff via email regarding the inclusion of pain in the guideline.

Evidence review:

- 1) **Ghaemina 2016**, Cochrane review of surgical removal vs retention of asymptomatic wisdom teeth
 - a. N=2 studies, one RCT and one prospective cohort study
 - b. No eligible studies in this review reported the effects of removal compared with retention of asymptomatic disease-free impacted wisdom teeth on health-related quality of life
 - c. One prospective cohort study (N=416) had , reporting data from a subgroup of 416 healthy male participants, aged 24 to 84 years, compared the very low quality evidence suggests that the presence of asymptomatic disease-free impacted wisdom teeth may be associated with increased risk of periodontitis affecting the adjacent second molar in the long term. In the same study, which is at serious risk of bias, there is insufficient evidence to demonstrate a difference in caries risk associated with the presence or absence of impacted wisdom teeth.
 - d. One RCT (N=164) found no evidence to suggest that removal of asymptomatic disease-free impacted wisdom teeth has a clinically significant effect on dimensional changes in the dental arch; study at very high risk of bias
 - e. Conclusions: Insufficient evidence is available to determine whether or not asymptomatic disease-free impacted wisdom teeth should be removed. Although asymptomatic disease-free impacted wisdom teeth may be associated with increased risk of periodontitis affecting adjacent second molars in the long term, the evidence is of very low quality.

- 2) **McArdle 2012**, evaluation of NHS/NICE guidelines on extraction of wisdom teeth
 - a. Results: The mean age of patients increased from 25 years in 2000 to 32 years in 2010, with the modal (most common) age increasing from 26 to 29 years. After the introduction of clinical guidelines the number of patients requiring third molar removal in secondary care dropped by over 30%, however, since 2003 the number of patients has risen by 97%. There is also a significant increase in caries as an indication for third molar removal.
 - b. **Conclusions** More patients are requiring third molar removal with an increasing number of patients having caries related to their third molars. Patients are, on average, older confirming that the removal of third molars is shifting from a young adult population group to an older adult population group. NICE guidelines did appear to have contributed to a fall in the volume of third molars removed within the NHS post 2000. However, concluding that this reduction demonstrates the success of NICE's guidance would be a premature assumption. The number of patients now requiring third molar removal is comparable to that of the mid 1990s. NICE has influenced the management of patients with third molars but this has not resulted in any reduction in the number of patients requiring third molar removal. Coding and data collection for third molars is not uniform, leading to potential misrepresentation of data. This perhaps raises the issue that an improved universal coding system is required for the NHS and that the NICE guidelines need review.
- 3) **Bouloux 2015**, systematic review of wisdom teeth removal
 - a. N=7 studies (70-821 patients)
 - b. The mean incidence rate for M3 extraction of previously asymptomatic M3s was 3.0% annually (range 1 to 9%). The cumulative incidence rate for M3 removal ranged from 5% at 1 year to 64% at 18 years. The reasons for extraction were caries, periodontal disease, and other inflammatory conditions.
 - c. Conclusions: The cumulative risk of M3 extraction for young adults with asymptomatic M3s is sufficiently high to warrant its consideration when reviewing the risks and benefits of M3 retention as a management strategy.
- 4) **AAOMS** white paper on third molar extraction
 - a. The presence of impacted third molars adversely affects the periodontium of adjacent second molars as reflected in disruption of the periodontal ligament, root resorption, and pocket depth associated with loss of attachment.
 - b. The removal of impacted third molars can negatively impact the periodontium of adjacent second molars. The preoperative existence of an intrabony defect, age of the patient, and level of plaque control may serve to predict adverse outcomes
 - c. The presence of visible third molars is associated with overall elevated levels of periodontitis and that of immediately adjacent teeth.
 - i. In the presence of visible third molars, periodontitis involving adjacent teeth is progressive and only partially responsive to therapy
 - d. Occasional damage to the inferior alveolar and lingual nerve occurs following third molar surgery. At least 50 percent of cases recover spontaneously.

HERC staff recommendation:

- 1) Modify GN34 as shown below
 - a. Includes NICE indications for extraction of impacted teeth
 - b. Includes pain as an additional criteria

GUIDELINE NOTE 34, ~~ORAL SURGERY~~ EXTRACTION OF IMPACTED WISDOM TEETH

Line 349

~~Treatment only for symptomatic dental pain, infection, bleeding or swelling (D7220, D7230, D7240, D7241, D7250).~~

Extraction of impacted wisdom teeth (D7220, D7230, D7240, D7241, D7250) is only included on this line when there is

- 1) evidence of pathology. Such pathology includes unrestorable caries, non-treatable pulpal and/or periapical pathology, cellulitis, abscess and osteomyelitis, internal/external resorption of the tooth or adjacent teeth, fracture of tooth, disease of follicle including cyst/tumour, tooth/teeth impeding surgery or reconstructive jaw surgery, and when a tooth is involved in or within the field of tumour resection OR
- 2) two or more episodes of pericoronitis
- 3) severe pain directly related to the impacted tooth that does not respond to conservative treatment
 - a. extraction for pain or discomfort related to normal tooth eruption or for non-specific symptoms such as “headaches” or “jaw pain” is not considered medically or dentally necessary for treatment.

Guideline on Caries-risk Assessment and Management for Infants, Children, and Adolescents

Originating Council

Council on Clinical Affairs

Review Council

Council on Clinical Affairs

Adopted

2002

Revised*

2006, 2010, 2011, 2013, 2014

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that caries-risk assessment and management protocols can assist clinicians with decisions regarding treatment based upon caries risk and patient compliance and are essential elements of contemporary clinical care for infants, children, and adolescents. This guideline is intended to educate health care providers and other interested parties on the assessment of caries risk in contemporary pediatric dentistry and aid in clinical decision making regarding diagnostic, fluoride, dietary, and restorative protocols.

Methods

This guideline is an update of AAPD's Policy on Use of a Caries-risk Assessment Tool (CAT) for Infants, Children, and Adolescents, Revised 2006 that includes the additional concepts of dental caries management protocols. The update used electronic and hand searches of English written articles in the medical and dental literature within the last 10 years using the search terms caries risk assessment, caries management, and caries clinical protocols. From this search, 1,909 articles were evaluated by title or by abstract. Information from 75 articles was used to update this document. When data did not appear sufficient or were inconclusive, recommendations were based upon expert and/or consensus opinion by experienced researchers and clinicians.

Background

Caries-risk assessment

Risk assessment procedures used in medical practice normally have sufficient data to accurately quantitate a person's disease susceptibility and allow for preventive measures.¹ Even though caries-risk data in dentistry still are not sufficient to quanti-

tate the models, the process of determining risk should be a component in the clinical decision-making process.² Risk assessment:

1. Fosters the treatment of the disease process instead of treating the outcome of the disease.
2. Gives an understanding of the disease factors for a specific patient and aids in individualizing preventive discussions.
3. Individualizes, selects, and determines frequency of preventive and restorative treatment for a patient.
4. Anticipates caries progression or stabilization.

Caries-risk assessment models currently involve a combination of factors including diet, fluoride exposure, a susceptible host, and microflora that interplay with a variety of social, cultural, and behavioral factors.³⁻⁶ Caries risk assessment is the determination of the likelihood of the incidence of caries (ie, the number of new cavitated or incipient lesions) during a certain time period⁷ or the likelihood that there will be a change in the size or activity of lesions already present. With the ability to detect caries in its earliest stages (ie, white spot lesions), health care providers can help prevent cavitation.⁸⁻¹⁰

Caries risk indicators are variables that are thought to cause the disease directly (eg, microflora) or have been shown useful in predicting it (eg, socioeconomic status) and include those variables that may be considered protective factors. Currently, there are no caries-risk factors or combinations of factors that have achieved high levels of both positive and negative predictive values.² Although the best tool to predict future caries is past caries experience, it is not particularly useful in young children due to the importance of determining caries risk before the disease is manifest. Children with white spot lesions should be considered at high risk for caries since these are precavitated lesions that are indicative of caries activity.¹¹ Plaque accumulation also is strongly associated with caries development in young children.^{12,13} As a corollary to the presence of plaque,¹⁴ a child's Mutans Streptococci (MS) levels³ and the age at which a child becomes colonized with cariogenic flora^{15,16} are valuable in assessing risk, especially in preschool children.

* The 2013 revision was limited to modification of Table 1. Caries-risk Assessment Form for 0-3 Year Olds (For Physicians and Other Non-Dental Health Care Providers). The 2014 revision was limited to use of toothpaste in young children.

While there is no question that fermentable carbohydrates are a necessary link in the causal chain for dental caries, a systematic study of sugar consumption and caries risk has concluded that the relationship between sugar consumption and caries is much weaker in the modern age of fluoride exposure than previously thought.¹⁷ However, there is evidence that night-time use of the bottle, especially when it is prolonged, may be associated with early childhood caries.¹⁸ Despite the fact that normal salivary flow is an extremely important intrinsic host factor providing protection against caries, there is little data about the prevalence of low salivary flow in children.^{19,20}

Sociodemographic factors have been studied extensively to determine their effect on caries risk. Children with immigrant backgrounds have three times higher caries rates than non-immigrants.²¹ Most consistently, an inverse relationship between socioeconomic status and caries prevalence is found in studies of children less than six years of age.²² Perhaps another type of sociodemographic variable is the parents' history of cavities and abscessed teeth; this has been found to be a predictor of treatment for early childhood caries.^{23,24}

The most studied factors that are protective of dental caries include systemic and topical fluoride, sugar substitutes, and tooth brushing with fluoridated toothpaste. Teeth of children who reside in a fluoridated community have been shown to have higher fluoride content than those of children who reside in suboptimal fluoridated communities.²⁵ Additionally, both pre- and post-eruption fluoride exposure maximize the

caries-preventive effects.^{26,27} For individuals residing in non-fluoridated communities, fluoride supplements have shown a significant caries reduction in primary and permanent teeth.²⁸ With regard to fluoridated toothpaste, studies have shown consistent reduction in caries experience.²⁹ Professional topical fluoride applications performed semiannually also reduce caries,³⁰ and fluoride varnishes generally are equal to that of other professional topical fluoride vehicles.³¹

The effect of sugar substitutes on caries rates have been evaluated in several populations with high caries prevalence.³² Studies indicate that xylitol can decrease MS levels in plaque and saliva and can reduce dental caries in young children and adults, including children via their mothers.³³ With regard to toothbrushing, there only is a weak relationship between frequency of brushing and decreased dental caries, which is confounded because it is difficult to distinguish whether the effect is actually a measure of fluoride application or whether it is a result of mechanical removal of plaque.³⁴ The dental home or regular periodic care by the same practitioner is included in many caries-risk assessment models because of its known benefit for dental health.³⁵

Risk assessment tools can aid in the identification of reliable predictors and allow dental practitioners, physicians, and other nondental health care providers to become more actively involved in identifying and referring high-risk children. Tables 1, 2, and 3 incorporate available evidence into practical tools to assist dental practitioners, physicians, and

Table 1. Caries-risk Assessment Form for 0-3 Year Olds^{59,60}
(For Physicians and Other Non-Dental Health Care Providers)

Factors	High Risk	Low Risk
Biological		
Mother/primary caregiver has active cavities	Yes	
Parent/caregiver has low socioeconomic status	Yes	
Child has >3 between meal sugar-containing snacks or beverages per day	Yes	
Child is put to bed with a bottle containing natural or added sugar	Yes	
Child has special health care needs	Yes	
Child is a recent immigrant	Yes	
Protective		
Child receives optimally-fluoridated drinking water or fluoride supplements		Yes
Child has teeth brushed daily with fluoridated toothpaste		Yes
Child receives topical fluoride from health professional		Yes
Child has dental home/regular dental care		Yes
Clinical Findings		
Child has white spot lesions or enamel defects	Yes	
Child has visible cavities or fillings	Yes	
Child has plaque on teeth	Yes	

Circling those conditions that apply to a specific patient helps the health care worker and parent understand the factors that contribute to or protect from caries. Risk assessment categorization of low or high is based on preponderance of factors for the individual. However, clinical judgment may justify the use of one factor (eg, frequent exposure to sugar containing snacks or beverages, visible cavities) in determining overall risk.

Overall assessment of the child's dental caries risk: High Low

Table 2. Caries-risk Assessment Form for 0-5 Year Olds^{59,60}

(For Dental Providers)

Factors	High Risk	Moderate Risk	Low Risk
Biological			
Mother/primary caregiver has active caries	Yes		
Parent/caregiver has low socioeconomic status	Yes		
Child has >3 between meal sugar-containing snacks or beverages per day	Yes		
Child is put to bed with a bottle containing natural or added sugar	Yes		
Child has special health care needs		Yes	
Child is a recent immigrant		Yes	
Protective			
Child receives optimally-fluoridated drinking water or fluoride supplements			Yes
Child has teeth brushed daily with fluoridated toothpaste			Yes
Child receives topical fluoride from health professional			Yes
Child has dental home/regular dental care			Yes
Clinical Findings			
Child has >1 decayed/missing/filled surfaces	Yes		
Child has active white spot lesions or enamel defects	Yes		
Child has elevated mutans streptococci levels	Yes		
Child has plaque on teeth		Yes	

Circling those conditions that apply to a specific patient helps the practitioner and parent understand the factors that contribute to or protect from caries. Risk assessment categorization of low, moderate, or high is based on preponderance of factors for the individual. However, clinical judgment may justify the use of one factor (eg, frequent exposure to sugar-containing snacks or beverages, more than one dmfs) in determining overall risk.

Overall assessment of the child's dental caries risk: High Moderate Low

Table 3. Caries-risk Assessment Form for ≥6 Years Olds⁶⁰⁻⁶²

(For Dental Providers)

Factors	High Risk	Moderate Risk	Low Risk
Biological			
Patient is of low socioeconomic status	Yes		
Patient has >3 between meal sugar-containing snacks or beverages per day	Yes		
Patient has special health care needs		Yes	
Patient is a recent immigrant		Yes	
Protective			
Patient receives optimally-fluoridated drinking water			Yes
Patient brushes teeth daily with fluoridated toothpaste			Yes
Patient receives topical fluoride from health professional			Yes
Additional home measures (eg, xylitol, MI paste, antimicrobial)			Yes
Patient has dental home/regular dental care			Yes
Clinical Findings			
Patient has ≥1 interproximal lesions	Yes		
Patient has active white spot lesions or enamel defects	Yes		
Patient has low salivary flow	Yes		
Patient has defective restorations		Yes	
Patient wearing an intraoral appliance		Yes	

Circling those conditions that apply to a specific patient helps the practitioner and patient/parent understand the factors that contribute to or protect from caries. Risk assessment categorization of low, moderate, or high is based on preponderance of factors for the individual. However, clinical judgment may justify the use of one factor (eg, ≥1 interproximal lesions, low salivary flow) in determining overall risk.

Overall assessment of the dental caries risk: High Moderate Low

other non-dental health care providers in assessing levels of risk for caries development in infants, children, and adolescents. As new evidence emerges, these tools can be refined to provide greater predictability of caries in children prior to disease initiation. Furthermore, the evolution of caries-risk

assessment tools and protocols can assist in providing evidence for and justifying periodicity of services, modification of third-party involvement in the delivery of dental services, and quality of care with outcomes assessment to address limited resources and work-force issues.

Table 4. Example of a Caries Management Protocol for 1-2 Year Olds

Risk Category	Diagnostics	Interventions		Restorative
		Fluoride	Diet	
Low risk	– Recall every six to 12 months – Baseline MS ^α	– Twice daily brushing	Counseling	– Surveillance ^χ
Moderate risk parent engaged	– Recall every six months – Baseline MS ^α	– Twice daily brushing with fluoridated toothpaste ^β – Fluoride supplements ^δ – Professional topical treatment every six months	Counseling	– Active surveillance ^ε of incipient lesions
Moderate risk parent not engaged	– Recall every six months – Baseline MS ^α	– Twice daily brushing with fluoridated toothpaste ^β – Professional topical treatment every six months	Counseling, with limited expectations	– Active surveillance ^ε of incipient lesions
High risk parent engaged	– Recall every three months – Baseline and follow up MS ^α	– Twice daily brushing with fluoridated toothpaste ^β – Fluoride supplements ^δ – Professional topical treatment every three months	Counseling	– Active surveillance ^ε of incipient lesions – Restore cavitated lesions with ITR ^φ or definitive restorations
High risk parent not engaged	– Recall every three months – Baseline and follow up MS ^α	– Twice daily brushing with fluoridated toothpaste ^β – Professional topical treatment every three months	Counseling, with limited expectations	– Active surveillance ^ε of incipient lesions – Restore cavitated lesions with ITR ^φ or definitive restorations

Table 5. Example of a Caries Management Protocol for 3-5 Year Olds

Risk Category	Diagnostics	Interventions			Restorative
		Fluoride	Diet	Sealants ^λ	
Low risk	– Recall every six to 12 months – Radiographs every 12 to 24 months – Baseline MS ^α	– Twice daily brushing with fluoridated toothpaste ^γ	No	Yes	– Surveillance ^χ
Moderate risk parent engaged	– Recall every six months – Radiographs every six to 12 months – Baseline MS ^α	– Twice daily brushing with fluoridated toothpaste ^γ – Fluoride supplements ^δ – Professional topical treatment every six months	Counseling	Yes	– Active surveillance ^ε of incipient lesions – Restoration of cavitated or enlarging lesions
Moderate risk parent not engaged	– Recall every six months – Radiographs every six to 12 months – Baseline MS ^α	– Twice daily brushing with fluoridated toothpaste ^γ – Professional topical treatment every six months	Counseling, with limited expectations	Yes	– Active surveillance ^ε of incipient lesions – Restoration of cavitated or enlarging lesions
High risk parent engaged	– Recall every three months – Radiographs every six months – Baseline and follow up MS ^α	– Brushing with 0.5 percent fluoride (with caution) – Fluoride supplements ^δ – Professional topical treatment every three months	Counseling	Yes	– Active surveillance ^ε of incipient lesions – Restoration of cavitated or enlarging lesions
High risk parent not engaged	– Recall every three months – Radiographs every six months – Baseline and follow up MS ^α	– Brushing with 0.5 percent fluoride (with caution) – Professional topical treatment every three months	Counseling, with limited expectations	Yes	– Restore incipient, cavitated, or enlarging lesions

Table 6. Example of a Caries Management Protocol for ≥6 Year-Olds

Risk Category	Diagnostics	Interventions			Restorative
		Fluoride	Diet	Sealants ^λ	
Low risk	<ul style="list-style-type: none"> – Recall every six to 12 months – Radiographs every 12 to 24 months 	<ul style="list-style-type: none"> – Twice daily brushing with fluoridated toothpaste^μ 	No	Yes	<ul style="list-style-type: none"> – Surveillance^χ
Moderate risk patient/parent engaged	<ul style="list-style-type: none"> – Recall every six months – Radiographs every six to 12 months 	<ul style="list-style-type: none"> – Twice daily brushing with fluoridated toothpaste^μ – Fluoride supplements^δ – Professional topical treatment every six months 	– Counseling	Yes	<ul style="list-style-type: none"> – Active surveillance^ε of incipient lesions – Restoration of cavitated or enlarging lesions
Moderate risk patient/parent not engaged	<ul style="list-style-type: none"> – Recall every six months – Radiographs every six to 12 months 	<ul style="list-style-type: none"> – Twice daily brushing with toothpaste^μ – Professional topical treatment every six months 	– Counseling, with limited expectations	Yes	<ul style="list-style-type: none"> – Active surveillance^ε of incipient lesions – Restoration of cavitated or enlarging lesions
High risk patient/parent engaged	<ul style="list-style-type: none"> – Recall every three months – Radiographs every six months 	<ul style="list-style-type: none"> – Brushing with 0.5 percent fluoride – Fluoride supplements^δ – Professional topical treatment every three months 	<ul style="list-style-type: none"> – Counseling – Xylitol 	Yes	<ul style="list-style-type: none"> – Active surveillance^ε of incipient lesions – Restoration of cavitated or enlarging lesions
High risk patient/parent not engaged	<ul style="list-style-type: none"> – Recall every three months – Radiographs every six months 	<ul style="list-style-type: none"> – Brushing with 0.5 percent fluoride – Professional topical treatment every three months 	<ul style="list-style-type: none"> – Counseling, with limited expectations – Xylitol 	Yes	<ul style="list-style-type: none"> – Restore incipient, cavitated, or enlarging lesions

Legends for Tables 4-6

- α Salivary mutans streptococci bacterial levels.
- χ Periodic monitoring for signs of caries progression.
- β Parental supervision of a “smear” amount of toothpaste.
- δ Need to consider fluoride levels in drinking water.
- ε Careful monitoring of caries progression and prevention program.
- φ Interim therapeutic restoration.⁶³
- γ Parental supervision of a “pea sized” amount of toothpaste.
- λ Indicated for teeth with deep fissure anatomy or developmental defects.
- μ Less concern about the quantity of toothpaste.

Caries management protocols

Clinical management protocols are documents designed to assist in clinical decision-making; they provide criteria regarding diagnosis and treatment and lead to recommended courses of action. The protocols are based on evidence from current peer-reviewed literature and the considered judgment of expert panels, as well as clinical experience of practitioners. The protocols should be updated frequently as new technologies and evidence develop.

Historically, the management of dental caries was based on the notion that it was a progressive disease that eventually destroyed the tooth unless there was surgical/restorative intervention. Decisions for intervention often were learned from unstandardized dental school instruction, and then refined by clinicians over years of practice. Little is known about the criteria dentists use when making decisions involving restoration of carious lesions.³⁶

It is now known that surgical intervention of dental caries alone does not stop the disease process. Additionally, many lesions do not progress, and tooth restorations have a finite longevity. Therefore, modern management of dental caries

should be more conservative and includes early detection of noncavitated lesions, identification of an individual’s risk for caries progression, understanding of the disease process for that individual, and active surveillance to apply preventive measures and monitor carefully for signs of arrestment or progression.

Caries management protocols for children further refine the decisions concerning individualized treatment and treatment thresholds based on a specific patient’s risk levels, age, and compliance with preventive strategies (Tables 4, 5, 6). Such protocols should yield greater probability of success and better cost effectiveness of treatment than less standardized treatment. Additionally, caries management protocols free practitioners of the necessity for repetitive high level treatment decisions, standardize decision making and treatment strategies,³⁶⁻³⁸ eliminate treatment uncertainties, and guarantee more correct strategies.³⁹

Content of the present caries management protocol is based on results of clinical trials, systematic reviews, and expert panel recommendations that give better understanding of and recommendations for diagnostic, preventive, and restorative treatments. The radiographic diagnostic guidelines are based

on the latest guidelines from the American Dental Association (ADA).⁴⁰ Systemic fluoride protocols are based on the Centers for Disease Control and Prevention's (CDC) recommendations for using fluoride.²⁹ Guidelines for the use of topical fluoride treatment are based on the ADA's Council on Scientific Affairs' recommendations for use of fluoride toothpaste in young children⁴¹ and professionally applied and prescription strength home-use topical fluoride,⁴² and the CDC's fluoride guidelines.²⁹ Guidelines for pit and fissure sealants are based on the ADA's Council on Scientific Affairs recommendations for the use of pit-and-fissure sealants.⁴³ Guidelines on diet counseling to prevent caries are based on two review papers.^{44,45} Guidelines for the use of xylitol are based on the AAPD's oral health policy on use of xylitol in caries prevention,³² a well-executed clinical trial on high caries-risk infants and toddlers,⁴⁶ and two evidence-based reviews.^{47,48} Active surveillance (prevention therapies and close monitoring) of enamel lesions is based on the concept that treatment of disease may only be necessary if there is disease progression,⁴⁹ that caries progression has diminished over recent decades,⁵⁰ and that the majority of proximal lesions, even in dentin, are not cavitated.⁵¹

Other approaches to the assessment and treatment of dental caries will emerge with time and, with evidence of effectiveness, may be included in future guidelines on caries-risk assessment and management protocols. For example, there are emerging trends to use calcium and phosphate remineralizing solution to reverse dental caries.⁵² Other fluoride compounds, such as silver diamine fluoride⁵³ and stannous fluoride⁵⁴, may be more effective than sodium fluoride for topical applications. There has been interest in antimicrobials to affect the caries rates, but evidence from caries trials is still inconclusive.^{55,56} However, some other proven methods, such as prescription fluoride drops and tablets, may be removed from this protocol in the future due to attitudes, risks, or compliance.^{57,58}

Recommendations

1. Dental caries-risk assessment, based on a child's age, biological factors, protective factors, and clinical findings, should be a routine component of new and periodic examinations by oral health and medical providers.
2. While there is not enough information at present to have quantitative caries-risk assessment analyses, estimating children at low, moderate, and high caries risk by a preponderance of risk and protective factors will enable a more evidence-based approach to medical provider referrals, as well as establish periodicity and intensity of diagnostic, preventive, and restorative services.
3. Clinical management protocols, based on a child's age, caries risk, and level of patient/parent cooperation, provide health providers with criteria and protocols for determining the types and frequency of diagnostic, preventive, and restorative care for patient specific management of dental caries.

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Evidence of Effectiveness of Current Therapies to Prevent and Treat Early Childhood Caries

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Abstract: Purpose: The purpose of this paper was to systematically review the quality of evidence related to self-applied and professionally applied fluorides, antimicrobial agents, fissure sealants, temporary restorations, and restorative care for the prevention and management of early childhood caries (ECC). **Methods:** Relevant papers were selected after an electronic search for literature published in English between 2000 and April 2014. From 877 reports, 33 were included for full review. The quality of evidence was expressed according to the GRADE (Grading of Recommendations Assessment, Development and Evaluation) system. **Results:** There was moderate and limited quality of evidence in support of fluoride toothpaste and fluoride varnish for ECC prevention, while the evidence for fluoride tablets/drops was insufficient. The support for the use of silver diamine fluoride, xylitol, chlorhexidine varnish/gel, povidone iodine, probiotic bacteria, and remineralizing agents (casein phosphopeptide-amorphous calcium phosphate) was insufficient. There was also insufficient quality of evidence for the use of sealants, temporary restorations, and traditional restorative care to reduce incidence of ECC. **Conclusion:** The results reinforce the need for high quality clinical research and point out the knowledge gaps to be addressed in future studies. (Pediatr Dent 2015;37(3):246-53) Received January 26, 2015 | Last Revision March 20, 2015 | Accepted March 31, 2015

KEYWORDS: DENTAL CARIES, FLUORIDE, INFANTS, RESTORATIVE CARE

Early childhood caries (ECC) is a complex condition associated with impaired oral health-related quality of life (OHRQOL) and high costs for families and society in general. It is commonly postulated that ECC is a preventable disease, but studies to support this are actually rare. In a previous update, Tinanoff and Reisine¹ concluded that preventive programs to combat ECC have been proven only partly successful, and the relapse after restorative treatment is commonly reported to be approximately 40 percent.^{2,3} In addition, many ECC prevention guidelines have been released over the years, but their effectiveness has seldom been proved.⁴ Systematic reviews on ECC prevention and management highlight early introduction and regular use of fluoride toothpaste as the best self-care method to prevent the disease.^{5,6} Among the professional methods, the use of fluoride varnish has been a recommended procedure for children younger than six years old, albeit the evidence is not strong.⁷ Consequently, there are still knowledge gaps and room for further clinical trials in infants.

The purpose of this conference paper was to systematically review the evidence with a focus on the following five clinical questions: (1) Do self-applied and professionally applied fluorides reduce the incidence of early childhood caries? (2) Do anticaries agents (e.g., antimicrobials, remineralizing agents) reduce the incidence of ECC? (3) Do sealants reduce the incidence of ECC? (4) Do temporary restorations provide disease management for ECC? (5) Does traditional restorative dentistry provide disease management for ECC?

Methods

A broad search for articles published in English was conducted in the PubMed database and Cochrane library. The main search

terms, in various combinations, were: early childhood caries; nursing caries; infant caries; prevention; fluoride; fluoride varnish; antibacterial agents; caries control; caries management; and restorative treatment. Relevant papers published between 2007 and April 2014 (prevention of ECC) and 2000 through April 2014 (treatment/management of ECC) were identified after an independent review of the abstracts by the authors (Figure 1). Diverging opinions were resolved in consensus. For the prevention sections (questions one and two), only prospective, randomized, and non-randomized controlled trials describing a defined intervention implemented to children before three years of age were considered. Furthermore, an endpoint reporting caries prevalence and/or incidence over a study period of at least one year was required. Reference lists of accepted papers and systematic reviews were hand-searched for additional literature. Studies reporting surrogate endpoints or interventions directed

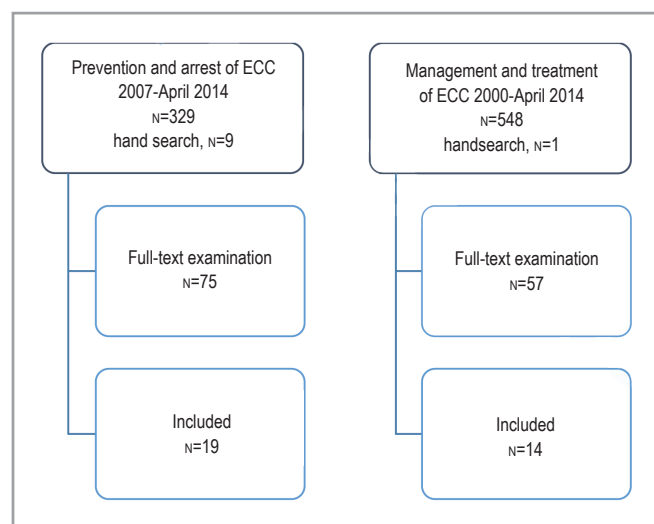


Figure 1. Flowchart of papers.

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Table 1. QUALITY OF EVIDENCE ACCORDING TO GRADE⁹

Grade	Legend	Quality of evidence
High	⊕⊕⊕⊕	Based on high or moderate quality studies containing no factors that weaken the overall judgment
Moderate	⊕⊕⊕○	Based on high or moderate quality studies containing isolated factors that weaken the overall judgment
Low	⊕⊕○○	Based on high or moderate quality studies containing factors that weaken the overall judgment
Very low	⊕○○○	The evidence base is insufficient when scientific evidence is lacking, quality of available studies is poor, or studies of similar quality are contradictory.

to mothers (primary-primary prevention) were excluded. For non-operative ECC management (questions three and four related to sodium diamine fluoride, atraumatic restorative treatment, temporary fillings, and sealants) and restorative treatment in children up to six years old (question five), controlled non-randomized clinical trials and observational studies were accepted, with endpoints related to the fate of treated teeth, new cavities (recurrent disease), caries arrestment, quality of life, and pain reduction. Case reports, case series, abstracts, textbooks, narrative reviews, and expert opinions were excluded. In the event of multiple publications from the same project, only the most recent contribution was included. Papers describing community fluorides (e.g., in water, milk, and salt) were not assessed.

Key data were extracted and compiled in tables. Both authors, according to predetermined criteria for methodology and performance, assessed the quality of the selected publications independently. The criteria of the Cochrane handbook for interventions⁸ were used, and the risk of bias for each paper was graded as low, moderate, or high. Due to the diversity of

the included studies, a narrative synthesis was carried out. The quality of evidence for each of the clinical questions was rated, using the GRADE profiler software version 3.6.1. The GRADE (Grading of Recommendations Assessment, Development and Evaluation) system,⁹ allows rating the quality of evidence in four categories, as shown in Table 1.

Results

Question 1: Do self-applied and professionally applied fluorides reduce the incidence of ECC? Self-applied fluorides.

Only two original papers from 2007 were included (Table 2), both supplying high-risk families with fluoride toothpaste and toothbrushes from early age as a part of oral health promotion activities for parents.^{10,11} Both had a high risk of bias and displayed a mixed outcome. This illustrates the challenge to get compliance among those with the greatest needs. However, several previous systematic reviews, of which two were published in recent years,^{12,13} have concluded that fluoride toothpaste reduces caries in the primary dentition. Thus, daily toothbrushing with fluoride toothpaste from the eruption of the first tooth must be regarded as best clinical practice today, based on moderate quality of evidence (⊕⊕⊕○). No recent papers on other self-applied fluoride supplements (tablets, drops) met the inclusion criteria, so the quality of evidence was based on systematic reviews of previously published literature.^{5,6,14} Therefore, it may be concluded that evidence for ECC prevention with fluoride tablets and drops is insufficient (⊕○○○).

Professional fluorides: Fluoride varnish. Seven papers describing six studies with fluoride varnish (five percent sodium fluoride) applications, typically two to four times per year, in combination with oral health promotion were included (Table 2).¹⁵⁻²¹ Only one study reported a double-blind placebo-controlled design,²¹ and none were assessed with a low risk of bias. Common confounding factors were water fluoride, supervised toothbrushing with fluoride toothpaste, attrition bias, and inadequate controls. The mean prevented fraction, calculated

Table 2. SELF-APPLIED AND PROFESSIONAL FLUORIDES FOR EARLY CHILDHOOD CARIES (ECC) PREVENTION (2007-2014)*

Author, year	Design size/age	Intervention	Control	Follow-up age (yrs)	ECC outcome/ PF (%)	Risk of bias
<i>Self-applied</i>						
Davies, 2007 ¹⁰	Cohort 664/8 mos	FTP+OHP	NI	5	20 vs. 32%/38%	High
Livny, 2007 ¹¹	Cohort 596/6 mos	FTP+OHP	NI	2.5	15 vs. 15%, NS	High
<i>Professionally applied</i>						
Lawrence, 2008 ¹⁵	CRCT 1146/6mos	FV, 2yrs+OHP	OHP	2.5-7	11.0 vs. 13.4 dmfs/18%	Moderate
Milgrom, 2009 ¹⁶	CCT 473/64 mos	V, 3yrs+FTP	FV, 3yrs	4	8.2 vs. 10.3 deft 20%	Moderate
Minah, 2010 ¹⁷	CCT 219/6 mos	FV + OHP	Historical	2-3	0.1 vs. 1.3ds/93%	High
Slade, 2011 ¹⁸	CRCT 543/18 mos	FV, 2yrs+OHP	NI	3.5-6	6.9 vs. 9.9 dmfs/24%	Moderate
Ramos-Gomez, 2012 ¹⁹	CCT 361/4 mos	FV, 2yrs+OHP	OHP+(FV)	3	34 vs. 34%, NS	High
Divaris, 2013 ^{20†}	CRCT 543/18 mos	FV, 2yrs+OHP	NI	3.5-6	RR: 0.75/25%, NS	Moderate
Oliviera, 2014 ²¹	RCT 200/12 mos	FV, 2yrs	Placebo, 2/yrs	3	36 vs. 47% d2d3/11%, NS	Moderate

* PF=prevented fraction; FTP=fluoride toothpaste; OHP=oral health promotion; NI=no intervention; CCT=controlled clinical trial; RCT=randomized controlled trial; CRCT=cluster randomized controlled trial; FV=fluoride varnish; NS=not significant; RR=relapse rates.

† Secondary analysis of Slade et al., 2011.¹⁸

from the three studies with moderate risk of bias, was 18 percent, and it seems reasonable that fluoride varnish to some extent can decrease caries incidence in early childhood. Yet, the quality of evidence was rated as low (⊕⊕OO).

Silver diamine fluoride (SDF). The literature search did not reveal any new articles other than those included in the reviews of Rosenblatt et al.²² and Fung et al.²³ Both claimed single and multiple applications of 38 percent SDF to be effective in arresting dentin caries in primary teeth. The four trials that were published after 2000, however, were not considered in this review, since they were conducted on children over three years old. Thus, the quality of evidence for the prevention of ECC was rated as very low (⊕OOO).

Question 2: Do anticaries agents (e.g., antimicrobials, remineralizing agents) reduce the incidence of ECC? The 10 papers that met the inclusion criteria are listed in Table 3. The antibacterial agents studied were xylitol (four papers),^{24,25,28,30} chlorhexidine varnish/gel (two papers),^{31,33} povidone iodine (two papers),^{26,27} and probiotic bacteria (one paper).²⁹ In addition, one paper evaluating the use of a remineralizing agent (casein phosphopeptide-amorphous calcium phosphate, or CPP-ACP) was identified.³¹ The scientific quality was mixed; none displayed a low risk of bias, and six papers were assessed with a high risk of bias. Three papers with topical xylitol applications (lozenges, syrup, and wipes)^{25,28,30} displayed significant reductions in caries prevalence at the one-year follow-up, with only one having a moderate risk of bias.²⁵ None of the other technologies displayed any beneficial effects on ECC incidence, in spite in some studies having significant reductions in salivary

mutans streptococci levels. The quality of evidence for anti-carries agents to prevent or control caries incidence in early childhood was graded as very low (⊕OOO).

Question 3: Do sealants reduce the incidence of ECC? No papers were identified on sealants specific to ECC, and there was scarce information on the use of sealants in primary teeth in very young children. Only one RCT on fissure sealants conducted in early childhood was identified (Table 3),³⁴ and this study found no evidence that glass ionomer sealants had an effect on caries incidence. Due to indirectness and risk of bias, the evidence on use of sealants to reduce incidence of ECC was graded as very low (⊕OOO).

Question 4: Do temporary restorations provide disease management for ECC? There were no papers identified that evaluated the use of temporary restorations like the atraumatic restorative technique (ART) or interim therapeutic restorations (ITR) without additional interventions in ECC.

Question 5: Does traditional restorative dentistry contribute to disease management for ECC? Three questions were formulated to address this query and facilitate a relevant literature search.

1. *In ECC children, does restorative care reduce relapse rates or reduce new caries?* A total of eight papers evaluating postoperative relapse rates or evidence of new caries in the follow-up visits were included (Table 4).^{3,35-41} All of these were observational studies with restorative intervention done under general anesthesia.

Table 3. ANTICARIES AGENTS FOR EARLY CHILDHOOD CARIES (ECC) PREVENTION PUBLISHED BETWEEN 2007-2014 AND SEALANTS FOR REDUCTION OF INCIDENCE OF ECC PUBLISHED BETWEEN 2000-2014*

Author, year	Design	Size/age	Intervention	Control	Follow-up age	ECC outcomes/PF	Risk of bias
<i>Anticaries agents</i>							
Meurman, 2009 ²⁴	Cohort	794/18 mos	Xyl+OHP	OHP	5 yrs	20 vs. 20%, NS	High
Milgrom, 2009 ²⁵	RCT	94/9-15 mos	Xyl syrup	Placebo	2-3 yrs	24 vs. 52%/54%	Moderate
Simratvir, 2010 ²⁶	RCT	30/3-4 yrs	PI	Water	4-5 yrs	Decreased relapse	High
Milgrom, 2011 ²⁷	q-exp	172/12-30 mos	PI+FV	FV	2-4 yrs	41 vs. 54%/24%	High
Alamoudi, 2012 ²⁸	RCT	60/10-36 mos	Xyl. tabl+OHPFV	2/yrs+OHP	1.5 yrs	0.8 vs. 4.4dmft/82%	High
Taipale, 2012 ²⁹	RCT	106/1-2 mos	Probiotic tabl	Xyl tabl	4 yrs	NS	High
Zhan, 2012 ³⁰	RCT	44/6-35 mos	Xyl wipes	Placebo	1.5-4 yrs	5 vs. 32%/85%	High
Plonka, 2013 ³¹	RCT	622/birth	CPP-ACP+FTP	FTP	2 yrs	1 vs. 2%, NS	Moderate
			CHX gel+FTP	FTP	2 yrs	1 vs. 2%, NS	Moderate
Pukallus, 2013 ³²	RCT	191/birth	CPP-ACP	NI	2 yrs	2 vs. 7%, NS	Moderate
Pukallus, 2013 ³³	RCT	189/birth	CHX-gel+FTP	FTP	2 yrs	5 vs. 7%, NS	Moderate
<i>Sealants</i>							
Chadwick, 2005 ³⁴	RCT	508/18-30 mos	GI	Placebo	30-60 mos	76.5 vs. 75.9%, NS	High

* PF=prevented fraction; PI=povidone iodine; CHX=chlorhexidine; FTP=fluoride toothpaste; OHP=oral health promotion; Xyl=xylitol; FV=fluoride varnish; CPP-ACP=casein phosphopeptides-amorphous calcium phosphate; RCT=randomized controlled trial; CCT=controlled clinical trial; NS=not significant; GI=glass ionomer.

Table 4. POST-RESTORATIVE CARE RELAPSE RATES IN CHILDREN WITH EARLY CHILDHOOD CARIES (ECC) BETWEEN 2000-2014*

Author, year	Design	Size/age	Intervention [†]	Control	Follow-up period	Relapse rate (RR)/PF (%)	Risk of bias
Almeida, 2000 ³⁵	Observational	73/1.9-4.9 yrs	Restorative work	Caries-free group	2 yrs	79 vs. 29/63(s)	High
Primosch, 2001 ³⁶	Observational	38/< 6 yrs	Restorative work	No control	6 mos	38	High
Chase, 2004 ³⁷	Observational	79/2.3-7.3 yrs	Restorative work	No control	6 mos	37	High
Foster, 2006 ³⁹	Observational	193/19-60 mos	Restorative work	No control	2 yrs	53	High
Zhan, 2006 ³⁸	Observational	22/2-6 yrs	Restorative work+10% PI, 1.23% APF	Restorative work+saline, 1.23% APF	1 yr	67 vs. 60/10 (NS)	Moderate
Amin, 2010 ⁴⁰	Observational	36/<6 yrs	Restorative work	No control	2 yrs	53	High
Berkowitz, 2011 ³	Observational	49/3.72 yrs	Restorative work+10% PI, 1.23% APF	No control	6 mos	39	High
Hughes, 2012 ⁴¹	Observational	117/2-6 yrs	Restorative work	Caries-free group	1 yr	22	High

* PF=prevented fraction; NS=not significant; S=significant; PI=povidine iodine; APF=acidulated phosphate fluoride.

Interestingly, evidence of new caries in the follow-up visits (at three months, two years) consistently indicated a relapse rate observed in the range of 22 to 79 percent (Figure 2). Since all the studies were observational in nature with moderate/high risk of bias, the quality of evidence was graded as very low (⊕OOO).

2. *In ECC children, does restoration of primary teeth influence the progression of disease and sequels like pain/abscess?* No papers were found that evaluated the effect of restorative care on progression/sequel of caries in ECC children.
3. *In ECC children, does restorative care improve OHRQOL, body weight, and performance in school settings?* Five papers that evaluated the impact of restorative care on quality of life were included (Table 5).⁴²⁻⁴⁶ All of the included studies carried out a parental survey to

assess the quality of life. Significant improvement was reported by parents in the child’s overall health post-operatively at the six-month and one-year follow-ups^{42,43,46} and in the child’s oral health three to four weeks postoperatively.^{44,45} Filstrup et al.⁴⁴ also surveyed children and found significant post-treatment improvement in the response to questions such as: “Do your teeth hurt you now?”; “Do your teeth hurt when you eat something hot or cold?”; “Do your teeth hurt when you eat something sweet?”; and “Is it hard for you to chew and bite?” Thomas et al.⁴³ also observed changes in children’s weight between pretreatment and post-treatment follow-ups but found no significant changes over one year. Cunnion et al.⁴⁶ reported significant improvement in parental ratings of their children’s overall oral health and significant reductions

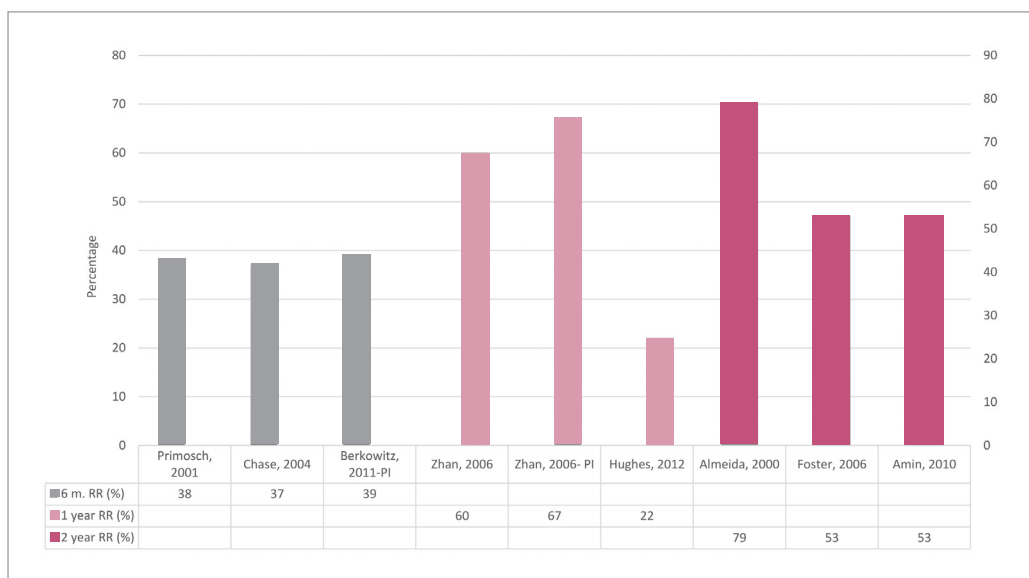


Figure 2. Postoperative relapse rates.

* RR=relapse rates; PI=intervention included application of 10% povidine iodine in addition to restorative care.

in problems associated with physical (pain related), mental, and social functioning for children who received dental treatment for ECC. These children maintained improvement at the one-year follow-up; however, the parent-reported health continued to be better for the caries-free control group. Since most of the studies were survey based and at high risk of bias, the quality of evidence was graded as very low (⊕○○○).

Discussion

This update was conducted mainly in accordance with methodology suggested by Siwek et al.⁴⁷ For prevention, the literature search was made to overlap the update by Twetman⁵ while the interval was extended to the year 2000 for management and restorative treatment of ECC due to a lack of previous reviews. For studies to be included, an implementation before the age of three years was required. This was based on the European Academy of Pediatric Dentistry's definition of ECC, which regards the disease as a unique entity to be separated from the normal occlusal and proximal caries lesions appearing in later preschool ages. The main limitations with the present review were the restriction to the English language and the fact that the systematic reviews were not quality assessed. A positive finding was that the benefits clearly outweighed the adverse events; no significant complications were reported in any study. It should be noted, however, that the included studies were not designed specifically to unveil such outcomes.

It was disappointing to find few new trials with home care fluorides for the treatment of ECC. Considering the conflicting opinions and traditions over the globe, high-quality trials on toothpaste concentration, frequency of brushing, and age of toothpaste introduction would be extremely helpful.

Since the study by Weintraub et al.,⁴⁸ sodium fluoride varnish has emerged as the professional treatment of choice to prevent and control ECC in children at risk. Our present find-

ings partly reinforced this concept, but it should be emphasized that the prevented fraction was low and the quality of evidence was weaker than that of studies of fluoride varnish in young permanent dentition.⁴⁹ A certain publication bias might also have occurred, as the findings from the three most recent trials in high-risk children¹⁹⁻²¹ were generally less in favor of fluoride varnish and, in fact, statistically nonsignificant. In addition, it was concluded that biannual fluoride varnish applications were not effective as a supplement to daily supervised toothbrushing in preschoolers living in Athens.⁵⁰

However, interesting site-specific observations were reported by Divaris et al.²⁰ in a secondary analysis of a previous trial.¹⁸ They found that the fluoride varnish intervention had the greatest efficacy on surfaces that were sound at baseline; also, the facial surfaces of the upper incisors received the most caries-preventive benefit. Thus, these findings suggest starting early with fluoride varnish applications in order to maximize the outcome, especially in high caries populations. Nevertheless, further placebo-controlled studies of fluoride varnish in combination with supervised toothbrushing in infants are needed to elucidate its clinical use.

SDF is often used as a last option in uncooperative children and special needs children with an urgent treatment need. It is, however, not approved for clinical use in several countries due to the high content of fluoride (44,800 ppm) and the lack of understanding regarding the mechanisms of action. No trials conducted in early childhood were identified in this search; however, according to a narrative review of Fung et al.,²³ SDF can arrest dentin caries in primary teeth and prevent caries recurrence after treatment. Since the included studies in the aforementioned review²³ were not quality assessed, further studies on this concept in early childhood are warranted.

In accordance with previous reviews,^{5,6} we found little evidence of efficacy for the use of xylitol, chlorhexidine varnish/gel, povidone iodine, probiotic bacteria, and remineralizing agents in ECC prevention. However, lack of evidence is not the same

Table 5. POST RESTORATIVE CARE OF EARLY CHILDHOOD CARIES: CHANGES IN QUALITY OF LIFE (2000-2014)*

Author, year	Design	Size/age	Intervention	Control	Follow-up period Follow-up age	Outcome	Risk of bias
Acs, 2001 ⁴²	Survey	228/41±6 mos	Restorative care (GA)	None	— 43±10 mos	OHI†: 65%	High
Thomas, 2002 ⁴³	Observational/survey	50/2-7 yrs	Restorative care (GA)	None	13±1 mos —	Change in weight: NS OHI: 90%	High
Filstrup, 2003 ⁴⁴	Survey	37/22-70 mos	Restorative care (GA or in-office treatment)	Caries-free group	4 wks —	OH: S; OH(C)‡	High
Klaassen, 2009 ⁴⁵	RCT	104/2-7 yrs	Restorative work (GA)	Pre-treatment survey	Before treatment/ 3-4 wks —	OH: S; OHI: NS	Low
Cunnion, 2010 ⁴⁶	Survey	501/2-8 yrs	Restorative work (GA)	Caries-free group	6 mos/1 yr —	OH: S; Improvement in mental, physical, social functioning: S	High

* OH=oral health-related quality of life (parental reporting); OHI=overall health improvement (parental reporting); OH(C)=oral health-related quality of life (child/self-reporting); PF=prevented fraction; RCT=randomized controlled trial; NS=not significant; S=significant; GA=done under general anesthesia.

† For patients with noncontributory medical histories.

‡ Significant improvement for questions like: Do your teeth hurt you now or when eating something sweet/hot/cold? Is it hard for you to chew and bite?

as lack of effect. In this context, the study of Milgrom et al.²⁵ was of particular interest, indicating a possible role of xylitol in ECC prevention that should be further studied in larger settings and other populations.

There is no literature pertaining to the use of pit and fissure sealants in children to prevent ECC. Based on clinical recommendations from the American Dental Association, there is weak evidence to support use of sealants in primary teeth and sealants should be placed when it is determined that the tooth, or the patient, is at risk of experiencing caries.⁵¹ Interestingly, Borges et al. found sealants as effective as conventional composite restorations for management of noncavitated dentin occlusal lesions in primary teeth.⁵² The studies utilized for the ADA review, however, were not graded for quality or risk of bias. Additionally, since most of the data of the ADA review were from older populations the evidence supporting use of sealants in ECC children is generally an extrapolation. Since the literature is not conclusive, the onus of the clinical decision to seal primary teeth in ECC children can be based on individual clinical expertise and patient preferences.

It was discouraging to see the lack of literature on effectiveness of techniques like ART/ITR in managing ECC, although some data is available for older children. Yassen⁵³ evaluated ART restorations in primary molars in six- to seven-year-olds and noted survival rates of 89 percent at six months and 74 percent at 12 months. Ng et al.⁵⁴ reported a reduction in new cavitation, pain, and referrals to the operating room among children undergoing a comprehensive disease management protocol versus historical controls. Some of these children received ITR as a part of the disease management; however, they received other interventions as well, so the effect of ITR as an intervention was not separately observed. There is certainly a need for further trials to evaluate effectiveness of temporary restorations in ECC.

Most of the studies evaluated in this paper to assess effectiveness of traditional restorative dentistry as a part of disease management were either surveys or observational in nature. Thus, the quality of evidence available to support restorative care was found to be insufficient. Even though graded as insufficient, the included studies provide some evidence highlighting high post-treatment relapse rates. Thus, there is lack of substantial evidence to suggest that restorative treatment leads to acceptable long-term clinical outcomes.

The evidence on influence of traditional restorative dentistry on overall or oral health-related quality of life is very limited and was assessed to be of weak quality. Most included papers noted evidence of improvement in OHRQOL, as reported by the parents. But conflicting results were also presented. For example, in a previous paper, Acs et al.⁵⁵ showed that the percentile weight categories for ECC children were significantly less than the caries-free patients. The authors also noted a significant improvement in weight following therapeutic dental treatment. However, these findings were inconsistent with those of Thomas et al.,⁴³ who were unable to confirm such a catch-up growth. Even though the current evidence supporting effectiveness of traditional restorative dentistry in ECC children is insufficient, it remains an integral part of the strategy to manage the disease. There is certainly a need to go beyond the drill-and-fill dentistry and integrate other concepts of disease management to ensure long-term success. One may also interpret the paucity of high-quality research as meaning the glass is half-full rather than half-empty. The mapping of knowledge gaps disclosed here and in other fields of pediatric dentistry⁵⁶ is a call for intensified clinical research and points out the most pertinent topics to be addressed in ECC prevention and management.

An appropriate question is: "What should be used to assist clinical decision-making when the quality of evidence is low or very low?" According to Sackett et al.,⁵⁷ evidence-based practice is a triad that requires the judicious integration of systematic assessments of clinically relevant scientific evidence, relating to the patient's oral and medical condition and history, with the dentist's clinical expertise and the patient's treatment needs and preferences. In pediatric dentistry, this means that the informed clinician must combine best available scientific evidence with his/her own expertise and parents' values and expectations. It further underpins the need and responsibility of the profession to understand and remain updated on the best available evidence for pediatric dental care.

Conclusions

Based on this updated review, the following conclusions can be made:

1. There is moderate and limited quality of evidence in support of fluoride toothpaste and fluoride varnish for early childhood caries prevention, while the evidence for fluoride tablets/drops is insufficient.
2. There is insufficient evidence to support the use of silver diamine fluoride, xylitol, chlorhexidine varnish/gel, povidone iodine, probiotic bacteria, and remineralizing agents (e.g., casein phosphopeptide-amorphous calcium phosphate) for ECC prevention.
3. There is insufficient evidence for the use of sealants to reduce incidence of ECC.
4. There is insufficient evidence to support the use of temporary restorations as a part of disease management of ECC.
5. There is insufficient evidence to evaluate the value of traditional restorative dentistry as a part of disease management of ECC.

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Is routine dental prophylaxis effective?

Abstracted from

Azarpazhooh A, Main PA.

Efficacy of dental prophylaxis (rubber cup) for the prevention of caries and gingivitis: a systematic review of literature. *Br Dent J* 2009; 207: E14; discussion 328–329

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Question: Does dental prophylaxis provided at recall appointments reduce caries increments, or improve gingival health?

Data sources Searches were made for relevant papers using Medline, CINHALL (Cumulative Index to Nursing and Allied Health Literature), Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic reviews, Database of Abstracts of Reviews of Effects, Embase, Health and Psychosocial Instruments, HealthSTAR, International Pharmaceutical Abstracts, and ACP (American College of Physicians) Journal Club. Further articles were identified by reviewing the references and bibliographies of the retrieved articles.

Study selection Articles were limited to original human studies assessing rubber cup dental prophylaxis. All other studies, including in vitro studies, reviews and case series, were excluded. Only studies in English with prophylaxis given at a recall appointment at intervals of 4 months were included.

Data extraction and synthesis The quality of articles was assessed independently and evidence levels rated. A qualitative synthesis is presented.

Results Four articles relating to dental prophylaxis and caries prevention and two articles relating to dental prophylaxis and gingivitis prevention were included. Four studies found that a dental prophylaxis was not warranted before professionally applied topical fluoride (PATF) for caries prevention in children. A generalisation about dental prophylaxis before PATF cannot be applied to adolescents and adults. Available evidence from two other studies fails to demonstrate any benefit in the prevention of gingivitis from further dental prophylaxis at the interval used here for recall examinations.

Conclusions To prevent caries in children, dental prophylaxis need not be provided either at a recall visit or before PATF. Dental prophylaxis at intervals of 4 months or more is not justified for the prevention of gingivitis in the general population.

Commentary

Dental prophylaxis generally consists of mechanical cleaning of the clinical crowns of the teeth, using an abrasive paste and a rubber cup rotating at low speed. This systematic review attempts to assess whether dental prophylaxis provided at recall appointments reduces caries increments, on its own or in combination with PATF, or improve gingival health.

Data for this review was obtained by searching Ovid Medline and several other well recognised databases. The authors made an attempt to include randomised control trials (RCT), although the number of suitable studies of this type was low, and non-RCT were therefore included. There was no personal contact with experts and only papers published in the English language were included, which may have limited the data somewhat.

The authors went into clear detail regarding methods for selecting appropriate studies from the literature search. Further articles were selected by performing a secondary search using the references from the original papers. Following initial exclusions, 12 articles were critically appraised by two separate readers using a checklist to assess evidence of efficacy of therapy or prevention.¹ Of the articles judged to be acceptable, four related to dental prophylaxis and caries prevention, and two related to dental prophylaxis and gingivitis prevention.

Although checklists are useful in such a review, they have several limitations which should be considered. The main issue involves the scoring system employed, in which equal weighting is given to aspects which carry different levels of importance. For example, the aforementioned checklist gives one point for sufficient duration of a study and the same score for the presence of randomisation. Such a system introduces a great deal of subjectivity to a literature review and should be used with caution. The Cochrane Collaboration explicitly discourages use of scales and checklists in reviews, as evidence shows them to be unreliable tools for assessment of validity.^{2,3}

Because of wide variation in the design of the separate studies, no attempt was made to combine the data. Instead, qualitative summaries of each of the studies were provided, with a unanimous indication that there was no significant difference between groups of results in each study. The lack of comparable quantitative data meant there was no opportunity to carry out meta-analysis or sensitivity analysis.

All the papers investigating the relationship between prophylaxis and caries increments used acidulated phosphate fluoride as their PATF of choice. Although this form of fluoride delivery has been shown to be effective in the prevention of caries, it has largely fallen

out of favour in recent years. Instead, topical fluoride varnishes such as Duraphat (2.26% F) have become more widely used because they can adhere to tooth surfaces and are easier to apply.^{4,5} With this in mind, the relevance of the papers to current clinical practice may be reduced.

An obvious theme running through the review is the lack of control of the subjects' dental care outside the study. This was acknowledged by the authors of this review, and points towards a potentially significant factor in influencing the results. The nature of the studies included means, however, that this would be an extremely difficult issue to resolve.

The overall recommendations made by the review are that:

- for the prevention of caries in children, dental prophylaxis need not be provided either at a recall visit or before the application of topical fluorides; and
- for the prevention of gingivitis in the general population, dental prophylaxis at recall appointments (of intervals of 4 or 6 months) is not effective for the prevention or treatment of gingivitis.

The authors state that in a setting such as Canada, to cease provision of prophylaxis prior to PATF would lead to considerable savings in oral health resources because of the nature of the fee structure. In general dental practice in the United Kingdom, no fee is paid for the provision of prophylaxis in the aforementioned situations and no financial gain would be made on the part of the National Health Service by excluding this treatment.

In general, most of the problems outlined here have been identified by the authors. It is fair to say that the evidence has been overstated, and the recommendations made are based on a limited amount of data. In any case, there appears to be little harm or benefit to the patient either way, whether prophylaxis is provided in these situations or not. Prophylaxis, does, however, have other uses not addressed by these authors: for example, prior to inspection for caries, or in the acclimatisation of an anxious or young patient. Given the limited number of high quality studies and reviews available, further research is clearly needed before any changes in clinical practice can be justified.

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Surgical removal versus retention for the management of asymptomatic disease-free impacted wisdom teeth (Review)

Ghaemina H, Perry J, Nienhuijs MEL, Toedtling V, Tummers M, Hoppenreijts TJM, Van der Sanden WJM, Mettes TG

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Surgical removal versus retention for the management of asymptomatic disease-free impacted wisdom teeth.

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[Intervention Review]

Surgical removal versus retention for the management of asymptomatic disease-free impacted wisdom teeth

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ABSTRACT

Background

Prophylactic removal of asymptomatic disease-free impacted wisdom teeth is surgical removal of wisdom teeth in the absence of symptoms and with no evidence of local disease. Impacted wisdom teeth may be associated with pathological changes, such as pericoronitis, root resorption, gum and alveolar bone disease (periodontitis), caries and the development of cysts and tumours. When surgical removal is carried out in older people, the risk of postoperative complications, pain and discomfort is increased. Other reasons to justify prophylactic removal of asymptomatic disease-free impacted third molars have included preventing late lower incisor crowding, preventing damage to adjacent structures such as the second molar or the inferior alveolar nerve, in preparation for orthognathic surgery, in preparation for radiotherapy or during procedures to treat people with trauma to the affected area. Removal of asymptomatic disease-free wisdom teeth is a common procedure, and researchers must determine whether evidence supports this practice. This review is an update of an existing review published in 2012.

Objectives

To evaluate the effects of removal compared with retention (conservative management) of asymptomatic disease-free impacted wisdom teeth in adolescents and adults.

Search methods

We searched the following electronic databases: Cochrane Oral Health's Trials Register (to 24 May 2016), the Cochrane Central Register of Controlled Trials (CENTRAL) (2016, Issue 4), MEDLINE Ovid (1946 to 24 May 2016) and Embase Ovid (1980 to 24 May 2016). We searched ClinicalTrials.gov and the [World Health Organization International Clinical Trials Registry Platform](http://WorldHealthOrganization.org/InternationalClinicalTrialsRegistryPlatform) for ongoing and unpublished studies to 24 May 2016. We imposed no restrictions on language or date of publication in our search of electronic databases.

Surgical removal versus retention for the management of asymptomatic disease-free impacted wisdom teeth (Review)

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The effects of NICE guidelines on the management of third molar teeth

L. W. McArdle¹ and T. Renton²

IN BRIEF

- Highlights that third molar removal is as common now as it was before the introduction of clinical guidelines.
- Informs that NICE guidelines have altered the dynamics of third molar management with patients on average being older.
- Stresses that dental caries associated with third molars has escalated by over 200% in a ten-year period.
- Suggests NICE guidelines may be flawed and require review.

Background Third molar surgery (TMS) is probably one of the most commonly performed surgical procedures undertaken in the NHS. In 2000, the National Institute of Clinical Excellence (NICE) introduced guidelines relating to TMS. These recommended against the prophylactic removal of third molars and listed specific clinical indications for surgery. The impact of these guidelines has not been fully evaluated and this research hopes to focus the effect of these guidelines over the last ten years. **Methods** Using data obtained from a variety of NHS databases such as HES (Eng & Wales), the NHSBSA and data from NHS Scotland, we looked at the age range of patients requiring third molar removal and the number of patients having third molars removed in both primary and secondary care environments from 1989 to 2009. In addition we looked at the clinical indications for TMS activity in secondary care. **Findings** The mean age of patients increased from 25 years in 2000 to 32 years in 2010, with the modal (most common) age increasing from 26 to 29 years. After the introduction of clinical guidelines the number of patients requiring third molar removal in secondary care dropped by over 30%, however, since 2003 the number of patients has risen by 97%. There is also a significant increase in caries as an indication for third molar removal. **Conclusions** More patients are requiring third molar removal with an increasing number of patients having caries related to their third molars. Patients are, on average, older confirming that the removal of third molars is shifting from a young adult population group to an older adult population group. NICE guidelines did appear to have contributed to a fall in the volume of third molars removed within the NHS post 2000. However, concluding that this reduction demonstrates the success of NICE's guidance would be a premature assumption. The number of patients now requiring third molar removal is comparable to that of the mid 1990s. NICE has influenced the management of patients with third molars but this has not resulted in any reduction in the number of patients requiring third molar removal. Coding and data collection for third molars is not uniform, leading to potential misrepresentation of data. This perhaps raises the issue that an improved universal coding system is required for the NHS and that the NICE guidelines need review.

INTRODUCTION

Impacted third molars (wisdom teeth) are one of the most common developmental conditions that affect humans. It occurs due to a failure of proper eruption of the third molar tooth resulting in impaction of the tooth against adjacent teeth, alveolar bone, the surrounding mucosal soft tissue or combination thereof (Fig. 1). The impaction is defined in relation to the geometric angle of impaction such as mesio-angular, disto-angular, vertical and horizontal.

If the tooth cannot fully erupt then its impaction will also be defined as partial, where some of the tooth has erupted into the oral cavity; or complete, where the tooth is buried and completely unerupted. The most common third molar tooth to be impacted is the mandibular third molar followed by the maxillary third molar. Third molar development tends to be bilateral although failure of the third molar to develop, either unilaterally or bilaterally, is not uncommon. Impacted third molars can cause a host of clinical problems that may necessitate the removal of the tooth to facilitate dental health.

Third molar surgery (TMS) is one of the most commonly performed surgical procedures undertaken in secondary care within the NHS. When combined with out-patient procedures undertaken in both secondary



Fig. 1 Mesio-angular impacted third molar with caries *in-situ* and causing caries to the second molar. Lower right side

care and primary dental care it probably rates as the most common surgical procedure undertaken in the whole of the NHS. The presence of an impacted third molar is a developmental condition and is

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What is the Risk of Future Extraction of Asymptomatic Third Molars? A Systematic Review

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Purpose: The purpose of our report was to determine clinically whether young adults who elect to retain their asymptomatic third molars (M3s) have a risk of undergoing 1 or more M3 extractions in the future.

Materials and Methods: To address our clinical question, we designed and implemented a systematic review. The studies included in the present review were prospective, had a sample size of 50 subjects or more with at least 1 asymptomatic M3, and had at least 12 months of follow-up data available. The primary study variables were the follow-up duration (in years) and the number of M3s extracted by the end of the follow-up period or the number of subjects who required at least one M3 extraction. The annual and cumulative incidence rates of M3 removal were estimated.

Results: Seven studies met the inclusion criteria. The samples sizes ranged from 70 to 821 subjects, and the follow-up period ranged from 1 to 18 years. The mean incidence rate for M3 extraction of previously asymptomatic M3s was 3.0% annually (range 1 to 9%). The cumulative incidence rate for M3 removal ranged from 5% at 1 year to 64% at 18 years. The reasons for extraction were caries, periodontal disease, and other inflammatory conditions.

Conclusions: The cumulative risk of M3 extraction for young adults with asymptomatic M3s is sufficiently high to warrant its consideration when reviewing the risks and benefits of M3 retention as a management strategy.

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The management of asymptomatic third molars (M3s) is controversial and currently unresolved. Some investigators have advocated for M3 retention until the clinical signs and symptoms dictate a need for removal.^{1,2} Others have advocated for early removal of M3s, given the potential for caries,³⁻⁹ pericoronitis,^{4,5,7,10-14} and periodontal disease.^{6,9,15-18} However, a systematic

review by the Cochrane Collaboration failed to provide insight and concluded that the evidence was insufficient to support or refute the removal of M3s to prevent future problems.¹⁹

The American Association of Oral and Maxillofacial Surgeons (AAOMS) has recommended that young adults be evaluated to assess for the presence and

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Management of Third Molar Teeth

Management of Third Molar Teeth was developed by the American Association of Oral and Maxillofacial Surgeons (AAOMS) and is supported by the following organizations:

American Academy of Oral and Maxillofacial Pathology (AAOMP)

American Academy of Oral and Maxillofacial Radiology (AAOMR)

American Academy of Pediatric Dentistry (AAPD)

American Academy of Periodontology (AAP)

American Association of Endodontists (AAE)

American Association of Orthodontists (AAO)

American College of Oral and Maxillofacial Surgeons (ACOMS)

British Association of Oral and Maxillofacial Surgeons (BAOMS)

British Association of Oral Surgeons (BAOS)

Canadian Association of Oral and Maxillofacial Surgeons (CAOMS)

International Association of Oral and Maxillofacial Surgeons (IAOMS)

The American Association of Oral and Maxillofacial Surgeons believes the best approach to any clinical dilemma is to employ “evidence based practice.” This process merges the best available clinically relevant evidence with the results of a comprehensive and focused clinical and imaging examination to formulate recommendations that can be discussed with the individual patient.

A common clinical dilemma faced by patients today is what to do about their third molars. Areas of concern include determining when surgical management is indicated (particularly in the case of “asymptomatic” teeth), the risks associated with either removal or retention of third molars, the optimal timing for treatment, the cost of treatment as well as the cost of retention, and how to best develop a plan for follow-up when a decision is made to retain a third molar.

There are a variety of recognized management choices for third molars, including removal, partial removal (coronectomy), retention with active clinical and radiographic surveillance, surgical exposure, tooth repositioning, transplantation, surgical periodontics, and marsupialization of associated soft tissue pathology with observation and possible secondary treatment.

When considering possible management choices, the clinician should also consider the likelihood that disease will develop. Further, evidence clearly indicates that surgery is more difficult as patients age;

therefore given the desire to achieve therapeutic goals, obtain positive outcomes, and avoid known risks and complications, a decision should be made before the middle of the patient’s third decade to remove or continue to observe third molars, with the knowledge that future treatment may be necessary based on the clinical situation. Finally, the AAOMS also recognizes the oral and maxillofacial surgeon as the clinician qualified to determine a surgical treatment plan and care for the individual patient.

AAOMS Position Statement on Third Molar Management

As a means of helping to clarify what is known with respect to third molar management, the AAOMS offers the following position statement:

Predicated on the best evidence-based data, third molar teeth that are associated with disease, or are at high risk of developing disease, should be surgically managed. In the absence of disease or significant risk of disease, active clinical and radiographic surveillance is indicated.

This statement clearly recognizes that while not all third molars require surgical management, given the documented high incidence of problems associated with third molars over time, all patients should be evaluated by someone experienced and expert in third molar management.

Approach to the Patient with Third Molars

The approach to third molar management begins with a thorough medical and dental history, with attention paid to any symptoms that may be associated with the patient's wisdom teeth. The clinician should ascertain whether symptoms are present and if so, whether they are related to the patient's third molars or another source. Physical examinations should include the eruption status and position of the tooth in the jaws/oral cavity, functionality, and periodontal and caries status. Imaging allows determination of the presence or absence of the tooth, presence or absence of disease, anatomy of the tooth and its root system, as well as the tooth's relationship to important structures such as the inferior alveolar nerve, adjacent second molar, maxillary sinus, etc. In addition, imaging can detect significant associated and non-associated disease, such as cysts or tumors.

Where there is evidence of disease, management is generally straightforward. When tissue associated with a third molar is suspected to be pathologic in nature, it should be submitted for histologic examination. When symptoms are present, it is important to identify the source with subsequent management focused on removal or control of the etiology.

Uncertainty is more explicit in the case of patients who have asymptomatic, disease-free third molars. Given that we cannot confidently predict what the future holds for all patients with asymptomatic, disease-free teeth, we must rely on the clinician's experience and expertise in recognizing the likelihood that pathology will develop and his or her ability to communicate this in realistic terms to the patient.

White Paper



In the absence of evidence regarding current associated symptoms or disease to support surgical management, the surgeon should review the likelihood of pathology developing in the future, functionality, risks of removal, risks of retention, and protocol for active surveillance. Removal should be favored when the third molar is currently or likely to be non-functional, there is an overlying removable prosthesis, orthodontic removal is justified (such as when the tooth is preventing the eruption of the second molar) and in the case of planned orthognathic surgery. Patients should also be informed of the greater difficulty and increased rate of complications associated with third molar removal as they age. When appropriate, patients should be advised that if they retain their disease-free wisdom teeth, it is possible they could live their entire lives without problems.

The AAOMS offers the above recommendations based on the best available clinically relevant literature and is committed to a process of constant re-evaluation of new information.

For relevant sources and resource material, please see [Supporting Information to the Management of Patients with Third Molar Teeth](#) available on [aaoms.org](#).

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Section 4.0

Biennial Review

OHAP 2018 Biennial Review

Question: Does the current placement of any CDT codes beside the implant codes need to be discussed as part of HERC's biennial review process that will result in the January 1, 2018 Prioritized List?

Question source: OHAP

Issue: The prioritization of implant codes is being discussed at the November OHAP meeting. If time allows are there other CDT codes that members would like to discuss regarding their current placement on the Prioritized List or their coverage according to other HSD files (e.g., diagnostic, ancillary, noncovered)? At a minimum, time at the November OHAP meeting will be budgeted to allow members to "nominate" codes for discussion as part of the biennial review. Each member will be asked to make a brief statement as to why they suggest the current placement of the code should be changed and any alternate placement they would like considered. Unlike the last review conducted in 2010 when the new (current) dental lines were created, an exhaustive review of every code will not be conducted. Please keep nominations to a manageable number of codes as there will only be time to hold one additional meeting in February 2017 prior to the March 2017 HERC meeting where all biennial review changes must be finalized.

Dental Placement on 1/1/17 Prioritized List

Line	Condition/Treatment			
3	PREVENTION SERVICES WITH EVIDENCE OF EFFECTIVENESS	MEDICAL THERAPY		
Code	Description		HSD Covg*	Fee
D0191	Assessment of a patient - a limited clinical inspection that is performed to identify possible signs of oral or systemic disease malformation or injury and the potential need for referral for diagnosis and treatment.		YYY	\$11.83
D1206	Topical application of fluoride varnish		YYY	\$12.97
Line	Condition/Treatment			
5	TOBACCO DEPENDENCE	MEDICAL THERAPY/BEHAVIORAL COUNSELING		
Code	Description		HSD Covg*	Fee
D1320	TOBACCO COUNSELING FOR THE CONTROL AND PREVENTION OF ORAL DISEASE		YYY	\$10.18
Line	Condition/Treatment			
47	CLEFT PALATE WITH AIRWAY OBSTRUCTION	MEDICAL AND SURGICAL TREATMENT, ORTHODONTICS		
Code	Description		HSD Covg*	Fee
D8010	LIMITED ORTHODONTIC TREATMENT OF THE PRIMARY DENTITION		YYY BR	
D8020	LIMITED ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION		YYY BR	
D8030	LIMITED ORTHODONTIC TREATMENT OF THE ADOLESCENT DENTITION		YYY BR	
D8040	LIMITED ORTHODONTIC TREATMENT OF THE ADULT DENTITION		YYY BR	
D8070	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION		YYY BR	
D8080	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE ADOLESCENT DENTITION		YYY BR	
D8090	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE ADULT DENTITION		YYY BR	
D8210	REMOVABLE APPLIANCE THERAPY		YYY BR	
D8220	FIXED APPLIANCE THERAPY		YYY BR	
D8660	PRE-ORTHODONTIC EXAMINATION TO MONITOR GROWTH AND DEVELOPMENT		YYY BR	
D8670	PERIODIC ORTHODONTIC TREATMENT VISIT		YYY BR	
D8680	ORTHODONTIC RETENTION (REMOVAL OF APPLIANCES, CONSTRUCTION AND PLACEMENT OF RETAINER(S))		YYY BR	
D8681	Removable orthodontic retainer adjustment		YYY BR	
D8690	ORTHODONTIC TREATMENT (ALTERNATIVE BILLING TO A CONTRACT FEE)		YYY BR	
D8691	REPAIR OF ORTHODONTIC APPLIANCE		NNN	
D8692	REPLACEMENT OF LOST OR BROKEN RETAINER		NNN	

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D8693	RE-CEMENT OR RE-BOND FIXED RETAINERS	NNN	
D8694	Repair of fixed retainers, includes reattachment	NNN	
Line	Condition/Treatment		
57	PREVENTIVE DENTAL SERVICES	CLEANING, FLUORIDE AND SEALANTS	
Code	Description	HSD Covg*	Fee
D0120	PERIODIC ORAL EVALUATION - ESTABLISHED PATIENT	YYY	\$23.66
D0145	ORAL EVALUATION FOR A PATIENT UNDER THREE YEARS OF AGE AND COUNSELING WITH PRIMARY CAREGIVER	YNN	\$23.66
D0150	COMPREHENSIVE ORAL EVALUATION - NEW OR ESTABLISHED PATIENT	YYY	\$36.81
D0180	COMPREHENSIVE PERIODONTAL EVALUATION - NEW OR ESTABLISHED PATIENT	YYY	\$36.81
D0191	Assessment of a patient - a limited clinical inspection that is performed to identify possible signs of oral or systemic disease malformation or injury and the potential need for referral for diagnosis and treatment.	YYY	\$11.83
D0601	Caries risk assessment and documentation with a finding of low risk	NNN	
D0602	Caries risk assessment and documentation with a finding of moderate risk	NNN	
D0603	Caries risk assessment and documentation with a finding of high risk	NNN	
D1110	PROPHYLAXIS-ADULT	NYN	\$37.17
D1120	PROPHYLAXIS-CHILD	YNN	\$28.59
D1206	Topical application of fluoride varnish	YYY	\$12.97
D1208	Topical application of fluoride--excluding varnish	YYY	\$12.97
D1310	NUTRITIONAL COUNSELING FOR THE CONTROL OF DENTAL DISEASE	NNN	
D1330	ORAL HYGIENE INSTRUCTION	NNN	
D1351	SEALANT-PER TOOTH	YNN	\$19.31
D1510	SPACE MAINTAINER-FIXED UNILATERAL	YNN	\$76.38
D1515	SPACE MAINTAINER-FIXED BILATERAL	YNN	\$98.21
D1520	SPACE MAINTAINER-REMOVABLE UNILATERAL	YNN	\$74.20
D1525	SPACE MAINTAINER-REMOVABLE BILATERAL	YNN	\$88.39
D1550	RECEMENT OR RE-BOND SPACE MAINTAINER	YYY	\$27.27
D1555	REMOVAL OF FIXED SPACE MAINTAINER	YYY	\$23.55
D1575	Distal shoe space maintainer - fixed - unilateral		
D4346	Scaling in presence of generalized moderate or severe gingival inflammation – full mouth, after oral evaluation		
D4355	FULL MOUTH DEBRIDEMENT TO ENABLE COMPREHENSIVE EVALUATION AND DIAGNOSIS	YYY	\$49.11
D5986	FLUORIDE GEL CARRIER	YYY	
D9920	BEHAVIOR MANAGEMENT, BY REPORT	YYY	BR

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Line	Condition/Treatment		
58	DENTAL CONDITIONS (EG. INFECTION, PAIN, TRAUMA)	EMERGENCY DENTAL SERVICES	
Code	Description	HSD Covg*	Fee
D0140	LIMITED ORAL EVALUATION - PROBLEM FOCUSED	YYY	\$31.54
D0160	DETAILED AND EXTENSIVE ORAL EVALUATION - PROBLEM FOCUSED, BY REPORT	YYY	\$63.25
D0170	RE-EVALUATION-LIMITED, PROBLEM FOCUSED (ESTABLISHED PATIENT; NOT POST-OPERATIVE VISIT)	YYY	\$24.61
D3110	PULP CAP-DIRECT (EXCLUDING FINAL RESTORATION)	NNN	\$20.21
D3221	PULPAL DEBRIDEMENT, PRIMARY AND PERMANENT TEETH	YYY	\$46.92
D7140	EXTRACTION, ERUPTED TOOTH OR EXPOSED ROOT (ELEVATION AND/OR FORCEPS REMOVAL)	YYY	\$76.60
D7210	SURGICAL REMOVAL OF ERUPTED TOOTH REQUIRING REMOVAL OF BONE AND/OR SECTIONING OF TOOTH, AND INCLUDING ELEVATION OF MUCOPERIOSTEAL FLAP IF INDICATED	YYY	\$87.31
D7260	ORAL ANTRAL FISTULA CLOSURE	YYY	\$98.21
D7261	PRIMARY CLOSURE OF A SINUS PERFORATION	YYY	BR
D7270	TOOTH REIMPLANTATION AND/OR STABILIZATION OF ACCIDENTALLY EVULSED OR DISPLACED TOOTH	YYY	\$65.46
D7510	INCISION AND DRAINAGE OF ABSCESS-INTRAORAL SOFT TISSUE	YYY	\$68.20
D7520	INCISION AND DRAINAGE OF ABSCESS-EXTRAORAL SOFT TISSUE	YYY	\$41.48
D7530	REMOVAL OF FOREIGN BODY FROM MUCOSA, SKIN, OR SUBCUTANEOUS ALVEOLAR TISSUE	YYY	\$87.31
D7560	MAXILLARY SINUSOTOMY FOR REMOVAL OF TOOTH FRAGMENT OR FOREIGN BODY	YYY	BR
D7670	ALVEOLUS - CLOSED REDUCTION, MAY INCLUDE STABILIZATION OF TEETH	YYY	\$338.09
D7770	ALVEOLUS - OPEN REDUCTION STABILIZATION OF TEETH	YYY	BR
D7910	SUTURE OF RECENT SMALL WOUNDS UP TO 5 CM	YYY	\$63.56
D7911	COMPLICATED SUTURE-UP TO 5 CM	YYY	\$95.34
D7997	APPLIANCE REMOVAL (NOT BY DENTIST WHO PLACED APPLIANCE), INCLUDES REMOVAL OF ARCHBAR	YYY	BR
D9110	PALLIATIVE (EMERGENCY) TREATMENT OF DENTAL PAIN-MINOR PROCEDURES	YYY	BR
D9410	HOUSE/EXTENDED CARE FACILITY CALL	YYY	\$36.01
D9420	HOSPITAL OR AMBULATORY SURGICAL CENTER CALL	YYY	\$109.12
D9440	OFFICE VISIT-AFTER REGULARLY SCHEDULED HOURS	YYY	\$36.01
D9610	THERAPEUTIC PARENTERAL DRUG, SINGLE ADMINISTRATION	YYY	\$13.09
D9612	THERAPEUTIC PARENTERAL DRUGS, TWO OR MORE ADMINISTRATIONS, DIFFERENT MEDICATIONS	YYY	BR

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Line	Condition/Treatment	
75	NEUROLOGICAL DYSFUNCTION IN BREATHING, EATING, SWALLOWING, BOWEL, OR BLADDER CONTROL CAUSED BY CHRONIC CONDITIONS; ATTENTION TO OSTOMIES	MEDICAL AND SURGICAL TREATMENT (EG. G-TUBES, J-TUBES, RESPIRATORS, TRACHEOSTOMY, UROLOGICAL PROCEDURES)

Code	Description	HSD Covg*	Fee
D5937	TRISMUS APPLIANCE (NOT FOR TM TREATMENT)	NNN	
D5992	ADJUST MAXILLOFACIAL PROSTHETIC APPLIANCE, BY REPORT	NNN	
D5993	MAINTENANCE AND CLEANING OF A MAXILLOFACIAL PROSTHESIS (EXTRA OR INTRAORAL) OTHER THAN REQUIRED ADJUSTMENTS, BY REPORT	NNN	

Line	Condition/Treatment	
205	CANCER OF BONES	MEDICAL AND SURGICAL TREATMENT, WHICH INCLUDES CHEMOTHERAPY AND RADIATION THERAPY

Code	Description	HSD Covg*	Fee
D5934	MANDIBULAR RESECTION PROSTHESIS WITH GUIDE FLANGE	NNN	
D5935	MANDIBULAR RESECTION PROSTHESIS WITHOUT GUIDE FLANGE	NNN	
D5984	RADIATION SHIELD	NNN	
D5992	ADJUST MAXILLOFACIAL PROSTHETIC APPLIANCE, BY REPORT	NNN	
D5993	MAINTENANCE AND CLEANING OF A MAXILLOFACIAL PROSTHESIS (EXTRA OR INTRAORAL) OTHER THAN REQUIRED ADJUSTMENTS, BY REPORT	NNN	
D7440	EXCISION OF MALIGNANT TUMOR-LESION DIAMETER UP TO 1.25 CM	NNN	
D7441	EXCISION OF MALIGNANT TUMOR-LESION DIAMETER GREATER THAN 1.25 CM	NNN	

Line	Condition/Treatment	
212	DEEP OPEN WOUND, WITH OR WITHOUT TENDON OR NERVE INVOLVEMENT	MEDICAL AND SURGICAL TREATMENT

Code	Description	HSD Covg*	Fee
D7912	COMPLICATED SUTURE-GREATER THAN 5 CM	YYY	\$137.72
D7920	SKIN GRAFT (IDENTIFY DEFECT COVERED, LOCATION, AND TYPE OF GRAFT)	NNN	

Line	Condition/Treatment	
215	CANCER OF THYROID	MEDICAL AND SURGICAL TREATMENT, WHICH INCLUDES CHEMOTHERAPY AND RADIATION THERAPY

Code	Description	HSD Covg*	Fee
D5984	RADIATION SHIELD	NNN	

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Line	Condition/Treatment		
223	DENTAL CONDITIONS (EG. PERIODONTAL DISEASE)	BASIC PERIODONTICS	
Code	Description	HSD Covg*	Fee
D4210	Gingivectomy or gingivoplasty - four or more contiguous teeth or bounded teeth spaces per quadrant. It is performed to eliminate suprabony pockets or to restore normal architecture when gingival enlargements or asymmetrical or unaesthetic topography is e	YYY	\$52.97
D4211	Gingivectomy or gingivoplasty -four or more contiguous teeth tooth bounded spaces per quadrant. It is performed to eliminate suprabony pockets or to restore normal architecture when gingival enlargements or asymmetrical or unaesthetic topography is evide	YYY	\$39.72
D4212	Gingivectomy or gingivoplasty - to allow access for restorative procedures - per tooth	NNN	
D4341	PERIODONTAL SCALING AND ROOT PLANING - FOUR OR MORE TEETH PER QUADRANT	YYY	\$63.17
D4342	PERIODONTAL SCALING AND ROOT PLANING - ONE TO THREE TEETH, PER QUADRANT	YYY	\$47.37
D4910	PERIODONTAL MAINTENANCE	YYY	\$32.75
Line	Condition/Treatment		
233	FRACTURE OF FACE BONES; INJURY TO OPTIC AND OTHER CRANIAL NERVES	SURGICAL TREATMENT	
Code	Description	HSD Covg*	Fee
D5988	SURGICAL SPLINT	NNN	
Line	Condition/Treatment		
261	DEFORMITIES OF HEAD	CRANIOTOMY/CRANIECTOMY	
Code	Description	HSD Covg*	Fee
D5915	ORBITAL PROSTHESIS	NNN	
D5919	FACIAL PROSTHESIS	NNN	
D5924	CRANIAL PROSTHESIS	NNN	
D5925	FACIAL AUGMENTATION IMPLANT PROSTHESIS	NNN	
D5928	ORBITAL PROSTHESIS, REPLACEMENT	NNN	
D5929	FACIAL PROSTHESIS, REPLACEMENT	NNN	
D5931	OBTURATOR PROSTHESIS, SURGICAL	NNN	
D5933	OBTURATOR PROSTHESIS, MODIFICATION	NNN	
D5992	ADJUST MAXILLOFACIAL PROSTHETIC APPLIANCE, BY REPORT	NNN	
D5993	MAINTENANCE AND CLEANING OF A MAXILLOFACIAL PROSTHESIS (EXTRA OR INTRAORAL) OTHER THAN REQUIRED ADJUSTMENTS, BY REPORT	NNN	

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Line	Condition/Treatment			
271	DENTAL CONDITIONS (TIME SENSITIVE EVENTS)	URGENT DENTAL SERVICES		
Code	Description	HSD Covg*		Fee
D2910	RECEMENT OR RE-BOND INLAY, ONLAY, VENEER OR PARTIAL COVERAGE RESTORATION	YYY		\$27.27
D2915	RECEMENT OR RE-BOND INDIRECTLY FABRICATED OR PREFABRICATED POST AND CORE	YYY		\$27.27
D2920	RECEMENT OR RE-BOND CROWN	YYY		\$27.27
D2921	Reattachment of tooth fragment, incisal edge or cusp	YYY		\$39.28
D2940	Protective restoration Direct placement of a restorative material to protect tooth and/or tissue form. This procedure may be used to relieve pain, promote healing, or prevent further deterioration. Not to be used for endodontic access closure, or as a ba	YYY		\$29.38
D2950	CORE BUILD-UP, INCLUDING ANY PINS, WHEN REQUIRED	YNN		\$49.11
D2970	TEMPORARY CROWN (FRACTURED TOOTH)			
D3120	PULP CAP-INDIRECT (EXCLUDING FINAL RESTORATION)	NNN		
D3220	THERAPEUTIC PULPOTOMY (EXCLUDING FINAL RESTORATION) REMOVAL OF PULP CORONAL TO THE DENTINOCEMENTAL JUNCTION AND APPLICATION OF MEDICAMENT	YYY		\$49.23
D3222	PARTIAL PULPOTOMY FOR APEXOGENESIS - PERMANENT TOOTH WITH INCOMPLETE ROOT DEVELOPMENT	YYY		\$49.23
D3230	PULPAL THERAPY (RESORBABLE FILLING)-ANTERIOR, PRIMARY TOOTH (EXCLUDING FINAL RESTORATION)	YNN		\$46.92
D3240	PULPAL THERAPY (RESORBABLE FILLING)-POSTERIOR, PRIMARY TOOTH (EXCLUDING FINAL RESTORATION)	YNN		\$46.92
D3351	APEXIFICATION/RECALCIFICATION INITIAL VISIT (APICAL CLOSURE/CALCIFIC REPAIR OF PERFORATIONS, ROOT RESORPTION ETC.)	YNN		\$109.12
D3352	Apexifaction/recalcification) - interim medication replacement. For visits in which the intra-canal medication is replaced with new medication. Includes any necessary radiographs."	YNN		\$54.56
D3353	APEXIFICATION/RECALCIFICATION-FINAL VISIT (INCLUDES COMPLETED ROOT CANAL THERAPY-APICAL CLOSURE/CALCIFIC REPAIR OF PERFORATIONS, ROOT RESORPTION, ETC.)	YNN	BR	
D4920	UNSCHEDULED DRESSING CHANGE (BY SOMEONE OTHER THAN TREATING DENTIST OR THEIR STAFF)	YYY	BR	
D5410	ADJUST COMPLETE DENTURE - MAXILLARY	YYY		\$18.55
D5411	ADJUST COMPLETE DENTURE - MANDIBULAR	YYY		\$18.55
D5421	ADJUST PARTIAL DENTURE - MAXILLARY	YYY		\$19.64
D5422	ADJUST PARTIAL DENTURE - MANDIBULAR	YYY		\$19.64
D5510	REPAIR BROKEN COMPLETE DENTURE BASE	YYY		\$32.75
D5850	TISSUE CONDITIONING, MAXILLARY	YYY		\$28.37
D5851	TISSUE CONDITIONING, MANDIBULAR	YYY		\$28.37

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D6930	RE-CEMENT OR RE-BOND FIXED PARTIAL DENTURE	YYY	\$45.83
D7111	EXTRACTION, CORONAL REMNANTS - DECIDUOUS TOOTH	YYY	\$30.56
D9120	FIXED PARTIAL DENTURE SECTIONING	YYY BR	
D9951	OCCLUSAL ADJUSTMENT-LIMITED	NNN	

Line	Condition/Treatment		
292	CANCER OF ORAL CAVITY, PHARYNX, NOSE AND LARYNX	MEDICAL AND SURGICAL TREATMENT, WHICH INCLUDES CHEMOTHERAPY AND RADIATION THERAPY	

Code	Description	HSD Covg*	Fee
D5983	RADIATION CARRIER	NNN	
D5984	RADIATION SHIELD	NNN	
D5985	RADIATION CONE LOCATOR	NNN	
D7440	EXCISION OF MALIGNANT TUMOR-LESION DIAMETER UP TO 1.25 CM	NNN	
D7441	EXCISION OF MALIGNANT TUMOR-LESION DIAMETER GREATER THAN 1.25 CM	NNN	
D7920	SKIN GRAFT (IDENTIFY DEFECT COVERED, LOCATION, AND TYPE OF GRAFT)	NNN	
D7981	EXCISION OF SALIVARY GLAND, BY REPORT	YYY BR	

Line	Condition/Treatment		
305	CLEFT PALATE AND/OR CLEFT LIP	EXCISION AND REPAIR VESTIBULE OF MOUTH, ORTHODONTICS	

Code	Description	HSD Covg*	Fee
D5932	OBTURATOR PROSTHESIS, DEFINITIVE	NNN	
D5933	OBTURATOR PROSTHESIS, MODIFICATION	NNN	
D5954	PALATAL AUGMENTATION PROSTHESIS	NNN	
D5955	PALATAL LIFT PROSTHESIS, DEFINITIVE	NNN	
D5958	PALATAL LIFT PROSTHESIS, INTERIM	NNN	
D5959	PALATAL LIFT PROSTHESIS, MODIFICATION	NNN	
D5960	SPEECH AID PROSTHESIS, MODIFICATION	NNN	
D5987	COMMISSURE SPLINT	NNN	
D5992	ADJUST MAXILLOFACIAL PROSTHETIC APPLIANCE, BY REPORT	NNN	
D5993	MAINTENANCE AND CLEANING OF A MAXILLOFACIAL PROSTHESIS (EXTRA OR INTRAORAL) OTHER THAN REQUIRED ADJUSTMENTS, BY REPORT	NNN	
D7111	EXTRACTION, CORONAL REMNANTS - DECIDUOUS TOOTH	YYY	\$30.56
D7140	EXTRACTION, ERUPTED TOOTH OR EXPOSED ROOT (ELEVATION AND/OR FORCEPS REMOVAL)	YYY	\$76.60
D7210	SURGICAL REMOVAL OF ERUPTED TOOTH REQUIRING REMOVAL OF BONE AND/OR SECTIONING OF TOOTH, AND INCLUDING ELEVATION OF MUCOPERIOSTEAL FLAP IF INDICATED	YYY	\$87.31

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D7250	SURGICAL REMOVAL OF RESIDUAL TOOTH ROOTS (CUTTING PROCEDURE)	YYY		\$117.51
D7260	ORAL ANTRAL FISTULA CLOSURE	YYY		\$98.21
D7340	VESTIBULOPLASTY-RIDGE EXTENSION (SECOND EPITHELIALIZATION)	YYY	BR	
D7350	VESTIBULOPLASTY-RIDGE EXTENSION (INCLUDING SOFT TISSUE GRAFTS, MUSCLE RE-ATTACHMENTS, REVISION OF SOFT TISSUE ATTACHMENT, AND MANAGEMENT OF HYPERTROPHIED AND HYPERPLASTIC TISSUE)	YYY	BR	
D7912	COMPLICATED SUTURE-GREATER THAN 5 CM	YYY		\$137.72
D8010	LIMITED ORTHODONTIC TREATMENT OF THE PRIMARY DENTITION	YYY	BR	
D8020	LIMITED ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION	YYY	BR	
D8030	LIMITED ORTHODONTIC TREATMENT OF THE ADOLESCENT DENTITION	YYY	BR	
D8040	LIMITED ORTHODONTIC TREATMENT OF THE ADULT DENTITION	YYY	BR	
D8050	INTERCEPTIVE ORTHODONTIC TREATMENT OF THE PRIMARY DENTITION	YYY	BR	
D8060	INTERCEPTIVE ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION	YYY	BR	
D8070	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION	YYY	BR	
D8080	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE ADOLESCENT DENTITION	YYY	BR	
D8090	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE ADULT DENTITION	YYY	BR	
D8210	REMOVABLE APPLIANCE THERAPY	YYY	BR	
D8220	FIXED APPLIANCE THERAPY	YYY	BR	
D8660	PRE-ORTHODONTIC EXAMINATION TO MONITOR GROWTH AND DEVELOPMENT	YYY	BR	
D8670	PERIODIC ORTHODONTIC TREATMENT VISIT	YYY	BR	
D8680	ORTHODONTIC RETENTION (REMOVAL OF APPLIANCES, CONSTRUCTION AND PLACEMENT OF RETAINER(S))	YYY	BR	
D8681	Removable orthodontic retainer adjustment	YYY	BR	
D8690	ORTHODONTIC TREATMENT (ALTERNATIVE BILLING TO A CONTRACT FEE)	YYY	BR	
D8691	REPAIR OF ORTHODONTIC APPLIANCE	NNN		
D8692	REPLACEMENT OF LOST OR BROKEN RETAINER	NNN		
D8693	RE-CEMENT OR RE-BOND FIXED RETAINERS	NNN		
D8694	Repair of fixed retainers, includes reattachment	NNN		

Line	Condition/Treatment		
328	SIALOADENITIS, ABSCESS, FISTULA OF SALIVARY GLANDS	MEDICAL AND SURGICAL TREATMENT	

Code	Description	HSD Covg*	Fee
D7980	SIALOLITHOTOMY	YYY BR	
D7981	EXCISION OF SALIVARY GLAND, BY REPORT	YYY BR	

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D7982	SIALODOCHOPLASTY	YYY	BR
D7983	CLOSURE OF SALIVARY FISTULA	YYY	BR

Line	Condition/Treatment		
348	DENTAL CONDITIONS (EG. CARIES, FRACTURED TOOTH)	BASIC RESTORATIVE (E.G. COMPOSITE RESTORATIONS FOR ANTERIOR TEETH, AMALGAM RESTORATIONS FOR POSTERIOR TEETH)	

Code	Description	HSD Covg*	Fee
D1354	Interim caries arresting medicament application	YYY	\$12.97
D2140	AMALGAM-ONE SURFACE, PRIMARY OR PERMANENT	YYY	\$37.05
D2150	AMALGAM-TWO SURFACES, PRIMARY OR PERMANENT	YYY	\$46.60
D2160	AMALGAM-THREE SURFACES, PRIMARY OR PERMANENT	YYY	\$56.71
D2161	AMALGAM-FOUR OR MORE SURFACES, PRIMARY OR PERMANENT	YYY	\$64.45
D2330	RESIN-ONE SURFACE, ANTERIOR	YYY	\$39.28
D2331	RESIN-TWO SURFACES, ANTERIOR	YYY	\$53.37
D2332	RESIN-THREE SURFACES, ANTERIOR	YYY	\$68.12
D2335	RESIN-FOUR OR MORE SURFACES OR INVOLVING INCISAL ANGLE (ANTERIOR)	YYY	\$82.70
D2390	RESIN-BASED COMPOSITE CROWN, ANTERIOR	YNN	\$74.16
D2391	RESIN-BASED COMPOSITE - ONE SURFACE, POSTERIOR	YYY	\$37.05
D2392	RESIN-BASED COMPOSITE - TWO SURFACES, POSTERIOR	YYY	\$46.60
D2393	RESIN-BASED COMPOSITE - THREE SURFACES, POSTERIOR	YYY	\$56.71
D2394	RESIN-BASED COMPOSITE - FOUR OR MORE SURFACES, POSTERIOR	YYY	\$64.45
D2930	PREFABRICATED STAINLESS STEEL CROWN-PRIMARY TOOTH	YYY	\$73.12
D2931	PREFABRICATED STAINLESS STEEL CROWN-PERMANENT TOOTH	YYY	\$76.90
D2932	PREFABRICATED RESIN CROWN	YNN	\$61.11
D2933	PREFABRICATED STAINLESS STEEL CROWN WITH RESIN WINDOW	YNN	\$65.46
D2941	Interim therapeutic restoration-primary dentition	YYY	\$29.38
D2950	CORE BUILD-UP, INCLUDING ANY PINS, WHEN REQUIRED	YNN	\$49.11
D2951	PIN RETENTION-PER TOOTH, IN ADDITION TO RESTORATION	YYY	\$22.20
D2954	PREFABRICATED POST AND CORE IN ADDITION TO CROWN	YNN	\$65.46
D2957	EACH ADDITIONAL PREFABRICATED POST - SAME TOOTH	YNN	\$65.46
D2980	Crown repair, necessitated by restorative material failure	YYY	
D6980	Fixed partial denture repair, necessitated by restorative material failure	YYY	

Line	Condition/Treatment		
349	DENTAL CONDITIONS (EG. SEVERE CARIES, INFECTION)	ORAL SURGERY (I.E. EXTRACTIONS AND OTHER INTRAORAL SURGICAL PROCEDURES)	

Code	Description	HSD Covg*	Fee
D7220	REMOVAL OF IMPACTED TOOTH-SOFT TISSUE	YYY	\$94.43
D7230	REMOVAL OF IMPACTED TOOTH-PARTIALLY BONY	YYY	\$128.00

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D7240	REMOVAL OF IMPACTED TOOTH-COMPLETLY BONY	YYY		\$157.38
D7241	REMOVAL OF IMPACTED TOOTH-COMPLETLY BONY, WITH UNUSUAL SURGICAL COMPLICATIONS	YYY	BR	
D7250	SURGICAL REMOVAL OF RESIDUAL TOOTH ROOTS (CUTTING PROCEDURE)	YYY		\$117.51
D7251	CORONECTOMY - INTENTIONAL PARTIAL TOOTH REMOVAL	YYY	BR	
D7310	ALVEOLOPLASTY IN CONJUNCTION WITH EXTRACTIONS - FOUR OR MORE TEETH OR TOOTH SPACES, PER QUADRANT	NNN		
D7311	ALVEOLOPLASTY IN CONJUNCTION WITH EXTRACTIONS - ONE TO THREE TEETH OR TOOTH SPACES, PER QUADRANT	NNN		
D7320	ALVEOLOPLASTY NOT IN CONJUNCTION WITH EXTRACTIONS - FOUR OR MORE TEETH OR TOOTH SPACES, PER QUADRANT	YNN		\$38.19
D7321	ALVEOLOPLASTY NOT IN CONJUNCTION WITH EXTRACTIONS - ONE TO THREE TEETH OR TOOTH SPACES, PER QUADRANT	YNN		\$45.35
D7450	REMOVAL OF BENIGN ODONTOGENIC CYST OR TUMOR-LESION DIAMETER UP TO 1.25 CM	YYY		\$168.84
D7451	REMOVAL OF BENIGN ODONTOGENIC CYST OR TUMOR-LESION DIAMETER GREATER THAN 1.25 CM	YYY		
D7465	DESTRUCTION OF LESION(S) BY PHYSICAL OR CHEMICAL METHODS, BY REPORT	YYY	BR	
D7471	REMOVAL OF LATERAL EXOSTOSIS (MAXILLA OR MANDIBLE)	YYY		\$38.19
D7540	REMOVAL OF REACTION-PRODUCING FOREIGN BODIES- MUSCULOSKELETAL SYSTEM	YYY	BR	
D7550	PARTIAL OSTECTOMY/SEQUESTRECTOMY FOR REMOVAL OF NON-VITAL BONE	YYY	BR	
D7960	FRENULECTOMY - ALSO KNOWN AS FRENECTOMY OR FRENOTOMY - SEPARATE PROCEDURE NOT INCIDENTAL TO ANOTHER PROCEDURE	YNN		\$62.19
D7963	FRENULOPLASTY	YNN		\$62.19
D7971	EXCISION OF PERICORONAL GINGIVA	YNN		\$49.75
D9930	TREATMENT OF COMPLICATIONS (POSTSURGICAL) - UNUSUAL CIRCUMSTANCES, BY REPORT	YYY	BR	

Line Condition/Treatment

364 DEFORMITY/CLOSED DISLOCATION OF MAJOR JOINT AND RECURRENT JOINT DISLOCATIONS SURGICAL TREATMENT

Code Description HSD Covg* Fee

D7810 OPEN REDUCTION OF DISLOCATION NNN

D7820 CLOSED REDUCTION OF DISLOCATION NNN

D7830 MANIPULATION UNDER ANESTHESIA NNN

Line Condition/Treatment

384 CHRONIC ULCER OF SKIN MEDICAL AND SURGICAL TREATMENT

Code Description HSD Covg* Fee

*The three Y/N positions in this field are Yes/No flags indicating coverage for children under 21, nonpregnant adults and pregnant women. BR indicates "By Report" (Clinical documentation required.)

D7920 SKIN GRAFT (IDENTIFY DEFECT COVERED, LOCATION, AND TYPE OF GRAFT) NNN

Line	Condition/Treatment
389	DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT ANTERIOR TOOTH) BASIC ENDODONTICS (I.E. ROOT CANAL THERAPY)

Code	Description	HSD Covg*	Fee
D3310	ENDODONTIC THERAPY, ANTERIOR TOOTH (EXCLUDING FINAL RESTORATION)	YYY	\$147.31
D3332	INCOMPLETE ENDODONTIC THERAPY; INOPERABLE, UNRESTORABLE OR FRACTURED TOOTH	YYY BR	

Line	Condition/Treatment
392	DEFORMITY/CLOSED DISLOCATION OF MINOR JOINT AND RECURRENT JOINT DISLOCATIONS SURGICAL TREATMENT

Code	Description	HSD Covg*	Fee
D7810	OPEN REDUCTION OF DISLOCATION	NNN	
D7820	CLOSED REDUCTION OF DISLOCATION	NNN	
D7830	MANIPULATION UNDER ANESTHESIA	NNN	

Line	Condition/Treatment
416	DENTAL CONDITIONS (EG. PULPAL PATHOLOGY, PERMANENT BICUSPID/PREMOLAR TOOTH) BASIC ENDODONTICS (I.E. ROOT CANAL THERAPY)

Code	Description	HSD Covg*	Fee
D3320	ENDODONTIC THERAPY, BICUSPID TOOTH (EXCLUDING FINAL RESTORATION)	YYY	\$169.14
D3332	INCOMPLETE ENDODONTIC THERAPY; INOPERABLE, UNRESTORABLE OR FRACTURED TOOTH	YYY BR	

Line	Condition/Treatment
448	DENTAL CONDITIONS (EG. PULPAL PATHOLOGY, PERMANENT MOLAR TOOTH) BASIC ENDODONTICS (I.E. ROOT CANAL THERAPY)

Code	Description	HSD Covg*	Fee
D3330	ENDODONTIC THERAPY, MOLAR (EXCLUDING FINAL RESTORATION)	YNN	\$212.77
D3332	INCOMPLETE ENDODONTIC THERAPY; INOPERABLE, UNRESTORABLE OR FRACTURED TOOTH	YYY BR	

Line	Condition/Treatment
457	DENTAL CONDITIONS (EG. MISSING TEETH, PROsthESIS FAILURE) REMOVABLE PROsthODONTICS (E.G. FULL AND PARTIAL DENTURES, RELINES)

Code	Description	HSD Covg*	Fee
D5110	COMPLETE DENTURE - MAXILLARY	YYY	\$354.63
D5120	COMPLETE DENTURE - MANDIBULAR	YYY	\$354.63
D5130	IMMEDIATE DENTURE - MAXILLARY	YYY	\$354.63
D5140	IMMEDIATE DENTURE - MANDIBULAR	YYY	\$354.63

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D5211	UPPER PARTIAL-RESIN BASE (INCLUDING ANY CONVENTIONAL CLASPS, RESTS AND TEETH)	YYY	\$226.96
D5212	LOWER PARTIAL-RESIN BASE (INCLUDING ANY CONVENTIONAL CLASPS, RESTS AND TEETH)	YYY	\$226.96
D5520	REPLACE MISSING OR BROKEN TEETH-COMPLETE DENTURE (EACH TOOTH)	YYY	\$32.75
D5610	REPAIR RESIN DENTURE BASE	YYY	\$32.75
D5620	REPAIR CAST FRAMEWORK	YYY	\$32.75
D5630	REPAIR OR REPLACE BROKEN CLASP	YYY	\$54.56
D5640	REPLACE BROKEN TEETH-PER TOOTH	YYY	\$32.75
D5650	ADD TOOTH TO EXISTING PARTIAL DENTURE	YYY	\$32.75
D5660	ADD CLASP TO EXISTING PARTIAL DENTURE	YYY	\$49.11
D5670	REPLACE ALL TEETH AND ACRYLIC ON CAST METAL FRAMEWORK (MAXILLARY)	YYY	\$204.27
D5671	REPLACE ALL TEETH AND ACRYLIC ON CAST METAL FRAMEWORK (MANDIBULAR)	YYY	\$204.27
D5710	REBASE COMPLETE MAXILLARY DENTURE	YYY	\$173.74
D5711	REBASE COMPLETE MANDIBULAR DENTURE	YYY	\$173.74
D5720	REBASE MAXILLARY PARTIAL DENTURE	YYY	\$173.74
D5721	REBASE MANDIBULAR PARTIAL DENTURE	YYY	\$173.74
D5730	RELINE COMPLETE MAXILLARY DENTURE (CHAIRSIDE)	YYY	\$32.75
D5731	RELINE LOWER COMPLETE MANDIBULAR DENTURE (CHAIRSIDE)	YYY	\$32.75
D5740	RELINE MAXILLARY PARTIAL DENTURE (CHAIRSIDE)	YYY	\$32.75
D5741	RELINE MANDIBULAR PARTIAL DENTURE (CHAIRSIDE)	YYY	\$32.75
D5750	RELINE COMPLETE MAXILLARY DENTURE (LABORATORY)	YYY	\$109.12
D5751	RELINE COMPLETE MANDIBULAR DENTURE (LABORATORY)	YYY	\$109.12
D5760	RELINE MAXILLARY PARTIAL DENTURE (LABORATORY)	YYY	\$109.12
D5761	RELINE MANDIBULAR PARTIAL DENTURE (LABORATORY)	YYY	\$109.12
D5820	INTERIM PARTIAL DENTURE (MAXILLARY)	YYY	\$154.83
D5821	INTERIM PARTIAL DENTURE (MANDIBULAR)	YYY	\$161.03
D7472	REMOVAL OF TORUS PALATINUS	NNN	
D7473	REMOVAL OF TORUS MANDIBULARIS	NNN	
D7970	EXCISION OF HYPERPLASTIC TISSUE-PER ARCH	YYY	\$65.46

Line	Condition/Treatment		
461	DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT ANTERIOR TOOTH)	ADVANCED ENDODONTICS (E.G. RETREATMENT OF PREVIOUS ROOT CANAL THERAPY)	
Code	Description	HSD Covg*	Fee
D3331	TREATMENT OF ROOT CANAL OBSTRUCTION; NON-SURGICAL ACCESS	YYY	\$264.85
D3333	INTERNAL ROOT REPAIR OF PERFORATION DEFECTS	YYY	BR
D3346	RETREATMENT OF PREVIOUS ROOT CANAL THERAPY-ANTERIOR	YYY	BR

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D3410	APICOECTOMY-ANTERIOR	YYY	\$157.68
D3430	RETROGRADE FILLING-PER ROOT	YYY BR	
Line	Condition/Treatment		
472	DENTAL CONDITIONS (EG. CARIES, FRACTURED TOOTH)	ADVANCED RESTORATIVE (I.E. BASIC CROWNS)	
Code	Description	HSD Covg*	Fee
D2710	Crown resin-based composite (indirect)	YNN	\$61.11
D2712	CROWN - 3/4 RESIN-BASED COMPOSITE (INDIRECT)	YNN	\$61.11
D2751	CROWN-PROCELAIN FUSED TO PREDOMINANTLY BASE METAL	YNN	\$261.89
D2752	CROWN-PORCELAIN FUSED TO NOBLE METAL	YNN	\$272.79
Line	Condition/Treatment		
488	ENOPHTHALMOS	ORBITAL IMPLANT	
Code	Description	HSD Covg*	Fee
D5915	ORBITAL PROSTHESIS	NNN	
D5928	ORBITAL PROSTHESIS, REPLACEMENT	NNN	
D5992	ADJUST MAXILLOFACIAL PROSTHETIC APPLIANCE, BY REPORT	NNN	
D5993	MAINTENANCE AND CLEANING OF A MAXILLOFACIAL PROSTHESIS (EXTRA OR INTRAORAL) OTHER THAN REQUIRED ADJUSTMENTS, BY REPORT	NNN	
Line	Condition/Treatment		
496	DENTAL CONDITIONS (EG. PERIODONTAL DISEASE)	ADVANCED PERIODONTICS (E.G. SURGICAL PROCEDURES AND SPLINTING)	
Code	Description	HSD Covg*	Fee
D4240	GINGIVAL FLAP PROCEDURE, INCLUDING ROOT PLANING - FOUR OR MORE CONTIGUOUS TEETH OR TOOTH BOUNDED SPACES PER QUADRANT	NNN	\$54.56
D4241	GINGIVAL FLAP PROCEDURE, INCLUDING ROOT PLANING - ONE TO THREE CONTIGUOUS TEETH OR TOOTH BOUNDED SPACES PER QUADRANT	NNN	\$41.48
D4245	APICALLY POSITIONED FLAP	NNN	\$65.46
D4260	Osseous surgery - (including elevation of a full thickness flap and closure - four or more contiguous teeth or tooth bonded spaces per quadrant.	NNN	\$320.67
D4261	Osseous surgery - (including elevation of a full thickness flap and closure - one to three contiguous teeth or tooth bonded spaces per quadrant.	NNN	\$240.50
D4268	SURGICAL REVISION PROCEDURE, PER TOOTH	NNN	\$65.46
D4270	PEDICLE SOFT TISSUE GRAFT PROCEDURE	NNN	
D4273	SUBEPITHELIAL CONNECTIVE TISSUE GRAFT PROCEDURES, PER TOOTH	NNN	

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D4274	mesial/distal or proximal wedge procedure, single tooth (when not performed in conjunction with surgical procedures in the same anatomical area)	NNN
D4275	SOFT TISSUE ALLOGRAFT	NNN
D4276	COMBINED CONNECTIVE TISSUE AND DOUBLE PEDICLE GRAFT, PER TOOTH	NNN
D4277	Free soft tissue graft procedure (including donor site surgery) - first tooth or edentulous tooth site in graft	NNN
D4278	Free soft tissue graft procedure (including donor site surgery) -each additional contiguous tooth position in same graft site	NNN
D4283	Autogenous connective tissue graft procedure (including donor and recipient surgical sites) – each additional contiguous tooth, implant or edentulous tooth position in same graft site	NNN
D4285	Non-autogenous connective tissue graft procedure (including recipient surgical site and donor material) – each additional contiguous tooth, implant or edentulous tooth position in same graft site	NNN
D4320	PROVISIONAL SPLINTING-INTRACORONAL	NNN
D4321	PROVISIONAL SPLINTING-EXTRACORONAL	NNN
D4381	Localized delivery of antimicrobial agents via controlled release vehicle into diseased crevicular tissue, per tooth. FDA approved subgingival delivery devices containing antimicrobial medication(s) are inserted into periodontal pockets to suppress the p	NNN
D5982	SURGICAL STENT	NNN

Line	Condition/Treatment	
504	SIALOLITHIASIS, MUCOCELE, DISTURBANCE OF SALIVARY SECRETION, OTHER AND UNSPECIFIED DISEASES OF SALIVARY GLANDS	MEDICAL AND SURGICAL TREATMENT

Code	Description	HSD Covg*	Fee
D7980	SIALOLITHOTOMY	YYY BR	
D7981	EXCISION OF SALIVARY GLAND, BY REPORT	YYY BR	
D7982	SIALODOCHOPLASTY	YYY BR	

Line	Condition/Treatment	
510	DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT BICUSPID/PREMOLAR TOOTH)	ADVANCED ENDODONTICS (E.G. RETREATMENT OF PREVIOUS ROOT CANAL THERAPY)

Code	Description	HSD Covg*	Fee
D3331	TREATMENT OF ROOT CANAL OBSTRUCTION; NON-SURGICAL ACCESS	YYY	\$264.85
D3333	INTERNAL ROOT REPAIR OF PERFORATION DEFECTS	YYY BR	
D3347	RETREATMENT OF PREVIOUS ROOT CANAL THERAPY-BICUSPID	NNN	
D3421	APICOECTOMY-BICUSPID	NNN	
D3426	APICOECTOMY-MOLAR (EACH ADDL ROOT)	NNN	
D3430	RETROGRADE FILLING-PER ROOT	YYY BR	
D3450	ROOT AMPUTATION-PER ROOT	NNN	

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Line	Condition/Treatment			
540	DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT MOLAR TOOTH)	ADVANCED ENDODONTICS (E.G. RETREATMENT OF PREVIOUS ROOT CANAL THERAPY)		
Code	Description		HSD Covg*	Fee
D3331	TREATMENT OF ROOT CANAL OBSTRUCTION; NON-SURGICAL ACCESS		YYY	\$264.85
D3333	INTERNAL ROOT REPAIR OF PERFORATION DEFECTS		YYY BR	
D3348	RETREATMENT OF PREVIOUS ROOT CANAL THERAPY-MOLAR		NNN	
D3425	APICOECTOMY-MOLAR (1ST ROOT)		NNN	
D3426	APICOECTOMY-MOLAR (EACH ADDL ROOT)		NNN	
D3430	RETROGRADE FILLING-PER ROOT		YYY BR	
D3450	ROOT AMPUTATION-PER ROOT		NNN	
Line	Condition/Treatment			
552	TMJ DISORDER	TMJ SPLINTS		
Code	Description		HSD Covg*	Fee
D7880	OCCLUSAL ORTHOTIC APPLIANCE		NNN	
D7881	Occlusal orthotic device adjustment		NNN	
Line	Condition/Treatment			
578	DEVIATED NASAL SEPTUM, ACQUIRED DEFORMITY OF NOSE, OTHER DISEASES OF UPPER RESPIRATORY TRACT	EXCISION OF CYST/RHINECTOMY/PROSTHESIS		
Code	Description		HSD Covg*	Fee
D7260	ORAL ANTRAL FISTULA CLOSURE		YYY	\$98.21
Line	Condition/Treatment			
587	ATROPHY OF EDENTULOUS ALVEOLAR RIDGE	VESTIBULOPLASTY, GRAFTS, IMPLANTS		
Code	Description		HSD Covg*	Fee
D7340	VESTIBULOPLASTY-RIDGE EXTENSION (SECOND EPITHELIALIZATION)		YYY BR	
D7350	VESTIBULOPLASTY-RIDGE EXTENSION (INCLUDING SOFT TISSUE GRAFTS, MUSCLE RE-ATTACHMENTS, REVISION OF SOFT TISSUE ATTACHMENT, AND MANAGEMENT OF HYPERTROPHIED AND HYPERPLASTIC TISSUE)		YYY BR	
Line	Condition/Treatment			
594	DENTAL CONDITIONS (EG. CARIES, FRACTURED TOOTH)	ADVANCED RESTORATIVE-ELECTIVE (INLAYS,ONLAYS,GOLD FOIL AND HIGH NOBLE METAL RESTORATIONS)		
Code	Description		HSD Covg*	Fee
D2410	GOLD FOIL-ONE SURFACE		NNN	
D2420	GOLD FOIL-TWO SURFACES		NNN	
D2430	GOLD FOIL-THREE SURFACES		NNN	
D2510	INLAY-METALLIC-ONE SURFACE		NNN	

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D2520	INLAY-METALLIC-TWO SURFACES	NNN
D2530	INLAY-METALLIC-THREE OR MORE SURFACES	NNN
D2542	ONLAY-METALLIC-TWO SURFACES	NNN
D2543	ONLAY - METALLIC - THREE SURFACES	NNN
D2544	ONLAY - METALLIC - FOUR OR MORE SURFACES	NNN
D2720	CROWN-RESIN WITH HIGH NOBLE METAL	NNN
D2721	CROWN-RESIN WITH PREDOMINANTLY BASE METAL	NNN
D2722	CROWN-RESIN WITH NOBLE METAL	NNN
D2740	CROWN-PORCELAIN/CERAMIC SUBSTRATE	NNN
D2750	CROWN-PORCELAIN FUSED TO HIGH NOBLE METAL	NNN
D2780	CROWN - 3/4 CAST HIGH NOBLE METAL	NNN
D2781	CROWN - 3/4 CAST PREDOMINANTLY BASE METAL	NNN
D2782	CROWN - 3/4 CAST NOBLE METAL	NNN
D2783	CROWN - 3/4 PORCELAIN/CERAMIC	NNN
D2790	CROWN-FULL CAST HIGH NOBLE METAL	NNN
D2791	CROWN-FULL CAST PREDOMINANTLY BASE METAL	NNN
D2792	CROWN-FULL CAST NOBLE METAL	NNN
D2794	CROWN-TITANIUM	NNN
D2929	Prefabricated porcelain/ceramic crown- primary tooth	NNN
D2949	Restorative foundation for an indirect restoration	NNN
D2952	POST AND CORE IN ADDITION TO CROWN, INDIRECTLY FABRICATED	NNN
D2953	EACH ADDITIONAL INDIRECTLY FABRICATED POST - SAME TOOTH	NNN
D2971	ADDITIONAL PROCEDURES TO CONSTRUCT NEW CROWN UNDER EXISTING PARTIAL DENTURE FRAMEWORK	NNN
D2981	Inlay repair, necessitated by restorative material failure.	NNN
D2982	Onlay repair, necessitated by restorative material failure	NNN
D4249	CLINICAL CROWN LENGTHENING-HARD TISSUE	NNN
D5213	MAXILLARY PARTIAL DENTURE - CAST METAL FRAMEWORK WITH RESIN DENTURE BASES (INCLUDING ANY CONVENTIONAL CLASPS, RESTS AND TEETH)	NNN
D5214	MANDIBULAR PARTIAL DENTURE - CAST METAL FRAMEWORK WITH RESIN DENTURE BASES (INCLUDING ANY CONVENTIONAL CLASPS,RESTS AND TEETH)	NNN
D5221	Immediate maxillary partial denture – resin base (including any conventional clasps, rests and teeth)	NNN
D5222	Immediate mandibular partial denture – resin base (including any conventional clasps, rests and teeth)	NNN
D5223	Immediate maxillary partial denture – cast metal framework with resin denture bases (including any conventional clasps, rests and teeth)	NNN
D5224	Immediate mandibular partial denture – cast metal framework with resin denture bases (including any conventional clasps, rests and teeth)	NNN

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D5281	REMOVABLE UNILATERAL PARTIAL DENTURE-ONE PIECE CAST METAL (INCLUDING CLASPS AND TEETH)	NNN
D5810	INTERIM COMPLETE DENTURE (MAXILLARY)	NNN
D5811	INTERIM COMPLETE DENTURE (MANDIBULAR)	NNN
D5862	PRECISION ATTACHMENT, BY REPORT	NNN
D5867	REPLACEMENT OF REPLACEABLE PART OF SEMI-PRECISION OR PRECISION ATTACHMENT (MALE OR FEMALE COMPONENT)	NNN
D5875	MODIFICATION OF REMOVABLE PROSTHESIS FOLLOWING IMPLANT SURGERY	NNN
D6205	PONTIC - INDIRECT RESIN BASED COMPOSITE	NNN
D6212	PONTIC-CAST NOBLE METAL	NNN
D6214	PONTIC - TITANIUM	NNN
D6253	Provisional Pontic –. Further treatment or completion of a diagnosis necessary prior to final impression. Not be used as a temporary pontic for routine prosthetic fixed partial dentures.	NNN
D6602	INLAY - CAST HIGH NOBLE METAL, TWO SURFACES	NNN
D6603	INLAY - CAST HIGH NOBLE METAL, THREE OR MORE SURFACES	NNN
D6604	INLAY - CAST PREDOMINANTLY BASE METAL, TWO SURFACES	NNN
D6605	INLAY - CAST PREDOMINANTLY BASE METAL, THREE OR MORE SURFACES	NNN
D6606	INLAY - CAST NOBLE METAL, TWO SURFACES	NNN
D6607	INLAY - CAST NOBLE METAL, THREE OR MORE SURFACES	NNN
D6610	ONLAY - CAST HIGH NOBLE METAL, TWO SURFACES	NNN
D6611	ONLAY - CAST HIGH NOBLE METAL, THREE OR MORE SURFACES	NNN
D6612	ONLAY - CAST PREDOMINANTLY BASE METAL, TWO SURFACES	NNN
D6613	ONLAY - CAST PREDOMINANTLY BASE METAL, THREE OR MORE SURFACES	NNN
D6614	ONLAY - CAST NOBLE METAL, TWO SURFACES	NNN
D6615	ONLAY - CAST NOBLE METAL, THREE OR MORE SURFACES	NNN
D6624	INLAY - TITANIUM	NNN
D6634	ONLAY - TITANIUM	NNN
D6710	CROWN - INDIRECT RESIN BASED COMPOSITE	NNN
D6780	CROWN-3/4 CAST HIGH NOBLE METAL	NNN
D6781	CROWN - 3/4 CAST PREDOMINANTLY BASED METAL	NNN
D6782	CROWN - 3/4 CAST NOBLE METAL	NNN
D6783	CROWN - 3/4 PORCELAIN/CERAMIC	NNN
D6790	CROWN-FULL CAST HIGH NOBLE METAL	NNN
D6793	Provisional Retainer Crown – Further treatment of completion or a diagnosis necessary prior to final impression. Not be used as a temporary retainer crown for routine prosthetic fixed partial dentures.	NNN
D6794	CROWN - TITANIUM	NNN

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D6920	CONNECTOR BAR	NNN
D6940	STRESS BREAKER	NNN
D6950	PRECISION ATTACHMENT	NNN
D9950	OCCCLUSION ANALYSIS-MOUNTED CASE	NNN

Line	Condition/Treatment
600	INCONSEQUENTIAL CYSTS OF ORAL SOFT TISSUES INCISION AND DRAINAGE

Code	Description	HSD Covg*	Fee
D7460	REMOVAL OF BENIGN NONODONTOGENIC CYST OR TUMOR-LESION DIAMETER UP TO 1.25 CM	NNN	
D7461	REMOVAL OF BENIGN NONODONTOGENIC CYST OR TUMOR-LESION DIAMETER GREATER THAN 1.25 CM	NNN	

Line	Condition/Treatment
604	DENTAL CONDITIONS (EG. MISSING TEETH) COMPLEX PROSTHODONTICS (I.E. FIXED BRIDGES, OVERDENTURES)

Code	Description	HSD Covg*	Fee
D5863	Overdenture--complete maxillary	NNN	
D5864	Overdenture -- partial maxillary	NNN	
D5865	Overdenture-complete mandibular	NNN	
D5866	Overdenture -- partial mandibular	NNN	
D6211	PONTIC-CAST PREDOMINANTLY BASE METAL	NNN	
D6241	PONTIC-PORCELAIN FUSED TO PREDOMINANTLY BASE METAL	NNN	
D6242	PONTIC-PORCELAIN FUSED TO NOBLE METAL	NNN	
D6251	PONTIC-RESIN WITH PREDOMINANTLY BASE METAL	NNN	
D6252	PONTIC-RESIN WITH NOBLE METAL	NNN	
D6545	RETAINER-CAST METAL FOR RESIN BONDED FIXED PROSTHESIS	NNN	
D6549	RESIN RETAINER--FOR RESIN BONDED FIXED PROSTHESIS	NNN	
D6751	CROWN-PORCELAIN FUSED TO PREDOMINANTLY BASE METAL	NNN	
D6752	CROWN-PORCELAIN FUSED TO NOBLE METAL	NNN	
D6791	CROWN-FULL CAST PREDOMINANTLY BASE METAL	NNN	
D6792	CROWN-FULL CAST NOBLE METAL	NNN	

Line	Condition/Treatment
605	CONGENITAL ANOMALIES OF THE EAR WITHOUT OTOPLASTY, REPAIR AND AMPUTATION IMPAIRMENT OF HEARING; UNILATERAL ANOMALIES OF THE EAR

Code	Description	HSD Covg*	Fee
D5914	AURICULAR PROSTHESIS	NNN	
D5927	AURICULAR PROSTHESIS, REPLACEMENT	NNN	
D5992	ADJUST MAXILLOFACIAL PROSTHETIC APPLIANCE, BY REPORT	NNN	

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D5993	MAINTENANCE AND CLEANING OF A MAXILLOFACIAL PROSTHESIS (EXTRA OR INTRAORAL) OTHER THAN REQUIRED ADJUSTMENTS, BY REPORT	NNN	
Line	Condition/Treatment		
620	ANOMALIES OF RELATIONSHIP OF JAW TO CRANIAL BASE, MAJOR ANOMALIES OF JAW SIZE, OTHER SPECIFIED AND UNSPECIFIED DENTOFACIAL ANOMALIES	OSTEOPLASTY, MAXILLA/MANDIBLE	
Code	Description	HSD Covg*	Fee
D7940	OSTEOPLASTY-FOR ORTHOGNATHIC DEFORMITIES	NNN	
D7941	OSTEOTOMY - MANDIBULAR RAMI	NNN	
D7943	OSTEOTOMY - MANDIBULAR RAMI WITH BONE GRAFT; INCLUDES OBTAINING THE GRAFT	NNN	
D7944	OSTEOTOMY-SEGMENTED OR SUBAPICAL	NNN	
D7945	OSTEOTOMY-BODY OF MANDIBLE	NNN	
D7946	LEFORT I (MAXILLA-TOTAL)	NNN	
D7947	LEFORT I (MAXILLA-SEGMENTED)	NNN	
D7948	LEFORT II OR LEFORT III (OSTEOPLASTY OF FACIAL BONES FOR MIDFACE HYPOPLASIA OR RETRUSION)-WITHOUT BONE GRAFT	NNN	
D7949	LEFORT II OR LEFORT III-WITH BONE GRAFT	NNN	
Line	Condition/Treatment		
621	DENTAL CONDITIONS (EG. MALOCCLUSION)	ORTHODONTIA (I.E. FIXED AND REMOVABLE APPLIANCES AND ASSOCIATED SURGICAL PROCEDURES)	
Code	Description	HSD Covg*	Fee
D0340	CEPHALOMETRIC RADIOGRAPHIC IMAGES	NNN	\$17.46
D0350	2D ORAL/FACIAL PHOTOGRAPHIC IMAGES OBTAINED INTRAORALLY OR EXTRAORALLY	NNN	\$21.19
D7280	SURGICAL ACCESS OF AN UNERUPTED TOOTH	NNN	
D7282	MOBILIZATION OF ERUPTED OR MALPOSITIONED TOOTH TO AID ERUPTION	NNN	
D7283	PLACEMENT OF DEVICE TO FACILITATE ERUPTION OF IMPACTED TOOTH	NNN	
D7290	SURGICAL REPOSITIONING OF TEETH	NNN	
D7291	TRANSSEPTAL FIBEROTOMY/SUPRA CRESTAL FIBEROTOMY, BY REPORT	NNN	
D7292	SURGICAL PLACEMENT OF TEMPORARY ANCHORAGE DEVICE [SCREW RETAINED PLATE] REQUIRING FLAP: INCLUDES DEVICE	NNN	
D7293	SURGICAL PLACEMENT OF TEMPORARY ANCHORAGE DEVICE REQUIRING FLAP; INCLUDES DEVICE REMOVAL	NNN	
D7294	SURGICAL PLACEMENT OF TEMPORARY ANCHORAGE DEVICE WITHOUT FLAP; INCLUDES DEVICE REMOVAL	NNN	
D8010	LIMITED ORTHODONTIC TREATMENT OF THE PRIMARY DENTITION	YYY	BR
D8020	LIMITED ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION	YYY	BR

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D8030	LIMITED ORTHODONTIC TREATMENT OF THE ADOLESCENT DENTITION	YYY	BR
D8040	LIMITED ORTHODONTIC TREATMENT OF THE ADULT DENTITION	YYY	BR
D8050	INTERCEPTIVE ORTHODONTIC TREATMENT OF THE PRIMARY DENTITION	YYY	BR
D8060	INTERCEPTIVE ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION	YYY	BR
D8070	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE TRANSITIONAL DENTITION	YYY	BR
D8080	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE ADOLESCENT DENTITION	YYY	BR
D8090	COMPREHENSIVE ORTHODONTIC TREATMENT OF THE ADULT DENTITION	YYY	BR
D8210	REMOVABLE APPLIANCE THERAPY	YYY	BR
D8220	FIXED APPLIANCE THERAPY	YYY	BR
D8660	PRE-ORTHODONTIC EXAMINATION TO MONITOR GROWTH AND DEVELOPMENT	YYY	BR
D8670	PERIODIC ORTHODONTIC TREATMENT VISIT	YYY	BR
D8680	ORTHODONTIC RETENTION (REMOVAL OF APPLIANCES, CONSTRUCTION AND PLACEMENT OF RETAINER(S))	YYY	BR
D8681	Removable orthodontic retainer adjustment	YYY	BR
D8690	ORTHODONTIC TREATMENT (ALTERNATIVE BILLING TO A CONTRACT FEE)	YYY	BR
D8691	REPAIR OF ORTHODONTIC APPLIANCE	NNN	
D8692	REPLACEMENT OF LOST OR BROKEN RETAINER	NNN	
D8693	RE-CEMENT OR RE-BOND FIXED RETAINERS	NNN	
D8694	Repair of fixed retainers, includes reattachment	NNN	

Line	Condition/Treatment		
622	DENTAL CONDITIONS (EG. MISSING TEETH)	IMPLANTS (I.E. IMPLANT PLACEMENT AND ASSOCIATED CROWN OR PROSTHESIS)	
Code	Description	HSD Covg*	Fee
D0393	Treatment simulation using 3D image volume	NNN	
D0394	Digital subtraction of two or more images or image volumes of the same modality	NNN	
D0395	Fusion of two or more 3D image volumes of one or more modalities	NNN	
D6010	SURGICAL PLACEMENT OF IMPLANT BODY: ENDOSTEAL IMPLANT	NNN	
D6011	Second stage implant surgery	NNN	
D6012	SURGICAL PLACEMENT OF INTERIM IMPLANT BODY FOR TRANSITIONAL PROSTHESIS: ENDOSTEAL IMPLANT	NNN	
D6013	Surgical placement of mini implant	NNN	
D6040	SURGICAL PLACEMENT: EPOSTEAL IMPLANT	NNN	
D6050	SURGICAL PLACEMENT: TRANSOSTEAL IMPLANT	NNN	
D6051	Interim abutment - includes placement and removal. A healing cap is not an interim abutment	NNN	

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D6052	Semi-precision attachment abutment-includes placement of keeper assembly	NNN
D6055	CONNECTING BAR - IMPLANT SUPPORTED OR ABUTMENT SUPPORTED	NNN
D6056	Prefabricated abutment - includes modification and placement. Modification of a prefabricated abutment may be necessary	NNN
D6057	Custom fabricated abutment - includes placement – Created by a laboratory process specific for an individual application	NNN
D6058	ABUTMENT SUPPORTED PORCELAIN/CERAMIC CROWN	NNN
D6059	ABUTMENT SUPPORTED PORCELAIN FUSED TO METAL CROWN (HIGH NOBLE METAL)	NNN
D6060	ABUTMENT SUPPORTED PORCELAIN FUSED TO METAL CROWN (PREDOMINANTLY BASE METAL)	NNN
D6061	ABUTMENT SUPPORTED PORCELAIN FUSED TO METAL CROWN (NOBLE METAL)	NNN
D6062	ABUTMENT SUPPORTED CAST METAL CROWN (HIGH NOBLE METAL)	NNN
D6063	ABUTMENT SUPPORTED CAST METAL CROWN (PREDOMINANTLY BASE METAL)	NNN
D6064	ABUTMENT SUPPORTED CAST METAL CROWN (NOBLE METAL)	NNN
D6065	IMPLANT SUPPORTED PORCELAIN/CERAMIC CROWN	NNN
D6066	IMPLANT SUPPORTED PORCELAIN FUSED TO METAL CROWN (TITANIUM, TITANIUM ALLOY, HIGH NOBLE METAL)	NNN
D6067	IMPLANT SUPPORTED METAL CROWN (TITANIUM, TITANIUM ALLOY, HIGH NOBLE METAL)	NNN
D6068	ABUTMENT SUPPORTED RETAINER FOR PORCELAIN/CERAMIC FPD	NNN
D6069	ABUTMENT SUPPORTED RETAINER FOR PORCELAIN FUSED TO METAL FPD (HIGH NOBLE METAL)	NNN
D6070	ABUTMENT SUPPORTED RETAINER FOR PORCELAIN FUSED TO METAL FPD (PREDOMINANTLY BASE METAL)	NNN
D6071	ABUTMENT SUPPORTED RETAINER FOR PORCELAIN FUSED TO METAL FPD (NOBLE METAL)	NNN
D6072	ABUTMENT SUPPORTED RETAINER FOR CAST METAL FPD (HIGH NOBLE METAL)	NNN
D6073	ABUTMENT SUPPORTED RETAINER FOR CAST METAL FPD (PREDOMINANTLY BASE METAL)	NNN
D6074	ABUTMENT SUPPORTED RETAINER FOR CAST METAL FPD (NOBLE METAL)	NNN
D6075	IMPLANT SUPPORTED RETAINER FOR CERAMIC FPD	NNN
D6076	IMPLANT SUPPORTED RETAINER FOR PORCELAIN FUSED TO METAL FPD (TITANIUM, TITANIUM ALLOY, OR HIGH NOBLE METAL)	NNN
D6077	IMPLANT SUPPORTED RETAINER FOR CAST METAL FPD (TITANIUM, TITANIUM ALLOY, OR HIGH NOBLE METAL)	NNN
D6080	IMPLANT MAINTENANCE PROCEDURES WHEN PROSTHESES ARE REMOVED AND REINSERTED, INCLUDING CLEANSING OF PROSTHESES AND ABUTMENTS	NNN

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D6081	scaling and debridement in the presence of inflammation or mucositis of a single implant, including cleaning of the implant surfaces, without flap entry and closure	
D6085	Provisional implant crown	
D6090	REPAIR IMPLANT SUPPORTED PROSTHESIS BY REPORT	NNN
D6091	REPLACEMENT OF SEMI-PRECISION OR PRECISION ATTACHMENT (MALE OR FEMALE COMPONENT) OF IMPLANT/ABUTMENT SUPPORTED PROSTHESIS, PER ATTACHMENT	NNN
D6092	RE-CEMENT OR RE-BOND IMPLANT/ABUTMENT SUPPORTED CROWN	NNN
D6093	RE-CEMENT OR RE-BOND IMPLANT/ABUTMENT SUPPORTED FIXED PARTIAL DENTURE	NNN
D6094	ABUTMENT SUPPORTED CROWN - (TITANIUM)	NNN
D6095	REPAIR IMPLANT ABUTMENT, BY REPORT	NNN
D6100	IMPLANT REMOVAL, BY REPORT	NNN
D6101	Debridement of a periimplant defect or defects surrounding a single implant, and surface cleaning of the exposed implant surfaces, including flap entry and closure	NNN
D6102	Debridement and osseous contouring of a periimplant defect or defects surrounding a single implant and includes surface cleaning of the exposed implant surfaces including flap entry and closure	NNN
D6103	Bone graft for repair of periimplant defect – does not include flap entry and closure. Placement of a barrier membrane or biologic materials to aid in osseous regeneration are reported separately	NNN
D6104	Bone graft at time of implant placement – placement of a barrier membrane, or biologic materials at aid in osseous regeneration are reported separately	NNN
D6110	Implant /abutment supported removable denture for edentulous arch – maxillary	NNN
D6111	Implant /abutment supported removable denture for edentulous arch – mandibular	NNN
D6112	Implant /abutment supported removable denture for partially edentulous arch – maxillary	NNN
D6113	Implant /abutment supported removable denture for partially edentulous arch – mandibular	NNN
D6114	Implant /abutment supported fixed denture for edentulous arch – maxillary	NNN
D6115	Implant /abutment supported fixed denture for edentulous arch – mandibular	NNN
D6116	Implant /abutment supported fixed denture for partially edentulous arch – maxillary	NNN
D6117	Implant /abutment supported fixed denture for partially edentulous arch – mandibular	NNN
D6190	RADIOGRAPHIC/SURGICAL IMPLANT INDEX, BY REPORT	NNN
D6194	ABUTMENT SUPPORTED RETAINER CROWN FOR FPD - (TITANIUM)	NNN
D6210	PONTIC-CAST HIGH NOBLE METAL	NNN

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D6240	PONTIC-PORCELAIN FUSED TO HIGH NOBLE METAL	NNN
D6245	PONTIC - PORCELAIN/CERAMIC	NNN
D6250	PONTIC-RESIN WITH HIGH NOBLE METAL	NNN
D7951	Sinus augmentation with bone or bone substitutes via a lateral open approach - The augmentation of the sinus cavity to increase alveolar height for reconstruction of edentulous portions of the maxilla. This procedure is performed via a lateral open appro	NNN
D7952	Sinus augmentation via a vertical approach - The augmentation of the sinus to increase alveolar height by vertical access through the ridge crest by raising the floor of the sinus and grafting as necessary. This includes obtaining the bone or bone substit	NNN

Line	Condition/Treatment
631	BENIGN NEOPLASMS OF SKIN AND OTHER SOFT TISSUES MEDICAL THERAPY

Code	Description	HSD Covg*	Fee
D7450	REMOVAL OF BENIGN ODONTOGENIC CYST OR TUMOR-LESION DIAMETER UP TO 1.25 CM	YYY	\$168.84
D7451	REMOVAL OF BENIGN ODONTOGENIC CYST OR TUMOR-LESION DIAMETER GREATER THAN 1.25 CM	YYY	
D7460	REMOVAL OF BENIGN NONODONTOGENIC CYST OR TUMOR-LESION DIAMETER UP TO 1.25 CM	NNN	
D7981	EXCISION OF SALIVARY GLAND, BY REPORT	YYY BR	

Line	Condition/Treatment
647	TMJ DISORDERS TMJ SURGERY

Code	Description	HSD Covg*	Fee
D7852	DISC REPAIR	NNN	
D7854	SYNOVECTOMY	NNN	
D7856	MYOTOMY	NNN	
D7858	JOINT RECONSTRUCTION	NNN	
D7860	ARTHROTOMY	NNN	
D7865	ARTHROPLASTY	NNN	
D7870	ARTHROCENTESIS	NNN	
D7871	NON-ARTHROSCOPIC LYSIS AND LAVAGE	NNN	
D7872	ARTHROSCOPY-DIAGNOSIS, WITH OR WITHOUT BIOPSY	NNN	
D7873	ARTHROSCOPY-SURGICAL: LAVAGE AND LYSIS OF ADHESIONS	NNN	
D7874	ARTHROSCOPY-SURGICAL: DISC REPOSITIONING AND STABILIZATION	NNN	
D7875	ARTHROSCOPY-SURGICAL: SYNOVECTOMY	NNN	
D7876	ARTHROSCOPY-SURGICAL: DISCECTOMY	NNN	
D7877	ARTHROSCOPY-SURGICAL: DEBRIDEMENT	NNN	
D7899	UNSPECIFIED TMD THERAPY, BY REPORT	NNN	
D7955	REPAIR OF MAXILLOFACIAL SOFT AND/OR HARD TISSUE DEFECT	NNN	

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D7991 CORONOIDECTOMY NNN

Line Condition/Treatment

649 DENTAL CONDITIONS WHERE TREATMENT IS CHOSEN PRIMARILY FOR AESTHETIC CONSIDERATIONS COSMETIC DENTAL SERVICES

Code	Description	HSD Covg*	Fee
D2610	INLAY-PORCELAIN/CERAMIC-ONE SURFACE	NNN	
D2620	INLAY-PORCELAIN/CERAMIC-TWO SURFACES	NNN	
D2630	INLAY-PORCELAIN/CERAMIC-THREE OR MORE SURFACES	NNN	
D2642	ONLAY - PORCELAIN/CERAMIC - TWO SURFACES	NNN	
D2643	ONLAY - PORCELAIN/CERAMIC - THREE SURFACES	NNN	
D2644	ONLAY - PORCELAIN/CERAMIC - FOUR OR MORE SURFACES	NNN	
D2650	INLAY - RESIN-BASED COMPOSITE - ONE SURFACE	NNN	
D2651	INLAY - RESIN-BASED COMPOSITE - TWO SURFACES	NNN	
D2652	INLAY - RESIN-BASED COMPOSITE - THREE OR MORE SURFACES	NNN	
D2662	ONLAY - RESIN-BASED COMPOSITE - TWO SURFACES	NNN	
D2663	ONLAY - RESIN-BASED COMPOSITE - THREE SURFACES	NNN	
D2664	ONLAY - - RESIN-BASED COMPOSITE - FOUR OR MORE SURFACES	NNN	
D2934	PREFABRICATED ESTHETIC COATED STAINLESS STEEL CROWN - PRIMARY TOOTH	NNN	
D2960	LABIAL VENEER (LAMINATE)-CHAIRSIDE	NNN	
D2961	LABIAL VENEER (RESIN LAMINATE)-LABORATORY	NNN	
D2962	LABIAL VENEER (PORCELAIN LAMINATE)-LABORATORY	NNN	
D2983	Veneer repair, necessitated by restorative material failure	NNN	
D3460	ENDODONTIC ENDOSSEOUS IMPLANT	NNN	
D4230	ANATOMICAL CROWN EXPOSURE - FOUR OR MORE CONTIGUOUS TEETH PER QUADRANT	NNN	
D4231	ANATOMICAL CROWN EXPOSURE - ONE TO THREE TEETH PER QUADRANT	NNN	
D6548	RETAINER - PORCELAIN/CERAMIC FOR RESIN BONDED FIXED PROSTHESIS	NNN	
D6600	INLAY-PORCELAIN/CERAMIC, TWO SURFACES	NNN	
D6601	INLAY - PORCELAIN/CERAMIC, THREE OR MORE SURFACES	NNN	
D6608	ONLAY - PORCELAIN/CERAMIC, TWO SURFACES	NNN	
D6609	ONLAY - PORCELAIN/CERAMIC, THREE OR MORE SURFACES	NNN	
D6720	CROWN-RESIN WITH HIGH NOBLE METAL	NNN	
D6721	CROWN-RESIN WITH PREDOMINANTLY BASE METAL	NNN	
D6722	CROWN-RESIN WITH NOBLE METAL	NNN	
D6740	CROWN - PORCELAIN/CERAMIC	NNN	
D6750	CROWN-PORCELAIN FUSED TO HIGH NOBLE METAL	NNN	

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D6985	PEDIATRIC PARTIAL DENTURE, FIXED	NNN
D7995	SYNTHETIC GRAFT-MANDIBLE OR FACIAL BONES, BY REPORT	NNN
D7996	IMPLANT-MANDIBLE FOR AUGMENTATION PURPOSES (EXCLUDING ALVEOLAR RIDGE), BY REPORT	NNN
D9970	ENAMEL MICROABRASION	NNN
D9971	ODONTOPLASTY 1 - 2 TEETH; INCLUDES REMOVAL OF ENAMEL PROJECTIONS	NNN
D9972	External bleaching per arch - performed in office	NNN
D9973	EXTERNAL BLEACHING - PER TOOTH	NNN
D9974	INTERNAL BLEACHING - PER TOOTH	NNN
D9975	External bleaching - external bleaching system for applications - per arch includes materials and fabrication of custom trays	NNN

Line	Condition/Treatment	
650	DENTAL CONDITIONS WHERE TREATMENT RESULTS IN MARGINAL IMPROVEMENT	ELECTIVE DENTAL SERVICES

Code	Description	HSD Covg*	Fee
D2799	Provisional Crown – Further treatment or completion of a diagnosis necessary prior to final impression. Not to be used as a temporary crown for a routine prosthetic restoration.	NNN	
D2955	Post removal	NNN	
D2990	Resin infiltration of incipient smooth surface lesions – placement of an infiltrating resin restoration for strengthening, stabilizing and/or limiting the progression of the lesion	NNN	
D3355	Pulpal regeneration -initial visit	NNN	
D3356	Pulpal regeneration - interim medication replacement	NNN	
D3357	Pulpal regeneration -- completion of treatment.	NNN	
D3427	Periradicular surgery w/o apicoectomy	NNN	
D3428	Bone graft in conjunction with periradicular surgery -- per tooth, single site	NNN	
D3429	Bone graft in conjunction with periradicular surgery -- each additional contiguous tooth in the same surgical site	NNN	
D3431	Biologic materials to aid in soft and osseous tissue regeneration in conjunction with periradicular surgery	NNN	
D3432	Guided tissue regeneration, resorbable barrier, per site, in conjunction with periradicular surgery	NNN	
D3470	INTENTIONAL REPLANTATION (INCLUDING NECESSARY SPLINTING)	NNN	
D3920	HEMISECTION (INCLUDING ANY ROOT REMOVAL), NOT INCLUDING ROOT CANAL THERAPY	NNN	
D3950	CANAL PREPARATION AND FITTING OF PREFORMED DOWEL OR POST	NNN	\$81.83
D4263	Bone replacement graft-retained natural tooth-first site in quadrant	NNN	
D4264	BONE REPLACEMENT GRAFT - retained natural tooth--EACH ADDITIONAL SITE IN QUADRANT	NNN	

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D5225	MAXILLARY PARTIAL DENTURE - FLEXIBLE BASE (INCLUDING ANY CLASPS, RESTS AND TEETH)	NNN
D5226	MANDIBULAR PARTIAL DENTURE - FLEXIBLE BASE (INCLUDING ANY CLASPS, RESTS AND TEETH)	NNN
D5994	Peridontal medicament carrier with peripheral seal--laboratory processed	NNN
D7272	TOOTH TRANSPLANTATION (INCLUDES REIMPLANTATION FROM ONE SITE TO ANOTHER AND SPLINTING AND/OR STABILIZATION)	NNN
D7950	OSSEOUS, OSTEOPERIOSTEAL, OR CARTILAGE GRAFT OF THE MANDIBLE OR MAXILLA - AUTOGENOUS OR NONAUTOGENOUS, BY REPORT	NNN
D7953	BONE REPLACEMENT GRAFT FOR RIDGE PRESERVATION - PER SITE	NNN
D7972	SURGICAL REDUCTION OF FIBROUS TUBEROSITY	NNN
D7998	INTRAORAL PLACEMENT OF A FIXATION DEVICE NOT IN CONJUNCTION WITH A FRACTURE	NNN
D9910	APPLICATION OF DESENSITIZING MEDICAMENT	NNN
D9911	APPLICATION OF DESENSITIZING RESIN FOR CERVICAL AND/OR ROOT SURFACE, PER TOOTH	NNN
D9940	OCCLUSAL GUARDS, BY REPORT	NNN
D9941	FABRICATION OF ATHLETIC MOUTHGUARD	NNN
D9942	REPAIR AND/OR RELINE OF OCCLUSAL GUARD	NNN
D9943	Occlusal guard adjustment	NNN
D9952	OCCLUSAL ADJUSTMENT-COMPLETE	NNN

Line	Condition/Treatment		
#####	Ancillary procedures	ANCILLARY (NOT ON ANY OTHER FILE/LIST)	
Code	Description	HSD Covg*	Fee
D2999	UNSPECIFIED RESTORATIVE PROCEDURE, BY REPORT	NNN	
D3910	SURGICAL PROCEDURE FOR ISOLATION OF TOOTH WITH RUBBER DAM	NNN	
D3999	UNSPECIFIED ENDODONTIC PROCEDURE, BY REPORT	NNN	
D4999	UNSPECIFIED PERIODONTAL PROCEDURE, BY REPORT	NNN	
D5899	UNSPECIFIED REMOVABLE PROSTHODONTIC PROCEDURE, BY REPORT	NNN	
D5911	FACIAL MOULAGE (SECTIONAL)	NNN	
D5912	FACIAL MOULAGE (COMPLETE)	NNN	
D5913	NASAL PROSTHESIS	NNN	
D5916	OCULAR PROSTHESIS	NNN	
D5922	NASAL SEPTAL PROSTHESIS	NNN	
D5923	OCULAR PROSTHESIS, INTERIM	NNN	
D5926	NASAL PROSTHESIS, REPLACEMENT	NNN	
D5936	OBTURATOR/PROSTHESIS, INTERIM	NNN	
D5951	FEEDING AID	NNN	
D5952	SPEECH AID PROSTHESIS, PEDIATRIC	NNN	

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D5953	SPEECH AID PROSTHESIS, ADULT	NNN	
D5991	Vesiculobullous disease MEDICAMENT CARRIER	NNN	
D5999	UNSPECIFIED MAXILLOFACIAL PROSTHESIS, BY REPORT	NNN	
D6199	UNSPECIFIED IMPLANT PROCEDURE, BY REPORT	NNN	
D6999	UNSPECIFIED FIXED PROSTHODONTIC PROCEDURE, BY REPORT	NNN	
D7410	EXCISION OF BENIGN LESION UP TO 1.25 CM	NNN	
D7490	RADICAL RESECTION OF MAXILLA OR MANDIBLE	NNN	
D7511	INCISION AND DRAINAGE OF ABSCESS - INTRAORAL SOFT TISSUE - COMPLICATED (INCLUDES DRAINAGE OF MULTIPLE FASCIAL SPACES)	NNN	
D7521	INCISION AND DRAINAGE OF ABSCESS - EXTRAORAL SOFT TISSUE - COMPLICATED (INCLUDES DRAINAGE OF MULTIPLE FASCIAL SPACES)	NNN	
D7610	MAXILLA-OPEN REDUCTION (TEETH IMMOBILIZED IF PRESENT)	NNN	
D7620	MAXILLA-CLOSED REDUCTION (TEETH IMMOBILIZED IF PRESENT)	NNN	
D7630	MANDIBLE-OPEN REDUCTION (TEETH IMMOBILIZED IF PRESENT)	NNN	
D7640	MANDIBLE-CLOSED REDUCTION (TEETH IMMOBILIZED IF PRESENT)	NNN	
D7650	MALAR AND/OR ZYGOMATIC ARCH-OPEN REDUCTION	NNN	
D7660	MALAR AND/OR ZYGOMATIC ARCH-CLOSED REDUCTION	NNN	
D7680	FACIAL BONES-COMPLICATED REDUCTION WITH FIXATION AND MULTIPLE SURGICAL APPROACHES	NNN	
D7710	MAXILLA-OPEN REDUCTION	NNN	
D7720	MAXILLA-CLOSED REDUCTION	NNN	
D7730	MANDIBLE-OPEN REDUCTION	NNN	
D7740	MANDIBLE-CLOSED REDUCTION	NNN	
D7750	MALAR AND/OR ZYGOMATIC ARCH-OPEN REDUCTION	NNN	
D7760	MALAR AND/OR ZYGOMATIC ARCH-CLOSED REDUCTION	NNN	
D7780	FACIAL BONES-COMPLICATED REDUCTION WITH FIXATION AND MULTIPLE SURGICAL APPROACHES	NNN	
D7840	CONDYLECTOMY	NNN	
D7850	SURGICAL DISCECTOMY; WITH/WITHOUT IMPLANT	NNN	
D7990	EMERGENCY TRACHEOTOMY	YYY	BR
D7999	UNSPECIFIED ORAL SURGERY PROCEDURE, BY REPORT	NNN	
D9211	REGIONAL BLOCK ANESTHESIA	YYY	BR
D9212	TRIGEMINAL DIVISION BLOCK ANESTHESIA	YYY	\$27.27
D9220	DEEP SEDATION/GENERAL ANESTHESIA-FIRST 30 MINUTES		
D9221	DEEP SEDATION/GENERAL ANESTHESIA-EACH ADDITIONAL 15 MINUTES		
D9223	Deep sedation/general anesthesia – each 15 minute increment	YYY	
D9230	INHALATION OF NITROUS OXIDE/ANXIOLYSIS, ANALGESIA	YYY	\$8.73
D9241	INTRAVENOUS MODERATE (CONSCIOUS) SEDATION/ANALGESIA - FIRST 30 MINUTES		

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D9242	INTRAVENOUS MODERATE (CONSCIOUS) SEDATION/ANALGESIA - EACH ADDITIONAL 15 MINUTES		
D9243	Intravenous moderate (conscious) sedation/analgesia – each 15 minute increment	YYY	
D9248	NON-INTRAVENOUS MODERATE (CONSCIOUS) SEDATION	YNN	\$76.40
D9310	CONSULTATION - DIAGNOSTIC SERVICE PROVIDED BY DENTIST OR PHYSICIAN OTHER THAN REQUESTING DENTIST OR PHYSICIAN	YYY	\$27.27
D9311	Consultation with medical professional		
D9430	OFFICE VISIT FOR OBSERVATION (DURING REGULARLY SCHEDULED HOURS) NO OTHER SERVICES PERFORMED	NNN	\$8.73
D9630	drugs or medicaments dispensed in the office for home use	YYY	\$41.96
D9991	Dental case management-addressing appointment compliance barriers		
D9992	Dental case management-care coordination		
D9993	Dental case management-motivational interviewing		
D9994	Dental case management-oral health literacy		
D9999	UNSPECIFIED ADJUNCTIVE PROCEDURE, BY REPORT	NNN	

Line	Condition/Treatment		
#####	Diagnostic procedures	DIAGNOSTIC	
Code	Description	HSD Covg*	Fee
D0210	INTRAORAL-COMPLETE SERIES (INCLUDING BITEWINGS)	YYY	\$30.55
D0220	INTRAORAL-PERIAPICAL-FIRST RADIOGRAPHIC IMAGE	YYY	\$9.44
D0230	INTRAORAL-PERIAPICAL-EACH ADDITIONAL RADIOGRAPHIC IMAGE	YYY	\$5.45
D0240	INTRAORAL-OCCLUSAL RADIOGRAPHIC IMAGE	YYY	\$4.36
D0250	EXTRAORAL-FIRST RADIOGRAPHIC IMAGE	YYY	\$18.55
D0251	Extra-oral posterior dental radiographic image	YYY	
D0260	EXTRAORAL-EACH ADDITIONAL RADIOGRAPHIC IMAGE	YYY	
D0270	BITEWING-SINGLE RADIOGRAPHIC IMAGE	YYY	\$5.45
D0272	BITEWINGS-TWO RADIOGRAPHIC IMAGES	YYY	\$10.92
D0273	BITEWINGS - THREE RADIOGRAPHIC IMAGES	YYY	\$12.00
D0274	BITEWINGS-FOUR RADIOGRAPHIC IMAGES	YYY	\$13.09
D0277	VERTICAL BITEWINGS - 7 TO 8 RADIOGRAPHIC IMAGES	YYY	\$22.68
D0310	SIALOGRAPHY	YYY BR	
D0320	TEMPOROMANDIBULAR JOINT ARTHROGRAM, INCLUDING INJECTION	YYY BR	
D0321	OTHER TEMPOROMANDIBULAR JOINT RADIOGRAPHIC IMAGE, BY REPORT	YYY	\$20.73
D0322	TOMOGRAPHIC SURVEY	YYY BR	
D0330	PANORAMIC RADIOGRAPHIC IMAGE	YYY	\$22.92
D0414	Laboratory processing of microbial specimen to include culture and sensitivity studies, preparation and transmission of written report		
D0415	COLLECTION OF MICROORGANISMS FOR CULTURE AND SENSITIVITY	YYY BR	

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D0472	ACCESSION OF TISSUE, GROSS EXAMINATION, PREPARATION AND TRANSMISSION OF WRITTEN REPORT	NNN	
D0473	ACCESSION OF TISSUE, GROSS AND MICROSCOPIC EXAMINATION, PREPARATION AND TRANSMISSION OF WRITTEN REPORT	NNN	
D0474	ACCESSION OF TISSUE, GROSS AND MICROSCOPIC EXAMINATION, INCLUDING ASSESSMENT OF SURGICAL MARGINS FOR PRESENCE OF DISEASE, PREPARATION AND TRANSMISSION OF WRITTEN REPORT	NNN	
D0480	ACCESSION OF EXFOLIATIVE CYTOLOGIC SMEARS, MICROSCOPIC EXAMINATION, PREPARATION AND TRANSMISSION OF WRITTEN REPORT	NNN	
D0486	LABORATORY ACCESSION OF TRANSEPITHELIAL CYTOLOGIC SAMPLE, MICROSCOPIC EXAMINATION, PREPARATION AND TRANSMISSION OF WRITTEN REPORT	NNN	
D0502	OTHER ORAL PATHOLOGY PROCEDURES, BY REPORT	NNN	
D7285	INCISIONAL BIOPSY OF ORAL TISSUE - HARD (BONE, TOOTH)	YYY	BR
D7286	INCISIONAL BIOPSY OF ORAL TISSUE - SOFT	YYY	\$49.11
D7287	EXFOLIATIVE CYTOLOGICAL SAMPLE COLLECTION	YYY	BR
D7288	BRUSH BIOPSY - TRANSEPITHELIAL SAMPLE COLLECTION	YYY	BR

Line	Condition/Treatment		
#####	Services Recommended for Noncoverage	NONE	
Code	Description	HSD Covg*	Fee
D0171	Re-evaluation – post-operative office visit	NNN	
D0190	Screening of a patient - a screening, including state or federally mandated screenings, to determine an individual's need to be seen by a dentist for diagnosis.	NNN	
D0351	3D PHOTOGRAPHIC IMAGE-This procedure is for dental or maxillofacial diagnostic purposes. Not applicable for a CAD-CAM procedure	NNN	
D0364	Cone beam CT capture and interpretation with limited field of view less than one whole jaw	NNN	
D0365	Cone beam CT capture and interpretation with field of view of one full dental arch - mandible	NNN	
D0366	Cone beam CT capture and interpretation with field of view one full dental arch – maxilla with or without cranium	NNN	
D0367	Cone beam CT capture and interpretation with field of view of both jaws with or without cranium	NNN	
D0368	Cone beam CT capture and interpretation for TMJ series including two or more exposures	NNN	
D0369	Maxillofacial MRI capture and interpretation	NNN	
D0370	Maxillofacial ultrasound, capture and interpretation	NNN	
D0371	Sialoendoscopy –capture and interpretation	NNN	
D0380	Cone beam CT image capture with limited field of view – less than one whole jaw	NNN	

*The three Y/N positions in this field are Yes/No flags indicating coverage for children under 21, nonpregnant adults and pregnant women. BR indicates "By Report" (Clinical documentation required.)

D0381	Cone beam CT image capture with field of view of one full dental arch – mandible	NNN
D0382	Cone beam CT image capture with field of view one full dental arch – maxilla, with and without cranium	NNN
D0383	Cone beam CT image capture with field of view of both jaws, with or without cranium.	NNN
D0384	Cone beam CT capture images for TMJ series including two or more exposures	NNN
D0385	Maxillofacial MRI image capture	NNN
D0386	Maxillofacial ultrasound image capture	NNN
D0391	Interpretation of diagnostic image by a practitioner not associated with capture of the image, including report	NNN
D0416	VIRAL CULTURE	NNN
D0417	COLLECTION AND PREPARATION OF SALIVA SAMPLE FOR LABORATORY DIAGNOSTIC TESTING	NNN
D0418	ANALYSIS OF SALIVA SAMPLE	NNN
D0421	GENETIC TEST FOR SUSCEPTIBILITY TO ORAL DISEASES	
D0422	Collection and preparation of genetic sample material for laboratory analysis and report	NNN
D0423	Genetic test for susceptibility to diseases – specimen analysis	NNN
D0425	CARIES SUSCEPTIBILITY TESTS	NNN
D0431	ADJUNCTIVE PRE-DIAGNOSTIC TEST THAT AIDS IN DETECTION OF MUCOSAL ABNORMALITIES INCLUDING PREMALIGNANT AND MALIGNANT LESIONS, NOT TO INCLUDE CYTOLOGY OR BIOPSY PROCEDURES	NNN
D0460	PULP VITALITY TESTS	NNN
D0470	DIAGNOSTIC CASTS	NNN
D0475	DECALCIFICATION PROCEDURE	NNN
D0476	SPECIAL STAINS FOR MICROORGANISMS	NNN
D0477	SPECIAL STAINS, NOT FOR MICROORGANISMS	NNN
D0478	IMMUNOHISTOCHEMICAL STAINS	NNN
D0479	TISSUE IN-SITU HYBRIDIZATION, INCLUDING INTERPRETATION	NNN
D0481	ELECTRON MICROSCOPY	NNN
D0482	DIRECT IMMUNOFLUORESCENCE	NNN
D0483	INDIRECT IMMUNOFLUORESCENCE	NNN
D0484	CONSULTATION ON SLIDES PREPARED ELSEWHERE	NNN
D0485	CONSULTATION, INCLUDING PREPARATION OF SLIDES FROM BIOPSY MATERIAL SUPPLIED BY REFERRING SOURCE	NNN
D0600	Non-ionizing diagnostic procedure capable of quantifying, monitoring and recording changes in structure of enamel, dentin, and cementum	
D0999	UNSPECIFIED DIAGNOSTIC PROCEDURE, BY REPORT	NNN

*The three Y/N positions in this field are Yes/No flags indicating coverage for children under 21, nonpregnant adults and pregnant women. BR indicates "By Report" (Clinical documentation required.)

D1352	PREVENTIVE RESIN RESTORATION IN A MODERATE TO HIGH CARIES RISK PATIENT - PERMANENT TOOTH	NNN
D1353	SEALANT REPAIR-PER TOOTH	NNN
D1999	Unspecified preventive procedure, by report	NNN
D2975	COPING	NNN
D4265	BIOLOGIC MATERIALS TO AID IN SOFT AND OSSEOUS TISSUE REGENERATION	NNN
D4266	Guided tissue regeneration -- resorbable barrier, per site This procedure does not include flap entry or closure, or, when indicated, wound debridement, osseous contouring, bone replacement grafts, and placement of biologic materials to aid in osseous reg	NNN
D4267	Guided tissue regeneration -- non-resorbable barrier, per site (includes membrane removal) This procedure does not include flap entry or closure, or, when indicated, wound debridement, osseous contouring, bone replacement grafts, and placement of biologic	NNN
D4275	SOFT TISSUE ALLOGRAFT	NNN
D4276	COMBINED CONNECTIVE TISSUE AND DOUBLE PEDICLE GRAFT, PER TOOTH	NNN
D4921	Gingival irrigation-per quadrant. Irrigation of gingival pockets with medicinal agent. Not to be used to report use of mouth rinses or non-invasive chemical debridement	NNN
D7295	HARVEST OF BONE FOR USE IN AUTOGENOUS GRAFTING PROCEDURE	NNN
D7411	EXCISION OF BENIGN LESION GREATER THAN 1.25 CM	NNN
D7412	EXCISION OF BENIGN LESION, COMPLICATED	NNN
D7413	EXCISION OF MALIGNANT LESION UP TO 1.25 CM	NNN
D7414	EXCISION OF MALIGNANT LESION GREATER THAN 1.25 CM	NNN
D7415	EXCISION OF MALIGNANT LESION, COMPLICATED	NNN
D7485	SURGICAL REDUCTION OF OSSEOUS TUBEROSITY	NNN
D7671	ALVEOLUS - OPEN REDUCTION, MAY INCLUDE STABILIZATION OF TEETH	NNN
D7771	ALVEOLUS, CLOSED REDUCTION STABILIZATION OF TEETH	NNN
D7921	Collection and application of autologous blood concentrate product	NNN
D8999	UNSPECIFIED ORTHODONTIC PROCEDURE, BY REPORT	NNN
D9210	LOCAL ANESTHESIA NOT IN CONJUNCTION WITH OPERATIVE OR SURGICAL PROCEDURES	NNN
D9215	LOCAL ANESTHESIA IN CONJUNCTION WITH OPERATIVE OR SURGICAL PROCEDURES	NNN
D9219	Evaluation for deep sedation or general anesthesia	YYY
D9450	CASE PRESENTATION, DETAILED AND EXTENSIVE TREATMENT PLANNING	NNN
D9931	Cleaning and inspection of a removable appliance. This procedure does not include any required adjustments	NNN
D9932	Cleaning and inspection of removable complete denture, maxillary	NNN
D9933	Cleaning and inspection of removable complete denture, mandibular	NNN

*The three Y/N positions in this field are Yes/No flags indicating coverage for children under 21, nonpregnant adults and pregnant women. BR indicates "By Report" (Clinical documentation required.)

D9934	Cleaning and inspection of removable partial denture, maxillary	NNN
D9935	Cleaning and inspection of removable partial denture, mandibular	NNN
D9936	Missed appointment	
D9985	Sales tax	NNN
D9987	Cancelled appointment	NNN

*The three Y/N positions in this field are Yes/No flags indicating coverage for children under 21, nonpregnant adults and pregnant women. BR indicates "By Report" (Clinical documentation required.)

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- Line: 57**
Condition: PREVENTIVE DENTAL SERVICES (See Guideline Notes 17,64,65)
Treatment: CLEANING, FLUORIDE AND SEALANTS
ICD-10: K00.4,K08.55,Z01.20-Z01.21,Z29.3
CPT: 98966-98969,99051,99060,99070,99078,99188,99201-99215,99281-99285,99341-99355,99358-99378,99381-99404,99408-99416,99429-99449,99487-99498,99605-99607
HCPCS: D0120,D0145,D0150,D0180,D0191,D0601-D0603,D1110-D1310,D1330,D1351,D1510-D1555,D4355,D5986,D9920,G0396,G0397,G0463,G0466,G0467
- Line: 58**
Condition: DENTAL CONDITIONS (EG. INFECTION, PAIN, TRAUMA)
Treatment: EMERGENCY DENTAL SERVICES
ICD-10: S02.5XXA-S02.5XXB,S03.2XXA-S03.2XXD
HCPCS: D0140,D0160,D0170,D3110,D3221,D7140,D7210,D7260-D7270,D7510,D7520,D7530,D7560,D7670,D7770,D7910,D7911,D7997,D9110,D9410,D9420,D9440,D9610,D9612
- Line: 223**
Condition: DENTAL CONDITIONS (EG. PERIODONTAL DISEASE) (See Guideline Note 53)
Treatment: BASIC PERIODONTICS
ICD-10: K05.00-K05.20,K05.211-K05.6,K06.0-K06.1,K06.3
HCPCS: D4210-D4212,D4341,D4342,D4910
- Line: 271**
Condition: DENTAL CONDITIONS (TIME SENSITIVE EVENTS) (See Guideline Notes 64,65)
Treatment: URGENT DENTAL SERVICES
ICD-10: K00.6,K01.0-K01.1,K03.5,K03.81,K04.01-K04.99,K08.3,M27.2-M27.3,S02.5XXD-S02.5XXG
CPT: 41000,41800,41806,98966-98969,99051,99060,99070,99078,99201-99215,99281-99285,99341-99355,99358-99378,99381-99404,99408-99416,99429-99449,99487-99498,99605-99607
HCPCS: D2910-D2921,D2940,D2950,D2970,D3120,D3220,D3222-D3240,D3351-D3353,D4920,D5410-D5510,D5850,D5851,D6930,D7111,D9120,D9951,G0396,G0397,G0463,G0466,G0467
- Line: 348**
Condition: DENTAL CONDITIONS (EG. CARIES, FRACTURED TOOTH) (See Guideline Notes 91,123)
Treatment: BASIC RESTORATIVE (E.G. COMPOSITE RESTORATIONS FOR ANTERIOR TEETH, AMALGAM RESTORATIONS FOR POSTERIOR TEETH)
ICD-10: K02.3,K02.51-K02.9,K03.2,K03.89,K08.530-K08.539
HCPCS: D1354,D2140-D2394,D2930-D2933,D2941,D2950,D2951,D2954,D2957,D2980,D6980
- Line: 349**
Condition: DENTAL CONDITIONS (EG. SEVERE CARIES, INFECTION) (See Guideline Notes 34,48)
Treatment: ORAL SURGERY (I.E. EXTRACTIONS AND OTHER INTRAORAL SURGICAL PROCEDURES)
ICD-10: E08.630-E08.638,E09.630-E09.638,E10.630-E10.638,E11.630-E11.638,E13.630-E13.638
CPT: 41870,41872
HCPCS: D7220-D7251,D7310-D7321,D7450,D7451,D7465,D7471,D7540,D7550,D7960-D7971,D9930
- Line: 389**
Condition: DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT ANTERIOR TOOTH)
Treatment: BASIC ENDODONTICS (I.E. ROOT CANAL THERAPY)
HCPCS: D3310,D3332
- Line: 416**
Condition: DENTAL CONDITIONS (EG. PULPAL PATHOLOGY, PERMANENT BICUSPID/PREMOLAR TOOTH)
Treatment: BASIC ENDODONTICS (I.E. ROOT CANAL THERAPY)
HCPCS: D3320,D3332
- Line: 448**
Condition: DENTAL CONDITIONS (EG. PULPAL PATHOLOGY, PERMANENT MOLAR TOOTH)
Treatment: BASIC ENDODONTICS (I.E. ROOT CANAL THERAPY)
HCPCS: D3330,D3332
- Line: 457**
Condition: DENTAL CONDITIONS (EG. MISSING TEETH, PROSTHESIS FAILURE)
Treatment: REMOVABLE PROSTHODONTICS (E.G. FULL AND PARTIAL DENTURES, RELINES)
ICD-10: K00.0,K08.101-K08.122,K08.124-K08.199,K08.401-K08.499
HCPCS: D5110-D5212,D5520-D5761,D5820,D5821

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- Line: 461**
Condition: DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT ANTERIOR TOOTH)
Treatment: ADVANCED ENDODONTICS (E.G. RETREATMENT OF PREVIOUS ROOT CANAL THERAPY)
HCPCS: D3331,D3333,D3346,D3410,D3430
- Line: 472**
Condition: DENTAL CONDITIONS (EG. CARIES, FRACTURED TOOTH)
Treatment: ADVANCED RESTORATIVE (I.E. BASIC CROWNS)
HCPCS: D2710,D2712,D2751,D2752
- Line: 496**
Condition: DENTAL CONDITIONS (EG. PERIODONTAL DISEASE)
Treatment: ADVANCED PERIODONTICS (E.G. SURGICAL PROCEDURES AND SPLINTING)
HCPCS: D4240-D4245,D4260,D4261,D4268-D4321,D4381,D5982
- Line: 510**
Condition: DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT BICUSPID/PREMOLAR TOOTH)
Treatment: ADVANCED ENDODONTICS (E.G. RETREATMENT OF PREVIOUS ROOT CANAL THERAPY)
HCPCS: D3331,D3333,D3347,D3421,D3426,D3430,D3450
- Line: 540**
Condition: DENTAL CONDITIONS (E.G. PULPAL PATHOLOGY, PERMANENT MOLAR TOOTH)
Treatment: ADVANCED ENDODONTICS (E.G. RETREATMENT OF PREVIOUS ROOT CANAL THERAPY)
HCPCS: D3331,D3333,D3348,D3425,D3426,D3430,D3450
- Line: 552**
Condition: TMJ DISORDER (See Guideline Notes 64,65)
Treatment: TMJ SPLINTS
ICD-10: M26.601-M26.69,S03.40XA-S03.40XD,S03.41XA-S03.41XD,S03.42XA-S03.42XD,S03.43XA-S03.43XD
CPT: 98966-98969,99051,99060,99070,99078,99201-99215,99281-99285,99341-99355,99358-99378,99381-99404,
99408-99416,99429-99449,99487-99498,99605-99607
HCPCS: D7880,D7881,G0396,G0397,G0463,G0466,G0467
- Line: 594**
Condition: DENTAL CONDITIONS (EG. CARIES, FRACTURED TOOTH)
Treatment: ADVANCED RESTORATIVE-ELECTIVE (INLAYS,ONLAYS,GOLD FOIL AND HIGH NOBLE METAL RESTORATIONS)
HCPCS: D2410-D2544,D2720-D2750,D2780-D2794,D2929,D2949,D2952,D2953,D2971,D2981,D2982,D4249,D5213-
D5224,D5281,D5810,D5811,D5862,D5867,D5875,D6205,D6212,D6214,D6253,D6602-D6607,D6610-D6710,
D6780-D6790,D6793-D6920,D6940,D6950,D9950
- Line: 604**
Condition: DENTAL CONDITIONS (EG. MISSING TEETH)
Treatment: COMPLEX PROSTHODONTICS (I.E. FIXED BRIDGES, OVERDENTURES)
HCPCS: D5863-D5866,D6211,D6241,D6242,D6251,D6252,D6545,D6549,D6751,D6752,D6791,D6792
- Line: 621**
Condition: DENTAL CONDITIONS (EG. MALOCCLUSION)
Treatment: ORTHODONTIA (I.E. FIXED AND REMOVABLE APPLIANCES AND ASSOCIATED SURGICAL PROCEDURES)
ICD-10: M26.211-M26.29,M26.31,M26.33-M26.37,M26.4,M26.70,Z46.4
HCPCS: D0340,D0350,D7280-D7283,D7290-D7294,D8010-D8694
- Line: 622**
Condition: DENTAL CONDITIONS (EG. MISSING TEETH)
Treatment: IMPLANTS (I.E. IMPLANT PLACEMENT AND ASSOCIATED CROWN OR PROSTHESIS)
ICD-10: M27.61-M27.69
HCPCS: D0393-D0395,D6010-D6194,D6210,D6240,D6245,D6250,D7951,D7952
- Line: 649**
Condition: DENTAL CONDITIONS WHERE TREATMENT IS CHOSEN PRIMARILY FOR AESTHETIC CONSIDERATIONS
(See Guideline Notes 64,65)
Treatment: COSMETIC DENTAL SERVICES
ICD-10: K00.1-K00.3,K00.5,K00.8-K00.9,K03.0-K03.1,K03.3-K03.4,K03.6-K03.7,K03.9,M26.30,M26.39
HCPCS: D2610-D2664,D2934,D2960-D2962,D2983,D3460,D4230,D4231,D6548,D6600,D6601,D6608,D6609,D6720-
D6750,D6985,D7995,D7996,D9970-D9975

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Line: 650
Condition: DENTAL CONDITIONS WHERE TREATMENT RESULTS IN MARGINAL IMPROVEMENT (See Guideline Notes 64,65)
Treatment: ELECTIVE DENTAL SERVICES
ICD-10: K00.7,K08.0,K08.51-K08.52,K08.54,K08.81-K08.89,M26.32,M85.2
CPT: 41822
HCPCS: D2799,D2955,D2990,D3355-D3357,D3427-D3429,D3431,D3432,D3470,D3920,D3950,D4263,D4264,D5225,D5226,D5994,D7272,D7950,D7953,D7972,D7998,D9910,D9911,D9940-D9943,D9952

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GUIDELINE NOTE 17, PREVENTIVE DENTAL CARE

Lines 3,57

Dental cleaning is limited to once per 12 months for adults and twice per 12 months for children up to age 19 (D1110, D1120). More frequent dental cleanings may be required for certain higher risk populations. Additionally, assessment (D0191) may be performed once per 12 months for adults and twice per 12 months for children up to age 19.

Fluoride varnish (D1206) is included on Line 3 for use with children 18 and younger during well child preventive care visits. Fluoride treatments (D1206 and D1208) are included on Line 57 PREVENTIVE DENTAL SERVICES for use with adults and children during dental visits. The total number of fluoride applications provided in all settings is not to exceed four per twelve months for a child at high risk for dental caries and two per twelve months for a child not at high risk. The number of fluoride treatments is limited to once per 12 months for average risk adults and up to four times per 12 months for high risk adults.

GUIDELINE NOTE 34, ORAL SURGERY

Line 349

Treatment only for symptomatic dental pain, infection, bleeding or swelling (D7220, D7230, D7240, D7241, D7250). To be used in conjunction with making a prosthesis (D7970).

GUIDELINE NOTE 48, FRENULECTOMY/FRENULOTOMY

Line 349

Frenulectomy/frenulotomy (D7960) is included on this line for the following situations:

- 1) When deemed to cause gingival recession
- 2) When deemed to cause movement of the gingival margin when frenum is placed under tension.
- 3) Maxillary labial frenulectomy not covered until age 12 and above.

GUIDELINE NOTE 53, BASIC PERIODONTICS

Line 223

Only for the treatment of severe drug-induced hyperplasia (D4210, D4211, D4212). Payable only when there are pockets of 5 mm or greater (D4341).

GUIDELINE NOTE 64, PHARMACIST MEDICATION MANAGEMENT

Included on all lines with evaluation & management (E&M) codes

Pharmacy medication management services must be provided by a pharmacist who has:

- 1) A current and unrestricted license to practice as a pharmacist in Oregon.
- 2) Services must be provided based on referral from a physician or licensed provider or health plan.
- 3) Documentation must be provided for each consultation and must reflect collaboration with the physician or licensed provider. Documentation should model SOAP charting; must include patient history, provider assessment and treatment plan; follow up instructions; be adequate so that the information provided supports the assessment and plan; and must be retained in the patient's medical record and be retrievable.

GUIDELINE NOTE 65, TELEPHONE AND EMAIL CONSULTATIONS

Included on all lines with evaluation & management (E&M) codes

Telephone and email consultations (CPT 98966-98969) must meet the following criteria:

- 1) Patient must have a pre-existing relationship with the provider as demonstrated by at least one prior office visit within the past 12 months.
- 2) E-visits must be provided by a physician or licensed provider within their scope of practice.
- 3) Documentation should model SOAP charting; must include patient history, provider assessment, and treatment plan; follow up instructions; be adequate so that the information provided supports the assessment and plan; must be retained in the patient's medical record and be retrievable.
- 4) Telephone and email consultations must involve permanent storage (electronic or hard copy) of the encounter.
- 5) Telephone and email consultations must meet HIPAA standards for privacy.
- 6) There needs to be a patient-clinician agreement of informed consent for E-visits by email. This should be discussed with and signed by the patient and documented in the medical record.

Examples of reimbursable telephone and email consultations include but are not limited to:

- 1) Extended counseling when person-to-person contact would involve an unwise delay.
- 2) Treatment of relapses that require significant investment of provider time and judgment.
- 3) Counseling and education for patients with complex chronic conditions.

Examples of non-reimbursable telephone and email consultations include but are not limited to:

- 1) Prescription renewal.

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GUIDELINE NOTE 65, TELEPHONE AND EMAIL CONSULTATIONS (CONT'D)

- 2) Scheduling a test.
- 3) Scheduling an appointment.
- 4) Reporting normal test results.
- 5) Requesting a referral.
- 6) Follow up of medical procedure to confirm stable condition, without indication of complication or new condition.
- 7) Brief discussion to confirm stability of chronic problem and continuity of present management.

GUIDELINE NOTE 91, CARIES ARRESTING MEDICAMENT APPLICATION

Line 348

D1354 is limited to silver diamine fluoride applications, with a maximum of two applications per year.

GUIDELINE NOTE 123, DENTAL FILLINGS FOR POSTERIOR TEETH

Line 348

For dental fillings in posterior teeth, amalgam is preferred for extensive restorations. If amalgam is unavailable or contraindicated, composite is acceptable.

MULTISECTOR INTERVENTIONS

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MULTISECTOR INTERVENTIONS: TOBACCO PREVENTION AND CESSATION, INCLUDING DURING PREGNANCY




Benefit coverage for smoking cessation on Line 5 and in Guideline Note 4 TOBACCO DEPENDENCE, INCLUDING DURING PREGNANCY is intended to be offered with minimal barriers, in order to encourage utilization. To further prevent tobacco use and help people quit, additional evidence-based policy and programmatic interventions from a population perspective are available here:


















- Oregon Public Health Division's Health Promotion and Chronic Disease Prevention Section: Evidence-Based Strategies for Reducing Tobacco Use A Guide for CCOs
https://public.health.oregon.gov/PreventionWellness/TobaccoPrevention/Documents/evidence-based_strategies_reduce_tob_use_guide_cco.pdf
- Community Preventive Services Task Force (supported by the CDC) - What Works: Tobacco Use
<http://www.thecommunityguide.org/about/What-Works-Tobacco-factsheet-and-insert.pdf>













The Community Preventive Services Task Force identified the following evidence-based strategies:

TASK FORCE FINDINGS ON TOBACCO USE

The Community Preventive Services Task Force (Task Force) has released the following findings on what works in public health to prevent tobacco use. These findings are compiled in The Guide to Community Preventive Services (The Community Guide) and listed in the table below. Use the findings to identify strategies and interventions you could use for your community.

Legend for Task Force Findings:  Recommended  Insufficient Evidence  Recommended Against (See reverse for detailed descriptions.)

Intervention	Task Force Finding
Reducing Tobacco Use Initiation	
Increasing the unit price of tobacco products	
Mass media campaigns when combined with other interventions	
Smoke-free policies	
Increasing Tobacco Use Cessation	
Increasing the unit price of tobacco products	
Mass media campaigns when combined with other interventions	
Mass-reach health communication interventions	
Mobile phone-based interventions	
Multicomponent interventions that include client telephone support	
Smoke-free policies	
Provider reminders when used alone	
Provider reminders with provider education	
Reducing client out-of-pocket costs for cessation therapies	
Internet-based interventions	
Mass media – cessation contests	
Mass media – cessation series	
Provider assessment and feedback	
Provider education when used alone	

Intervention	Task Force Finding
Reducing Exposure to Environmental Tobacco Smoke	
Smoke-free policies	
Community education to reduce exposure in the home	
Restricting Minors' Access to Tobacco Products	
Community mobilization with additional interventions	
Sales laws directed at retailers when used alone	
Active enforcement of sales laws directed at retailers when used alone	
Community education about youth's access to tobacco products when used alone	
Retailer education with reinforcement and information on health consequences when used alone	
Retailer education without reinforcement when used alone	
Laws directed at minors' purchase, possession, or use of tobacco products when used alone	
Decreasing Tobacco Use Among Workers	
Smoke-free policies	
Incentives and competitions to increase smoking cessation combined with additional interventions	
Incentives and competitions to increase smoking cessation when used alone	

Visit the "Tobacco Use" page of The Community Guide website at www.thecommunityguide.org/tobacco to find summaries of Task Force findings and recommendations on tobacco use. Click on each topic area to find results from the systematic reviews, included studies, evidence gaps, and journal publications.

The Centers for Disease Control and Prevention provides administrative, research, and technical support for the Community Preventive Services Task Force.

To reduce the use of tobacco during pregnancy and improve associated outcomes, the evidence supports the following interventions:

- Financial incentives (incentives contingent upon laboratory tests confirming tobacco abstinence are the most effective)
- Smoke-free legislation
- Tobacco excise taxes

Implants
2018 Biennial Review

Question: Should some care of dental implants be moved to higher priority lines on the Prioritized List?

Question source: OHAP

Issue: Currently, all implant related CDT codes are located on Line 622 DENTAL CONDITIONS (EG. MISSING TEETH) Treatment: IMPLANTS (I.E. IMPLANT PLACEMENT AND ASSOCIATED CROWN OR PROSTHESIS). OHAP requested at their October 2017 meeting that these services be reviewed as a biennial review change for possible reprioritization of some of these services higher on the Prioritized List. There was some discussion about reprioritizing the entire implant line; further discussions have not supported this but rather the movement of certain codes for maintaining or removing existing implants to covered lines.

HERC staff recommendation:

- 1) Discuss coverage of the codes below

Codes for consideration for movement

CDT Code	Code description
D6080	IMPLANT MAINTENANCE PROCEDURES WHEN PROSTHESES ARE REMOVED AND REINSERTED, INCLUDING CLEANSING OF PROSTHESES AND ABUTMENTS
D6081	SCALING AND DEBRIDEMENT IN THE PRESENCE OF INFLAMMATION OR MUCOSITIS OF A SINGLE IMPLANT, INCLUDING CLEANING OF THE IMPLANT SURFACES, WITHOUT FLAP ENTRY AND CLOSURE
D6085	PROVISIONAL IMPLANT CROWN
D6090	REPAIR IMPLANT SUPPORTED PROSTHESIS BY REPORT
D6091	REPLACEMENT OF SEMI-PRECISION OR PRECISION ATTACHMENT (MALE OR FEMALE COMPONENT) OF IMPLANT/ABUTMENT SUPPORTED PROSTHESIS, PER ATTACHMENT
D6092	RE-CEMENT OR RE-BOND IMPLANT/ABUTMENT SUPPORTED CROWN
D6093	RE-CEMENT OR RE-BOND IMPLANT/ABUTMENT SUPPORTED FIXED PARTIAL DENTURE
D6095	REPAIR IMPLANT ABUTMENT, BY REPORT