SANTA FE GROUP
Improving Lives Through Oral Health

BY ELECTRONIC MAIL:
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February 10, 2025

The Honorable Stephanie Carlton
Acting Administrator
Centers for Medicare and Medicaid Services
7500 Security Boulevard
P.O. Box 8016
Baltimore, MD 21244-8016

Re: Dental Recommendations for CY 2026 Review

Dear Acting Administrator Carlton:

On behalf of the Santa Fe Group, (https://santafegroup.org), we are pleased to nominate this clarification of payment policy for dental services that are inextricably linked, substantially related, and integral to the clinical success of covered medical services used for the treatment of certain Medicare beneficiaries with diabetes.

The Santa Fe Group is a 501(c)(3), action-oriented think tank with a passion to improve lives through oral health. Since its inception 27 years ago, the Santa Fe Group has served as a neutral convener, communicator, connector, and catalyst on critical national issues such as oral cancer, dental education, children's oral health, improved primary care access, the importance of linking medical and dental health systems, and most recently, expanding oral health care for our nation's seniors.

We are proud to be joined in this submission by the Santa Fe Group's Coalition for Oral Health Policy (COHP), a key thought leader in the oral health community, and the Consortium for Medically Necessary Oral Health Coverage, a diverse partnership of nearly 250 organizations united in support of Medicare coverage of medically necessary oral and dental treatment.

Older and disabled Americans are grateful to the Centers for Medicare and Medicaid Services (CMS) for its efforts in this critical area. By clarifying Medicare payment policy for medically necessary oral and dental care, the Agency is having a direct impact in the lives of millions of Medicare beneficiaries. Equally meaningful is the annual nominations process it created, which enables stakeholders to provide input on dental services that are inextricably linked, substantially related, and integral to the clinical success of covered medical services.

Towards that end, we are pleased to submit this nomination for dental services that are inextricably linked to covered medical services upon which certain beneficiaries with diabetes depend. As detailed below:

- The delivery of appropriate dental services in accordance with clinical guidelines and standards of care is substantially related and integral to the optimal outcome of covered medical services related to diabetes-associated retinopathy and nephropathy.
- Clinical studies document that treatment of oral infections, such as periodontitis and related inflammation, meaningfully improves the medical treatment and management of diabetes-associated retinopathy and nephropathy.
- Importantly, healthcare utilization and costs are also substantially reduced when medically necessary oral and dental treatment is provided, as evidenced by extensive analyses of the real-world care experience of more than 1.6 million individuals.
- By contrast, the absence of treatment of chronic dental infections complicates covered medical treatment for the management of diabetes and exacerbates insulin resistance, worsens glycemic control, and intensifies other diabetes related complications.
- Therefore, we respectfully urge CMS to include within the Physician Fee Schedule for CY 2026 a proposal to clarify Medicare payment policy for dental services that are inextricably linked to covered medical treatment of diabetes-associated retinopathy and nephropathy.

Key Background Issues

A recent and extensive Cochrane Collaboration systematic review (Simpson et.al., 2022) found that preventive dental care and conservative periodontal treatment are associated with a reduction in glycated hemoglobin (HbA1c) of 0.43 – 0.50% over 3 to 12 months. This reduction is due to the removal of the biofilm, with a resulting reduction in the local inflammatory response. This care reduces the systemic inflammatory burden. Because there is an inextricable link between HbA1c and clinical complications, reflective of long-term effective management of blood glucose levels, reducing oral and dental disease is inextricably linked to the effective treatment of diabetes-related conditions.

Indeed, the Cochrane authors described the above clinical outcome related to preventive dental care, conservative periodontal treatment, and reduction in HbA1c, as statistically and clinically significant. Importantly, it is comparable to what is seen when a second hypoglycemic agent is added to metformin for patients with diabetes who are managed with oral medication (Simpson, 2022). Underscoring the confidence of this finding, the Cochrane authors stated that "further trials evaluating no treatment *vs* usual care are unlikely to change this conclusion."

Our nomination relies on numerous basic and clinical studies that document the connection between oral diseases and inflammation in persons with diabetes, *especially among persons facing heightened risk for microvascular complications including retinopathy and nephropathy*.

Central to this connection is the bi-directional relationship between diabetes and dental infections, as well as the pathophysiology of inflammation related to periodontal disease and diabetes. Diabetes is a chronic condition in which circulating levels of glucose lead to enhanced systemic inflammation through several mechanisms, including the formation of advanced glycation end products (Lalla et al., 2000). As type 2 diabetes (T2D) develops, cells become less responsive to insulin and the resulting insulin resistance increases blood glucose and the systemic inflammatory burden. This is crucially important because inflammation plays a central role in the pathophysiology of T2D, its associated metabolic abnormalities, and a broad range of related chronic illnesses.

Fortunately, reciprocal management of glycemic control and periodontal disease decreases risk for the development and severity of diabetes and periodontal disease. As one important example, medical management of glycemic control in diabetes may also involve less medication if inflammation related to periodontal risk and disease is minimized. As determined by clinical analyses discussed below, medically necessary dental/oral treatment lowers the risk of medical complications, improves clinical outcomes, and reduces hospitalization and the utilization of other health care resources, thereby decreasing total healthcare costs.

The relationship between oral diseases and diabetes mellitus is complex and bidirectional. Diabetes increases the risk and severity of oral diseases, such as periodontitis (gum inflammation and bone loss), tooth loss, caries, dry mouth, and oral fungal infections. Additionally, oral diseases are documented as affecting circulating levels of blood glucose and contributing to the development of diabetes complications, such as retinopathy and nephropathy, which are traditionally considered the earliest clinical complications of diabetes.

Provision of dental benefits in the Medicare program for what has been termed “medically necessary dental care” has been provided since 2023 following changes to the Physician’s Fee Schedule (PFS) to consider dental care nominations. The approved dental services are defined in the context of inextricable linkage to specific medical conditions and treatments covered by the Medicare program. The need for dental care must be based on evidence that the dental services positively impact the desired outcome for the medical treatment, here diabetes, and /or decreases the risk for, or mitigates the related complications, here diabetes-associated retinopathy, or nephropathy.

Parallel examples are provided by previously authorized medically necessary dental services for specific medical conditions.

- A patient diagnosed with large B-cell lymphoma (the disease) who is receiving chimeric antigen receptor therapy (CART; the treatment) is eligible to receive basic dental services. These services are authorized because they decrease the risk of dissemination of oral bacteria and/or limit the contribution of the local inflammatory response associated with

infection to the systemic inflammatory burden in an immunocompromised patient. In an immunocompromised patient, resulting complications such as sepsis or fungal infections can interrupt successful treatment of lymphoma, increase hospital admissions, and prolong length of hospital stays.

- A patient diagnosed with end-stage renal disease (the disease) who is receiving dialysis (the treatment) is now eligible to receive medically necessary dental services. Basic dental services are authorized to decrease the risk of local or disseminated infection of oral origin, or local chronic inflammation contributing to the systemic inflammatory burden in a debilitated individual.

In this application we provide evidence that oral infection/inflammation can adversely affect the outcomes of treatment for persons with diabetes associated retinopathy who are receiving various treatments for macular edema and/or microvascular retinal hemorrhages, treated with Medicare-approved medical services that are standard of care for treatment of diabetes associated retinopathy, including intravitreal pharmacotherapy and laser photocoagulation. Similarly, research shows that the complications and mortality related to the treatment of nephropathy are reduced when patients with diabetes improve their glycemic control.

The control of oral and periodontal infections and resultant inflammation, preventing local and/or disseminated infection, coupled with reduction of the systemic inflammatory burden that is an essential part of the pathophysiology of many chronic diseases, are inextricably linked to increased probability of achieving the desired outcome of the medical therapies for diabetes-associated retinopathy and nephropathy. Evidence for these statements is presented below.

Relationship and Pathophysiologic Link between Oral Disease, Diabetes, and Diabetes-associated Retinopathy

Diabetes mellitus (DM) remains an enormous health care challenge in the United States, taking a personal and economic toll of enormous proportions. According to the Centers for Disease Control and Prevention, the direct and indirect cost of DM in the U.S. was $412.9 billion (2022 data).

The percentage of people with DM is 15.8%, but for adults 65 years of age and older the prevalence is 29.2%. Further, as a chronic disease effective metabolic management is difficult to achieve. Nearly half of adults with diabetes have an HbA1c of 7% and above, which is the clinical target for disease management. Further, 24.5% of adults have an HbA1c equal to or greater than 8%, placing them at increased risk for clinical complications of DM (CDC 1).

Diabetic retinopathy is a microvascular disorder occurring because of diabetes mellitus. It may lead to vision-threatening damage to the retina, eventually leading to blindness. It is the most common cause of severe vision loss in adults of working age in the western world. The number of people with diabetic retinopathy in America is estimated to reach 16 million by 2050, with vision-threatening complications affecting ~3.4 million of them. Poor glycemic control is associated with worsening retinopathy.

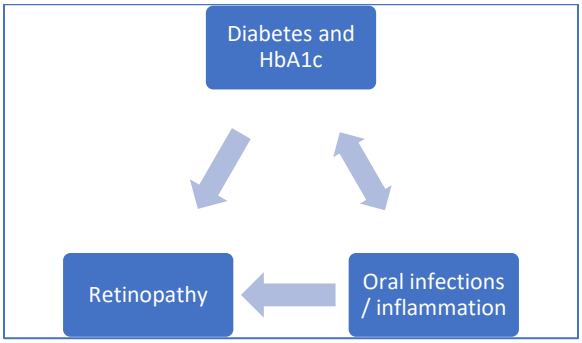
The clinical complications of DM are associated with significant morbidity and mortality. One of the earliest complications of diabetes is retinopathy, which is damage to the retina associated with changes to the microvasculature. Vision can become impaired, and retinopathy associated with DM is the major cause of blindness in the U.S. (CDC 2). The significance of the problem is illustrated by the finding that more than 10% of persons with diabetes report severe vision impairment or blindness (CDC 2).

Chronic inflammation is an essential component of the pathophysiology of diabetes and diabetes-associated retinopathy. Microvascular changes in the retina occur relatively early in the natural course of diabetes. Leukocyte activation is a characteristic feature of diabetes-associated retinopathy, with adherent macrophages playing a key role in development of capillary occlusion in the retina (Forrester et al. 2020). These authors note that the treatment of diabetes-associated retinopathy now often involves injection of anti-Vascular Endothelial Growth Factor (VEGF), but that many affected individuals do not respond to this therapy. This reinforces the need to control other chronic sources of inflammation, including periodontitis.

Further, a Cochrane Database systematic review of prognostic factors in persons with diabetes-associated retinopathy identified elevated glycated hemoglobin as the most important prognostic

factor for retinopathy in persons with type 2 diabetes. Several other markers, including duration of diabetes and body mass index (BMI), were not found to be predictive of this complication (Perais et al., 2023). The authors of this review emphasized the importance of metabolic control of diabetes, stating that "maintaining adequate glucose control throughout life, irrespective of the stage of (diabetes retinopathy) severity, may help to prevent progression to (diabetes-associated retinopathy) and risk of its sight-threatening complications."

An association between periodontitis and retinopathy in patients with DM has been identified, as represented in this Figure.



Periodontitis is a risk factor for complications of DM, and conservative periodontal treatment has been associated with a clinically significant reduction in HbA1c (Simpson et. al., 2022). A review examined the underlying pathology that links periodontitis and retinopathy in persons with DM (Zhao & Shen, 2024). The authors concluded that the systemic inflammatory response and specifically oxidative stress and formation of advanced glycation end-products resulting in vascular/endothelial cell dysfunction were responsible for the pathology in both DM-associated periodontitis and DM-associated retinopathy. The over-production of VEGF drives the excess development of microvasculature. While the retinal environment is sterile, the periodontal environment is chronically infected (the periodontal biofilm), driving the development and progression of the periodontal lesion. This local inflammatory response has been shown to contribute to the systemic inflammatory response (Martinez-Garcia & Hernandez-Lemus 2021), thereby contributing to hyper-vasculature/microangiopathy that characterizes DM retinopathy.

Clinical studies identify periodontitis as a risk factor for diabetic retinopathy. An early cross-sectional study (Amiri et.al., 2014) demonstrated the relationship between these two disorders.

Similar findings were reported in a more detailed study that observed increased retinopathy when periodontitis was present (Veena et.al, 2018). A review paper published a few years later (Nguyen 2020) reported increased risk of retinopathy for people with DM and periodontitis versus those with DM without periodontitis (odds ratio of 2.8-8.7). Subsequent studies provided additional, more detailed information about this relationship. A report from South Korea analyzed data from a national health survey. This included more than 10,000 participants with diabetes who were followed for mean of 7.7 years. They concluded that "Multivariable Cox regression analyses revealed that periodontitis was an independent risk factor for diabetes-related microvascular complications…In the secondary analysis for individual microvascular complication, periodontitis was an independent risk factor for retinopathy."

A meta-analysis of studies examining the relationship of periodontitis to microangiopathy also concluded that periodontitis is associated with microangiography in persons with diabetes. Of the microangiography-associated complications of DM, the highest odds ratio (OR = 4.33) was seen for retinopathy (Zhang et.al., 2021).

A recent detailed assessment of periodontal inflammation (tissue surface area with inflammation) examined serum levels of interleukin 6 and lipoprotein(a) in relationship to diabetic retinopathy (Poyil et.al., 2024). Periodontitis was more severe in persons with DM and retinopathy versus persons with DM only. The tissue inflammatory index was correlated to serum levels of IL-6, suggesting the contribution of locally persistent tissue inflammation to systemic inflammation. Further, the measure of the severity of periodontal disease was higher in persons with DM retinopathy versus those with DM but not retinopathy.

An editorial in the World Journal of Diabetes followed the publication of the Poyil article, with the authors stating that the observed "…correlation highlights the importance of addressing periodontal health in diabetes management to potentially reduce the severity of (diabetic retinopathy), a complication of diabetes." The authors continued "This article highlights the importance of collaboration amongst diabetes specialists, ophthalmologists, periodontists, and public health professionals to advance the prevention, early detection and treatment of (periodontal disease) and (diabetic retinopathy)." (Martinez et. al., 2024)

Thus, the available literature supports the concept that periodontitis is a preventable risk factor for diabetic retinopathy, and that conservative periodontal treatment as a part of basic dental services meets the description of medically necessary dental care.

In summary, in this application we provide evidence that oral infection/inflammation can adversely affect the outcomes of treatment for persons with diabetes associated retinopathy. The findings of the studies reported indicate that:

- Poor glycemic control increases the risk of retinopathy.
- Poorly controlled diabetes and advanced periodontitis negatively impact risk for, treatment of, and outcomes of retinopathy.
- The treatment of dental infections like periodontitis and other oral infections will improve glycemic control and, by extension, retinopathy outcomes.
- Lack of treatment of oral infections will exacerbate symptoms of retinopathy (macular edema, retinal hemorrhage) and increase the need for treatment for retinopathy.

The standard of care for medical services by a retinal specialist for treatment of retinopathy in persons with diabetes includes assessment questions about glycemic control. As evidenced by the Simpson study, glycemic control is adversely affected by periodontitis.

Relationship and Pathophysiologic Link between Oral Disease, Diabetes, and Diabetes-associated Nephropathy

One of the most important complications of diabetes is chronic kidney disease (CKD). The magnitude of the problem posed by CKD cannot be understated. Among Medicare Beneficiaries, diabetes is the leading cause of kidney failure in the U.S. (CDC, 2025). In 2019, treating Medicare beneficiaries with CKD cost $87.2 billion, and treating people with end-stage kidney disease cost an additional $37.3 billion (CDC, 2025). The enormity of the problem is further illustrated by the finding that 33% of persons with type 2 diabetes among Medicare Fee for Service Population received treatment for nephropathy in 2017, at an average annual cost of $9,576/person (Wang,

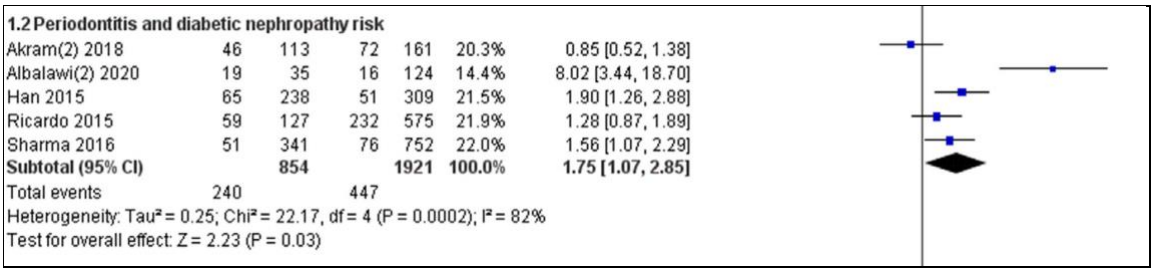
2022). Risk reduction for CKD in diabetes includes keeping blood sugar (HbA1c) in the target range (CDC, 2025).

Periodontitis has been identified as a risk factor for complications of Diabetes. Conservative periodontal treatment is associated with a clinically significant reduction in HbA1c (Simpson 2022). An association between periodontitis and nephropathy in patients with DM has been identified, with pathways as illustrated by the Figure and described in the sections that follow.

Yang et al. (2024) studied the pathophysiological relationship between diabetic nephropathy and periodontitis; they found that AGE-RAGE pathway signaling, the complement system, and immune inflammatory pathways appear as common features of both diseases. They proposed CSF1R, CXCL6, VCAM1, JUN and IL1β as potential crosstalk aging genes linking periodontal disease and diabetic nephropathy.

Park and colleagues (2022) conducted a prospective cohort study (N=11,353) among persons with diabetes. Multivariable Cox regression analyses found that periodontitis was an independent risk factor for diabetes-related microvascular complications (adjusted hazard ratio (HR):1.13; 95% confidence interval (CI):1.04–1.23; p = 0.004).

In a systematic review of periodontitis and diabetes complications, Nguyen et al. (2020) showed persons with periodontitis had higher risks for nephropathy (1.9-8.5), cardiovascular complications (1.28-17.7), and mortality (2.3-8.5) than people without periodontitis. Further, Zhang and coworkers (2021) conducted a meta-analyses of 13 cross-sectional studies including 10,570 participants. Findings revealed that periodontitis was associated with increased risk of type 2 diabetic microangiopathy (OR: 2.43, 95% CI: 1.65-3.56), diabetic retinopathy (OR: 4.33, 95% CI: 2.19-8.55), and diabetic nephropathy (OR: 1.75, 95% CI: 1.07-2.85) (see Figure below from Zhang et al., 2021).

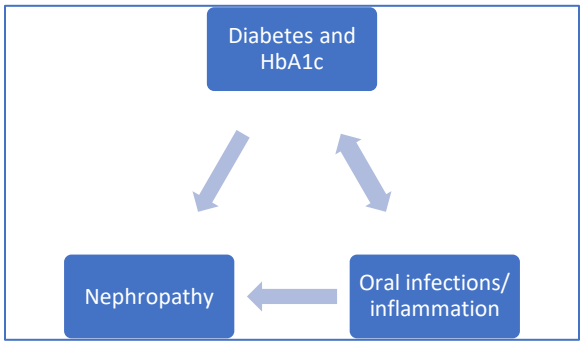


Further amplifying the link between diabetes, periodontitis and CKD and outcomes, Sharma et al. (2016) studied the impact of periodontitis and diabetes on mortality among persons with chronic kidney disease (CKD). Using data from NHANES III and linked mortality data, and adjusting for confounders, the 10-year all-cause mortality rate for persons with CKD increased from 32% (95% CI: 29–35%) to 41% (36–47%) in persons with periodontitis. Similarly, for diabetes, the 10-year all-cause mortality rate increased to 43% (38–49%). The authors concluded, "there is a strong, association between periodontitis and increased mortality in individuals with CKD. Sources of chronic systemic inflammation (including periodontitis, other dental infections) may be important contributors to mortality in patients with CKD."

Finally, Zheng and coworkers (2012) found an association between multiple space infections of the head and neck caused by dental infections in persons with diabetes. Specifically, not only are patients with diabetes more likely to develop complications, but the complications of space infections are also more likely to be severe, and result in death, than in persons without diabetes. Similar to other infections, head and neck space infections exacerbate hyperglycemia, and can thereby contribute to CKD.

Research demonstrates that the need for treatment of nephropathy is reduced when patients with diabetes improve their glycemic control. Specifically, Barrett et al. described in the 2017 Endocrine Society Scientific Statement: that "The DCCT and subsequent EDIC trial demonstrated that intensive glucose control in T1DM delayed the development and progression of microalbuminuria (DCCT 1995; EDIC, 2003). The UKPDS reached similar conclusions in patients with T2DM, reporting that improved glycemic control produced prolonged delays or reductions in microvascular complications, which are potentially linked to epigenetic factors (UKPDS, 1998; Holman, 2008). The more recent ADVANCE, ACCORD, and Veterans Affairs Diabetes trials

extended this finding, demonstrating significant reductions in microalbuminuria and overt proteinuria with intensive glycemic control" (Ismail-Beigi, 2010; Duckworth 2009; Patel, 2008)



Stratton et al (2000) demonstrated the increases in mortality and complications with diabetes decreases in glycemic control. They concluded that "the lower the glycaemia the lower the risk of complications, and that the rate of increase of risk for microvascular disease with hyperglycaemia is greater than that for macrovascular disease."

The above research findings demonstrate the link between periodontitis and diabetic nephropathy. Equally important, for people with poorly controlled diabetes (A1c of 8 or higher) and severe periodontitis or other forms of dental infection, there is improvement in the management and treatment of nephropathy achieved through dental treatment. As noted, Simpson et al stated "we now have evidence that periodontal treatment improves glycemic control in people with both periodontitis and diabetes by a clinically significant amount when compared to no treatment or usual care." Thus, the provision of periodontal therapy will improve both periodontitis and glycemic control.

In summary, in this application we provide evidence that oral infection/inflammation can adversely affect the outcomes of treatment for persons with diabetes associated nephropathy. The findings of the studies reported indicate that:

- Poor glycemic control exacerbates the risk of nephropathy.
- Poorly controlled diabetes and advanced periodontitis negatively impact treatment, outcomes, and mortality of nephropathy.
- The treatment of dental infections (periodontitis, others) will improve glycemic control and, by extension, nephropathy outcomes.
- Lack of treatment or oral infections (periodontitis, others) will compromise treatment for nephropathy.

The covered services for the management of diabetes-associated nephropathy could be significantly and materially compromised absent the provision of the inextricably linked dental services. Dental services are a clear clinical companion to proceeding with the primary medical procedure and/or treatment. Above, we provided documentation accompanying recommendations that include medical evidence to support that certain dental services are inextricably linked to covered services. Specifically, we provide evidence that:

"(1) the provision of dental services (treatment of periodontitis, dental infections, abscesses, cellulitis or space infections) leads to reduction in HbA1c, improved healing, reduced rates of complications of nephropathy, improved outcomes, and the reduced likelihood of readmission and/or surgical revisions because an infection has interfered with treatment for nephropathy.

(2) Dental services are clinically meaningful and result in a material difference in terms of the clinical outcomes and success of the treatments for nephropathy in diabetes, such that the dental services are inextricably linked to other covered services; and,

(3) Proposed dental services result in clinically significant improvements in HbA1c in patients with nephropathy, and therefore better care quality and outcomes (for example, fewer complications, fewer readmissions, lower mortality, more rapid healing, quicker discharge, and quicker rehabilitation for the patient).

The need for treatment of nephropathy complications is reduced when patients improve glycemic control. Again, per Barrett et al., "Therapies to prevent or slow the development of DKD are multifactorial and include lowering blood sugar levels with medications, diet, and exercise, as well as treating hypertension and hyperlipidemia." Thus, the removal of dental infections and treatment of periodontal diseases, which lower HbA1c levels, contribute to the multifactorial treatment of diabetic kidney diseases. Among persons with poorly controlled diabetes (HbA1c of 8 or higher) and severe periodontitis or other forms of dental infection, there is improvement in the management and treatment of nephropathy achieved via dental treatments.

The link between periodontitis and diabetic nephropathy is evident; this link is important because while 25% of patients with diabetes in the US have chronic kidney disease, 33% of persons with type 2 diabetes among Medicare Fee for Service Population received treatment for nephropathy in 2017, and world-wide diabetic nephropathy was the leading cause of chronic kidney and end stage renal disease (Zhang et al., 2016).

In closing, as stated by Simpson et al., "We now have evidence that periodontal treatment improves glycemic control in people with both periodontitis and diabetes by a clinically significant amount when compared to no treatment or usual care." Thus, provision of periodontal therapy will improve both periodontitis and glycemic control.

Covered Medical Services Related to Recommended Payment Clarification

Quoting from the 2025 final rule, "Are there codes that describe specific services that align to patients with these conditions or needs (for example, an uncontrolled diabetic that has periodontitis)? Are there physicians' services that dental services would be inextricably linked to for beneficiaries with these needs?" This nomination focuses on dental services that are inextricably linked to, and substantially related and integral to the clinical success of, the following covered medical services upon which beneficiaries with diabetes depend:

Exemplary ICD diagnostic codes for individuals with diabetic nephropathy or diabetic retinopathy; i.e., the specific groups for which coverage is requested:

E1021	Type 1 diabetes mellitus with diabetic nephropathy
E1022	Type 1 diabetes mellitus with diabetic chronic kidney disease
E1029	Type 1 diabetes with other diabetic kidney complication
E1121	Type 2 diabetes mellitus with diabetic nephropathy
E1122	Type 2 diabetes mellitus with diabetic chronic kidney disease
E1129	Type 2 diabetes mellitus with other diabetic kidney complication
E1321	Other specified diabetes mellitus with diabetic nephropathy
E1322	Other specified diabetes mellitus with diabetic chronic kidney disease

E1329	Other specified diabetes mellitus with other diabetic kidney complication
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E11.331	DM with moderate non proliferative diabetic retinopathy w/macular edema
E11.319	DM with unspecified diabetic retinopathy without macular edema
H35.82	Retinal Ischemia
H35.81	Retinal Edema
H47.01	Optic Neuropathy

Exemplary related CPT treatment codes relevant to the proposed diabetic complications:

Diabetic Retinopathy

67028	Intravitreal Injection of a pharmacologic agent (Separate Procedure)
67028	LT left eye injection
67028	RT right eye museum
67028	Bilateral eye injections
J0177	Injection, Aflibercept HD, 2 U
J0178	Injection, Aflibercept, 1 MG
09035	Injection, Avastin – 1u only MCR
02778	Injection, /LU-RO/AMD-5 DME-3
17312	Dexameth-OZ Impl-7u
67288	Laser treatment for diabetic retinopathy (one or more sessions)
67105	Laser treatment
92002	Eye exam – new
92014	Eye exam – established
92202	Opscpy Extnd Ocular Nerve/Macular Drawing I&R Uni/B
	(to establish location and extent of retinopathy)
92134	Opscpy Retina (screening for diabetic macular edema)

Diabetic Nephropathy

82043	quantitative measurement of proteinuria
36901-36906	Dialysis circuit procedures

90935, 90937, 90940	Hemodialysis procedures
90961	Physician or other qualified healthcare professional visits for ESRD
90989-90999	Other dialysis procedures
99212-99215	Evaluation and Management (E/M) Services
DRG code 872	Hospitalization for septicemia or severe sepsis

Diabetes (covered medical procedures to control/improve hyperglycemia integrally and inextricably linked to prevention/slowing progression of diabetic nephropathy and diabetic retinopathy)

Hypoglycemic drugs (Insulin, Metformin, SGLT2 inhibitors, GLP-1 agonists, Sulfonylureas)

ICD-10-CM code Z79.4	diagnostic code for long-term (current) use of insulin
ICD-10-CM code Z79.84	long-term use of oral hypoglycemic drugs
ICD-10-CM code Z79.85	long-term use of injectable non-insulin anti-diabetic drug
HCPCS code J1815	Insulin, injection, per 5 units
HCPCS code J1817	Insulin for administration through DME (insulin pump)
HCPCS code J3490	Unclassified injectable drugs (used for GLP-1 agonists)

Insulin Infusion Pump

HCPCS code E0784	External ambulatory infusion pump, insulin
HCPCS code S9145	Insulin pump initiation, instructions in initial use
HCPCS code K0554	Receiver (monitor) for use w/ therapeutic CGMS
HCPCS code A4224	Supplies for maintenance of insulin infusion catheter, per week
HCPCS code A4225	Supplies for external insulin infusion pump

Continuous Glucose Monitoring Systems (CGMS)

95249, 95250, 95251	Continuous glucose monitoring (CGM) data
0446T, 0447T, 0448T	Insertion & removal of Implantable Interstitial Glucose Sensor
HCPCS codes A4238, 4239	CGM Supply Allowance
HCPCS code E0607	Home blood glucose monitor
HCPCS code E2103	Durable Medical Equipment, Non-implanted CGM

Remote Patient Monitoring (RPM)

99091	Collection and interpretation of remote physiologic data.
99453	Onboarding patient for RPM services
99454	Monthly data transmission for patients receiving RPM services

Exemplary dental treatment codes to resolve/manage infections inextricably linked to improved outcomes of referenced covered medical services

Endodontic Therapy (including treatment plan, clinical procedures and follow-up care)

D3330	Endodontic therapy, molar tooth (excluding final restoration)
D3421	Apicoectomy – premolar (first root)

Periodontal Therapies (including usual postoperative care)

D4241	Gingival flap procedure, including root planing - one to three contiguous teeth
D4260	Osseous surgery (including elevation of a full thickness flap and closure)
D4265	Biologic materials to aid in soft and osseous tissue regeneration, per site
D4341	Periodontal scaling and root planing - four or more teeth per quadrant
D4342	Periodontal scaling and root planing - one to three teeth per quadrant
D4346	Scaling in presence generalized gingival inflammation, full mouth

Oral And Maxillofacial Surgery Procedures (incl. suturing and usual postoperative care)

D7140	Extraction, erupted tooth or exposed root (elevation and/or forceps removal)
D7310	Alveoloplasty in conjunction with extractions, four or more teeth per quadrant
D7510	Incision and drainage of abscess
D7511	Incision and drainage of abscess, intraoral soft tissues, complicated (includes drainage of multiple facial spaces)

Cost Savings

A series of compelling academic and market analyses completed in the past decade demonstrate that improved outcomes and savings are achieved when patients with certain medical conditions access dental care. We present a summary of these studies below, which document reduced

utilization of healthcare resources, such as but not limited to fewer emergency room visits, lower hospital admissions, and reduced drug utilization.

Although these studies are retrospective, use disparate populations, are conducted by different investigators, and employ different methodologies, their outcomes are strikingly similar. Moreover, they are derived from the real-world care experience of more than 1.6 million individuals. As such, we view them as complementary to the other data presented above and list them below as an additional resource for the Agency:

1. Jeffcoat MK, et al. Am J Prev Med 2014, Aug;47(2): 166-74. Examined records of 338,891 enrollees in an insurance plan that provided both medical and dental benefits. Enrollees with type 2 diabetes (DM), cardiovascular disease (CAD), cerebrovascular disease (CVD), rheumatoid arthritis (RA) and women who were pregnant were considered. Reporting both total medical costs and hospitalizations, they found that health outcomes were significantly better for enrollees with DM, CVD, CAD, and pregnancy (40.2%, 40.9%, 10.7% and 73.7%, respectively), but not RA with preventive dental treatment. Although this study has been criticized due to methodological issues, it is the first in a series of papers which identified key relationships between dental treatment and diabetes outcomes.

2. Nasseh K, et al. Health Econ 2017 Apr; 26(4):519-527. Examined records of 15,002 persons in the Truven Health MarketScan database. Examining individuals with newly diagnosed DM who were in the database for one year and four years after the diagnosis, periodontal treatment was associated with reduced total health care costs (-$1799) and lower total healthcare costs related to diabetes (-$408) suggesting better health outcomes.

3. Smits KP, et al. BMJ Open Diabetes Res Care 2020 Oct;8(1): e001666. Examined records of 41,598 persons with DM in the Netherlands whose records were in a Dutch insurance database. Records were collected from 2012 to 2018. Analyzing health care costs related to DM revealed a median amount of E38.45 (95% confidence interval E11.52 – 263.14) per quarter. When periodontal care was provided, the median health care costs were

reduced by E12.03 per quarter (95% confidence interval -E15.77 to -E8.29). This is a 31% reduction in DM related healthcare costs suggesting improved health outcomes.

4. Blaschke K, et al. Diabetes Res Clin Pract. 2021 Feb: 172:109641. Examined 23,771 records from a German health insurance company. Participants continuously enrolled between 2011 and 2016 and recently diagnosed with DM were studied. Persons receiving periodontal care were compared with persons not receiving this care. For persons receiving periodontal treatment there was a 4% reduction in total health care costs, 13% reduction in hospital costs, and a 7% reduction in the cost of drugs for diabetes suggesting improved total health outcomes.

5. Lamster IB, et al. J Dent Res 2021 Aug:100(9):928-934 and Lamster IB, et al. Front Dent Med 2022 3:952182. Examined records from the New York State Department of Health Medicaid database. All 551,689 enrollees between the ages of 42 and 64 who were continuously enrolled between 2012 to 2015 were analyzed (1st study). Enrollees who did and did not access dental care were compared. For the entire cohort, in a fully adjusted model, preventive dental services were associated with a 3% reduction in visits to the emergency department, and a 13% reduction in in-patient admissions. In terms of healthcare costs, there were no differences in terms of cost per enrollee for emergency department usage but there was a reduction for in-patient cost (-$380 per year). When analyzing the enrollees in this cohort with a diagnosis of DM (2nd study), a more pronounced reduction in health care utilization and costs were seen for enrollees who accessed preventive dental services. Preventive dental services were associated with a 7% reduction in visits to the emergency department and a 20% reduction in in-patient admissions. Similarly, the cost of in-patient admissions was dramatically lower (-$823 per year) for enrollees with diabetes who received preventive dental care versus those with diabetes who did not access dental services. These studies are the first to report health outcomes associated with preventive dental care in a publicly insured population, A disproportionate beneficial effect is realized by enrollees with diabetes.

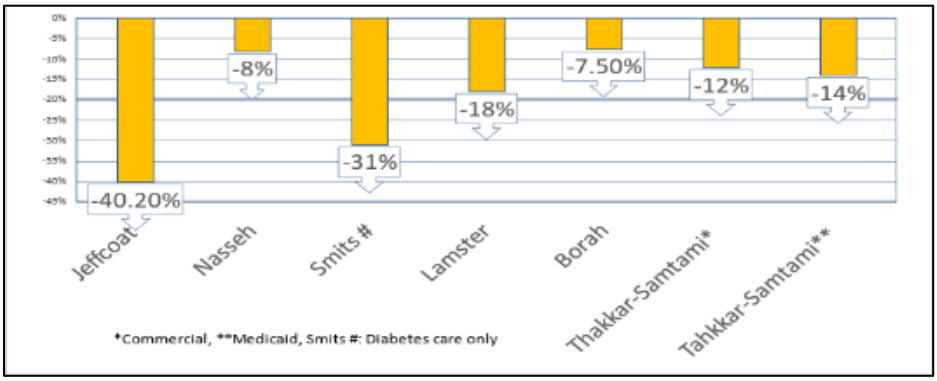
6. Borah et al. Compend Contin Educ Dent. 2022 Mar; 43 (3): 130-139. Examined records from an insurance plan in Arkansas that had an affiliated dental plan. Data for 11,374 enrollees who were in the plan were included in the evaluation. All were enrolled in the plan for one to five years. Comparison was between enrollees with diabetes, coronary artery disease, or both diabetes and coronary artery disease who received conservative periodontal care as compared to those that did not receive such care. The outcome was the total yearly health care costs. With provision of periodontal treatment, they observed a reduction in total health care costs for enrollees with DM ($515-$574), CVD ($548-$675) and both DM and CVD ($866-$1718). This report provides further evidence of the association between preventive dental care and diabetes outcomes, with even greater improvement for enrollees with both diabetes and coronary artery disease.

7. Thakkar-Samtani M, et al. J Am Dent Assoc. 2023 Apr;154(4):283-292. Using the IBM MarketScan commercial insurance database and Medicaid databases, examined a total of 671,483 enrollees. For enrollees with DM, the relationship of periodontal treatment in years 1 and 2 to the cost of medical services in year 3. Compared to no periodontal treatment, use of periodontal treatment was associated with a 12% reduction in total health care costs ($13,915 *vs*. $15,739) for those with commercial insurance, and a 14% reduction for those with Medicaid ($14,796 *vs*. $17,181). This study had findings similar to what was reported in “5” above.

8. Michalowicz BS, et al. PLoS One. 2023 18(8): e0290028. Examined data from 9,503 enrollees in the HealthPartners database. A total of 9,503 enrollees having both periodontitis and DM, CAD or CVD were analyzed for the relationship of treatment for periodontitis to clinical outcomes and the cost of medical care. (There were 4,879 individuals in the DM cohort.) For all groups, enrollees receiving periodontal treatment had a significantly reduced chance of being hospitalized [CAD odds ratio (OR) = 0.71, CVD = 0.73, DM = 0.80). In this relatively small study, there was no difference in total treatment costs among enrollees who received periodontal care, but lower inpatient costs and higher drug costs were seen.

In sum, these studies of more than 1.6 million individuals enrolled in both private and public insurance programs examined persons with chronic diseases and reported findings in persons with diabetes mellitus. Reductions in both total health care costs (reported in all studies) and utilization of health care (reported in 3 studies) were observed. Indeed, there is a close association of health care costs and utilization (Lehnert T, et al. Med Care Res Rev 2011 Aug:68 (4):387-420).

This thesis is further supported by a series of important analyses of insurance databases, which indicate that reduction of healthcare utilization and costs can be achieved by medically necessary dental treatment. By way of example, studies of total health care costs (illustrated below) document that provision of medically necessary dental treatment services achieves lower resource utilization.



Based on the above, we submit that clarifying payment policy for dental services that are inextricably linked and substantially related and integral to the clinical success of diabetes-associated covered medical services will meaningfully reduce healthcare resource utilization.

Societal Issues Addressed by the Recommended Payment Clarification

One of the most pressing yet overlooked issues in diabetes management is the connection between oral health and overall health. Research consistently demonstrates that poor dental health exacerbates diabetes complications, contributing to higher hospitalization rates, increased medical costs, and worsening health outcomes. Despite this, many Medicare beneficiaries with diabetes struggle to access necessary dental care – a problem that disproportionately impacts Americans of

color. Indeed, data compiled by CMS paints a stark picture of the racial and ethnic disparities in diabetes prevalence among Medicare beneficiaries.

As the Centers for Disease Control and Prevention (CDC) has reported, diagnosed diabetes among American adults is most prevalent among American Indians and Alaska Natives (13.6%), Blacks (12.1%), Hispanics (11.7%), and Asians (9.1%). As of 2024, the rate of diagnosed diabetes among White adults was 6.9%. By the time Americans reach the age of 75 years or older, diabetes prevalence continues to be significantly higher among minorities compared to white adults.

This disparity is not just a statistical anomaly – it translates into higher rates of diabetes-related complications, including retinopathy and nephropathy, leading to preventable suffering and higher Medicare costs. Among the many diabetes-associated conditions, oral health remains one of the most consequential. The National Institute of Dental and Craniofacial Research (NIDCR) has found that patients with diabetes – particularly those in underserved communities – are at higher risk of periodontal disease, tooth loss, and infections that exacerbate their overall health conditions. These issues further contribute to eating difficulties, poor nutrition, and increased risk of additional chronic conditions, making diabetes management even more challenging.

Importantly, the CDC reports that adults with diabetes face higher cost barriers to dental care than the general population. Many delay or forgo needed dental treatment due to cost concerns, which only worsens their health outcomes over time. Clarifying Medicare coverage for oral health services that are inextricably linked to diabetes-associated medical treatment would therefore remove a critical barrier to care and help prevent complications that drive up healthcare costs.

For these reasons, the recommended clarifications to Medicare payment for inextricably linked dental services for beneficiaries with diabetes are not just a matter of expanding coverage – they are a fiscally responsible and patient-centered reform that aligns with the Trump Administration's principles of reducing long-term healthcare costs while improving outcomes. The President has long called for clinically- and cost-effective healthcare reforms that reduce wasteful spending while ensuring that Americans receive the care they need. Expanding access to oral healthcare for patients with diabetes-associated retinopathy and/or nephropathy would achieves both goals –

especially in communities that lack access to efficient and effective care – by achieving the following:

- Fewer unnecessary hospitalizations and complications, reducing Medicare costs;
- Better diabetes management, improving beneficiaries' health and quality of life; and,
- Reduced racial and ethnic disparities, ensuring all beneficiaries have access to needed care.

The case for action is clear. Americans who rely on Medicare for their healthcare should not be forced to go without critical services that can prevent severe complications. Expanding access to necessary dental care for beneficiaries with diabetes is a pragmatic, high-impact policy step that reflects a commitment to healthcare efficiency and patient empowerment.

For these reasons, we submit that clarifying Medicare payment for inextricably linked dental care services needed by beneficiaries with diabetes can do much to address racial and ethnic health disparities in the Medicare program. Americans who rely on the Medicare program for their health should be able to access or afford treatment services that are vital for preservation of health. As a result, increasing access to and the affordability of inextricably linked dental and oral health services holds the promise of improved health outcomes for all aging Americans.

Clinical Practice Opportunities

If approved, the clarified payment policy nominated here would enable greater collaborative practice between physicians, nurse practitioners, nurses, physician assistants, and dentists, addressing the growing interest in medical-dental integration and ensuring that patients with diabetes-associated retinopathy and nephropathy will receive comprehensive, coordinated care. With the support of CMS guidance on consultations, documentation, reimbursement, and electronic health record (EHR) interoperability, integration can become more seamless, leading to expanded access, reduced complications, and improved alignment between medical and dental professionals in clinical practice.

Effective diabetes management requires a multidisciplinary approach, as oral health directly influences overall medical outcomes. Periodontal disease, a prevalent condition among patients with diabetes, both worsens glycemic control and is exacerbated by diabetes-related inflammation and immune dysfunction. Research demonstrates that early periodontal intervention improves HbA1c levels, reduces systemic inflammation, and prevents diabetes-related complications, including but not limited to retinopathy and nephropathy. By integrating dental and medical care, the healthcare system can reduce avoidable hospitalizations, lower overall treatment costs, and improve long-term patient outcomes.

A key benefit of medical-dental collaboration is expanded access to preventive and therapeutic services that are often siloed in separate care models. Patients with diabetes frequently see primary care providers, endocrinologists, and ophthalmologists, but may lack access to coordinated dental care, increasing their risk of untreated infections, chronic inflammation, and worsening systemic health. By incorporating intra-oral exams in the medical standard of care for all persons with diabetes including, but not limited to periodontal screenings, risk assessments, oral health coaching and targeted referrals into routine medical visits, providers can proactively manage oral health risks before they lead to costly and preventable complications. Moreover, to facilitate collaborative and comprehensive health care, oral/dental health status should be a required documentation field in all medical electronic health records.

As demonstrated by integrated care models and leaders in the delivery of integrated care, a structured referral and treatment model enables medical and dental teams to effectively collaborate in numerous essential ways. With integration, physicians assess oral health risk factors as part of routine diabetes care, using standardized screening tools and incorporating dental health questions into patient assessments. Medical EHRs integrate with dental EHRs, enabling real-time referral notifications between providers, allowing dentists to receive immediate access to relevant medical histories and physicians to track dental treatment outcomes. Dentists provide periodontal treatment and ongoing oral health monitoring, ensuring early intervention in high-risk patients, with findings shared with the medical team so they can adjust diabetes management plans accordingly. And medical and dental providers incorporate shared care plans, ensuring that patients receive coordinated follow-ups, reducing disease progression and emergency care episodes.

Such a structured approach to medical-dental collaboration will achieve improved outcomes, including but not limited to reduced risk of uncontrolled diabetes due to improved glycemic stability; fewer emergency dental visits and hospitalizations linked to severe infections and abscesses; and better long-term diabetes management, with fewer complications, lower costs, and improved quality of life.

By fostering this systematic integration, CMS can lead the way in bridging the gap between medical and dental care, ensuring that diabetes management is truly comprehensive. With evidence-based alignment of physician and dentist clinical practice, the Agency will not only enhance patient care but also support the Administration's broader objectives of cost-effectiveness and quality improvement.

Closing

The Santa Fe Group, its Coalition for Oral Health Policy, and the Consortium for Medically Necessary Oral Health Coverage are grateful for the opportunity to submit this nomination to the Agency for its consideration and believe its adoption would be of substantial benefit to Medicare beneficiaries with diabetes who today lack access to the medically necessary dental treatment services that are inextricably linked and substantially related and integral to the clinical success of treatment for diabetes-associated retinopathy and nephropathy.

As detailed above, the delivery of appropriate dental services in accordance with clinical guidelines and standard of care is substantially related and integral to the optimal outcome of covered medical services for diabetes-associated retinopathy and nephropathy. Clinical studies, including the Cochrane Collaborative's extensive review, document that treatment of oral infections meaningfully improves the treatment and management of diabetes-associated conditions. Similarly, healthcare utilization and costs are substantially reduced when medically necessary oral and dental treatment is provided, as evidenced by the extensive academic and marlet analyses discussed above.

By contrast, the absence of treatment of chronic dental infections complicates covered medical treatment for the management of diabetes-associated retinopathy and nephropathy. The nexus between such care and covered medical services is also detailed above, as are the relationship between oral disease and diabetes-associated retinopathy and nephropathy, and the resulting improvement in the effectiveness and efficiency of healthcare in America. It is for these reasons, access to such care has garnered strong support from key stakeholders due to its power to improve outcomes while reducing health care costs.

On behalf of the Santa Fe Group and its Coalition for Oral Health Policy and the Consortium for Medically Necessary Oral Health Coverage, thank you for all you are doing for the older adults and people with disabilities who depend on the Medicare program.

Sincerely,

Ralph Fuccillo
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https://santafegroup.org/

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APPENDIX

Stakeholder Support

"This bidirectional relationship underscores the need for comprehensive management strategies in diabetic patients, targeting both glycemic control and periodontal health, to mitigate the progression of DR [diabetic retinopathy] and improve overall vascular health."

World J. Diabetes

Link Between Periodontitis and Diabetic Retinopathy:

Inflammatory Pathways And Clinical Implications

"Chronic dental infections can exacerbate management of diabetes, which is the most common cause of kidney failure."

"Poor dental health can compromise the ability of ESRD patients to achieve good medical outcomes due to its impact on serum albumin levels and glucose control. Periodontitis can worsen blood glucose control in diabetics by increasing the levels of inflammatory mediators, such as cytokines and C-reactive protein. This enhanced systemic inflammation can interfere with insulin, increase insulin resistance, resulting in clinical complications of diabetes, including CKD."

"The consequences of poor oral health are worse for kidney failure patients due to advanced age, diabetes, polypharmacy, and impaired immune function."

"The consequences of poor oral health are worse for kidney failure patients due to advanced age, diabetes, polypharmacy, and impaired immune function."

American Society of Nephrology

National Kidney Foundation

"The connection between uncontrolled diabetes and serious periodontal disease has been well documented. Further, untreated periodontal disease makes it more difficult to control diabetes, leading to the dreaded diabetic microvascular and macrovascular complications."

American Association of Clinical Endocrinology

“People with diabetes are more likely to have periodontal disease and its complications. Additionally, untreated periodontal disease makes it more difficult to control blood glucose and is associated with increased risk of diabetes complications, including kidney failure and cardiovascular disease.”

American Diabetes Association

“Poor dental health can compromise the ability of ESRD patients to achieve good medical outcomes due to its impact on serum albumin levels and glucose control.”

Renal Physicians Association

“Dental services are often integral to the successful care and management of individuals with diabetes. That is because oral disease and diabetes are closely connected. For example, diabetes is documented as increasing the risk and severity of oral diseases, such as periodontitis, tooth loss, dry mouth, and oral infections. Similarly, oral diseases are documented as affecting blood glucose control and contributing to the development of diabetes complications, such as cardiovascular disease and kidney disease. As a result, indeed, ensuring that chronic dental infections are treated will protect beneficiaries with diabetes from suffering insulin resistance, worsened glycemic control, and other complications. Also, as a researcher studying vascular disease in diabetes, both the laboratory and clinical literature have clearly list periodontal disease and the development of atherosclerosis.”

Ira Goldberg, MD,
Director Division of Endocrinology Diabetes and Metabolism
NYU Langone Medical Center

“There is no question that dental services are often integral to the successful care and management of individuals with diabetes. That is because oral disease and diabetes are closely connected. For example, patients living with diabetes are documented to be at an increased risk and severity of oral diseases, such as periodontitis, tooth loss, dry mouth, and oral infections. Similarly, oral

diseases are documented as affecting insulin sensitivity and blood glucose control which contribute to the development of diabetes complications, such as cardiovascular disease and kidney disease. As a result, ensuring that chronic dental infections are diagnosed and treated will protect beneficiaries with diabetes from suffering insulin resistance, worsened glycemic control, and other complications."

Robert H. Eckel, MD

Professor of Medicine, Emeritus University of Colorado Anschutz Medical Campus

Past President of the American Heart Association

"Improving oral health through Medicare authorized dental services for periodontitis and related dental care, we can help patients better manage their diabetes and reduce their risk of severe complications like retinopathy and vision impairment … Studies indicate that treating gum disease can improve glycemic control, thereby slowing the progression of diabetes associated complications. This is crucial in preventing diabetic retinopathy."

Jay Fleischman, M.D.

Clinical Associate Professor of Ophthalmology

Albert Einstein College of Medicine, Montefiore Medical Center

In Response to Agency Questions

In the 2024 final rule, several statements and questions were posed regarding the identification, classification, and treatment of periodontitis. In response, it is correct to state that for persons with diabetes, conservative treatment of periodontitis improves glycemic control for individuals with moderate to severe periodontitis. This is no evidence that this is so for patients with gingivitis and mild periodontitis.

Semi-annual examinations and prophylaxis are the minimum standard of care for the management of diabetes. For reference, we wish to refer the Agency to the United Kingdon's National Health Service (UK NHS) standard and the Diabetes and Periodontal Diseases: Consensus Report to the Joint EFP/AAP Workshop on Periodontitis and Systemic Diseases which demonstrate that oral health/dental/periodontal services are inextricably linked to covered diabetes medical services. Periodontal treatment is also listed as a mandatory service of the UK NHS Commissioning Standard, with key components of periodontal treatment in primary dental care.

Additionally, high-quality evidence underscores that type 2 diabetes is a risk factor for periodontitis, causing people with diabetes to be more likely to suffer severe gum disease. This evidence also exists that people with type 2 diabetes benefit from intensive periodontal therapy involving scaling and subgingival professional plaque removal, reducing HbA1c between 0.3% and 0.5% over one year (Simpson et al., 2022).

Specifically, the staging refers to the severity, complexity and extent of the disease and ranges from Stage I-Stage IV, based on clinical loss of attachment of the teeth to the underlying bone and soft tissue, as measured by a dental professional with a periodontal probe and x-rays.

Grading indicates the rate of progression, as measured in bone loss over time, and is modified by smoking and glycemic control. An approach to identifying persons whose dental services are considered "so integral to the primary covered services that the necessary dental interventions are inextricably linked to, and substantially related and integral to clinical success of, the primary covered services", is to use cutoff levels in the periodontal grading and staging where it would be

most beneficial to the beneficiary with diabetes to receive periodontal care. Thus, if HbA1c>7, after referral to a dentist for dental/periodontal evaluation is appropriate.

The studies that have examined this question and are included in the Simpson et al (2022) systematic review published in the Cochrane Library do not use the 2017 classification scheme. Using the older system, persons with stage 3 or 4 were included in the studies and are defined as moderate and severe periodontitis, respectively. The 2017 classification system defines different sub-stages of periodontitis, but in the overview does not differ fundamentally in structure from the basic, original classification system. That is, disease classification is related to the extent of clinical pathology, specifically non-mineralized (mucosa) and mineralized (alveolar bone) tissue inflammation and loss. The 2017 classification system is more complex and considers additional parameters such as risk factors (i.e., diabetes, smoking). Basic criteria associated with these conditions include the following, both of which require clinical intervention:

- Moderate periodontitis: 5-7 mm probing depth and moderate attachment loss due to radiographs demonstrating moderate bone loss (30-50%) and early furcation involvement of multi-rooted teeth.

- Severe periodontitis: 7-12 mm probing depths and advanced attachment loss due to radiographs demonstrating advance bone loss (>50%), with established furcation involvement of multi-rooted teeth.

All dentists can diagnose and provide basic periodontal care to patients. While there are many oral disorders, dental caries and periodontal disease are the most common and management of both are the focus of education in dental school. Further, dental hygienists and dental therapists are also able to identify periodontal disease and provide preventive dental care.

The studies included in the Simpson et al (2022) systematic review involved patients with both diabetes and moderate to advanced periodontitis. We propose that Medicare enrollees with diabetes-associated retinopathy and/or diabetes-associated nephropathy should receive conservative periodontal care, and other ancillary care to control periodontal infection sand

inflammation (i.e., extraction of hopeless teeth and adjunctive use of systemic and locally delivered antibiotics/antiseptics). Indeed, the greatest impact has been achieved by ensuring that all patients with diabetes are signposted to a general dentist for periodontal screening. Patients who are diagnosed with periodontitis will then be assessed for care complexity levels and managed accordingly. The most frequent codes for management of advanced periodontal disease, as differentiated from mild to moderate disease, include CDT D4210 – D4278 and D4322 – D4323. The most common claims format is 837D.

In addition, given the close association between diabetes, diabetes associated complication and periodontal disease, there is significant interest in assessment of diabetes (plasma glucose, glycated hemoglobin) in the dental office (Lalla, et al, 2000).

Dental care for periodontitis is provided by dentists, but in more advanced cases treatment is provided by periodontists, who are dentists that have completed a minimum of 3 years of additional training in the management of periodontal disease. The provision of conservative/non-surgical periodontal therapy generally begins with an emphasis on self-care, which is reinforced throughout the course of active treatment. The outcomes in the published papers cited by Simpson et al (2022) generally include root planning and scaling, which is a thorough debridement of the periodontal cuff around each tooth, with removal of calcified deposits along each root surface. The treatment of advanced periodontitis can be augmented with systemic antibiotics or locally delivered antibiotics/antiseptics. This is based on clinical judgment and would be a bundled service. Extraction of hopeless teeth may also be required as part of controlling periodontal infection and the resultant inflammatory response.

Depending on the number of affected teeth, this treatment can require one to four sessions. Local anesthesia is generally required. Treatment of moderate to advanced periodontitis is provided in several clinical locations, including community dental offices, but also hospital dental clinics and dental school clinics. The patient intake forms are those that are standard in all dental offices, including a consent to care and patient privacy notices.

Moderate and severe periodontitis are chronic disorders and as such are subject to exacerbation and remission. However, long-term studies have demonstrated that appropriate self-care (which is emphasized as part of active periodontal treatment) and routine dental preventive care provided by a dental hygienist have been shown to dramatically reduce the risk of recurrence.

The management of dental caries is a concern for all older adult dental patients. However, while dental caries is not considered a primary oral complication diabetes, an increase in the caries rate can be seen in persons with diabetes due to development of xerostomia (a relatively late oral complication of diabetes) as well as the formation of caries on exposed root surfaces of the teeth. There will be increased recession of the gingival margin about the teeth in persons with diabetes due to increase severity of periodontitis. Root caries would be treated with dental restorations on the affected root surfaces. Of greater significance, prevention is key, including self-care, routine dental preventive appointments, and daily use of fluoride-containing oral rinses. Left unchecked, dental caries in persons with diabetes and xerostomia can be devastating and result in the need for extensive dental rehabilitation and even extraction of many or all teeth.

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