COMMERCE DEPARTMENT

# Evaluation of HF 2557/SF 2654 – Dental Coverage for Cancer Patients

Report to the Minnesota Legislature Pursuant to Minn. Stat. § 62J.26

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Defrayal analysis completed by the Minnesota Department of Commerce is independent of AIR's evaluation.

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## Executive Summary

House File 2557 and Senate File 2654 would require health carriers to provide health insurance coverage for medically necessary dental procedures resulting from cancer treatment. The coverage would include diagnosis, evaluation, and treatment of associated dental complications.

Different cancer treatments and diagnoses are associated with dental complications, and the dental services required would depend on the specific dental condition, its severity, and the overall health status of the affected individual. Oral hygiene and dental comorbidities, dental care, and cancer treatment type and dosage alter the relative risk of developing dental pathology during cancer treatment.

In addition to Medicare Part A and B, several other states have passed laws or have bills under consideration to expand dental coverage for cancer patients. These laws concern services for dental conditions resulting from cancer treatment rather than routine or preventive dental care. Currently, the Minnesota benchmark plan includes coverage for oral surgery but does not include evaluation and treatment requirements for other adult dental diagnoses.

Request for information respondents stated that, as drafted, the bill is unclear regarding which dental procedures would need to be covered, whether coverage includes pretreatment and posttreatment dental services, and how long coverage would be required following termination of cancer treatment. Respondents noted that determining whether a dental condition occurred because of cancer treatment can be challenging and that there is the potential for this coverage requirement to extend to all dental needs during cancer treatment.

Given the heterogeneity of dental treatment types, cancers, and clinical presentations; the limited amount of relevant research; and the focus on preventive needs for individuals undergoing cancer treatment, it is difficult to assess the potential public health and economic impact of the mandate. Further, an actuarial analysis is not possible for this mandate due to the limitations of the dental claims data in the Minnesota All Payer Claims Database.

The potential state fiscal impact of this mandate is as follows:

- There is no estimated cost for the State Employee Group Insurance Program because the required dental procedures associated with the bill are covered in the program's medical benefits package as of January 1, 2024.
- Commerce has determined that this proposed mandate would likely require partial defrayal under the Affordable Care Act, with an estimated cost between $130,000 and $1,000,000 in the first year.
- There is no estimated cost for Minnesota public health coverage programs.

## Introduction

In accordance with Minn. Stat. § 62J.26, the Minnesota Department of Commerce (Commerce), in consultation with the Minnesota Department of Health (MDH) and Minnesota Management and Budget (MMB), performs a detailed evaluation of all relevant benefit mandate proposals. For evaluation criteria and required evaluation components, please review the Evaluation Report Methodology, available at https://mn.gov/commerce/insurance/industry/policy-data-reports/62j-reports/.

## Bill Requirements

House File (HF) 2557 and Senate File (SF) 2654 are sponsored by Rep. Klevorn and Sen. Boldon and were introduced in the 93rd Legislature (2023–24) on March 6, 2023.

If enacted, this bill would require a health carrier to provide coverage for medically necessary dental procedures resulting from cancer treatment. Applicable cancer therapies identified in this proposed mandate include but are not limited to chemotherapy, biotherapy, and radiation therapy.

This proposed mandate would apply to fully insured small and large group commercial health plans, individual market plans, and the State Employee Group Insurance Program (SEGIP). It would not apply to self-insured employer plans, grandfathered plans, Medicare and Medicare supplemental policies, and Minnesota public health coverage programs.

## Related Health Conditions and Associated Services/Treatments

This bill broadly applies to any type of cancer that requires cancer treatment. Associated dental conditions include but are not limited to oral mucositis, tooth decay, gum disease, fungal and viral oral infections, and oral lesions. Dental complications are most common for individuals with head and neck cancers. Data from 2011–2013 indicate that there were approximately 737 new cases of oral and pharyngeal cancer in Minnesota each year.[1]

Applicable dental services that must be covered by insurance include evaluations/examinations, laboratory assessments, medications, and treatments associated with the dental procedures. Applicable dental treatments that may be needed due to a cancer therapy include tooth extraction, dentures or implants, and oral hygiene rinses.

## Related State and Federal Laws

This section provides an overview of state and federal laws related to the proposed mandate and any external factors that provide context on current policy trends related to this topic.

### Relevant Federal Laws

Recent federal policy changes have included dental coverage for cancer patients in the Medicare program. The Plan Year (PY) 2024 Medicare Physician Fee Schedule Final Rule[2] noted that these services will improve the success of cancer treatments and increase access to dental care by

- codifying payment policy for dental services for head and neck cancer treatments and
- permitting Medicare Part A and B payment for dental services related to radiation, chemotherapy, or surgery to treat cancer.

In addition, the U.S. Department of Health and Human Services (HHS) Notice of Benefit and Payment Parameters (NBPP) for 2025, which outlines new policies for Qualified Health Plans (QHPs) offered on the federal exchange, proposes to allow routine adult dental benefits to be treated as essential health benefits (EHBs).[2] This rule is not final and would require additional state action to implement as well as research to understand whether dental services to meet the needs of cancer patients would be covered as part of routine adult dental benefits.

### Relevant Minnesota Laws

Under the current EHBs in Minnesota, certain oral surgeries are covered for unerupted teeth, for a tooth root that does not require extraction of the entire tooth, and for gums and mouth tissues where extraction or repair of teeth is not involved.[3] These provisions do not describe the procedures required to treat most dental conditions faced by individuals with cancer, such as dental caries.

### State Comparison

In recent years, several other states have passed laws or have bills under consideration to expand dental coverage for cancer patients. Some of these bills and laws apply to state Medicaid programs, while others are broader mandates.

#### *Maine*

In 2022, Maine passed a health benefit mandate that provides for dental coverage for cancer patients.[4]

- This health coverage must include fluoride treatment and other services that are medically necessary to reduce the risk of dental issues before beginning cancer treatment or following treatment.
- This law specifies that routine preventive care, such as cleaning or sealants, is not part of this coverage.

#### *West Virginia*

- In 2023, the West Virginia legislature introduced a bill to add dental coverage for cancer patients as a health benefit mandate applicable to all health insurance in the state.[5] The bill was not enacted.

#### *Texas*

- In 2023, a bill was introduced in the Texas House of Representatives to expand dental coverage for cancer patients enrolled in Medicaid.[6]

## Public Comments Summary

Commerce solicited public input on the potential health benefit mandate through a request for information (RFI) posted to Commerce's website and the Minnesota State Register. The summary below represents only the opinions and input of the individuals and/or organizations that responded to the RFI.

### Key Stakeholder Comment Themes

For this proposed mandate, Commerce received comments from four commercial health carriers that provided information related to insurance coverage.

Respondents noted that it was unclear what specific dental procedures resulting from cancer treatment would need to be covered by the proposed health benefit mandate, if coverage would apply to procedures prior to and/or following the cancer treatment, and how long this coverage would last after the end of the cancer treatment. Responses also indicated concern about what procedures would be considered medically necessary, as the term is not defined in the proposed mandate. As it may be challenging to determine if a dental ailment is directly tied to cancer treatment, the proposed mandate language could be interpreted to require insurers to provide coverage for all dental needs for a patient with a history of cancer for the remainder of their life.

Tooth extraction was flagged as the most common required dental procedure for patients prior to cancer treatment, and an estimated one third of patients receiving treatment for head and neck cancers require dental extractions prior to cancer treatment. Cited posttreatment dental impacts included damage to salivary glands and medications that can contribute to dry mouth, which increases the risk of tooth decay.

### Cost Estimates Provided in Stakeholder Comments

Stakeholders and MMB provided the following cost estimates related to the proposed benefit mandate:

- MMB provided Commerce with SEGIP's estimate. MMB does not estimate any fiscal impact on the state plan from this legislation based on current and upcoming coverage for dental procedures resulting from cancer treatment (see the State Fiscal Impact section).
- Respondents indicated that there is currently some coverage for procedures that may fall under this proposed mandate, such as tooth extraction and treatment of oral abscesses or lesions prior to cancer treatment, but coverage would be expanded to a wider range of procedures under the current proposed language. Therefore, the enactment of this bill would result in an estimated cost increase of up to $0.35 per member per month (PMPM).

Stakeholders' results may or may not reflect generalizable estimates for the mandate, depending on the methodology, data sources, and assumptions used for analysis.

## Evaluation of Proposed Health Benefit Mandate

### Methodology

The following section includes a summary of the literature review performed to examine the potential public health and economic impact of the mandate. The literature review includes moderate- to high-quality relevant peer-reviewed literature and/or independently conducted domestic research that was published within the last 10 years and is related to the public health, economic, or legal impact of the proposed health benefit mandate. For further information on the literature review methodology, please reference https://mn.gov/commerce/insurance/industry/policy-data-reports/62j-reports/.

### Public Health Impact

#### *Literature Review*

**Associations of Pre-, Peri-, and Post-Cancer Treatment Dental Complications.** Dental complications during cancer treatment are strongly associated with pre-existing dental comorbidities and oral hygiene. The effects of cancer treatment, along with the resulting dental complications, are often related to dental health problems that should be diagnosed, evaluated, and treated prior to cancer treatment.[7–9] Certain dental complications, such as dental caries (cavities) or oral mucositis, are most closely associated with dental health prior to cancer treatment initiation.[7,8,10] The proposed mandate's language is specific to the dental diagnosis, evaluation, and treatment of conditions resulting from cancer treatment rather than pretreatment dental coverage specifically. However, as pre-existing dental comorbidities and oral hygiene are inextricably linked to dental pathology resulting from cancer treatment, the literature analysis covers data associated with both preventive and reactive dental procedures associated with cancer treatment.

**Risk of Dental Complications Associated With Cancer Treatments.** Several cancer treatments increase the risk for developing dental complications that would require diagnosis, evaluation, and treatment, particularly for head and neck cancers. The risk of dental complications during cancer treatment varies by the type of treatment, dose, underlying cancer, and location of treatment (e.g., targeted radiation in the orofacial area).[7–9,11] The potential severity of dental complications varies by pathology, and time to onset varies by type of treatment, as explained in Table 1.

**Table 1. Cancer Treatment Associated With Dental Complications**

| Treatment type | Description |
|---|---|
| **Radiation therapy** | Targeted therapy and high-dose radiation therapy for head and neck cancer are more commonly associated with dental complications than other cancer treatment types and cancer diagnoses.[7,11,12] The location and dose of radiation affect the risk of impacting orofacial structures. Dental complications typically occur within 2–4 weeks and potentially occur up to 24 months after treatment.[9,11] |
| **Chemotherapy** | Chemotherapy increases the risk for dental pathology through a variety of mechanisms, including toxicity to mucous membranes and immunosuppression, that increase the risk of dental complications.[8,11] The specific chemotherapy used affects the risk of dental complications,[8,10] which the literature indicates is between 2% and 50%, depending on treatment characteristics.[8] Dental complications from treatment typically occur no more than 3–4 weeks after discontinuation of treatment.[8] |
| **Bisphosphonate therapy** | Bisphosphonates, often used to treat primary or metastatic cancer in the bone, are also associated with dental pathology. By impacting bone growth and the vascularity of bones, bone death (osteonecrosis) can occur in vulnerable structures. While chronic bisphosphonate therapy is critical for treating cancer related to the bones, this therapy may increase the risk of osteonecrosis of the jaw.[7] The average time frame for developing osteonecrosis from this treatment is not clear from the available literature. |

**Impact of Insurance Coverage and Receipt of Treatment.** Insurance coverage for dental services, the timing of treatment, and whether a dental evaluation and diagnosis is performed by a dental specialist may impact dental complications. One study indicated that oncologists reported challenges related to patients completing pretreatment evaluations and treatment to reduce the likelihood of dental disease during treatment.[12] For example, despite high rates of pretreatment referral for dental care, financial barriers (cost-sharing or lack of coverage) were associated with lack of patient compliance with pretreatment dental evaluation and recommended treatment.[12] As poor oral hygiene and dental pathology prior to initiating treatment may result in adverse dental outcomes from cancer treatment,[9,11] underserved populations with barriers to dental evaluation and treatment, both before and during treatment, may have the highest risk of adverse dental complications.

**Dental Complications Associated With Chemotherapy, Radiation Therapy, and Bisphosphonates.** The most commonly cited dental conditions resulting from cancer treatment include oral mucositis, dry mouth (xerostomia), oral infections, oral pain alone or secondary to other dental complications, osteoradionecrosis, and osteonecrosis of the jaw.[7,8,10,12]

**Oral Mucositis.** Oral mucositis due to treatment toxicity is considered the most prevalent dental complication from cancer treatment and is characterized by painful swelling and irritation within the mouth.[10,11] The type of dental treatment required for this complication may depend on the stage at which the pathology is identified,

the symptoms, and the severity. Treatment for oral mucositis may be primarily palliative, with the use of dental evaluation and oral rinses to address the pain associated with this condition.[7,11]

**Dental Caries and Xerostomia.** The effects of chemotherapy and radiation therapy increase the risk of dental complications, such as dental caries, through different physiological mechanisms. Teeth in an irradiated field have a higher likelihood of developing dental caries, and the reduced salivary flow from chemotherapy and radiation creates a more bacteria friendly environment for dental disease progression. Xerostomia also results from the reduced salivary flow secondary to cancer treatment.[8]

**Osteoradionecrosis.** Receiving radiation and bisphosphonate treatments carries the risk of osteoradionecrosis, or bone death secondary to radiation, due to damage to the blood supply of bones. Osteoradionecrosis of the teeth or jaw could result in significant pain and may compromise a patient's ability to sustain adequate nutritional intake.[8,9,11] Appropriate oral health evaluation and diagnosis following radiation therapy may be effective in reducing the risk of developing osteoradionecrosis, as osteoradionecrosis and bisphosphonate osteonecrosis often occur following the discontinuation of therapy.[7,11] Dental treatment for this complication alone could range from medication management to oral surgical debridement.[8,10]

Complications from some dental pathologies, such as oral mucositis and osteoradionecrosis, could result in emergency room visits and hospitalization.[8,10,11] Unmanaged and severe presentations of oral mucositis may increase the risk of sepsis and death.[8] The inclusion of a dental team before, during, and after cancer treatment may reduce potential delays in treatment and improve dental outcomes for cancer patients.[7,11] There is consensus across clinical recommendations on the appropriateness of pre-, peri-, and post-cancer treatment dental evaluation and treatment for individuals undergoing cancer treatment.[7,9,11,12]

## Economic Impact

### *Literature Review*

**Cost Considerations.** A conceptual model of the economic costs associated with oral complications from cancer treatment proposes four categories of economic considerations: prevention strategies, specific type of oral complication, management of relevant oral complications, and management of serious outcomes specific to a dental pathology.[10] This conceptual model indicates interdependence of cost and clinical outcome at each stage, which is supported in the available literature.[7–10] Determining the costs specifically associated with dental complications from cancer treatment is complex, as patients undergoing cancer treatment tend to experience complications in clusters and require a broad range of management strategies based on the stage and severity of the complication and other required interventions.[10]

Some costs in this section may not be specific to the coverage requirements of the proposed mandate given the multidisciplinary management of some dental complications. Cost for dental complications depends on the specific dental pathology, facility of treatment, and severity of condition. Cost trade-offs associated with this mandate are hard to quantify, as the dental diagnosis, evaluation, and treatment for some dental complications may help to avoid high costs in other settings.

**Xerostomia.** Xerostomia is more common than other dental complications but less likely to result in serious adverse outcomes.[7–10] The medication cost for treating xerostomia ranges from $46 to $190 per month, depending on the medication required, but the treatment may be relatively long term.[10] The treatment may already be covered outside of the proposed mandate through a plan's pharmacy benefit. Management of xerostomia may also help to prevent osteoradionecrosis, a potentially more severe and costly dental

complication.[9] Dental caries, which also may result from xerostomia, involve a treatment cost of $192–$399 for composite fillings and over $4,500 if implants are required.[10]

**Oral Mucositis.** The literature estimates a cost range of $5,067–$8,056 per patient associated with management of oral mucositis in patients with head and neck cancers undergoing radiation and chemoradiation.[10] In a hospital setting, mucositis-related complications as either the primary or tertiary reason for hospitalization significantly increase the cost of care.[10] The existing research does not specifically compare the cost of mucositis treatment and the cost of adverse outcomes of untreated mucositis.[10,11]

**Osteoradionecrosis.** Other less common but notable dental complications, such as osteoradionecrosis, may have costs that range from $4,800 (for less serious clinical presentations that require medication management and oral surgery debridement) to $78,000 (for interventions for more advanced necrosis requiring hospitalization).[8,10] Not all potential costs, such as costs associated with hospitalization, are relevant to the coverage requirements of the proposed mandate.

### *Limitations*

It is difficult to assess the extent to which these findings address the coverage requirements specific to the proposed mandate given the inextricability of prevention and outcomes specific to cancer treatment. Most literature is focused on diagnosis, evaluation, and treatment in the pre-cancer treatment phase owing to the current clinical recommendations and the potential for more serious dental complications during treatment without preventive care. It is unclear to what degree this mandate would alter coverage for pre-cancer treatment diagnosis, evaluation, and treatment.

There is limited literature from the last 10 years on this mandate topic related to clinical outcomes, treatment efficacy, and associated costs. Most literature on this topic is more than 10 years old, and a significant amount of emerging literature is published outside of the United States. There is limited confidence that the literature can provide a reasonable estimate for the potential economic impact of the proposed mandate given the range of treatment types, durations, cancer types, cancer severity, and other characteristics of the study population. The focus in the literature on head and neck cancers and dental complications associated with radiation limits the generalizability of findings to other cancer types and treatment progressions.[8,9] The literature does not address all significant outcomes of dental complications, and the data on acute and chronic oral pain secondary to cancer treatment exhibit considerable gaps.[10]

### *Data Limitations*

Actuarial analysis of the potential impacts of this mandate was not possible given current data availability. Most dental claims are not currently included in the Minnesota All Payer Claims Database (MN APCD), with only a limited number of dental claims currently covered under medical benefits.[13] A sufficient number of relevant claims, clarity on whether this mandate applies to pretreatment needs, and the duration of proposed posttreatment coverage are required to produce a confident estimate of the potential economic cost of the proposed mandate. Future dental claim integration into the MN APCD may help to determine the prevalence and cost of certain dental procedures and to analyze the potential for downstream costs or savings for future proposed health benefit mandates related to dental coverage requirements. As a result of recent legislation, MDH will soon begin to collect claims from dental plans, which would address some of the analytical limitations.[14] However, for the purposes of this mandate, linking specific dental complications to cancer treatment would continue to be challenging given the heterogenous nature of cancer diagnoses and treatments

that may be associated with dental complications as well as the time frame in which dental complications could occur.

## State Fiscal Impact

The potential state fiscal impact of this legislation includes the estimated cost to SEGIP as assessed by MMB in consultation with health plan administrators, the cost of defrayal of benefit mandates as understood under the Patient Protection and Affordable Care Act (ACA), and the estimated cost to public programs.

- This proposed mandate is estimated to have no fiscal impact on SEGIP.
- The partial defrayal cost assessed by Commerce under the ACA is estimated to be between $130,000 and $1,000,000 in the first year.
- There is no estimated cost to state public programs.

### *Fiscal Impact Estimate for SEGIP*

MMB does not estimate any fiscal impact on the state plan from this legislation. SEGIP currently provides coverage in its medical benefit package for the required dental procedures in the bill as of January 1, 2024.

### *Affordable Care Act Mandate Impact and Analysis*

States may require qualified health plan issuers to cover benefits in addition to the 10 EHBs defined by the ACA but must defray the costs, either through payments to individual enrollees or directly to issuers, and can partially defray the costs of proposed mandates if some of the care, treatment, or services are already covered in the state's benchmark plan or mandated by federal law, pursuant to section 1311(d)(3)(b) of the ACA.[15,16] For further defrayal requirements and methodology, please visit https://mn.gov/commerce/insurance/industry/policy-data-reports/62j-reports/.

HF 2557/SF 2654 likely requires partial state defrayal for some of the required coverage. If enacted, HF 2557/SF 2654 constitutes an additional benefit mandate to the 10 EHBs as defined under the ACA. Adult dental coverage is not included as an EHB,[17] and HF 2557/SF 2654 proposes new requirements for specific care, treatment, or services that are not already covered by Minnesota's benchmark plan. The state's benchmark plan includes broad coverage for oral surgery (enacted prior to 2012).[3] However, the other services defined in the proposed mandate—dental evaluations, examinations, diagnoses, laboratory assessments, and medications—are not included.

The cost of defrayal associated with HF 2557/SF 2654 is estimated to be between $130,000 and $1,000,000 in the first year. Producing a defrayal estimate is challenging due to the data limitations and lack of clarity of coverage requirements under the mandate (see the Data Limitations section). In developing this estimate, Commerce considered cancer prevalence rates derived from MN APCD data, broad averages of dental care costs, cost estimates provided by stakeholders through the RFI, and cost estimates for similar mandates proposed in other states. Specifically, Commerce assumed 0.4% of enrollees receive treatment for cancer, 70% of those receiving cancer treatment require chemotherapy and/or radiation treatment, and 70% to 90% of those requiring chemotherapy and/or radiation use related dental services. The cost for dental services was estimated to range from an average of $800 to $4,000 per patient.

### *Fiscal Impact on State Public Programs*

There is no estimated cost to Minnesota public health coverage programs, as the proposed health benefit mandate does not apply to these programs.

# Appendix A. Bill Text

A bill for an act relating to health; requiring health plans to cover medically necessary dental procedures that are a result of cancer treatment; proposing coding for new law in Minnesota Statutes, chapter 62Q.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MINNESOTA:

Section 1. [62Q.59] COVERAGE FOR DENTAL PROCEDURES RESULTING FROM CANCER TREATMENT.

(a) All health plans, as defined in section 62Q.01, shall provide coverage for medically necessary dental procedures that are the direct result of cancer treatment, including chemotherapy, biotherapy, and radiation therapy.

(b) The coverage required under this section shall include coverage for evaluations and examinations, laboratory assessments, medications, and treatments associated with the medically necessary dental procedures resulting from cancer treatment.

**EFFECTIVE DATE.** This section is effective the day following final enactment and applies to insurance contracts issued, renewed, or amended on or after that date.

## Appendix B. Key Search Terms for Literature Scan

Anti-neoplastic agents

Biotherapy

Cancer

Cancer treatment

Chemotherapy

Dental caries (cavity)

Dental examinations

Dental procedures

Head and neck cancer

Hematopoietic stem cell transplantation

Leukemia

Lymphoma

Mouth neoplasms

Osteoradionecrosis

Periodontal disease

Perioperative oral management

Radiation therapy

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