COMMERCE DEPARTMENT

Evaluation of HF 4211 / SF 4089 – Coverage for Vasectomies

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

January 28, 2025

Report Prepared By

This report was prepared by the American Institutes for Research (AIR), with actuarial analysis by Actuarial Research Corporation (ARC), at the request of the Minnesota Department of Commerce. AIR and ARC created this document for internal use by the Minnesota Department of Commerce pursuant to Contract No. 216732. The document assumes reader familiarity with the proposed mandated health benefits currently under consideration by the Minnesota State Legislature. The document was prepared solely to assist the Minnesota Department of Commerce. No other use of this document or the information or conclusions contained herein is authorized. The period of data collection for any policies and literature analyzed for the proposed mandate ended on December 31, 2024.

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

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Upon request, this material will be made available in an alternative format such as large print, Braille or audio recording. Printed on recycled paper. A 508 compliant version of this report is forthcoming.

Contents

Executive Summary

If enacted, this proposed mandate would require health issuers to provide coverage for vasectomies as a contraceptive service. Similar to other forms of contraception, vasectomies would be covered with no cost-sharing, referral requirements, or restrictions. A vasectomy is a form of male sterilization which cuts the vas deferens, preventing sperm from leaving the body.

Although federal laws require coverage of contraceptive services for some private health insurance plans, no federal laws require coverage for male sterilization. Minnesota Health Care Programs (e.g., Medical Assistance and MinnesotaCare) currently cover vasectomies for adults seeking sterilization. Eleven other states require either Medicaid or commercial coverage for male sterilization services.

Request for information respondents generally supported the proposed mandate, noting that the expanded coverage would provide improved contraceptive options. Respondents noted that the mandate provides improved contraceptive responsibility between genders and amends a gap in contraceptive coverage for males in the Patient Protection and Affordable Care Act. Several commenters mentioned that other states currently mandate similar coverage requirements.

Literature reviewed for this mandate indicates that vasectomies are an effective and safe procedure for those seeking sterilization for contraceptive purposes. Vasectomies have a failure rate of less than 1% and can often be performed by urologists in an outpatient setting. However, cost can often be a barrier to receiving the procedure, either related to lack of insurance coverage or cost-sharing. Over the long term, vasectomies are typically a less expensive and more effective option for contraception than comparable female contraceptive methods and may be cost-effective compared to recurring costs related to other contraceptive methods.

Estimated expenditures from the proposed mandate are projected to result in a net increase of $0.23 per member per month (PMPM) for the non-public insured in the first year, increasing to $0.49 PMPM by the tenth year.

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

- Minnesota Management and Budget estimates the cost of this proposed mandate for the state plan to be $46,800 for partial Fiscal Year 2026 (FY 2026) and $98,280 for FY 2027.
- There are no estimated defrayal costs associated with this proposed mandate.
- There is no estimated impact to Minnesota Health Care Programs (e.g., Medical Assistance and MinnesotaCare), as the proposed health benefit mandate, as written, does not explicitly apply to these 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 an evaluation of 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) 4211 and Senate File (SF) 4089 are sponsored by Representative Amanda Hemmingsen-Jaeger and Senator Alice Mann and were introduced in the 93rd Legislature (2023-24) on February 22, 2024.

If enacted, this bill would require a health issuer to provide coverage for vasectomies as a contraceptive service. Male sterilization (also known as a vasectomy) is an elective procedure. Coverage for contraceptive services must be provided at no cost-sharing and without referral requirements, restrictions, or delays.

This proposed mandate would apply to fully insured small and large group commercial health plans, individual market plans, self-insured employer plans, and the State Employee Group Insurance Program (SEGIP). This would not apply to grandfathered plans and Medicare supplemental policies. The proposed mandate, as written, does not apply to Minnesota Health Care Programs (e.g., Medical Assistance and MinnesotaCare); however, Minnesota Health Care Programs already provide coverage for vasectomies.[1]

This bill would amend Minn. Stat. § 62Q.522, subdivision 1.

Key Terms

For the purpose of this bill and its evaluation, the key terms are as follows:

- "Contraceptive method" means drug, device, or other product approved by the United States Food and Drug Administration to prevent unintended pregnancy.
- "Contraceptive service" means consultation, examination, procedures, and medical services related to the prevention of unintended pregnancy. This may include voluntary sterilization procedures, patient education, counseling on contraceptives, and follow-up services related to contraceptive methods or services, management of side effects, counseling for continued adherence, and device insertion or removal.

Within state legislation, male sterilization or vasectomy may be referred to as "voluntary male sterilization."

Related Health Conditions and Associated Services

There are no specific conditions for the proposed mandate.

Vasectomy is a surgical procedure that cuts off the supply of sperm to prevent unintended pregnancy.[2] Although a vasectomy is intended to be a permanent form of contraception, reversal may be possible for some individuals. Vasectomy reversal is not explicitly covered under this mandate. Associated services for coverage of vasectomy may include consultation, examination, patient education, voluntary sterilization procedures, counseling on contraceptives, management of side effects, and follow-up services related to contraceptive methods or services.[3] A vasectomy may be performed as an outpatient procedure in a physician's office using a scalpel or no-scalpel technique. Vasectomies may also be performed in an operating room as a laparoscopic or open procedure, which are typically associated with another abdominal surgery.[4]

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

Under section 2713 of the Public Health Service Act, health insurance plans are required to provide coverage at no cost-sharing to enrollees for preventive health services and contraceptive services, devices, and procedures, such as birth control pills, intrauterine devices, and female sterilization. This regulation does not include male sterilization procedures.[5]

Health insurance marketplace plans must cover prescribed female contraceptive methods, including sterilization and emergency contraception like Plan B, along with counseling.[6] However, coverage for male sterilization procedures are not required for these plans.

Relevant Minnesota Laws

Minnesota Health Care Programs (e.g., Medical Assistance and MinnesotaCare) currently provide coverage for sterilization procedures for both men and women.[7] In order to be eligible, enrollees must be at least 21 years old, mentally competent, not institutionalized, and sign a consent form prior to the procedure. Reversal of voluntary sterilization procedures is not covered by Minnesota Health Care Programs.

State Comparison

Currently 11 states require coverage for voluntary sterilization for men in either Medicaid or commercial coverage. Some state Medicaid programs (e.g., California[8], New Jersey[9], and Ohio[10]) cover voluntary sterilization for men, but cost-sharing requirements vary by state. Eight states (Illinois[11], Maryland[12], New Mexico[13], New York[14], Oregon[15], Rhode Island[16], Vermont[17], and Washington[18]) have commercial coverage for voluntary male sterilization, and all provide this coverage at no cost-sharing. A few of these states have coverage for specific sterilization procedures, including California's coverage for vasectomies and New Mexico's coverage for sterilization implants. Additionally, commercial coverage in Rhode Island and Vermont does not apply to high deductible health plans (HDHP).

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 who responded to the RFI.

Key Stakeholder Comment Themes

For this proposed mandate, Commerce received RFI responses from four commercial health issuers, two health care organizations, and three advocacy organizations.

Support for the Proposed Mandate. Some respondents voiced support for this mandate, noting that all individuals should have access to a broad range of contraception. One noted that the proposed coverage to expand access to no-cost vasectomy coverage would address gaps in the Patient Protection and Affordable Care Act (ACA), which only covers female contraception and voluntary sterilization. This respondent flagged that vasectomies are safer and cheaper than female sterilization and promote shared contraceptive responsibility. Additionally, this respondent highlighted that multiple states already require no-cost vasectomy coverage.

Cost-Sharing. Many issuers indicated that vasectomies are already covered services included in their health plans, but include enrollee cost-sharing. These respondents expressed concerns about the elimination of cost-sharing for services, generally, because this will result in increased costs which will be passed on to consumers through premiums.

General Comments. One respondent highlighted Minnesota's implementation of Minn. Stat. § 62M.07, effective January 1, 2026, which prohibits prior authorization for certain medical conditions, including outpatient mental health or substance use disorder treatment, antineoplastic cancer treatment per National Comprehensive Cancer Network® guidelines (excluding medications), preventive services, pediatric hospice care, neonatal abstinence program treatment by pediatric pain or palliative care specialists, and ongoing chronic condition treatment. The respondent suggested that many of this year's proposed benefit mandates fall under this new statute and expressed concerns that removing prior authorization could increase health care costs and negatively affect health outcomes for Minnesotans.

Another respondent noted that all of the proposed health benefit mandates have the potential to broadly improve health outcomes for Minnesotans by enhancing their quality of life, supporting individuals, families, and caregivers, and increasing workforce participation, while also benefiting the broader health care system.

Cost Estimates Provided in Stakeholder Comments

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

- MMB estimates that the average state fiscal impact of the proposed mandate would be $0.06 per member per month (PMPM), as the bill would expand the current health care coverage for vasectomies at no cost-sharing to the patient. The partial fiscal year 2026 cost is projected to be $46,800 for 130,000 members, with a 5% annual inflation factor for future years.
- The expected impact on commercial issuers is varied, depending on expectations of increased utilization and changes to cost-sharing provisions. While some commercial issuers do not estimate an increase in costs, other respondents noted that the increased cost for some commercial issuers would be up to $0.20 PMPM.

Cost estimates shared in RFI responses may reflect different methodologies, data sources, and assumptions than those used in the actuarial analysis for this evaluation. Stakeholders' results may or may not reflect generalizable estimates for the mandate.

Evaluation of Proposed Health Benefit Mandate

Methodology

The following section includes an overview of the literature review and actuarial analysis 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 research with domestic data 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

Vasectomy Utilization. A vasectomy is an effective, elective surgical procedure performed by urologists to achieve permanent male contraception.[1] As of 2021, the vasectomy rate among privately insured men aged 18-64 in the U.S was around 0.527%.[19] The prevalence of vasectomies has increased in recent years, which may be due to the 2022 U.S. Supreme Court decision on Dobbs v. Jackson Women's Health Organization, which overturned the right to an abortion under the U.S. Constitution.[20] This may have cause some individuals to consider more permanent and effective forms of contraception. A study found that in the seven months since the overturning of Roe v. Wade, vasectomy rates in the U.S increased by 20%.[21] The primary motivations for a vasectomy are not wanting to become a parent, a sense that their family is complete, a desire from their female partners to not have any or any more children, or a perceived risk of passing on genetic conditions. Demographic data suggest that most vasectomy patients are in their 30s or 40s, and typically have two or more children.[22]

Additionally, vasectomy utilization may have socioeconomic implications. A study found that as unemployment rises, so does the demand for vasectomies, as men seek to avoid the cost of raising a child.[23]

Clinical Considerations. Vasectomies are considered effective procedures, with a failure rate of less than 1%.[22] Vasectomies involve severing or blocking the vas deferens, the tubes that carry sperm from the testicles to the urethra, using one of two methods. The standard vasectomy involves making an incision in the scrotum to access and sever the vas deferens, while the no-scalpel vasectomy is a less invasive method that uses a small puncture, reducing the risk of complications such as infection or hematoma.[24] Compared to condoms, which are the most common male contraceptive method, vasectomies offer more protection against pregnancy. When used correctly, condoms are 98% effective at preventing pregnancy. However, the typical efficacy rate is 87%.[5] While vasectomies are extremely effective at preventing pregnancies compared to condoms, they do not protect against sexually transmitted infections.[22]

A vasectomy can be reversed, but reversal is not guaranteed. Reversal success rates vary depending on the technique and the length of time since the procedure, with an overall success rate of around 50-75%.[25] Vasectomy reversals are typically pursued by individuals who want reproductive capabilities later, as on average, only 6% of men who undergo a vasectomy seek a reversal.[26] The proposed mandate provides coverage for vasectomies, but may not extend to vasectomy reversal coverage.

Health Equity. Despite its effectiveness and affordability, there are several specific disparities related to access to vasectomy services. Socioeconomic factors, including income and insurance status, play a significant role in whether men seek this procedure.[27] Typically, men from lower-income households or those with no insurance may face significant barriers to obtaining a vasectomy due to considerable variability in self-pay costs, which can range from $431 to $7,147. Racial and ethnic disparities exist, with studies showing that Black and Hispanic men are less likely to choose a vasectomy as a contraceptive option compared to their white counterparts. This disparity is largely attributed to disparities in insurance coverage faced by underserved populations due to

socioeconomic factors.[28] However, the degree to which the proposed, expanded coverage would address inequities related to access for particular populations has not been directly evaluated in the literature.

When insurance covers the procedure, patients face little to no out-of-pocket expenses, making it a more accessible option for patients.[27] In states like Minnesota, where Medicaid programs cover vasectomies, patients eligible to receive Medicaid are not required to pay out-of-pocket.[7] Expanding coverage and reducing cost sharing requirements in private insurance may reduce barriers to access for men from underserved populations who do not qualify for Medicaid and cannot afford the out-of-pocket costs associated with a vasectomy.

Economic Impact

Actuarial Analysis[a]

Objective

This actuarial analysis evaluates the current prevalence of diagnoses, coverage and utilization of vasectomy-related services, as well as the proposed mandate's potential effects on overall expenditures due to expanded coverage and removal of cost-sharing.

Assumptions and Approach

MDH provided Actuarial Research Corporation with tabulations from the Minnesota All Payer Claims Database (MN APCD) of all diagnoses and services relating to vasectomies for Minnesota commercial health plan male enrollees over a historical period spanning 2018-2022.[29] Per MDH, the MN APCD includes approximately 40% of the total commercial market in Minnesota.[30]

Not all commercial insurance plans are required to provide data to the MN APCD,[30] and this proposed mandate would only apply to certain plans. As such, the insurance plans impacted by the proposed mandate may not perfectly align with those represented in the MN APCD. However, claims that are not captured in the MN APCD largely represent health plans that are not subject to the requirements of the state health benefit mandate and are not in the scope of the evaluation. All available non-public claims data from the MN APCD were used to improve the robustness and accuracy of PMPM estimates.

Commercial male enrollees were identified as having vasectomy-related diagnoses (VRD) if they had one of the International Classification of Diseases, Tenth Revision (ICD-10) diagnosis codes in Appendix C. Certain codes for encounters for contraception advice or management were rare or absent in the data - data for code Z30.0 were redacted due to small cell size, and data for code Z30.4 did not appear at all. However, other codes related to encounters for contraception advice or management were present in Z30.09 and Z30.8.

Enrollees were identified as having vasectomy-related services (VRS) if they had one of the Current Procedural Terminology (CPT)/Healthcare Common Procedure Coding System (HCPCS) procedure codes and ICD-10

[a] Michael Sandler and Anthony Simms are actuaries for Actuarial Research Corporation (ARC). They are members of the American Academy of Actuaries and meet the qualification standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

procedure codes in Appendix C. For this analysis, three categories of VRS were tabulated: consultations, vasectomies, and semen exams.

There is no procedure code for a vasectomy-specific consultation. Code 99396 for preventive evaluation and management was tabulated to obtain a unit cost that could be used for a consultation about vasectomies, and utilization in each year was assumed for enrollees with ICD-10 diagnosis codes of Z30.09 or Z30.8.

Data for vasectomy procedures was sparse for most codes. Codes 55450 and 0VBQ0ZZ for ligation and excision of vas deferens did not appear in the data. Another code for excision of the vas deferens 0VBQ3ZZ and code 55559 for laparoscopic procedures on the spermatic cord had such small cell sizes that they had to be aggregated across the entire historical period to avoid redaction. The only procedure for vasectomies which appeared regularly in the historical period was 55250 which is for excision procedures on the vas deferens, including postoperative semen examination. Code 55250 was the only code for vasectomies included in this analysis. Code J3490 for unclassified drugs is not specific to vasectomies but was tabulated to obtain a unit cost for medications administered during the procedure. This unit cost was included with each vasectomy charge.

Procedure codes 89320-89322 for semen analysis were present in the data. However, these codes can also be present for analyses relating to infertility, and vasectomy code 55250 includes post-operative semen exams to confirm sterility. It was therefore assumed that these semen analysis codes were not indicative of VRS, and they were excluded from this analysis, with 55250 being used to indicate both vasectomies and semen exams.

Developing the methodology and related assumptions for the data collection and analysis for this proposed mandate was complex, and this actuarial estimate relied on the most robust metrics available from both the data provided and current literature. One significant change in reproductive health care coinciding with the historical period as tabulated by MDH was the Supreme Court's 2022 ruling in Dobbs v. Jackson which overturned Roe v. Wade and removed federal protection of abortion rights. Multiple studies analyzing the impact of Dobbs v. Jackson observed sharp increases in both consultations (22.4%)[31] and vasectomies (20.1%),[32] which were attributed to the ruling. These increases in utilization were also observed in the tabulations provided by MDH, where MN APCD data showed a 23.8% year-over-year increase in consultations and a 19.8% year-over-year increase in vasectomies between 2021 and 2022. Additionally, the significant decrease in outpatient elective care during the early months of SARS-CoV-2 pandemic (COVID-19) appears to have had an impact on both VRD and VRS in the historical period, with 2020 prevalence and utilization being far lower than other years in the historical period.

During the historical period, trends in the proportion of enrollees with VRD and VRS followed patterns that were similar to each other. Overall, proportions of VRD and VRS increased in the historical period. All categories decreased during 2020 due to COVID-19, and increased in 2022 at a level consistent with the literature.[31,32] The consultation proportion increased at a higher rate than that of vasectomy and semen exam, such that the percentage of consultations leading to a vasectomy decreased year-over-year, from 85.7% in 2018 to 70.6% by 2022, which is below the 12-month estimate from the literature (73.7%)[31] and is trending down. Additionally, patient cost-sharing increased from 32.6% to 43.1% over the historical period for vasectomies and semen exams. These findings could suggest in part that interest in vasectomies has increased, but that a lack of coverage and high cost-sharing has discouraged further utilization. Recent literature indicates that vasectomy rates fell slightly below the annual vasectomy rates observed in a recent analysis of commercial insurance[19] (0.48% vs 0.54% in 2021, for example), which may indicate a coverage gap as well.

For the purposes of this analysis, VRD prevalence and VRS total utilization and expenditures were projected under current law and under the proposed mandate for 2026 (the base year) through 2035. Reasonable prevalence, utilization, and per-user expenditure rates were obtained based on an analysis of historical period data and a literature review. Expenditure rates for VRS were trended forward into the projection period of 2026–2035 using physician and clinical projection factors derived from the National Health Expenditure data compiled by the Centers for Medicare & Medicaid Services.[33]

The actual population impacted by the proposed mandate is unknown. While certain plans may not be impacted directly by the proposed mandate, individuals within those plans may be impacted by broader changes to insurance design in response to the mandate. Therefore, results for prevalence, utilization, and expenditures were scaled to the entire non-publicly insured market in Minnesota for illustrative purposes. This does not affect PMPM estimates, which are based on prevalence and per-user expenditure rates. The overall Minnesota population projections are based on the figures published by the Minnesota State Demographic Center.[34] Given the historic non-public health insurance coverage levels from Minnesota Public Health Data Access, 65% of the total state population under the age of 65 were assumed to be included in the non-public insured population.[35]

Current Law Projections. Under current law, prevalence for VRD and VRS were calculated by first taking the average of annual rates in the historical period, weighted by membership. Both 2020 and 2022 were outliers, and neither was deemed representative of a regular annual prevalence. The year 2020 was excluded from the weighted average due to lack of representative utilization, but 2022 was still incorporated because the 2022 utilization jump was assumed to persist to a lesser degree into the projection period. The resulting weighted average prevalence was used for 2022.

For vasectomy and semen exams, combining the 2020 and 2021 trends resulted in a slightly downward trend which was inconsistent with the overall gradual increase, so a year-over-year trend was derived from the commercial insurance analysis for use in projections.[19] This 3.3% trend[19] was within range of the 5.8% 2019 historical increase, which was the only discernable annual trend for vasectomy and semen exams in the historical period.

Enrollees utilizing consultations were assumed based on the presence of a diagnosis code in a given year, and unit cost was obtained using a code not specifically related to vasectomies, so there was no way to obtain the number of consultations an enrollee utilized per year from the data. Based on the projected portions of consultations resulting in a vasectomy and a 0.24% repeat vasectomy rate from an NIH-published overview of vasectomies,[22] 1.0016 consultations per utilizing enrollee each year was estimated.

In the resulting current law projections:

- The VRD projection assumes a 1.2% prevalence in the base year, increasing by 4.7% annually.
- The consultation projection assumes a constant 0.5% cost-sharing and a 0.87% utilization rate in the base year with a 5.2% annual increase.
- The vasectomy and semen exam projection assumes a constant 45% cost-sharing and a 0.59% utilization rate in the base year with a 3.3% annual increase.

By 2035, VRD and consultation rates roughly double compared to the historical period, while the vasectomy and semen exam rate increases by around 60%. This results in a continued decrease in the percentage of consultations leading to a vasectomy, with the percentage falling to 58% by 2035.

Proposed Mandate Projections. Under the proposed mandate, the projection for VRD is unchanged from the current law scenario. To reflect base year utilization levels under improved coverage, the vasectomy and sperm exam projection uses the higher annual rates and utilization increase derived from the literature[19,32] in place of those observed in the historical period. The projection also assumes that 50% of the observed 2022 utilization increase persists in 2023 for vasectomies only, and that the 3.3% annual trend rises slightly for 2023 onward. This results in a 0.70% vasectomy and sperm exam utilization rate in the base year with a 4% annual increase and no cost-sharing.

The rise in vasectomy and sperm exam utilization changes the portion of consultations leading to a vasectomy which increases estimated consultations per utilizing enrollee to 1.0019. This increase along with the elimination of cost-sharing leads to a slight increase in expenditures for the consultation projections, which are otherwise unchanged from the current law scenario.

By 2035, vasectomy and semen exam rates roughly double compared to the historical period and the percentage of consultations leading to a vasectomy is brought into the range observed in the historical period and the literature (80.5% in the base year, dropping to 72.4% by year 10).[31]

Results

This analysis projects VRD prevalence in Minnesota for the total non-public insured population as well as current law utilization and expenditures for VRS, then projects potential utilization and total expenditures under the mandate's expanded coverage.

Table 1 shows projected VRD prevalence and projected VRS utilization and expenditures based on historic claims and current law.

Table 2 shows projected VRD prevalence and projected VRS utilization and expenditures under the proposed mandate.

Table 1. Total Projected Vasectomy-Related Prevalence and Expenditures Under Current Law[b]

	Population			Prevalence	Enrollees utilizing…		Plan paid expenditures for…		Total cost-sharing for…	
Year	Total Minnesota population	Non-public insured population	Non-public insured male population	Diagnoses relating to vasectomies	Consultation	Vasectomy and semen exam	Consultation	Vasectomy and semen exam	Consultation	Vasectomy and semen exam
2026	5,830,008	3,067,013	1,558,593	18,036	13,548	9,233	$4,993,677	$7,792,007	$25,094	$5,955,082
2027	5,854,785	3,064,627	1,557,983	18,873	14,251	9,537	$5,502,490	$8,430,873	$27,619	$6,435,841
2028	5,878,663	3,070,240	1,561,213	19,798	15,027	9,874	$6,041,173	$9,089,061	$30,322	$6,938,294
2029	5,901,603	3,075,295	1,564,122	20,764	15,843	10,222	$6,630,132	$9,794,998	$33,286	$7,478,891
2030	5,923,535	3,079,734	1,566,763	21,773	16,699	10,580	$7,266,280	$10,540,925	$36,485	$8,049,628
2031	5,944,374	3,083,514	1,569,038	22,826	17,598	10,948	$7,968,170	$11,350,360	$40,009	$8,667,677
2032	5,964,016	3,086,623	1,570,997	23,924	18,541	11,327	$8,712,053	$12,185,854	$43,738	$9,304,394
2033	5,982,648	3,095,934	1,575,749	25,121	19,570	11,739	$9,563,170	$13,134,749	$48,011	$10,028,914
2034	6,000,234	3,104,721	1,580,226	26,372	20,652	12,164	$10,495,518	$14,154,947	$52,692	$10,807,877
2035	6,016,749	3,112,910	1,584,404	27,680	21,789	12,603	$11,516,495	$15,251,379	$57,818	$11,645,047

[b] The state health benefit mandates generally only apply to fully insured individual and small group health plans regulated in Minnesota, except where explicitly indicated. Prevalence, utilization, and expenditures were scaled to the entire non-publicly insured market in Minnesota for illustrative purposes. This does not impact PMPM estimates. For more details, see the *Assumptions and Approach* section.

Table 2. Total Projected Vasectomy-Related Prevalence and Expenditures Under Proposed Mandate[c]

	Population			Prevalence	Enrollees utilizing…		Plan paid expenditures for…			
Year	Total Minnesota population	Non-public insured population	Non-public insured male population	Diagnoses relating to vasectomies	Consultation	Vasectomy and semen exam	Consultation	Vasectomy and semen exam	Total non-public insured PMPM	Total non-public insured PMPM change
2026	5,830,008	3,067,013	1,558,593	18,036	13,548	10,900	$5,020,176	$16,229,949	$0.58	$0.23
2027	5,854,785	3,064,627	1,557,983	18,873	14,251	11,332	$5,531,689	$17,674,730	$0.63	$0.25
2028	5,878,663	3,070,240	1,561,213	19,798	15,027	11,810	$6,073,231	$19,178,369	$0.69	$0.27
2029	5,901,603	3,075,295	1,564,122	20,764	15,843	12,305	$6,665,315	$20,802,208	$0.74	$0.30
2030	5,923,535	3,079,734	1,566,763	21,773	16,699	12,819	$7,304,839	$22,531,819	$0.81	$0.33
2031	5,944,374	3,083,514	1,569,038	22,826	17,598	13,351	$8,010,453	$24,419,658	$0.88	$0.35
2032	5,964,016	3,086,623	1,570,997	23,924	18,541	13,902	$8,758,283	$26,387,505	$0.95	$0.38
2033	5,982,648	3,095,934	1,575,749	25,121	19,570	14,502	$9,613,917	$28,627,048	$1.03	$0.42
2034	6,000,234	3,104,721	1,580,226	26,372	20,652	15,125	$10,551,213	$31,050,990	$1.12	$0.45
2035	6,016,749	3,112,910	1,584,404	27,680	21,789	15,772	$11,577,607	$33,673,537	$1.21	$0.49

[c] The state health benefit mandates generally only apply to fully insured individual and small group health plans regulated in Minnesota, except where explicitly indicated. Prevalence, utilization, and expenditures were scaled to the entire non-publicly insured market in Minnesota for illustrative purposes. This does not impact PMPM estimates. For more details, see the *Assumptions and Approach* section.

The total statewide non-public insured population expenditures for VRS (consultations plus vasectomy procedure and post-op semen analysis) are projected to be $21.3 million in year one, increasing to $45.3 million in the tenth and final year of the projection period. Current law expenditures are projected to be $18.8 million in year one with $12.8 million being paid by plans, and $38.5 million in year ten with $26.8 million being paid by plans. Overall, the mandate is projected to result in a net increase of $0.23 PMPM for the total non-public insured in year one of the projection, and that increase will grow to $0.49 PMPM in the tenth and final year of the projection.

Data Sources

- Minnesota state population projections are from the "Long-Term Population Projections for Minnesota" published by the Minnesota State Demographic Center.[34]
- Minnesota non-public health insurance coverage levels are from Minnesota Public Health Data Access.[35]
- Trends and projection factors are derived from the National Health Expenditure data.[33]
- MDH tabulations of the MN APCD from 2018 to 2022 were used for the estimation of vasectomy-related diagnosis prevalence and historical utilization, expenditures, and enrollee cost-sharing for vasectomy-related services.[29]

Literature Review

A more comprehensive actuarial analysis and modeling of all VRS, including downstream effects, and a full picture of what current coverage and expenditures are for Minnesota were not possible with the available data. A literature review was conducted to assess the broader environment of coverage, utilization, and expenditures and to assess potential long-term savings and improved health outcomes.

Cost Considerations. Costs for vasectomy may vary by specific procedure and facility setting. As previously mentioned, vasectomies can be performed in an office setting or an ambulatory surgery center (ASC). A study found that vasectomies conducted in ASCs often incur higher health care costs due to the use of ancillary services, such as anesthesia and pathologic evaluation, which may be unnecessary for some vasectomies.[24] This study found that the average cost of office-based vasectomies were $707, based on 2009-2015 claims data, compared to $1,851 for ASC-based vasectomies. Another study found that there are significant variations in cost between regions, hospital ownership type (e.g., for profit versus not-for-profit hospital), and payer type (e.g., Medicaid versus commercial issuer).[36] While the national increase in average spending for vasectomies may be driven by utilization of vasectomy services in ACS, the degree to which this trend reflects the actual cost in the state of Minnesota is unknown.

Cost-Effectiveness. Prior research has found that vasectomies may offer long-term cost savings compared to other contraceptive methods.[37,38] Vasectomies may cost less over time compared to contraceptive options, such as long-acting reversible contraception, which require ongoing costs for insertion, removal, and maintenance.[38] Another study comparing the cost of vasectomies to other contraceptive alternatives stated that tubal ligation for female sterilization is not as effective and is approximately six times the cost of vasectomies.[39] The article

also explained that other options, such as birth control pills, intrauterine devices, and condoms, have persistent costs. Over time, some of these costs can exceed the one-time cost of a vasectomy.

Although vasectomies may be cost-effective over time, some patients may opt for a reversal. Although only a small percentage of men (6%) seek reversal, the cost of the procedure—often $5,000 or more—may be an additional burden to those considering male reproductive services.[40] The degree to which reversal would be addressed by the proposed coverage, or the impact on potential downstream savings from the proposed mandate, is unknown.

Limitations

Existing Data Limitations. Based on the evaluation's inclusion criteria, there is limited literature that provides a holistic picture of the potential public health and economic impact of the proposed coverage. Specifically, very few studies have comprehensively evaluated the cost-effectiveness of vasectomies compared to other contraceptive methods, specifically female sterilization and long-acting reversible contraception. No studies have specifically evaluated the societal impacts of expanded coverage without cost-sharing, and/or changes in utilization and cost of services overall.

Societal and Cultural Limitations. While the proposed coverage may address economic barriers associated with vasectomy access, other challenges remain that may confound the findings from the available literature. Cultural stigma about male contraception is a primary reason why some men opt against vasectomy, despite having health insurance coverage and overall affordability. This leads to reluctance to undergo a vasectomy, even though it may be otherwise desired for financial and/or personal reasons.[41] Such factors may play a role in potential utilization and associated expenditures from expanded coverage.

State Fiscal Impact

The potential state fiscal impact of this proposed mandate 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 ACA, and the potential impact to Minnesota Health Care Programs.

- MMB estimates the cost of this proposed mandate for the state plan to be $46,800 for partial Fiscal Year 2026 (FY 2026) and $98,280 for FY 2027.
- There are no estimated defrayal costs associated with this proposed mandate.
- There is no estimated impact for Minnesota Health Care Programs (e.g., Medical Assistance and MinnesotaCare), as the proposed health benefit mandate, as written, does not explicitly apply to these programs.

Fiscal Impact Estimate for SEGIP

Currently MMB covers voluntary male sterilization, but this coverage requires cost-sharing. MMB provided SEGIP's fiscal impact analysis, which is based on 2023 claims data. MMB's analysis predicted a PMPM fiscal impact of $0.06 PMPM. The partial fiscal year impact of the proposed mandate on SEGIP is estimated to be

$46,800 for partial FY 2026 ($0.06 PMPM medical cost × 130,000 members × 6 months). The estimated impact for FY 2027 equals $98,280, and the amount is estimated to increase by a 5% annual inflation factor each of the following years due to the increasing cost of medical services.

Patient Protection and Affordable Care Act Mandate Impact and Analysis

States may require qualified health plan issuers to cover benefits in addition to the 10 essential health benefits (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. For further defrayal requirements and methodology, please visit https://mn.gov/commerce/insurance/industry/policy-data-reports/62j-reports/.

If enacted, HF 4211/SF 4089 would not constitute an additional benefit mandate requiring defrayal, as it does not relate to any new requirements for specific care, treatment, or services that are not already covered by Minnesota's benchmark plan.[42] Minnesota's benchmark plan includes coverage for inpatient physician and surgical services and outpatient surgery physician/surgical services.

Fiscal Impact of State Public Programs

There is no estimated impact to Minnesota Health Care Programs, as the proposed health benefit mandate, as written, does not apply to these programs. However, licensed health maintenance organizations (HMOs) that participate in the programs as managed care organizations (MCOs) are required to meet the requirements of coverage in chapter 62Q.

If applied to Minnesota Health Care Programs, this proposed mandate may not have a cost as Medical Assistance and MinnesotaCare already cover vasectomies.[1] However, a fiscal estimate has not yet been completed.

Appendix A. Bill Text

Section 1. Minnesota Statutes 2023 Supplement, section 62Q.522, subdivision 1, is amended to read:

Subdivision 1. **Definitions.**

(a) The definitions in this subdivision apply to this section.

(b) "Closely held for-profit entity" means an entity that:

(1) is not a nonprofit entity;

(2) has more than 50 percent of the value of its ownership interest owned directly or indirectly by five or fewer owners; and

(3) has no publicly traded ownership interest.

For purposes of this paragraph:

(i) ownership interests owned by a corporation, partnership, limited liability company, estate, trust, or similar entity are considered owned by that entity's shareholders, partners, members, or beneficiaries in proportion to their interest held in the corporation, partnership, limited liability company, estate, trust, or similar entity;

(ii) ownership interests owned by a nonprofit entity are considered owned by a single owner;

(iii) ownership interests owned by all individuals in a family are considered held by a single owner. For purposes of this item, "family" means brothers and sisters, including half-brothers and half-sisters, a spouse, ancestors, and lineal descendants; and

(iv) if an individual or entity holds an option, warrant, or similar right to purchase an ownership interest, the individual or entity is considered to be the owner of those ownership interests.

(c) "Contraceptive method" means a drug, device, or other product approved by the Food and Drug Administration to prevent unintended pregnancy.

(d) "Contraceptive service" means consultation, examination, procedures, and medical services related to the prevention of unintended pregnancy~~, excluding vasectomies~~. This includes but is not limited to voluntary sterilization procedures, patient education, counseling on contraceptives, and follow-up services related to contraceptive methods or services, management of side effects, counseling for continued adherence, and device insertion or

removal.

(e) "Eligible organization" means an organization that opposes providing coverage for some or all contraceptive methods or services on account of religious objections and that is:

(1) organized as a nonprofit entity and holds itself out to be religious; or

(2) organized and operates as a closely held for-profit entity, and the organization's owners or highest governing body has adopted, under the organization's applicable rules of governance and consistent with state law, a resolution or similar action establishing that the organization objects to covering some or all contraceptive methods or services on account of the owners' sincerely held religious beliefs.

(f) "Exempt organization" means an organization that is organized and operates as a nonprofit entity and meets the requirements of section 6033(a)(3)(A)(i) or (iii) of the Internal Revenue Code of 1986, as amended.

(g) "Medical necessity" includes but is not limited to considerations such as severity of side effects, difference in permanence and reversibility of a contraceptive method or service, and ability to adhere to the appropriate use of the contraceptive method or service, as determined by the attending provider.

(h) "Therapeutic equivalent version" means a drug, device, or product that can be expected to have the same clinical effect and safety profile when administered to a patient under the conditions specified in the labeling, and that:

(1) is approved as safe and effective;

(2) is a pharmaceutical equivalent: (i) containing identical amounts of the same active drug ingredient in the same dosage form and route of administration; and (ii) meeting compendial or other applicable standards of strength, quality, purity, and identity;

(3) is bioequivalent in that:

(i) the drug, device, or product does not present a known or potential bioequivalence problem and meets an acceptable in vitro standard; or

(ii) if the drug, device, or product does present a known or potential bioequivalence problem, it is shown to meet an appropriate bioequivalence standard;

(4) is adequately labeled; and

(5) is manufactured in compliance with current manufacturing practice regulations.

EFFECTIVE DATE. This section is effective January 1, 2025, and applies to health plans offered, issued, or renewed on or after that date.

Appendix B. Key Search Terms for Literature Scan

Birth control

Contraception

Family planning

No-scalpel vasectomy

Scalpel vasectomy

Semen

Sperm

Sterilization

Unintended pregnancy

Vasectomy

Vasectomy reversal

Vasectomy utilization

Appendix C. Associated Codes

Vasectomy-Related Diagnosis Codes

Name	Code
ENCOUNTER OTH GENERAL COUNSEL&ADVICE CONTRACEPT	Z30.09
ENCOUNTER FOR OTHER CONTRACEPTIVE MANAGEMENT	Z30.8
ENCOUNTER GENERAL COUNSEL & ADVICE CONTRACEPTION	Z30.0
ENCOUNTER FOR STERILIZATION	Z30.2
VASECTOMY STATUS	Z98.52
ENCOUNTER FOR SURVEILLANCE OF CONTRACEPTIVES	Z30.4

Vasectomy-Related Procedure Codes

Name	Code
HCPCS Codes	
PERIODIC PREVENTIVE MED EST PATIENT 40-64YRS	99396
VASECTOMY UNI/BI SPX W/POSTOP SEMEN EXAMS	55250
SEMEN ANALYSIS VOLUME COUNT MOTILITY DIFFERENT	89320
SEMEN ANALYSIS SPERM PRESENCE&/MOTILITY SPRM	89321
UNCLASSIFIED DRUGS	J3490
UNLISTED LAPROSCOPY PROCEDURE SPERMATIC CORD	55559
SEMEN ANALYSIS STRICT MORPHOLOGIC CRITERIA	89322
LIGATION PRQ VAS DEFERENS UNI/BI SPX	55450
ICD-10 Procedure Codes	
EXCISION OF BILATERAL VAS DEFERENS OPEN APPROACH	0VBQ0ZZ
EXCISION BILATERAL VAS DEFERENS PERQ APPROACH	0VBQ3ZZ

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