A Report to the Joint Standing Committee on Health Coverage, Insurance and Financial Services of the 130th Maine Legislature

Review and Evaluation of
LD 1539, An Act to Provide Access to Fertility Care
LD 922, An Act to Help Cancer Patients with Fertility Preservation

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I. Executive Summary

The Joint Standing Committee on Health Coverage, Insurance and Financial Services (Committee) of the 130th Maine Legislature directed the Bureau of Insurance (Bureau) to review LD 1539, An Act to Provide Access to Fertility Care. The review was conducted as required by 24-A M.R.S.A § 2752 to answer prescribed questions about the bill including the estimated cost. This document and review are a collaborative effort of NovaRest, Inc. and the Bureau of Insurance, and are intended to respond to the Committee's request.

LD 1539 requires carriers offering health plans in this State to provide coverage for fertility diagnostic care, for fertility treatment if the enrollee is a fertility patient and for fertility preservation services (including storage costs for at least 5 years). The requirements of the bill apply to health plans issued or renewed on or after January 1, 2023.

In addition to LD 1539, the committee also considered a related bill, LD 922, An Act to Help Cancer Patients with Fertility Preservation. The Committee asked that we review and evaluate the impact of both bills using the guidelines set out in Title 24-A § 2752. Therefore, this report discusses the combined impact of the two proposed bills.

LD 922 requires insurance carriers offering health plans in this State to provide coverage for fertility preservation services when necessary cancer treatment may directly or indirectly cause infertility. The requirements of the bill apply to health plans issued or renewed on or after January 1, 2022. Based on the language in the bill, LD 922 would not provide coverage for storage following the preservation procedure.

LD 1539 would cover all requirements of LD 922 and therefore the cost of the combined impact will be the cost of LD 1539.

Neither LD 922 nor LD 1539 would prohibit the use of maximum benefits, limitations, deductibles, or cost sharing. We assume the carriers would be free to set their own parameters for these benefits. Because we do not know what the carriers will choose, we modelled the full cost of the proposed coverage, although we do not expect the carriers to pay the full cost of the benefits. We recommend the Committee consider defining the cost sharing parameters. Testimony by the American Society of Reproductive Medicine also discusses consideration of defining the parameters.

NovaRest estimates a cost of $0.11 PMPM - $0.21 PMPM or 0.02% - 0.04% of premium for LD 922 for 100% coverage meaning no limitations or cost sharing. With an estimated 62,250 members in Maine enrolled in qualified health plans, we estimate the cost to the state of $79,000 to $159,000. While we do not know what cost sharing carriers will implement, an 80% cost sharing would reduce the cost to the carriers to $0.09 PMPM - $0.18 PMPM or 0.02% - 0.03%. The total cost to the state would then be $63,000 to $127,000. This cost only relates to fertility preservation benefits.

NovaRest estimates a cost of $5.03 PMPM - $6.32 PMPM or 0.90% - 1.13% of premium for LD 1539 for 100% coverage meaning no limitations or cost sharing. With an estimated 62,250 members in Maine enrolled in qualified health plans, we estimate the cost to the state of $3.7 to $4.8 million. While we do not know what cost sharing carriers will implement, an 80% cost sharing would reduce the cost to the carriers to $4.36 PMPM - $5.48 PMPM or 0.78% - 0.98%. The total cost to the state would then be $3.0 to $3.8 million.

Because we do not know what cost sharing level carriers will use, the costs provided in the remainder of this report are the full costs for coverage. A breakout of the 100% coverage costs for LD 1539 is provided in the following table.

LD 1539 Costs	**Low**	**High**
Fertility Diagnosis PMPM Cost	$0.08	$0.11
Fertility Treatment PMPM Cost	$4.25	$4.70
Additional Births PMPM Cost	$0.52	$1.15
Fertility Preservation PMPM Cost	$0.15	$0.31
Fertility Storage PMPM Cost	$0.03	$0.05
Total PMPM Cost	**$5.03**	**$6.32**
Fertility Diagnosis % of premium	0.01%	0.02%
Fertility Treatment % of premium	0.76%	0.84%
Additional Births % of premium	0.09%	0.21%
Fertility Preservation % of premium	0.03%	0.06%
Fertility Storage % of premium	0.00%	0.01%
Total % of premium	**0.90%**	**1.13%**

This report includes information from several sources to provide more than one perspective on the proposed mandate with the intention of providing an objective report. As a result, there may be some conflicting information within the contents. Although we only used sources that we considered credible, we do not offer any opinions regarding whether one source is more credible than another, leaving it to the reader to develop his/her own conclusions.

The Affordable Care Act (ACA) describes a broad set of benefits that must be included in any Essential Health Benefits (EHB) package. In its December 2011 bulletin, the Department of Health and Human Services (HHS) provided guidance on the types of health benefit plans each state could consider when determining a benchmark EHB plan for its residents. Each state had the opportunity to update its benchmark plan effective for 2017. Maine has chosen the small group Anthem Health Plans of Maine PPO Off Exchange Blue Choice, $2,500 Deductible as its 2017-2022 benchmark plan.[1] It is important to note that the ACA requires states to fund the cost

[1] Centers for Medicare and Medicaid Services. "Plan Year 2020 and Beyond EHB-Benchmark Plans." https://www.cms.gov/CCIIO/Resources/Data-Resources/ehb. Accessed September 13, 2021.

of any mandates that are not included in the state-specific EHBs for policies purchased through the Health Exchange Market.

The benefits required by both LD 1539 (fertility diagnostic, treatment, preservation, and storage) and LD 922 (fertility preservation) are not currently included in the EHB benchmark plan and therefore this would be considered a new benefit where the cost would be required to be paid by the state, but this is not a legal interpretation, nor should it be considered legal advice.

II. Background

Condition

Approximately 9% of men and 11% of women in the United States have experienced fertility problems and studies suggest after 1 year of having unprotected sex, 12% to 15% of couples are unable to conceive.[2]

Infertility may be caused by an issue present at birth or by a variety of issues that develop later in life. It can also be caused directly or indirectly during treatment for certain conditions. "An iatrogenic condition is a negative side effect or adverse condition that is caused by the diagnosis, manner, activity, or treatment of a health-care provider."[3]

According to the American Cancer Institute, radiation therapy and many chemotherapy drugs used to treat patients in their reproductive years carry a high risk of causing damage to eggs or sperm, and therefore carry a high risk of infertility.[4] Other treatments that carry an increased risk of infertility are bone/stem cell transplants, which can be used to treat a variety of conditions, including erythematosus, lupus, severe aplastic anemia, sickle cell disease, rheumatoid arthritis, etc. Endometriosis is also associated with an increased risk of fertility difficulties.[5] Bone marrow and stem cell transplants, which usually involve high doses of chemotherapy and sometimes radiation to the whole body before the transplant, can permanently stop a woman's

[2] Eunice Kennedy Shriver National Institute of Child Health and Human Development. "How common is infertility?" February 8, 2018. https://www.nichd.nih.gov/health/topics/infertility/conditioninfo/common. Accessed September 14, 2021.
[3] Campo-Engelstein, Lisa. "For the Sake of Consistency and Fairness: Why Insurance Companies Should Cover Fertility Preservation Treatment for Iatrogenic Infertility." https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3086472/. Accessed November 15, 2021.
[4] Lee, Stephanie J. et al. Journal of Clinical Oncology. "American Society of Clinical Oncology Recommendations on Fertility Preservation in Cancer Patients." June 2006.
[5] Brigham and Women's Hospital. "Endometriosis and Fertility." https://www.brighamandwomens.org/obgyn/infertility-reproductive-surgery/endometriosis/endometriosis-and-fertility. Accessed September 16, 2021.

ovaries from releasing eggs[6] and permanently prevent a man from producing sperm.[7] Although there are several conditions where treatment may involve bone marrow and stem cell transplant, most treatments that cause iatrogenic infertility are associated with cancer treatment.[8]

Treatment

Infertility is treated using a variety of methods, including medications, hormone treatments, and surgery.[9] Infertility is also treated using assisted reproductive technology (ART). ART is defined differently by different sources, with some including intrauterine insemination (IUI), in vitro fertilization (IVF), gamete intrafallopian transfer (GIFT), and zygote intrafallopian transfer (ZIFT).[10]

For those with a disease treatment that will result in iatrogenic infertility, the person may have time prior to the start of the disease treatment to undergo fertility preservation procedures. Fertility preservation services are procedures that may allow patients to safeguard their ability to have a child. According to the American Society of Clinical Oncology, the most effective preservation method for males is sperm cryopreservation while a female has multiple options (oocyte, embryo, ovarian tissue[11]) for fertility preservation depending on various factors including age, type of treatment, diagnosis, whether she has a partner, the time available, and the potential that cancer has metastasized to her ovaries.[12]

After performing the fertility preservation procedure, the sample must be stored until it is ready for use. Typically, storage lasts between 5 and 10 years[13].

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[6] American Cancer Society. "How Cancer Treatments Can Affect Fertility in Women." Last Revised February 6, 2020. https://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fertility-and-sexual-side-effects/fertility-and-women-with-cancer/how-cancer-treatments-affect-fertility.html. Accessed February 5, 2021.
[7] American Cancer Society. "How Cancer Treatments Can Affect Fertility in Men."
[8] LiveStrong. "Position Statement: Health Insurance Coverage for Iatrogenic Infertility." https://d1un1nybq8gi3x.cloudfront.net/sites/default/files/what-we-do/reports/LIVESTRONG-CLRC-Position-Statement-Iatrogenic-Infertility-2011.pdf. Accessed January 31, 2019.
[9] Understanding Infertility – Treatment. https://www.webmd.com/infertility-and-reproduction/guide/understanding-infertility-treatment . Reviewed April 2, 2019. Accessed February 3, 2021.
[10] Ibid.
[11] American Cancer Society. "Preserving Fertility in Females with Cancer." February 6, 2020. https://www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/fertility-and-sexual-side-effects/fertility-and-women-with-cancer/preserving-fertility-in-women.html. Accessed December 3, 2021.
[12] Journal of Clinical Oncology. "American Society of Clinical Oncology Recommendations on Fertility Preservation in Cancer Patients."
[13] Texas Fertility Center. "Long Term Storage of Frozen Eggs." https://txfertility.com/egg-freezing/long-term-storage-frozen-eggs/#:~:text=Most%20women%20will%20store%20their,for%20eight%20to%2010%20years. Accessed December 3, 2021.

LD 1539 and LD 922

LD 922 would require coverage of fertility preservation services for an enrollee at least 18 years of age with a diagnosis of cancer for which necessary cancer treatments may directly or indirectly cause iatrogenic infertility.

LD 1539 would also require fertility preservation services but does not restrict the age or diagnosis. In addition, LD 1539 would require coverage for 5 years of storage of samples, fertility diagnosis and fertility treatment services.

NovaRest did not have access to insurer claim records to determine the cost estimate. Instead, the cost estimate was developed using publicly available information, interviews with interested parties, the National Association of Insurance Commissioners (NAIC) Annual Supplemental Health Care Exhibit (SHCE), and a high-level carrier survey.

Interested parties that were interviewed include:

- Dr. Ben Lannon, a Reproductive Endocrinologist with Boston IVF
- Kate Weldon LeBlanc, Executive Director of Resolve New England, a non-profit devoted to serving the fertility community throughout the New England region
- Davina Fankhauser, Co-Founder and Executive Director of Fertility Within Reach, a non-profit advocating for fertility health benefits.

Companies that were surveyed and responded include:

- Aetna
- Anthem
- Cigna
- Community Health Options
- Harvard
- United Healthcare (UHC)

III. Social Impact

A. Social Impact of Mandating the Benefit

1. The extent to which the treatment or service is utilized by a significant portion of the population.

Approximately 9% of men and 11% of women are experiencing non-surgical infertility. [14] In

[14] Chandra A, Copen CE, Stephen EH. Infertility and impaired fecundity in the United States, 1982–2010: Data from the National Survey of Family Growth. National health statistics reports; no 67. Hyattsville, MD: National Center for Health Statistics. 2013.

Maine,[15] we estimate this results in approximately 47,000 people of reproductive age experiencing fertility difficulties who would potentially pursue fertility diagnostic testing or fertility treatment.

Fertility preservation services could be used by people of reproductive age facing treatments which could cause infertility. Our understanding is that the primary cause of iatrogenic infertility is treatment for non-fast acting cancers. Applying age adjusted Maine cancer incidence rate for less than age 50[16] to the to the Maine population estimates for people of reproductive age (15-50)[17] and removing 10% of cases for fast-acting cancers (Leukemia, Lymphoma and Myeloma), [18] which would prevent fertility preservation services, result in approximately 700 cases annually in Maine.

2. The extent to which the service or treatment is available to the population.

Most fertility services and treatments are widely used but need to be provided by a fertility provider. Harvard indicated in their survey response that they contract with 35 fertility providers in Maine. However, according to the testimony from David Stern, CEO of Boston IVF, Boston IVF is the only IVF center currently operating in the state of Maine with offices in Portland and Bangor. He further explained Boston IVF would consider expanding if there was a mandate for infertility treatment in Maine.

3. The extent to which insurance coverage for this treatment is already available.

Coverage is not generally available for fertility diagnostic services, fertility treatment, or fertility preservation.

Coverage for fertility testing or treatment is not available in the individual market from any of the carriers who responded to the survey. In the small group market, Anthem indicated certain small group plans cover up to six in-vitro fertilization cycles. In the large group market, Anthem indicated they cover diagnostic testing in their standard plan language and both Anthem and UHC make infertility coverage optional for large groups. Aetna primarily operates in the large group market and indicated they cover diagnostic infertility services to determine the cause of infertility and treatment only when specific coverage is provided under the terms of the member's benefit plan.

The EHB benchmark plan certificate of coverage indicates, "We do not provide Benefits for

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[15] United States Census Bureau. "State Population by Characteristics: 2010-2020." Single Year of Age and Sex for the Civilian Population https://www.census.gov/programs-surveys/popest/technical-documentation/research/evaluation-estimates/2020-evaluation-estimates/2010s-state-detail.html. Accessed September 14, 2021.
[16] NIH National Cancer Institute. "State Cancer Profiles." https://statecancerprofiles.cancer.gov/quick-profiles/index.php?statename=maine. Accessed September 14, 2021.
[17] United States Census Bureau. "State Population by Characteristics: 2010-2020."
[18] Leukemia & Lymphoma Society. "Facts and Statistics Overview." https://www.lls.org/facts-and-statistics/facts-and-statistics-overview. Accessed September 16, 2021.

Diagnostic Services, procedures, treatment or other services related to Infertility. This exclusion also applies to drugs used to enhance fertility. We do not provide Benefits for costs associated with achieving pregnancy through surrogacy.

UHC offers fertility preservation for iatrogenic infertility from cancer treatment in the small group market. Harvard Pilgrim covers sperm collection and up to one year of cryopreservation when a medically necessary treatment may result in iatrogenic infertility. Cigna indicated that LD 922 would cause them to expand their cryopreservation coverage but did not indicate the level at which cryopreservation is currently covered. The other three carriers did not indicate any fertility preservation or storage coverage currently.

4. If coverage is not generally available, the extent to which the lack of coverage results in a person being unable to obtain the necessary health care treatment.

Due to the high cost of infertility treatment, many people are unable to pursue treatment or preservation if it isn't covered by insurance. Some may eventually achieve a healthy live birth without the discussed services, while others may never conceive, have repeated miscarriages, or deliver a child with an inheritable genetic condition. People may also opt to adopt, which is also expensive ($8,000 to $40,000 and averages $10,000 to $15,000)[19], and some prospective parents may not find a match.

5. If coverage is not generally available, the extent to which the lack of coverage involves unreasonable financial hardship.

Those without insurance coverage that need to pursue fertility services would pay out of pocket, which is expensive. Based on a discussion with Dr. Lannon, the first round of IVF is approximately $10,000 not including medications. This represents 17% of the 2019 median household income of $57,918 in Maine for only one cycle without medications.[20] Fertility preservation for females would require similar costs as a round of IVF[21] while the cost for sperm preservation would be approximately $1,000. [22] It is important to note, that in addition to preservation, storage costs and subsequent costs for using the stored samples, which would likely involve IVF, would also be incurred. LD 922 would only cover preservation procedures according to our interpretation, while LD 1539 would cover storage and subsequent treatment services.

While many people with fertility challenges may be adequately treated with less costly treatments such as medications only or IUI, if multiple rounds of treatment are required the costs

[19] "What is the cost of adoption from foster care?" AdoptUSKids. https://www.adoptuskids.org/adoption-and-foster-care/overview/what-does-it-cost. Accessed December 3, 2021.
[20] United States Census Bureau. "Quickfacts: Maine", https://www.census.gov/quickfacts/ME. Accessed September 30, 2021.
[21] Sources range from $6,000 - $20,000.
[22] "What You Need to Know About Freezing Sperm." Healthline. May 18, 2020. https://www.healthline.com/health/fertility/freezing-sperm#cost. Accessed November 30, 2021.

can be significant and unaffordable for much of the population.

Several pieces of public testimony discussed significant costs related to fertility care. Three people testified (Jill Barkley Roy, Sarah Haas, and Lyndsey Fitzpatrick) to have spent over $40,000. Several people testified to taking out loans to pay for services and one person (Anna Kellar) discussed postponing investments such as purchasing a house.

6. The level of public demand and the level of demand from providers for this treatment or service.

LD 922 received testimony from Team Up Cancer and American Cancer Society Cancer Action Network Maine in support of the bill. The Maine Association of Health Plans submitted testimony opposed to the bill.[23]

LD 1539 received 46 pieces of testimony in support of the bill and two pieces of testimony against the bill.[24] Some pieces of testimony were neutral or were duplicates.

A majority of the comments were from private citizens, along with support from organizations such as RESOLVE: The National Infertility Association, Resolve New England GLAD, EqualityMaine, Solomon Center for Health Law and Policy, Alliance for Fertility Preservation, COLAGE, and Fertility Within Reach.

The Maine Association of Health Plans and Maine State Chamber of Commerce submitted testimony opposed to the bill.

7. The level of public demand and the level of demand from the providers for individual or group coverage of this treatment.

Two pieces of testimony were provided by the American Cancer Society Cancer Action Network Maine in support of LD 922.

Twelve pieces of testimony were submitted by providers in support of LD 1539, many were individual physicians (including Joseph Hill, M.D., Benjamin M. Lannon, MD, Shruthi Mahalingaiah, MD, Kathryn E. Sharpless, MD, PhD, Dr. Kim Wells, Dr. Elizabeth Wolfe) although provider organizations such as the American Cancer Society Cancer Action Network Maine, Boston IVF, the Leukemia & Lymphoma Society, Fertility Centers of New England, Maine Medical Association, and the American Society for Reproductive Medicine also provided support of LD 1539.

Neither LD 922 or LD 1539 received opposition from providers or provider organizations.

[23] https://legislature.maine.gov/legis/bills/display_ps.asp?PID=1456&snum=130&paper=&paperld=l&ld=922
[24] https://legislature.maine.gov/legis/bills/display_ps.asp?PID=1456&snum=130&paper=&paperld=l&ld=1539#

8. The level of interest in and the extent to which collective bargaining organizations are negotiating privately for the inclusion of this coverage by group plans.

We do not have this information.

9. The likelihood of meeting a consumer need as evidenced by the experience in other states.

A fact sheet provided by Resolve New England indicates only Maine and Vermont do not have fertility insurance laws among the six New England States.[25]

There are approximately 17 states that have passed legislation addressing the issue of insurance companies covering infertility treatments. Of those states, thirteen have laws that require insurance companies to cover infertility treatment. California and Texas have laws that require insurance companies to *offer* coverage for infertility treatment. Five states have fertility preservation laws for iatrogenic (medically-induced) infertility. The mandates differ regarding what is covered. Additionally, each State has its own infertility definition, to meet to qualify for coverage. Illinois and Delaware have also passed fertility preservation mandates, and New Jersey has a bill pending.

Some other states limit the number of cycles that will be covered or the total lifetime amount covered.

More detail regarding other state mandates are found in Appendix B.

10. The relevant findings of the state health planning agency or the appropriate health system agency relating to the social impact of the mandated benefit.

No information available.

11. The alternatives to meeting the identified need.

We are not aware of any alternatives.

12. Whether the benefit is a medical or a broader social need and whether it is inconsistent with the role of insurance and the concept of managed care.

The benefit is a medical need and coverage required by LD 922 or LD 1539 is not inconsistent with the role of insurance to provide medically necessary services for a condition, as infertility is defined as a disease by the World Health Organization.[26] Another perspective is that many infertility treatments are not considered medically necessary by insurance contracts.

13. The impact of any social stigma attached to the benefit upon the market.

The social stigma related to diagnosis and treatment of infertility has lessened over the years.

[25] Resolve New England. "An Act to Provide Access to Fertility Care." May 2021.
[26] World Health Organization. "Infertility." September 14, 2020. https://www.who.int/news-room/fact-sheets/detail/infertility. Accessed September 30, 2021.

14. The impact of this benefit upon the other benefits currently offered.

Both LD 922 and LD 1539 may increase claim costs for prenatal, delivery, and postpartum costs due to covering the additional resulting pregnancies.

Community Health Options expressed concerns that fertility services have a higher likelihood of multiple births which increases risk of maternal complications, neonatal intensive care, and higher cost for pre- and post- delivery medical services, which could result in costs over $200,000 per pregnancy.[27]

15. The impact of the benefit as it relates to employers shifting to self-insurance and the extent to which the benefit is currently being offered by employers with self-insured plans.

As premiums increase due to mandated benefits, some employers choose to self-insure in order to have more control over the benefits that they provide to employees and control the cost of health insurance premiums. Since this mandate has an impact on premiums it could contribute to shifting to self-insurance or dropping coverage.

Peter Gore Executive Vice President of the Maine State Chamber of Commerce provided testimony regarding the concerns of employers relating to paying higher costs for health insurance for employees, especially considering the financial impact of the pandemic.

16. The impact of making the benefit applicable to the state employee health insurance program.

Anthem estimated the impact of LD 1539 to the state employee plan to be $8.28 PMPM.[28]

IV. Financial Impact

B. Financial Impact of Mandating Benefits

1. The extent to which the proposed insurance coverage would increase or decrease the cost of the service or treatment over the next five years.

Mandating coverage of a service or product increases the demand for that service or product, which typically increases the cost of the service, where allowed. Carriers can offset this upward pressure on price by contracting with providers. Potential increases in cost are not expected to have a significant impact on per member per month (PMPM) costs or percentage of premium

[27] We assume that 25% of deliveries resulting from fertility services will result multiple births per: Katz, Patricia et al. "Costs of infertility treatment: results from an 18-month prospective cohort study." Fertility and sterility vol. 95,3 (2011): 915-21. doi:10.1016/j.fertnstert.2010.11.026

[28] Please note that we do not have information on how Anthem developed their estimate and cannot comment on the magnitude.

estimates, as fertility providers and services are generally available. Additional demand from Maine enrollees is unlikely to significantly increase the cost of the service or treatment.

2. The extent to which the proposed coverage might increase the appropriate or inappropriate use of the treatment or service over the next five years.

LD 922 would lead to an increase in the use of fertility preservation services for people who may otherwise become infertile either directly or indirectly through treatment for cancer. Because fertility preservation is restricted to a cancer diagnosis, this limits use, and not all people will use the preserved samples.

LD 1539, similar to LD 922, would lead to an increase in the use of fertility preservation. As opposed to LD 922, LD 1539 does not limit the age and does not require a cancer diagnosis. While most cases of iatrogenic infertility are caused by treatment for cancer, other conditions such as sickle cell disease, lupus, and thalassemia may require treatment that could result in iatrogenic infertility.[29] Additionally, LD 1539 limits coverage of storage to5 years. We note our interpretation is that LD 922 does not cover storage.

LD 1539 would likely lead to an increase in fertility diagnostic testing as individuals with fertility challenges would be able to receive a diagnosis for the issue and determine an appropriate plan of action with the help of a medical professional. While over the counter fertility tests are now available, they may be inaccurate[30] or misinterpreted.

LD 1539 restricts fertility treatment to those with infertility, those with an increased risk of transmitting a serious genetic or chromosomal abnormality, and those who do not have the necessary gametes for conception. Infertility is defined as a demonstrated condition recognized by a provider or a couple's inability to conceive after 12 months of unprotected intercourse (or less depending on age). Additionally, LD 1539 would not pay for non-medical costs related to surrogacy.

LD 1539 does not allow a limitation based on the number of conception attempts or age, which may lead to use beyond what is generally recommended.

3. The extent to which the mandated treatment or service might serve as an alternative for more expensive or less expensive treatment or service.

An alternative to providing fertility services would be adoption, however, adoption is also a difficult and costly process. We are unaware of alternative treatments or services.

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[29] Washington State Department of Health. "Sunrise Review criteria (from RCW 48.47.030)." https://www.doh.wa.gov/Portals/1/Documents/2000/2021/Applicantreport-infertilitycoverage.pdf. Accessed November 15, 2021.
[30] Bonnie Rochman. "Are You Fertile? Don't Rely on a Drug-Store Fertility Test to Tell You." Time Magazine. October 28, 2010. https://www.med.unc.edu/timetoconceive/are-you-fertile-dont-rely-on-a-drug-store-fertility-test-to-tell-you/. Accessed September 30, 2021.

4. The methods which will be instituted to manage the utilization and costs of the proposed mandate.

Carriers may include deductibles, copayments, coinsurance, maximum benefits, waiting periods or other limitations consistent with those imposed on other services.

5. The extent to which insurance coverage may affect the number and types of providers over the next five years.

Aetna, Anthem, Community Health Options, and Cigna noted they have only contracted with a few fertility specialists or would have to contract with more fertility specialists; however, Harvard Pilgrim noted they already contract with 35 infertility providers in Maine.

Aetna stated "There are a very limited number of reproductive endocrinologists in Maine. In southern Maine, those that are licensed and practicing, are not in network. When referring to southern Maine, we are referring to Lewiston south. North of Lewiston, there simply are not providers. There is a clinic doing business as Fertility Clinics of New England that seems to have popped up in Bangor very recently, but they are not in our network in Maine. They do participate in MA and NH so we do believe there is opportunity to add the ME location without issue. Outside of that, the providers simply are not here. Any member north of Bangor has to travel for access. We do have adequate access to Urologists for treatment of male infertility."

Harvard Pilgrim's response leads us to believe there are sufficient providers. However, Aetna's responded that their coverage is concentrated in the southern part of the state, with the exception of one clinic in Bangor. Fertility Clinic of New England's website, mentions two "monitoring centers" in Bangor. Some patients may still have to travel significant distances and there may be an opportunity for new fertility specialists.

David Stern, CEO of Boston IVF, discussed expanding operations within Maine and hiring additional providers if the fertility mandate is implemented.

6. The extent to which the insurance coverage of the health care service or providers may be reasonably expected to increase or decrease the insurance premium or administrative expenses of policyholders.

Total administrative costs are typically 25% or less of claims costs. Both LD 1539 and LD 922 would expand allowable treatments and the scope of coverage. Expanding coverage to additional non-covered providers could have administrative implications. However, we cannot determine the specific increase in administrative cost.

United Healthcare indicated no additional administrative costs are expected. Community Health Options noted they will incur significant administrative expense and time such as contracting directly with fertility providers, credentialing providers, and configuring claims and utilization management systems. Anthem, Cigna, and Harvard Pilgrim did not directly comment on the impact to administrative expenses.

Changes to the cost of the service or utilization of the service would impact the total cost of health care. We do not anticipate any significant change in the cost, but the utilization of the service would likely increase as many patients likely do not pursue fertility preservation services due to cost. Dr. Lannon indicated approximately 30% of couples currently who meet with him do not pursue treatment due to cost and there are likely others who do not even take the step of meeting with a specialist. Higher utilization of services could put upward pressure on the total cost of health care. The bill may also increase the expenses associated with pregnancies and children. While the mandate might lead to lower rates of depression, lower rates of anxiety, and lower support costs for patients facing iatrogenic infertility, which could put some downward pressure on health care costs, the savings would be minor compared to the cost of infertility treatment.

Carrier Estimates

Aetna[31]:

"We do not anticipate any impact to costs as this benefit is covered."

Anthem:

"The proposed legislation does not allow for coverage limitations such as age, number of attempts, or dollar limits, which leads to significant cost. There are also costs associated with infertility treatments, such as an increased risk of multiple births. The per member per month (PMPM) cost estimates for coverage under the proposed mandate are as follows:

Individual	$6.03
Small Group	$5.53
Large Group	$7.53

We estimate that the cost of fertility preservation for members with cancer treatments result in a negligible cost increase."[32]

Cigna:

"Cost implications for this additional coverage could be around $5.30 PMPM. For the additional coverage of cryopreservation, would anticipate a small, but not significant, impact."

Community Health Options:

"Community Health Options anticipates the cost of fertility treatments to cost approximately $20,000 per cycle. Without a lifetime limit, we would expect to see costs in excess of $100,000

[31] Aetna did not specify what coverage is specified by benefit plan, and also did not indicate if fertility preservation/storage was covered. While they indicate they do not anticipate impact, we cannot confirm.
[32] We interpret this statement to mean the cost of LD 922 is expected to be negligible.

per individual. In addition to the cost per cycle, Community Health Options anticipates the cost of fertility medications to increase premiums by at least $0.79 PMPM. Community Health Options will incur significant administrative expense and time such as contracting directly with fertility providers, credentialing providers, configuring claims and utilization management systems. Community Health Options will incur expense related to increased risk of multiple pregnancy and associated claims. The cost of complications of multiple births is over $200,000."

Harvard Pilgrim:

"The estimate of the mandate to require coverage for previously denied fertility coverage is minimal. Due to the lack of fully credible experience at the segment level, this estimate would be the same for individual, small group, and large group plans."

United Healthcare:

"The projected medical cost of this mandate is approximately $6 PMPM, which would require approximately a 1% increase to premiums. This cost is consistent between SG, LG and individual. These costs are directly tied to medical costs. No additional administrative expenses are expected."

NovaRest Estimate

We estimate a cost of $0.11 PMPM - $0.21 PMPM or 0.02% - 0.04% of premium for LD 922.

We estimate a cost of $5.03 PMPM - $6.32 PMPM or 0.90% - 1.13% of premium for LD 1539.

As LD 1539 appears to cover all benefits included in LD 922, the combined cost is the same as the cost of LD 1539.

LD 922:

LD 922 requires fertility preservation services for an enrollee who is at least 18 years of age and has been diagnosed with cancer where necessary treatment may cause iatrogenic infertility. We estimate $0.11 PMPM - $0.23 PMPM or 0.02% - 0.04% of premium for this benefit. This estimate was developed as follows:

- The 2020 SHCE indicated approximately 285,000 total lives covered in the Maine combined individual, small group, and large group markets. We assume 'health plans' as stated in LD 922 refers to these markets.
- While LD 922 does not specify a maximum age for fertility preservation, we used an age range of 18-44.

- The age and gender proportions of Maine's population are based on the 2020 Vintage population estimates.[33]
- New cancer cases were estimated based on data reported by the International Agency for Research on Cancer, which provided expected 2020 cases.[34]
- 10%[35] of cancers were removed for Leukemia, Lymphoma, and Myeloma which are fast acting and require immediate treatment which would not allow time for fertility preservation.
- $12,000 was used as the cost of cryopreservation of egg/embryos.[36,37]
- $1,000 was used as the cost of sperm cryopreservation.[38]
- We used a range of 50% to 100% of people facing iatrogenic infertility will take advantage of the benefit.

LD 1539:

Fertility Preservation:

LD 1539 also requires fertility preservation coverage, but does not prescribe 18 as the minimum age and does not require a diagnosis of cancer. We estimate $0.15 PMPM - $0.31 PMPM or 0.03% - 0.06% of premium for this benefit. The assumptions were essentially the same as for LD 922 except we assumed a 15-44 age range. While LD 1539 would allow preservation in the case of genetic conditions or other diseases where treatment result in iatrogenic infertility, we could not find adequate statistics on the number of non-cancer related iatrogenic infertility. As cancer appears to be the primary cause of iatrogenic infertility, we continued to only consider cancer related cases. We believe the impact from non-cancer related cases would be small.

Fertility Preservation Storage:

LD 1539 would require coverage for at least 5 years of cryopreservation storage. We estimate $0.03 PMPM - $0.05 PMPM or 0.01% of premium for this benefit. This estimate was developed as follows:

- $600 was used as the annual storage cost for egg or embryo.[39]
- $225 was used as the annual storage cost for sperm.[40]

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[33] "State Population by Characteristics: 2010-2020." Vintage 2020 State Population Estimates.
[34] International Agency for Research on Cancer. "Cancer Tomorrow." https://gco.iarc.fr/tomorrow/en/dataviz/tables?populations=840&single_unit=5000&age_start=3&age_end=8&types=0&years=2025&sexes=0&cancers=39. Accessed September 30, 2021.
[35] Leukemia and Lymphoma Society. https://www.lls.org/facts-and-statistics/facts-and-statistics-overview. Accessed November 29, 2021.
[36] Sources range from $6,000 - $20,000. We assume it is similar to a round of IVF and selected $12,000.
[37] While other preservation methods may be available, such as ovarian tissue, we assume egg/embryo would be most common.
[38] "What You Need to Know About Freezing Sperm." Healthline. May 18, 2020. https://www.healthline.com/health/fertility/freezing-sperm#cost. Accessed November 30, 2021.
[39] "Egg Freezing Storage Costs." Extend Fertility. https://extendfertility.com/pricing-1/long-term-storage-pricing/
[40] "What You Need to Know About Freezing Sperm." Healthline.

- 5 years of storage will be covered.
- Assume 100% of people will use their stored sample.[41]

Fertility Diagnostic:

LD 1539 would require coverage for fertility diagnostic care which includes procedures, products, medications and services intended to provide information about an individual's fertility. We estimate $0.08 PMPM - $0.11 PMPM or 0.01% - 0.02% of premium for this benefit. This estimate was developed as follows:

- The number of married people between the age of 20 to 44 for females and age 20 to 44 for males was determined using the ACS 1-Year Estimates 2019 Marital Status Table.[42]
- Men over age 44 may still pursue fertility services. We calculated the number of men over 44 as the female age 20-44 minus male age 20-44.
- We assume same-sex couples are equally distributed male and female.
- Same-sex households in Maine were determined from the Census Bureau Characteristics of Same-Sex Couple Households: 2005 to Present tables.[43]
- The age and gender proportions are based on the 2020 Vintage population estimates.[44]
- To estimate additional individuals and couples who may pursue diagnostic testing, we included a range of 2.5% to 7.5% additional individuals and couples.
- Assume 13.5% of couples have trouble conceiving after 12 months.[45]
- Assume 18% of couples with a prior condition which can cause infertility, based on a CDC definition.[46][47] This includes:
    - 10% due to endometriosis[48]
    - 4% due to pelvic inflammatory disease[49]
    - 2% due to very painful periods[50]

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[41] We do not expect everybody will use their sample. However, we use 100% as a conservative estimate as we do not have good information on who will use their sample and expect the cost to be very small.
[42] "2019 ACS 1-year Estimates." United States Census Bureau. October 8, 2021. https://www.census.gov/programs-surveys/acs/technical-documentation/table-and-geography-changes/2019/1-year.html. Accessed Sept. 30, 2021.
[43] "Characteristics of Same-Sex Couple Households: 2005 to Present." United States Census Bureau. October 8, 2021. https://www.census.gov/data/tables/time-series/demo/same-sex-couples/ssc-house-characteristics.html. Accessed September 30, 2021.
[44] "State Population by Characteristics: 2010-2020." Vintage 2020 State Population Estimates.
[45] "How common is infertility?" National Institute of Health. February 8, 2018. https://www.nichd.nih.gov/health/topics/infertility/conditioninfo/common. Accessed September 30, 2021
[46] "Infertility FAQs." Centers for Disease Control and Prevention. April 13, 2021. https://www.cdc.gov/reproductivehealth/infertility/index.htm. Accessed September 30, 2021.
[47] It is unclear whether there is overlap between the number of couples who have trouble conceiving after 12 months and those with demonstrated conditions. If there is overlap, our estimate may be overstated.
[48] "Endometriosis." World Health Organization. March 31, 2021. https://www.who.int/news-room/fact-sheets/detail/endometriosis. Accessed September 30, 2021.
[49] Kreisel K, Torrone E, Bernstein K, Hong J, Gorwitz R. Prevalence of Pelvic Inflammatory Disease in Sexually Experienced Women of Reproductive Age — United States, 2013–2014. MMWR Morb Mortal Wkly Rep 2017;66:80–83. DOI: http://dx.doi.org/10.15585/mmwr.mm6603a3External.
[50] Ju, Hong et al. "The prevalence and risk factors of dysmenorrhea." Epidemiologic reviews vol. 36 (2014): 104-13. doi:10.1093/epirev/mxt009

  - 1% due to more than one miscarriage[51]
  - 1% due to suspected male condition[52]
- $175 was used as the cost of a basic semen analysis.[53] Dr. Lannon indicated one round of analysis is typically sufficient unless irregularities found. We assumed one round.
- $1,050 was used as the cost if additional advanced testing was required for males.[54] We used a range of 15% to 35% of males would need more advanced testing.
- $950 was used as the cost of a female diagnostic panel, which includes an ovarian reserve test, hormone test, and imaging test.[55]
- $2,700 was used as the cost if additional advanced testing was required for females.[56] We used a range of 15% to 35% of females needing more advanced testing.
- The male/female distribution was determined using the ACS 1-Year Estimates 2019 Marital Status Table.[57]

Fertility Treatment:

LD 1539 would require coverage for fertility diagnostic care which includes procedures, products, medications and services intended to provide information about an individual's fertility. We estimate $4.25 PMPM - $6.32 PMPM or 0.76% - 1.13% of premium for this benefit. This estimate was developed as follows:

- The number of individuals or couples pursuing fertility treatment was those using their cryopreserved samples plus those pursuing diagnostic treatment.
- We relied on an NIH study of people pursuing fertility treatment to determine the average cost of fertility treatment.[58] The fertility treatment options were categorized by:

[51] https://www.mayoclinic.org/healthy-lifestyle/getting-pregnant/in-depth/pregnancy-after-miscarriage/art-20044134#:~:text=Miscarriage%20is%20usually%20a%20one,20%20percent%20after%20one%20miscarriage.
[52] Grigorian, Areg et al. "National analysis of testicular and scrotal trauma in the USA." Research and reports in urology vol. 10 51-56. 10 Aug. 2018, doi:10.2147/RRU.S172848
[53] "Cost of Fertility Treatment for Women and Men National averages, ranges - and our prices." Advanced Fertility Center of Chicago. https://advancedfertility.com/fertility-treatment/affording-care/fertility-treatment-costs/. Accessed October 10, 2021.
[54] Advanced testing methods ranged from $600 to $1500 per https://www.maleinfertilityguide.com/genetics-and-advanced-sperm-testing-costs-maleinfertility and https://www.ajronline.org/doi/pdf/10.2214/AJR.16.17322.
[55] "Cost of Fertility Treatment for Women and Men National averages, ranges - and our prices." Advanced Fertility Center of Chicago.
[56] Advanced testing methods ranged from $1,900 to $3,500 per https://advancedfertility.com/fertility-treatment/affording-care/fertility-treatment-costs/ and https://advancedfertility.com/fertility-treatment/affording-care/pgd-cost/.
[57] "2019 ACS 1-year Estimates." United States Census Bureau.
[58] Katz, Patricia et al. "Costs of infertility treatment: results from an 18-month prospective cohort study." Fertility and sterility vol. 95,3 (2011): 915-21. doi:10.1016/j.fertnstert.2010.11.026

  - No cycle treatment,[59] assume $0 cost as costs already included in diagnostic test
  - Medications only, assume $1,400 cost per cycle[60]
  - IUI-Clomiphene,[61] assume $650 cost per cycle[62]
  - IUI-Gonadotropins,[63] assume $4,650 cost per cycle[64]
  - IVF, assume $12,000 for first cycle, $6,000 per additional cycle including medications[65]
  - IVF – Donor Egg, assume IVF costs plus $10,000 for egg donation per cycle[66]
- The number of cycles is based on the NIH study
- The probability of treatment is based on the NIH study. The NIH study only provided the probability of the most invasive treatment. We split the probability evenly among scenarios of people pursuing less invasive treatments first. For example, for IUI-Gonadotropins we split the ultimate probability into three scenarios: IUI-Gonadotropins only, medications only then IUI-Gonadotropins, and medications only then IUI-Clomiphene then IUI-Gonadotropins.
- The diagnosis was based on the NIH study.
- The average cost per diagnosis was the cost of treatment times number of cycles weighted by probability of treatment
- The average cost was the weighted average cost by diagnosis weighted by the probability of diagnosis

Additional Births:

Due to coverage of fertility benefits, we would expect additional costs due to additional pregnancies. We estimate $0.52 PMPM - $1.15 PMPM or 0.09% - 0.21% of premium for this benefit. This estimate was developed as follows:

- People pursuing fertility treatment
- Dr. Lannon indicated approximately 30% of couples currently who meet with him do not pursue treatment due to cost. We used a range of 20% to 40% to determine the number of additional pregnancies as a result of LD 1539.

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[59] No cycle treatment can include surgery or no treatment after diagnostic tests. We assume surgical treatments would be rare and would already be covered by carriers and the diagnostic test cost was calculated separately.
[60] Dupree, James M. "Insurance coverage of male infertility: what should the standard be?." Translational andrology and urology vol. 7,Suppl 3 (2018): S310-S316. doi:10.21037/tau.2018.04.25
[61] "Clomiphene." Medline Plus. September 15, 2017. https://medlineplus.gov/druginfo/meds/a682704.html#:~:text=Clomiphene%20is%20used%20to%20induce,the%20ovaries%20and%20be%20released. Accessed December 1, 2021.
[62] Fertility Within Reach Handbook
[63] "Gonadotropins." Drugs.com. https://www.drugs.com/drug-class/gonadotropins.html. Accessed December 1, 2021.
[64] IUI with clomiphene plus $400 for gonadotropins per https://extendfertility.com/iui-vs-ivf/
[65] Dr. Lannon indicated a cost of $10,000 for the first IVF cycle and $4,000 for additional cycles without meds. Assume $2,000 for meds, which is average of minimal cost for clomiphene and $4,000 for gonadotropins per https://extendfertility.com/iui-vs-ivf/
[66] Fertility Within Reach Handbook

- We used the NIH study for the percentage of successful outcomes from fertility treatment and the % of multiple births.
- $26,157 was used as the cost of a single child birth based on a 2013 American Journal of Obstetrics and Gynecology (AJOG) article trended at 2%.[67]
- $143,868 was used as the cost of a multiple birth based on a 2013 AJOG article weighted by probability of two birth versus three or more trended at 2%.[68]

We could not find statistics on those pursuing diagnostics or treatment within a year and we did not have access to carrier claims information. As the primary age range is 20 to 44 we calculate the total cost over the 25-year period and assume a uniform annual cost.

7. The impact of indirect costs, which are costs other than premiums and administrative costs, on the question of the cost and benefits of coverage.

As we are anticipating the benefit will lead to additional births, there could be implications for childcare costs, education costs, tax revenues, etc. Given the small number of additional births, we do not believe the additional costs are significant.

Multiple public testimonies discussed the mental health struggles relating to fertility challenges. Mental health counseling is a covered by health plans.

Dr. Elizabeth Wolfe provided testimony about a patient who opted to transfer multiple embryos to increase their chance of live birth due to the cost per IVF cycle. While cost-saving for a consumer, this practice increases the chance of providing a multiple birth (twin or higher), which would be significantly more expensive than a single child birth, but would be covered by health plans.

Lisa Hopper testified about her child who inherited Cystic Fibrosis which can lead to lifelong medical costs to both the family and insurance company. Kati Pelletier discussed the astronomical costs related to her child inheriting Menkes Disease and even though she now knows she is a hereditary carrier for the disease, genetic testing and IVF are not covered.

8. The impact on the total cost of health care, including potential benefits and savings to insurers and employers because the proposed mandated treatment or service prevents disease or illness or leads to the early detection and treatment of disease or illness that is less costly than treatment or service for later stages of a disease or illness.

We do not believe fertility diagnostic, fertility treatment, or fertility preservation are less costly than for later stages of a disease or illness.

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[67] Lemos EV, Zhang D, Van Voorhis BJ, et al. Healthcare expenses associated with multiple vs singleton pregnancies in the United States. Am J Obstet Gynecol 2013;209:586.e1-11.
[68] Lemos EV, Zhang D, Van Voorhis BJ, et al. Healthcare expenses associated with multiple vs singleton pregnancies in the United States.

As discussed in the prior question, there may be some offsetting costs, however, we are unable to determine the impact.

9. The effects of mandating the benefit on the cost of health care, particularly the premium and administrative expenses and indirect costs, to employers and employees, including the financial impact on small employers, medium-sized employers and large employers.

Both LD 922 and LD 1539 are expected to increase costs in the individual, small group, and large group markets. We note the bills would not be applicable to self-funded plans.

10. The effect of the proposed mandates on cost-shifting between private and public payers of health care coverage and on the overall cost of the health care delivery system in this State.

MaineCare does not cover infertility treatment, artificial insemination, IVF, or fertility drugs.[69] MaineCare does cover some family planning services, which appear to cover some diagnostic testing. It is unclear whether fertility preservation is covered by MaineCare. It is unlikely anyone on Medicare would be using the services and benefits. We do not believe there would be cost shifting.

V. Medical Efficacy

C. The Medical Efficacy of Mandating the Benefit

1. The contribution of the benefit to the quality of patient care and the health status of the population, including any research demonstrating the medical efficacy of the treatment or service compared to the alternative of not providing the treatment or service.

According to studies, infertility can have a devastating impact on the mental health of women[70] and men.[71] This impact would apply to both LD 1539 and LD 922. There may be offsetting costs related to mental health treatment for people unable to conceive and without the resources to pursue fertility treatment. We are unable to model this cost.

LD 1539 would allow for fertility treatment for those who at a high risk of passing down a serious inheritable genetic or chromosomal abnormality. According to Dr. Lannon, IVF would

[69] "MaineCare Benefits Manual." Department of Health and Human Services. October 1, 2016. https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.maine.gov%2Fsos%2Fcec%2Frules%2F10%2F144%2Fch101%2Fc10s004.docx&wdOrigin=BROWSELINK. Accessed October 15, 2021.
[70] Hasanpoor-Azghdy, Seyede Batool et al. "The emotional-psychological consequences of infertility among infertile women seeking treatment: Results of a qualitative study." *Iranian journal of reproductive medicine* vol. 12,2 (2014): 131-8.
[71] Fisher, Jane R W, and Karin Hammarberg. "Psychological and social aspects of infertility in men: an overview of the evidence and implications for psychologically informed clinical care and future research." Asian journal of andrology vol. 14,1 (2012): 121-9. doi:10.1038/aja.2011.72

allow providers to analyze sperm and eggs for these abnormalities to ensure they would not be passed down. There may be offsetting costs related to lower incidence of inheritable diseases, although we are unable to model this cost. Not everyone will know they can pass down an inheritable abnormality nor would they pursue genetic testing, however, family history or popular genetic testing such as 23andMe may cause more people to recognize these issues. A child inheriting a serious genetic or chromosomal abnormality may incur significantly greater financial expense to the parents, insurance company and the State than procedures designed to ensure a live birth with healthy outcomes.

2. If the legislation seeks to mandate coverage of an additional class of practitioners:

The bill will not apply to an additional class of practitioners.

VI. Balancing the Effects

D. The Effects of Balancing the Social, Economic, and Medical Efficacy Considerations

1. The extent to which the need for coverage outweighs the cost of mandating the benefit for all policyholders.

Both the World Health Organization[72] and the American Medical Association[73] designate infertility as a disease. Approximately 9% of men and 11% of women of reproductive age in the United States have fertility challenges.[74] As such a prevalent disease in the United States, it is not unreasonable that the benefit should be mandated for all policyholders since it is unknown which policyholders would require the service.

2. The extent to which the problem of coverage can be resolved by mandating the availability of coverage as an option for policyholders.

It is likely that only those who would benefit from the services would purchase the optional coverage. This would result in an alternative coverage that would be very expensive. This cost would be reduced if the option were only available when the coverage was initially purchased, but it would then be less effective because many individuals would not anticipate needing the coverage and, therefore, would not purchase it. Additionally, this would not be permitted for qualified health plans.

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[72] "Infertility." World Health Organization.
[73] Sara Berg, MS. "AMA backs global health experts in calling infertility a disease." June 13, 2017. https://www.ama-assn.org/delivering-care/public-health/ama-backs-global-health-experts-calling-infertility-disease. Accessed September 15, 2021.
[74] https://www.nichd.nih.gov/health/topics/infertility/conditioninfo/common

Most couples would not know that they needed to pursue fertility treatment until they are trying to have a child, so it would only be purchased by those who need it.

Those who would need to use fertility preservation for iatrogenic infertility would not know they need to use the services until they are diagnosed with a condition where treatment could result in iatrogenic infertility. Purchasing coverage in between receiving a diagnosis and receiving treatment may not be possible in cases of faster acting diseases.

3. The cumulative impact of mandating this benefit in combination with existing mandates on costs and availability of coverage.

NovaRest estimate a cost of $0.11 PMPM - $0.21 PMPM or 0.02% - 0.04% of premium for LD 922. This cost only relates to fertility preservation benefits.

NovaRest estimates a cost of $5.03 PMPM - $6.32 PMPM or 0.90% - 1.13% of premium for LD 1539.

The estimated cost of current Maine mandates is detailed in Appendix A. For most of these mandates, our estimate is based on the net impact on premiums as estimated at the time the mandate was enacted. Four of the mandates – mental health, substance abuse, chiropractic, and screening mammograms – require carriers to report annually the number of claims paid for these benefits and the estimates are based on that data. The true cost for the Maine mandates are impacted by the fact that:

B. Some services would be provided and reimbursed in the absence of a mandate.
C. Certain services or providers will reduce claims in other areas.
D. Some mandates are required by Federal law.

Using the high end of the range, the addition of 0.04% of premium for LD 922 to the estimated cost of current Maine mandates would result in a cumulative cost as shown below:

Total cost for groups larger than 20:	**12.63%**
Total cost for groups of 20 or fewer:	**12.68%**
Total cost for individual contracts:	**10.94%**

Using the high end of the range, the addition of 1.13% of premium for LD 1539 or for the combined impact of LD 922 and LD 1539 to the estimated cost of current Maine mandates would result in a cumulative cost as shown below:

Total cost for groups larger than 20:	**13.72%**
Total cost for groups of 20 or fewer:	**13.77%**
Total cost for individual contracts:	**12.03%**

VII. Actuarial Memoranda

Limitations

NovaRest has prepared this report in conformity with its intended use by persons technically competent to evaluate our estimate of the proposed bill. Any judgments as to the data contained in the report or conclusions about the ramifications of that data should be made only after reviewing the report in its entirety, as the conclusions reached by review of a section or sections on an isolated basis by be incorrect. Appropriate staff is available to explain and/or clarify any matter presented herein. It is assumed that any user of this report will seek such explanations as to any matter in question.

NovaRest has developed projections in conformity with what we believe to be the current and proposed operating environments and are based on best estimates of future experience within such environments. It should be recognized that actual future results may vary from those projected in this report. Factors that may cause the actual results to vary from the projected include new insurance regulations, differences in implementation of the required coverage by carrier, accounting practices, changes in federal and/or local taxation, external economic factors such as inflation rates, investment yields and ratings and inherent potential for normal random fluctuations in experience.

Reliance and Qualifications

We are providing this report to you solely to communicate our findings and analysis of the bill's consideration. The reliance of parties other than the Maine Bureau of Insurance and the Joint Standing Committee on Health Coverage, Insurance and Financial Services on any aspect of our work is not authorized by us and is done at their own risk.

To arrive at our estimate, we made use of information provided by carriers included in the data call. We also made assumptions based on information gained from interviews with medical professionals. We did not perform an independent investigation or verification. If this information was in any way inaccurate, incomplete, or out of date, the findings and conclusions in this report may require revision. While we have relied on information without independent investigation or verification, the medical professionals we spoke to are fully qualified and knowledgeable in their field.

This memorandum has been prepared in conformity with the applicable Actuarial Standards of Practice. We have no conflicts of interest in performing this review and providing this report.

We are members of the American Academy of Actuaries and meet that body's Qualification Standards to render this opinion. We meet the Qualification Standards promulgated by these professional organizations to perform the analyses and opine upon the results presented in this Actuarial Report.

VIII. Appendices

Appendix A: Cumulative Impact of Mandates

Bureau of Insurance
Cumulative Impact of Mandates in Maine

Report for the Year 2020

This report provides data for medical insurance coverage of mandates as required by 24-A M.R.S.A. §2752 and compiled by the Bureau of Insurance. While some data was provided through annual mandate reports by insurers, other figures were estimated as a part of the proposed mandates study. The following provides a brief description of each state mandate and the estimated claim cost as a percentage of premium. Many of these mandates are now required by the federal Affordable Care Act (ACA). In addition, the ACA requires benefits covered by the benchmark plan which includes all state mandates to be covered by all individual and small group plans effective January 1, 2014. A summary chart is provided at the end of this report.

- ***Mental Health*** (Enacted 1983)

Mental health parity for group plans in Maine became effective July 1, 1996 and was expanded in 2003. The percentage of mental health group claims paid has been tracked since 1984 and has historically been between 3% - 4% of total group health claims. Claims jumped sharply in 2020 by 1.3% to 5.2% for groups after steadily declining by a half point per year for the previous 3 years.

Maine mental health parity was only a mandated offer for individual plans until it was included in the essential health benefits for ACA (Affordable Care Act) individual and small group plans beginning 2014. The Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) amended the PHS Act, ERISA, and the Code to provide increased parity between mental health and substance use disorder benefits and medical/surgical benefits and extended parity to all individual plans. As expected, mental health claims have stabilized back to a lower level of 2.5% in 2017 after meeting pent-up demand of 9.4% in 2015. From 2018 to 2020 claims have increased slightly to an average of 3.5%, but still within a stabilized range.

- ***Substance Abuse*** (Enacted 1983)

Maine's mandate only applied to group coverage. Effective October 1, 2003, substance abuse was added to the list of mental health conditions for which parity is required. Effective on January 1, 2014, the federal Affordable Care Act requires substance abuse treatment benefits for individual and small group plans as part of the essential health benefits. The percentage of claims paid for group plans has been tracked since 1984. Substance abuse claims paid have remained flat at 1.2% average for the past 3 years of the total group health claims. Individual substance abuse health claims have also remained flat at 1.0% for the past 3 years. As expected, substance abuse claims have leveled out as pent-up demand is met, and carriers manage utilization.

- ***Chiropractic*** (Enacted 1986)

This mandate requires coverage for the services of chiropractors to the extent that the same services would be covered if performed by a physician. Using annual experience reports from the carriers, the percentage of claims paid has been tracked since 1986 and, in 2020, was 0.80% of total health claims. Prior to 2014, the level has typically been lower for individual than for group. Individual claims at 0.4% in 2020 have continued a trend of lower than group claims since 2017 when they were equivalent.

- ***Screening Mammography*** (Enacted 1990)

This mandate requires that benefits be provided for screening mammography. We estimate the current 2020 levels of 0.9% for group and 1.0% for individual going forward. Coverage is required by ACA for preventive services.

- ***Dentists*** (Enacted 1975)

This mandate requires coverage for dentists' services to the extent that the same services would be covered if performed by a physician. A 1992 study done by Milliman and Robertson for the Mandated Benefits Advisory Commission estimated that these claims represent 0.5% of total health claims and that the actual impact on premiums is "slight." It is unlikely that this coverage would be excluded in the absence of a mandate. We include 0.1% as an estimate.

- ***Breast Reconstruction*** (Enacted 1998)

This mandate requires coverage for reconstruction of both breasts to produce a symmetrical appearance after a mastectomy. At the time this mandate was being considered in 1995, one carrier estimated the cost at $0.20 per month per individual. We do not have a more recent estimate. We include 0.02% in our estimate of the maximum cumulative impact of mandates.

- ***Errors of Metabolism*** (Enacted 1995)

This mandate requires coverage for metabolic formula and prescribed modified low-protein food products. At the time this mandate was being considered in 1995, Blue Cross estimated the cost at $0.10 per month per individual. We do not have a more recent estimate. We include 0.01% in our estimate.

- ***Diabetic Supplies*** (Enacted 1996)

This mandate requires that benefits be provided for medically necessary diabetic supplies and equipment. Based on data collected in 2006, most carriers reported that there would be no cost increase or an insignificant cost increase because they already provide this coverage. Based on our report we estimate 0.2%.

- ***Minimum Maternity Stay*** (Enacted 1996)

This mandate requires that if a policy provides maternity benefits, the maternity (length of stay) and newborn care benefits must be provided in accordance with "Guidelines for Prenatal Care." Based on carrier responses indicating that they did not limit maternity stays below those recommended, we estimate no impact.

- ***Pap Smear Tests*** (Enacted 1996)

This mandate requires that benefits be provided for screening Pap smear tests. HMOs would typically cover these costs and, for non-HMO plans, the relatively small cost of this test would not in itself satisfy the deductible, so there would be no cost unless other services were also received. We estimate a negligible impact of 0.01%. Coverage is required by ACA for preventive services.

- ***Annual GYN Exam Without Referral*** (Enacted 1996)

This mandate only affects HMO plans and similar plans, and it requires the provision of benefits for annual gynecological exams without prior approval from a primary care physician. To the extent the Primary Care Physician (PCP) would, in absence of this law, have performed the exam personally rather than referring to an OB/GYN, the cost may be somewhat higher; therefore, we include 0.1%.

- ***Breast Cancer Length of Stay*** (Enacted 1997)

This mandate requires that benefits for breast cancer treatment be provided for a medically appropriate period of time as determined by the physician in consultation with the patient. Group claims in 2020 were 2.0% compared to individual claims at 1.4% with the combined impact remaining level with past years at 1.7%.

- ***Off-label Use Prescription Drugs*** (Enacted 1998)

This mandate requires coverage of off-label prescription drugs in the treatment of cancer, HIV, and AIDS. Our 1998 report stated a "high-end cost estimate" of about $1 per member per month (0.6% of premium) if it is assumed there is currently no coverage for off-label drugs. Because the HMOs claimed to already cover off-label drugs, in which case there would be no additional cost; and providers testified that claims have been denied on this basis, we include half this amount, or 0.3%.

- ***Prostate Cancer*** (Enacted 1998)

This mandate requires prostate cancer screenings. Our report estimated additional claims cost would approximate $0.10 per member per month. With the inclusion of administrative expenses, we would expect a total cost of approximately $0.11 per member per month, or approximately 0.07% of total premiums. Coverage is required by ACA for preventive services.

- ***Nurse Practitioners and Certified Nurse Midwives*** (Enacted 1999)

This law mandates coverage for nurse practitioners and certified nurse midwives and allows nurse practitioners to serve as primary care providers. This mandate is estimated to increase premium by 0.16%.

- ***Coverage of Contraceptives*** (Enacted 1999)

This mandate requires health plans that cover prescription drugs to cover contraceptives. Our report estimated an increase of premium of 0.8%.

- ***Registered Nurse First Assistants*** (Enacted 1999)

This mandate requires health plans that cover surgical first assistants to cover registered nurse first assistants if an assisting physician would be covered. No material increase in premium is expected.

- ***Access to Clinical Trials*** (Enacted 2000)

This mandate requires that coverage be provided for an eligible enrollee to participate in approved clinical trials. Our report estimated a cost of 0.19% of premium.

- ***Access to Prescription Drugs*** (Enacted 2000)

This mandate only affects plans with closed formularies. Our report concluded that enrollment in such plans is minimal in Maine and therefore the mandate will have no material impact on premiums.

- ***Hospice Care*** (Enacted 2001)

No cost estimate was made for this mandate because the Legislature waived the requirement for a study. Because carriers generally covered hospice care prior to the mandate, we assume no additional cost.

- ***Access to Eye Care*** (Enacted 2001)

This mandate affects plans that use participating eye care professionals. Our report estimated a cost of 0.04% of premium.

- ***Dental Anesthesia*** (Enacted 2001)

This mandate requires coverage for general anesthesia and associated facility charges for dental procedures in a hospital for certain enrollees for whom general anesthesia is medically necessary. Our report estimated a cost of 0.05% of premium.

- ***Prosthetics*** (Enacted 2003)

This mandate requires coverage for prosthetic devices to replace an arm or leg. Our report estimated a cost of 0.03% of premium for groups over 20, and a cost of 0.08% of premium for small employer groups and individuals.

- ***LCPCs*** (Enacted 2003)

This mandate requires coverage of licensed clinical professional counselors. Our report on mental health parity indicated no measurable cost impact for coverage of LCPCs.

- ***Licensed Pastoral Counselors and Marriage & Family Therapists*** (Enacted 2005)

This mandate requires coverage of licensed pastoral counselors and marriage & family therapists. Our report indicated no measurable cost impact for this coverage.

- ***Hearing Aids*** (Enacted 2007 and revised 2019)

The prior mandate required coverage for a hearing aid for each ear every 36 months for children age 18 and under. The mandate was phased-in between 2008 and 2010, and our report estimated a cost of 0.1% of premium. For 1/2020 the hearing aid mandate is expanded to require adult hearing aids. Based on rate filings and a proposed mandate study we estimate 0.2% addition impact to rates to provide hearing aids to adults.

- ***Infant Formulas*** (Enacted 2008)

This mandate requires coverage for amino acid-based elemental infant formulas for children two years of age and under, regardless of delivery method. This mandate is effective January 2009, and our report estimated a cost of 0.1% of premium.

- ***Colorectal Cancer Screening*** (Enacted 2008)

This mandate requires coverage for colorectal cancer screening. This mandate is effective January 2009. No carriers stated they denied coverage prior to this mandate; therefore, our report estimated no impact on premium. Coverage is required by ACA for preventive services.

- ***Independent Dental Hygienist*** (Enacted 2009)

This mandate requires individual dental insurance or health insurance that includes coverage for dental services to provide coverage for dental services performed by an independent practice dental hygienist. This mandate applies only to policies with dental coverage; therefore, there is no estimated impact on medical plan premiums.

- ***Autism Spectrum* Disorders** (Enacted 2010)

This mandate was effective January 2011 and required all contracts to provide coverage for the diagnosis and treatment of autism spectrum disorders for individuals five years of age or under. It was expanded to age 10 for January 2014 effective dates. A recent report estimated a cost of 0.3% of premium once the mandate is fully implemented if it included those under age 10. Based on that estimate and recently reported experience we are estimating this going forward.

- ***Children's Early Intervention Services*** (Enacted 2010)

This mandate requires all contracts to provide coverage for children's early intervention services from birth to 36 months for a child identified with a developmental disability or delay. This mandate was effective January 2011, and our report estimated a cost of 0.05% of premium.

- ***Chemotherapy Oral Medications*** (Enacted 2014)

Policies that provide chemotherapy treatment must provide coverage for prescribed orally administered anticancer medications equivalent to the coverage for IV or injected anticancer medication. No material increase in premium is expected.

- ***Bone Marrow Donor Testing*** (Enacted 2014)

Reimbursement for human leukocyte antigen testing to register as a bone marrow donor. Limited to $150 per lifetime. May not be applied to any deductible or other cost share. No material increase in premium is expected.

- ***Dental Hygienist*** (Enacted 2014)

Coverage for services provided by a dental hygiene therapist for policies with dental coverage. No material increase in premium is expected.

- ***Abuse-Deterrent Opioid Analgesic Drugs*** (Enacted 2015)

Coverage for abuse-deterrent opioid analgesic drugs on a basis not less favorable than that for opioid analgesic drugs that are not abuse-deterrent and are covered by the health plan. No material increase in premium is expected.

- ***Preventive Health Services*** (Enacted 2018)

Coverage for preventive health services including evidence-based items or services with a rating of A or B in the United States Preventive Services Task Force or equivalent, preventive care and screenings and immunizations supported by the federal DHHS. Currently covered and no material increase in premium is expected.

- ***Naturopathic Doctor*** (Enacted 2018)

Coverage for services provided by a naturopathic doctor when those services are covered when provided by any other health care provided and within the lawful scope of practice of the naturopathic doctor. No material increase in costs is expected and if the services are a substitute for medical doctor services, there may be a decrease in cost for some patients.

- ***Abortion Coverage*** (Enacted 2019)

This mandate requires that health insurance carriers who provide coverage for maternity services also provide coverage for abortion services except for employers granted a religious exclusion.

- ***Coverage for certified registered nurse anesthetists (CRNA)*** (Enacted 2021)

This mandate requires insurers, health maintenance organizations and nonprofit hospitals or medical service organizations to provide coverage for the services of certified registered nurse anesthetists provided to individuals.

- ***Coverage for certified midwives.*** (Enacted 2021)

This mandate requires insurers, health maintenance organizations and nonprofit hospitals or medical service organizations to provide coverage under those contracts for services performed by a certified nurse midwife to a patient who is referred to the certified nurse midwife by a primary care provider when those services are within the lawful scope of practice of the certified nurse midwife.

- ***Coverage for HIV prevention drugs.*** (Enacted Federal 2021)

This mandate requires health insurance carriers to provide coverage for an enrollee for HIV prevention drugs that have been determined to be medically necessary by a health care provider.

COST OF EXISTING MANDATED HEALTH INSURANCE BENEFITS

Year Enacted	Benefit	Type of Contract Affected	Est. Maximum Cost as % of Premium
1975	Must include benefits for **dentists'** services to the extent that the same services would be covered if performed by a physician.	All Contracts	0.10%
1983	Benefits must be included for treatment of **alcoholism and drug dependency**.	Groups	1.24%
		Individual	1.13%
1975 1983 1995 2003	Benefits must be included for **Mental Health Services**, including psychologists and social workers.	Groups	5.15%
		Individual	3.58%
1986 1994 1995 1997	Benefits must be included for the services of **chiropractors** to the extent that the same services would be covered by a physician. Benefits must be included for therapeutic, adjustive and manipulative services.	Group	0.83%
		Individual	0.61%
1990 1997	Benefits must be made available for screening **mammography**.	Group	0.85%
		Individual	0.96%
1995	Must provide coverage for **reconstruction of both breasts** to produce symmetrical appearance according to patient and physician wishes.	All Contracts	0.02%
1995	Must provide coverage for **metabolic formula** and up to $3,000 per year for prescribed modified low-protein food products.	All Contracts	0.01%
1996	If policies provide maternity benefits, the **maternity (length of stay**) and newborn care benefits must be provided in accordance with "Guidelines for Prenatal Care."	All Contracts	0
1996	Benefits must be provided for medically necessary equipment and supplies used to treat **diabetes** and approved self-management and education training.	All Contracts	0.20%
1996	Benefits must be provided for **screening Pap tests**.	All	0.01%
1996	Benefits must be provided for **annual gynecological exam** without prior approval of primary care physician.	Group managed care	0.10%
1997	Benefits provided for **breast cancer treatment** for a medically appropriate period of time determined by the physician in consultation with the patient.	All Contracts	2.57%
1998	Coverage required for **off-label use of prescription drugs** for treatment of cancer, HIV, or AIDS.	All Contracts	0.30%
1998	Coverage required for **prostate cancer screening**.	All Contracts	0.07%

1999	Coverage of nurse **practitioners and nurse midwives** and allows nurse practitioners to serve as primary care providers.	All Managed Care Contracts	0.16%
1999	Prescription drug must include **contraceptives**.	All Contracts	0.80%
1999	Coverage for **registered nurse first assistants**.	All Contracts	0
2000	Access to **clinical trials**.	All Contracts	0.19%
2000	Access to **prescription drugs**.	All Managed Care Contracts	0
2001	Coverage of **hospice care services** for terminally ill.	All Contracts	0
2001	Access to **eye care**.	Plans with participating eye care professionals	0.04%
2001	Coverage of **anesthesia** and facility charges for certain **dental** procedures.	All Contracts	0.05%
2003	Coverage for **prosthetic devices** to replace an arm or leg	Groups >20	0.03%
		All other	0.08%
2003	Coverage of licensed clinical professional counselors	All Contracts	0
2005	Coverage of licensed pastoral counselors and marriage & family therapists	All Contracts	0
2007	Coverage of hearing aids for children	All Contracts	0.1%
2008	Coverage for amino acid-based elemental **infant formulas**	All Contracts	0.1%
2008	Coverage for **colorectal cancer screening**	All Contracts	0
2009	Coverage for **independent dental hygienist**	All Contracts	0
2010	Coverage for **autism spectrum**	All Contracts	0.3%
2010	Coverage for **children's early intervention services**	All Contracts	0.05%
2014	Coverage for **chemotherapy oral medications**	All Contracts	0
2014	Coverage for human **leukocyte antigen testing**	All Contracts	0
2014	Coverage for **dental hygienist**	All Contracts	0
2015	Coverage for **abuse-deterrent opioid analgesic medications**	All Contracts	0
2018	Coverage for **naturopath**	All Contracts	0
2018	Coverage for **preventive services**	All Contracts	0
2019	Coverage for **adult hearing aids**	All Contracts	0.20%
2019	Coverage for **abortion services**	Individual	0.14%
		Group	0.19%
2021	Coverage for **certified registered nurse anesthetists**	All Contracts	0
2021	Coverage for **certified midwives**	All Contracts	0
2021	Coverage for **HIV prevention drugs**	All Contracts	0
	Total cost for groups larger than 20:		**12.59%**
	Total cost for groups of 20 or fewer:		**12.64%**
	Total cost for individual contracts:		**10.90%**

Appendix B: Other State Laws

There are approximately 17 states that have passed legislation addressing the issue of insurance companies covering infertility treatments. Of those states, thirteen have laws that require insurance companies to cover infertility treatment. California and Texas have laws that require insurance companies to *offer* coverage for infertility treatment. Five states have fertility preservation laws for iatrogenic (medically-induced) infertility. The mandates are different regarding what is covered. Additionally, each State has its own infertility definition, which must be met to qualify for any benefits. Illinois and Delaware have also passed fertility preservation mandates, and New Jersey has a bill pending.

Nine (9) states passed legislation addressing infertility treatment using IVF. These states are Arkansas, Connecticut, Hawaii, Illinois, Maryland, Massachusetts, New Jersey, Rhode Island, and Texas.[75] Each state's regulation is different and is not necessarily consistent with this North Dakota legislation being proposed. Some other states limit the number of cycles that will be covered or the total lifetime cost.

New York has a pending bill that seeks to update the state's infertility insurance mandate to include up-to-date treatments, including IVF, which is currently excluded.[76]

The estimates of the premium impact of fertility preservation and IVF varies significantly from study to study.

Arkansas: Ark. Stat. Ann. § 23-85-137 and § 23-86-118 (1987, 2011) require accident and health insurance companies to cover in vitro fertilization. Services and procedures must be performed at a facility licensed or certified by the Department of Health and conform to the guidelines and minimum standards of the American College of Obstetricians and Gynecologists and the American Society for Reproductive Medicine. (2011 SB 213)

California: Cal. Health & Safety Code § 1374.55 and Cal. Insurance Code § 10119.6 require specified group health care service plan contracts and health insurance policies to offer coverage for the treatment of infertility, except in vitro fertilization. The law requires every plan to communicate the availability of coverage to group contract holders. The law defines infertility, treatment for infertility, and in vitro fertilization. The law clarifies that religious employers are not required to offer coverage for forms of treatment that are inconsistent with the organization's religious and ethical principles. The law was amended by 2013 Cal. Stats., Chap. 644 (AB 460) to specify that treatment of infertility shall be offered and, if purchased, provided without discrimination on the basis of age, ancestry, color, disability, domestic partner status, gender, gender expression, gender identity, genetic information, marital status, national origin, race, religion, sex, or sexual orientation.

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[75] National Conference of State Legislatures. "State Laws Related to Insurance Coverage for Infertility Treatment." April 27, 2018. http://www.ncsl.org/research/health/insurance-coverage-for-infertility-laws.aspx. Accessed January 27, 2019.
[76] Alliance for Fertility Preservation. "State Legislation: New York." http://www.allianceforfertilitypreservation.org/advocacy/state-legislation/new-york. Accessed January 28, 2019.

Proposed SB172 would require individual or group health care service plans or policies that cover hospital, medical, or surgical expenses and that are issued, amended, or renewed on and after January 1, 2018, to include coverage for standard fertility preservation services when a necessary medical treatment may cause iatrogenic infertility. As amended (March 7, 2017), the bill would require coverage for evaluation and treatment of iatrogenic infertility, including, but not limited to, standard fertility preservation services.[77] This bill is currently in Senate Suspense File, where it will be held until consideration before moving to the Senate floor.[78]

The California Health Benefits Review Program estimates that under the amended language, utilization would increase by 30%, and annual expenditures would increase by $6,001,000 or 0.041% for enrollees with plans or policies regulated by the Department of Managed Health Care (DMHC) or the California Department of Insurance (CDI).[79]

Connecticut: Conn. Gen. Stat. § 38a-509 and § 38a-536 (1989, 2005) require that health insurance organizations provide coverage for medically necessary expenses in the diagnosis and treatment of infertility, including in vitro fertilization procedures. Infertility, in this case, refers to an otherwise healthy individual who is unable to conceive or produce conception or to sustain a successful pregnancy during a one-year period. The law was amended in 2005 to provide an exemption for coverage that is contrary to the religious beliefs of an employer or individual.

Connecticut passed H.B. 5644, which takes effect January 2018 and will require health insurance to cover fertility preservation services for insureds who face likely infertility as a result of a necessary medical procedure for the treatment of cancer or other medical conditions.[80]

Connecticut estimated a 10 - 15 percent increase in the use of procedures per year and a premium increase of $0.062 PMPM for individual policies and $0.059 PMPM for fully insured group plans.[81] Using the 2016 SHCE member months and health premiums earned for the Connecticut market, this amounts to about 0.01% for individual policies and fully insured group plans.

Delaware: Senate Bill 139 was signed on June 30, 2018. The Act requires all individual, group, and blanket health insurance policies that provide for medical or hospital expenses shall include coverage for fertility care services, including IVF and standard fertility preservation services for individuals who must undergo medically necessary treatment that may cause iatrogenic infertility.

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[77] California Health Benefits Review Program. "Analysis of California Senate Bill 172 Fertility Preservation." April 13, 2017. http://chbrp.ucop.edu/index.php?action=read&bill_id=233&doc_type=1000. Accessed September 26, 2017.
[78] Alliance for Fertility Preservation. "State Legislation: California." http://www.allianceforfertilitypreservation.org/advocacy/state-legislation/california. Accessed September 26, 2017.
[79] Alliance for Fertility Preservation. "State Legislation: California."
[80] UCONN Center for Public Health and Health Policy. "Review and Evaluation of Certain Health Benefit Mandates in Connecticut 2013." December 31, 2013. http://www.allianceforfertilitypreservation.org/_assets/pdf/2013_ct_review.pdf. Accessed September 26, 2017.
[81] UCONN Center for Public Health and Health Policy. "Review and Evaluation of Certain Health Benefit Mandates in Connecticut 2013."

In a letter to the members of the Delaware State Senate Insurance Commissioner Trinidad Navarro wrote, "After consultation with an independent actuary, I am pleased to inform you that the impact of mandating coverage for IVF on health insurance premiums is estimated to be about one percent (+1%)"[82].

Hawaii: Hawaii Rev. Stat. § 431:10A-116.5 and § 432.1-604 (1989, 2003) require all accident and health insurance policies that provide pregnancy-related benefits to also include a one-time-only benefit for outpatient expenses arising from in vitro fertilization procedures. In order to qualify for in vitro fertilization procedures, the couple must have a history of infertility for at least five years or prove that the infertility is a result of a specified medical condition.

Illinois: Ill. Rev. Stat. Ch. 215, § 5/356m (1991, 1996) requires certain insurance policies that provide pregnancy-related benefits to provide coverage for the diagnosis and treatment of infertility. Coverage includes in vitro fertilization, uterine embryo lavage, embryo transfer, artificial insemination, gamete intrafallopian tube transfer, zygote intrafallopian tube transfer and low tubal ovum transfer. Coverage is limited to four completed oocyte retrievals, except if a live birth follows a completed oocyte retrieval, then two more completed oocyte retrievals are covered. (1996 Ill. Laws, P.A. 89-669).

Louisiana: La. Rev. Stat. Ann. § 22:1036 prohibits the exclusion of coverage for the diagnosis and treatment of a medical condition otherwise covered by the policy, contract, or plan, solely because the condition results in infertility. The law does not require insurers to cover fertility drugs, in vitro fertilization or other assisted reproductive techniques, reversal of a tubal litigation, a vasectomy, or any other method of sterilization. (2001 La. Acts, P.A. 1045)

Maryland: Md. Insurance Code Ann. § 15-810 (2000) amends the original 1985 law and prohibits certain health insurers that provide pregnancy-related benefits from excluding benefits for all outpatient expenses arising from in vitro fertilization procedures performed. The law clarifies the conditions under which services must be provided, including a history of infertility of at least a two-year period and infertility associated with one of several listed medical conditions. An insurer may limit coverage to three in vitro fertilization attempts per live birth, not to exceed a maximum lifetime benefit of $100,000. The law clarifies that an insurer or employer may exclude the coverage if it conflicts with the religious beliefs and practices of a religious organization, on request of the religious organization. Regulations that became effective in 1994 exempt businesses with 50 or fewer employees from having to provide the IVF coverage. (2000 Md. Laws, Chap. 283; H.B. 350) Md. Health General Code Ann. § 19-701 (2000) includes family planning or infertility services in the definition of health care services.

Maryland estimated the cost of iatrogenic fertility preservation would cost anywhere from 0.05% to 0.15%, depending upon the market.

Maryland conducts a periodic review of all mandates. The latest available was completed in 2012. Maryland is a state that mandated in vitro in the individual and large group fully insured market.

[82] Delaware Dem, "This is how the Insurance Commissioner should be acting" BlueDelaware, April 13, 2018. https://bluedelaware.com/2018/04/13/this-is-how-the-insurance-commissioner-should-be-acting/ Accessed January 30, 2019.

According to that study, the full cost of the invitro mandate was 1.3% to 1.5% of the premium, depending upon the market.[83]

Massachusetts: Mass. Gen. Laws Ann. Ch. 175, § 47H, Ch. 176A, § 8K, Ch. 176B, § 4J, Ch. 176G, § 4 and 211 Code of Massachusetts Regulations 37.00 (1987, 2010) require general insurance policies, non-profit hospital service corporations, medical service corporations, and health maintenance organizations that provide pregnancy-related benefits to also provide coverage for the diagnosis and treatment of infertility, including in vitro fertilization. This law was amended in 2010 to change the definition of "infertility" to be a condition of an individual who is unable to conceive or produce conception during a period of one year if the female is under the age of 35 or during a period of six months if the female is over the age of 35. If a person conceives but cannot carry that pregnancy to live birth, the period of time she attempted to conceive prior to achieving that pregnancy shall be included in the calculation of the one year or six-month period. (SB 2585)

A state-commissioned study of the Massachusetts mandate estimated that the law adds 0.12 percent to 0.96 percent to health insurance premiums, or 54 cents to $4.44 per person per month.[84] Research presented 20 years after the Massachusetts mandate was passed concluded that infertility treatment represents 0.89% of the premium.[85] That equates to a roughly $4.16 per member per month to premiums or $200 a year for a family of four.

Montana: Mont. Code Ann. § 33-22-1521 (1987) revises certain requirements of Montana's Comprehensive Health Association, the state's high-risk pool, and clarifies that covered expenses do not include charges for artificial insemination or treatment for infertility. (SB 310) Mont. Code Ann. § 33-31-102 et seq. (1987) requires health maintenance organizations to provide basic health services on a prepaid basis, which include infertility services. Other insurers are exempt from having to provide the coverage.

New Jersey: N.J. Stat. Ann. § 17:48-6x, § 17:48A-7w, § 17:48E-35.22 and § 17B:27-46.1x (2001) require health insurers to provide coverage for medically necessary expenses incurred in diagnosis and treatment of infertility, including medications, surgery, in vitro fertilization, embryo transfer, artificial insemination, gamete intrafallopian transfer, zygote intrafallopian transfer, intracytoplasmic sperm injection and four completed egg retrievals per lifetime of the covered person. The law includes some restrictions as well as a religious exemption for employers that provide health coverage to fewer than 50 employees. (SB 1076)

New York: N.Y. Insurance Law § 3216 (13), § 3221 (6) and § 4303(1990, 2002, 2011) prohibit individual and group health insurance policies from excluding coverage for hospital care, surgical care, and medical care for diagnosis and treatment of correctable medical conditions otherwise covered by the policy solely because the medical condition results in infertility. The laws were

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[83] Marilyn Moon and Ben Steffen, "Study of Mandated Health Insurance Services: A Comparative Evaluation" Maryland Health Care Commission, January 1, 2012. http://dlslibrary.state.md.us/publications/Exec/DHMH/MHCC/IN15-1502(a)(4)_2012.pdf Accessed January 28, 2019.

[84] Daniel Hemel, "Insurance companies should be required to cover in vitro fertilization" The Washington Post, November 15, 2018. https://www.washingtonpost.com/outlook/2018/11/15/insurance-coverage-vitro-fertilization-should-be-mandatory/?utm_term=.2a81fa5f049a Accessed January 30, 2019.

[85] Coalition to Help Families Struggling with Infertility. https://resolve.org/wp-content/uploads/2017/09/ivf-cost-fact-sheet.pdf Accessed January 30, 2019

amended in 2002 to require certain insurers to cover infertility treatment for women between the ages of 21 and 44 years. The laws exclude coverage for in vitro fertilization, gamete intrafallopian tube transfers, and zygote intrafallopian tube transfers. The laws were amended again in 2011 by N.Y. laws, Chap. 598 to require every policy that provides coverage for prescription fertility drugs and requires or permits prescription drugs to be purchased through a network participating mail order or other non-retail pharmacy to provide the same coverage for prescription fertility drugs that are purchased from a network participating non-mail order retail pharmacy provided that the network participating non-mail order retail pharmacy agrees in advance to the same reimbursement amount and the same terms and conditions that the insurer has established for a network participating mail order or other non-retail pharmacy. The policy is prohibited from imposing additional fees, co-payments, co-insurance, deductibles, or other conditions on any insured person who elects to purchase prescription fertility drugs through a non-mail order retail pharmacy. (2011 AB 8900)

N.Y. Public Health Law § 2807-v (2002) creates a grant program to improve access to infertility services, treatments, and procedures from the tobacco control and insurance initiatives pool.

N.Y. passed a bill to update the state's infertility insurance mandate to include up-to-date treatments, including IVF, which is currently excluded. The bill adds coverage for standard fertility preservation treatments for those facing iatrogenic infertility.[86]

Ohio: Ohio Rev. Code Ann. § 1751.01 (A)(1)(h) (1991) requires health maintenance organizations (HMOs) to provide basic health care services, which are defined to include infertility services, when medically necessary.

Rhode Island: R.I. Gen. Laws § 27-18-30, § 27-19-23, § 27-20-20 and § 27-41-33 (1989, 2007) require any contract, plan or policy of health insurance (individual and group), nonprofit hospital service, nonprofit medical service and health maintenance organization to provide coverage for medically necessary expenses for the diagnosis and treatment of infertility. The law clarifies that the co-payments for infertility services may not exceed 20 percent. Infertility is defined as the condition of an otherwise healthy married individual who is unable to conceive or produce conception during a period of one year. Rhode Island includes IVF coverage. The law was amended in 2007 to increase the age of coverage for infertility from forty (40) to forty-two (42) and redefines infertility to mean a woman who is unable to sustain pregnancy during a period of one year. (2007 R.I. Pub. Laws, Chap. 411, SB 453.

Rhode Island has passed legislation requiring that, "Any health insurance contract, plan, or policy delivered or issued for delivery or renewed in this state, except contracts providing supplemental coverage to Medicare or other governmental programs, which includes pregnancy related benefits, shall provide coverage for medically necessary expenses of diagnosis and treatment of infertility for women between the ages of twenty-five (25) and forty-two (42) years and for standard fertility preservation services when a medically necessary medical treatment may directly or indirectly

[86] Joyce Reinecke, JD. "States Add Coverage Mandates to Cover Infertility Treatment following Cancer Treatments". National Academy for State Health Policy. November 20, 2018. https://nashp.org/states-add-coverage-mandates-to-cover-infertility-treatment-following-cancer-treatments/ Accessed January 28, 2019

cause iatrogenic infertility to a covered person."[87]

Per patient advocate Christie Gross, when similar IVF bills passed in Rhode Island and Connecticut premiums in both states increased less than $2.00 PMPM[88].

Texas: Tex. Insurance Code Ann. § 1366.001 et seq. (1987, 2003) requires that all health insurers offer and make available coverage for services and benefits for expenses incurred or prepaid for outpatient expenses that may arise from in vitro fertilization procedures. In order to qualify for in vitro fertilization services, the couple must have a history of infertility for at least five years or have specified medical conditions resulting in infertility. The law includes exemptions for religious employers.

Utah: 2014 Utah Laws, Chap. 353 (HB 347) amended § 31A-22-610.1, which requires insurers that provide coverage for maternity benefits to also provide an adoption indemnity benefit of $4,000 for a child placed for adoption with the insured within 90 days of the child's birth. The law was amended to allow an enrollee to obtain infertility treatments rather than seek reimbursement for an adoption. If the policy offers optional maternity benefits, then it must also offer coverage for these indemnity benefits under certain circumstances.

West Virginia: W. Va. Code § 33-25A-2 (1995) amends the 1997 law and requires health insurers to cover basic health care services, which include infertility services. Applies to health maintenance organizations (HMOs) only.

[87] State of Rhode Island. "2017 – S 0821 Substitute A." April 26, 2017. http://webserver.rilin.state.ri.us/BillText/BillText17/SenateText17/S0821A.pdf. Accessed September 26, 2017.

[88] Meredith Newman, "Senate bill would cover IVF, all fertility treatments for Delawareans" Delaware online, March 27, 2018. https://www.delawareonline.com/story/news/health/2018/03/25/senate-bill-would-cover-ivf-all-fertility-treatments-delaware/425921002/ Access January 20, 2019

Appendix C: Letter from the Committee on Health Coverage, Insurance and Financial Services with Proposed Legislation

STATE OF MAINE
ONE HUNDRED AND THIRTIETH LEGISLATURE
COMMITTEE ON HEALTH COVERAGE, INSURANCE AND FINANCIAL SERVICES

June 30, 2021

Eric A. Cioppa
Superintendent
Bureau of Insurance
34 State House Station
Augusta, Maine 04333

Dear Superintendent Cioppa:

Title 24-A Maine Revised Statutes Annotated, Section 2752 requires the Joint Standing Committee on Health Coverage, Insurance and Financial Services to submit legislation proposing health insurance mandates to the Bureau of Insurance for review and evaluation if there is substantial support for the mandate among the committee after a public hearing on the proposed legislation. Pursuant to that statute, we request that the Bureau of Insurance prepare a review and evaluation of **LD 1539, An Act To Provide Access to Fertility Care,** using the bill as amended by the sponsor, Rep. Madigan. A copy of the proposed amendment is attached.

As drafted, LD 1539 requires carriers offering health plans in this State to provide coverage for fertility diagnostic care, for fertility treatment if the enrollee is a fertility patient and for fertility preservation services. The committee also considered a related bill, LD 922, An Act to Help Cancer Patients with Fertility Preservation, which requires insurance carriers offering health plans in this State to provide coverage for fertility preservation services when necessary cancer treatment may directly or indirectly cause infertility. We ask that you review and evaluate the impact of both bills using the guidelines set out in Title 24-A § 2752. In addition, we ask that the Bureau provide an analysis of the extent to which the bills expand coverage beyond the State's essential benefits package and, if so, the estimated costs to the State to defray the costs of including the coverage in qualified health plans

Please submit the report to the committee no later than January 1, 2022 so the committee can take final action on LD 1539 before the end of the Second Regular Session. If you have any questions, please do not hesitate to contact us or our legislative analyst, Colleen McCarthy Reid.

Sincerely,

Sen. Heather B. Sanborn
Senate Chair

Rep. Denise A. Tepler
House Chair

Enclosure: Proposed Committee Amendment to LD 1539

cc: Marti Hooper, Bureau of Insurance
Rep. Colleen Madigan

Appendix D: LD 922

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Fertility preservation services" means fertility preservation procedures consistent with established medical practice and professional guidelines published by the American Society for Reproductive Medicine or the American Society of Clinical Oncology or their successor organizations.

B. "Iatrogenic infertility" means an impairment of fertility caused by surgery for the treatment of cancer, radiation, chemotherapy or any other cancer treatment affecting reproductive organs or processes.

2. Required coverage. Except as provided in subsection 4, a carrier offering a health plan in this State shall provide coverage for fertility preservation services for an enrollee who is at least 18 years of age and has been diagnosed with cancer for which necessary cancer treatment may directly or indirectly cause iatrogenic infertility.

3. Limits; deductible; copayment; coinsurance. A health plan that provides coverage required by this section may contain provisions for maximum benefits and coinsurance and reasonable limitations, deductibles and exclusions to the extent that these provisions are not inconsistent with the requirements of this section.

4. Exclusion for religious employer. A religious employer may request and a carrier shall grant an exclusion under the policy or contract for the coverage required by this section if the required coverage conflicts with the religious employer's bona fide religious beliefs and practices. A religious employer that obtains an exclusion under this subsection shall provide prospective enrollees and enrollees under its policy written notice of the exclusion. For the purposes of this section, "religious employer" means an employer that is a church, a convention or association of churches or an elementary or secondary school that is controlled, operated or principally supported by a church or by a convention or association of churches as defined in 26 United States Code, Section 3121(w)(3)(A) and that qualifies as a tax-exempt organization under 26 United States Code, Section 501(c)(3).

Sec. 2. Application. This Act applies to all policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State on or after January 1, 2022. For purposes of this Act, all contracts are deemed to be renewed no later than the next yearly anniversary of the contract date.

SUMMARY

This bill requires insurance carriers offering health plans in this State to provide coverage for fertility preservation services when necessary cancer treatment may directly or indirectly cause infertility. The requirements of the bill apply to health plans issued or renewed on or after January 1, 2022.

Appendix E: LD 1539

LD 1539
Draft Proposed Amendment
Proposed by Sponsor, Rep, Madigan
For HCIFS Consideration

PROPOSED AMENDMENT to LD 1539,
An Act To Provide Access to Fertility Care

Note: Changes from original bill are shown by strike through and in bold italics

Sec. 1. 24-A MRSA §4320-Q is enacted to read:

§4320-Q. Coverage for fertility services

1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings.

A. "Experimental fertility procedure" means a procedure for which the published medical evidence is not sufficient for the American Society for Reproductive Medicine, its successor organization or a comparable organization to regard the procedure as established medical practice.

B. "Fertility diagnostic care" means procedures, products, medications and services intended to provide information about an individual's fertility, including laboratory assessments and imaging studies.

C. "Fertility patient" means an individual or couple with infertility, ***an individual or couple who is at increased risk of transmitting a serious inheritable genetic or chromosomal abnormality to a child,*** or an individual unable to conceive as an individual or with a partner because the individual or couple does not have the necessary gametes for conception.

D. "Fertility preservation services" means procedures, products, medications and services, intended to preserve fertility, consistent with established medical practice and professional guidelines published by the American Society for Reproductive Medicine, its successor organization or a comparable organization for an individual who has a medical or genetic condition or who is expected to undergo treatment that may directly or indirectly cause a risk of impairment of fertility. "Fertility preservation services" includes the procurement and cryopreservation of gametes, embryos and reproductive material and storage from the time of cryopreservation for a period of 5 years. Storage may be offered for a longer period of time.

E. "Fertility treatment" means procedures, products, medications and services intended to achieve pregnancy ***that results in a live birth with healthy outcomes and is provided in a manner*** consistent with established medical practice and professional guidelines published by the American Society for Reproductive Medicine, its successor organization or a comparable organization.

F. "Gamete" means a cell containing a haploid complement of deoxyribonucleic acid that has the potential to form an embryo when combined with another gamete. "Gamete" includes sperm and eggs.

G. "Infertility" means the presence of a demonstrated condition recognized by a provider as a cause of loss or impairment of fertility or a couple's inability to achieve pregnancy after 12 months of unprotected intercourse when the couple has the necessary gametes for conception, including the loss of a pregnancy occurring within that 12-month period, or after a period of less than 12 months due to

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a person's age or other factors. Pregnancy resulting in a loss does not cause the time period of trying to achieve a pregnancy to be restarted.

2. Required coverage. A carrier offering a health plan in this State shall provide coverage as provided in this subsection to an enrollee:

A. For fertility diagnostic care;

B. For fertility treatment if the enrollee is a fertility patient; and

C. For fertility preservation services.

Coverage under this subsection must include evaluations, laboratory assessments, medications and procedures intended to achieve pregnancy, including but not limited to the procurement of donor gametes. Coverage must be provided to the same extent that coverage is provided for other medical services or prescription drugs. Coverage under this subsection may not be denied to any enrollee who foregoes a particular fertility treatment or fertility preservation service if a provider determines that such fertility treatment or fertility preservation service is likely to be unsuccessful.

3. Limitations on coverage. A health plan that provides coverage for the services required by this section may include reasonable limitations to the extent that these provisions are not inconsistent with the following requirements.

A. A carrier may not impose deductibles, copayments, coinsurance, maximum benefits, waiting periods or other limitations that are different from those that are imposed on coverage for other services under the health plan or any limitations on coverage for prescribed fertility medication that are different from those that are imposed on other prescription medication.

B. A carrier may not use any prior diagnosis or prior fertility treatment as a basis for excluding, limiting or otherwise restricting the availability of coverage required by this section.

C. A carrier may not impose any limitations on coverage for any fertility services based on an enrollee's use of donor gametes, donor embryos or surrogacy.

D. A carrier may not impose any limitations on coverage solely based on arbitrary factors, such as number of conception attempts, dollar amounts or age of an enrollee, or provide different benefits to or impose different requirements on a class of persons protected under Title 5, chapter 337 than those limitations placed on other enrollees.

E. Any limitations imposed by a carrier must be based on an enrollee's medical history and clinical guidelines. Any clinical guidelines used by a carrier must be maintained in written form and must be made available to an enrollee in writing upon request. Clinical guidelines developed by the American Society for Reproductive Medicine, its successor organization or a comparable organization may serve as a basis for a carrier's clinical guidelines. Making, issuing, circulating or causing to be made, issued or circulated any clinical guidelines that are based on data that are not reasonably current or that do not cite with any specificity any reference relied upon constitutes an unfair or deceptive act or practice in the business of insurance pursuant to section 2152.

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4. Certain services not required. This section does not require a carrier to provide coverage for:

A. Any experimental fertility procedure; or

B. Any nonmedical costs related to donor gametes, donor embryos or surrogacy.

5. Rules. The superintendent shall adopt rules as necessary to implement the requirements of this section. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A.

Sec. 2. Application. This Act applies to all policies, contracts and certificates executed, delivered, issued for delivery, continued or renewed in this State on or after January 1, 2023. For purposes of this Act, all contracts are deemed to be renewed no later than the next yearly anniversary of the contract date.

SUMMARY

This bill requires carriers offering health plans in this State to provide coverage for fertility diagnostic care, for fertility treatment if the enrollee is a fertility patient and for fertility preservation services. The requirements of the bill apply to health plans issued or renewed on or after January 1, 2023.