

# Key Findings:

## Analysis of California Senate Bill 600 Fertility Preservation

Summary to the 2019–2020 California State Legislature, April 17, 2019



### AT A GLANCE

The version of California Senate Bill (SB) 600 analyzed by CHBRP would require coverage for medically necessary expenses for standard fertility preservation services when a medically necessary treatment may directly or indirectly cause iatrogenic infertility.

1. CHBRP estimates that, in 2020, of the 24.5 million Californians enrolled in state-regulated health insurance, 16.9 million of them will have insurance subject to SB 600.
2. **Benefit coverage.** Some fertility preservation services are provided as part of cancer treatment and CHBRP assumes 100% of enrollees have coverage for these standard services. However, 0.9% of enrollees currently have benefit coverage for sperm, oocyte, and embryo cryopreservation, which are classified as standard fertility preservation services by ACSO and ASRM. Benefit coverage would increase to 100% postmandate. SB 600 is unlikely to exceed the essential health benefits.
3. **Utilization.** The number of enrollees utilizing sperm, oocyte, and embryo cryopreservation services would increase from 1,102 premandate to 1,753 postmandate.
4. **Expenditures.** Total expenditures would increase by \$6,773,000 (0.0043%).
  - a. This is due to premium increases of \$8,263,000 and increases in enrollee out-of-pocket expenses of \$3,244,000, offset by a decrease of enrollee expenses for noncovered services of \$4,734,000.
5. **Medical effectiveness.** The medical effectiveness review found there is:
  - a. Preponderance of evidence that **sperm, oocyte, and embryo** cryopreservation is an effective method of fertility preservation.

### AT A GLANCE, Cont.

6. **Public health.** SB 600 could potentially increase the rate of physician referrals for fertility counseling and preservation by providing coverage for such services and reducing out-of-pocket costs for patients potentially experiencing iatrogenic infertility.
7. **Long-term impacts.** Use of cryopreservation will lead to some increased utilization of infertility treatments to achieve pregnancy among the affected enrollees. CHBRP estimates utilization of cryopreservation services in 2020 would result in additional 86 live births over a 20-year period.

### CONTEXT

Iatrogenic infertility is medically induced infertility caused by a medical intervention used to treat a primary disease or condition. Iatrogenic infertility is typically caused by cancer treatments, such as radiation and chemotherapy (gonadotoxic treatments) or surgical removal of reproductive organs. Approximately 90% of iatrogenic infertility is caused by cancer treatment.<sup>1</sup> Including services specified by the American Society of Clinical Oncology (ASCO) and American Society for Reproductive Medicine (ASRM) guidelines, SB 600 would require coverage of: fertility preservation consultation; sperm, oocyte, and embryo cryopreservation; and services as part of or concurrent with cancer treatment for persons likely to experience iatrogenic infertility.

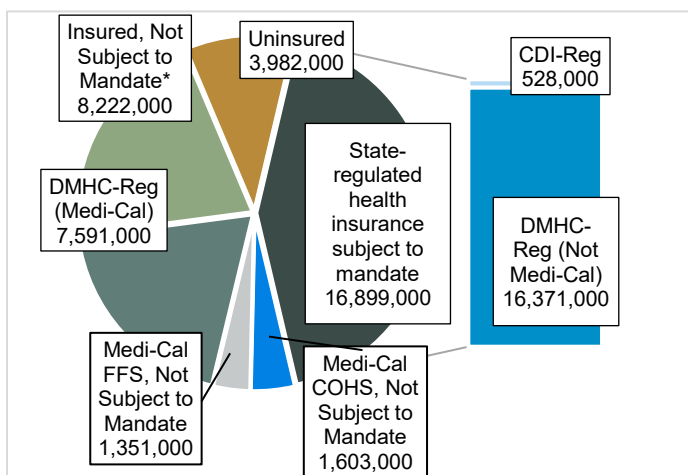
CHBRP assumes that enrollees have coverage for fertility preservation consultation and services that are part of or concurrent with cancer treatment; therefore, this report focuses on the impacts of requiring plans and policies to cover sperm, oocyte, and embryo cryopreservation.

<sup>1</sup> Refer to CHBRP's full report for full citations and references.

## BILL SUMMARY

SB 600 would require coverage for medically necessary expenses for standard fertility preservation services when a medically necessary treatment may directly or indirectly cause iatrogenic infertility. SB 600 also provides definitions of iatrogenic infertility, medical treatment that may directly or indirectly cause iatrogenic infertility, standard fertility preservation services, and medical necessity. Figure A notes how many Californians have health insurance that would be subject to SB 600.

**Figure A.** Health Insurance in CA and SB 600



Source: California Health Benefits Review Program, 2019.  
Notes: \*Medicare beneficiaries, enrollees in self-insured products, etc.

## IMPACTS

### Benefit Coverage, Utilization, and Cost

Standard fertility preservation services that do not involve cryopreservation, such as ovarian transposition, are covered by insurance as part of standard cancer treatment. Hence, in this analysis CHBRP focused on examining specifically the coverage of cryopreservation of sperm, mature oocytes, and embryos, including all procedures to harvest the materials and storage for 1 year, among enrollees in DMHC-regulated health plans and CDI-regulated policies in California.

#### Benefit Coverage

Currently, 0.9% of enrollees with health insurance that would be subject to SB 600 have coverage for cryopreservation services for sperm, mature oocytes, and

embryos. Postmandate, the coverage for cryopreservation would increase to 100%.

#### Utilization

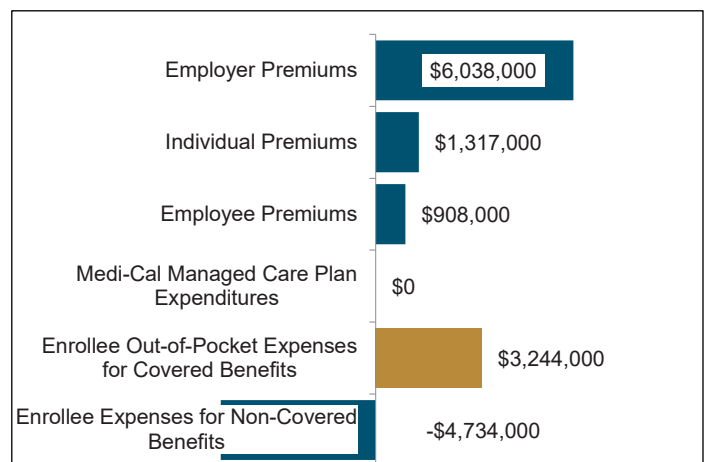
CHBRP estimates that in the first year postmandate, SB 600 would result in 792 male and 961 female enrollees with cancer using cryopreservation services.

Of the 792 male users postmandate, 136 enrollees would be new users of sperm cryopreservation. The estimated 639 male cryopreservation users at baseline using cryopreservation without coverage would experience financial relief postmandate, because coverage would be available to them. Of the 961 female users postmandate, 516 enrollees would be new users (123 new users of embryo cryopreservation and 392 new users of mature oocyte cryopreservation). A total of 428 female enrollees (102 users of embryo cryopreservation and 326 of mature oocyte cryopreservation) would use cryopreservation with coverage postmandate, whereas they were using the services without coverage at baseline.

#### Expenditures

SB 600 would increase net annual expenditures by total net annual \$6,773,000 or total net annual 0.0043% for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to a \$8,263,000 increase in total health insurance premiums paid by employers and enrollees for newly covered benefits, adjusted by a \$4,734,000 decrease in enrollee expenses for noncovered benefits.

**Figure B.** Expenditure Impacts of SB 600



Source: California Health Benefits Review Program, 2019.

## Enrollee Out-of-Pocket Spending

About 10% of enrollees in the nongrandfathered large group and 100% of enrollees in the Covered California individual markets with coverage for cryopreservation have the same cost-sharing structure as major medical services. CHBRP assumed the cost-sharing structure for cryopreservation would involve a 50% coinsurance, based, for all other enrollees. Cost-sharing impacts (not including premiums) among enrollees using cryopreservation would range from \$184 for CalPERS HMO enrollees to \$1,051 for enrollees in small group plans.

## Medi-Cal

SB 600 does not apply to Medi-Cal beneficiaries, and therefore, there would be no impact.

## CalPERS

Premium employer expenditures would increase by \$271,000 (0.0087%) for CalPERS enrollees. Enrollees would also see a corresponding increase in employee premiums and out-of-pocket expenses, but a decrease in enrollee expenses for noncovered benefits.

## Number of Uninsured in California

SB 600 would not result in premium increases of more than 1%, and therefore, there would be no measurable impact on the number of uninsured in California.

## Medical Effectiveness

Recommendations issued by the ASCO in July 2018 indicate that cryopreservation is considered standard practice for fertility preservation in cancer patients. As discussed above, cryopreservation is not a widely covered form of fertility preservation. Therefore, the *Medical Effectiveness* review examined whether sperm, oocyte, and embryo cryopreservation services used for fertility preservation resulted in pregnancy and live births, among other outcomes.

- There is a *preponderance of evidence* that **sperm, oocyte, and embryo cryopreservation** are effective methods of preserving fertility.

Other standard fertility preservation services, such as shielding and ovarian transposition, are all covered by

insurance as part of standard cancer treatment. Additional fertility preservation services — ovarian suppression with hormones for female breast cancer patients, cryopreservation of ovarian tissue and testicular tissue, testicular suppression with hormones during radiation, and maturation of oocytes outside of the body — are either considered experimental or not broadly recommended.

## Public Health

SB 600 would likely improve the quality of life by reducing regret about fertility outcomes, dissatisfaction, and distress for the additional 651 enrollees newly using fertility preservation services to prevent iatrogenic infertility. SB 600 could potentially increase the rate of physician referrals for fertility counseling and preservation by providing coverage for such services and reducing out-of-pocket costs for patients experiencing iatrogenic infertility.

In California, females have twice the rate of cancers with treatments causing iatrogenic infertility as males; furthermore, females pay 23 times more for uncovered fertility preservation services than males. Postmandate, SB 600 would decrease the gender disparity by reducing the financial burden, thereby bringing costs between genders to parity, and reduce the cost consideration from a woman's decision-making process regarding iatrogenic infertility risk. However, CHBRP estimates that some females would still face greater out-of-pocket expense burdens than males, postmandate, due to differences in costs of sex-specific preservation methods (e.g., more office visits, prescription drug cost, procedure costs) and insurance cost-sharing structures.

## Long-Term Impacts

When the enrollee is ready to use the cryopreserved material at some point in the future, they would incur costs associated with infertility treatments, such as in vitro fertilization. Costs for this treatment incurred by the enrollee would be dependent on whether or not infertility treatment is covered by insurance and the level of coverage. Use of cryopreservation will lead to some increased utilization of infertility services to achieve pregnancy among the affected enrollees. CHBRP estimates utilization of cryopreservation services in 2020 would result in additional 86 live births over a 20-year period.

## Essential Health Benefits and the Affordable Care Act

SB 600 is unlikely to exceed EHBs. DMHC confirmed to CHBRP that under existing law, fertility preservation to

address potential iatrogenic infertility is a basic health care service within the meaning of Health and Safety Code section 1345(b) when medically necessary for the enrollee.