CENTER FOR HEALTH
INFORMATION AND ANALYSIS

SENATE BILL 483 AND HOUSE BILL 948 SUBMITTED TO THE 189TH GENERAL COURT: AN ACT RELATIVE TO WOMEN'S HEALTH AND ECONOMIC EQUITY

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TABLE OF CONTENTS

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BENEFIT MANDATE OVERVIEW: S.B. 483/H.B. 948: AN ACT RELATIVE TO WOMEN'S HEALTH AND ECONOMIC EQUITY

HISTORY OF THE BILL

The Senate Committee on Financial Services referred Senate Bill (S.B.) 483, "An Act relative to women's health and economic equity," sponsored by Senator Chandler of Worcester in the 189th General Court, to the Center for Health Information and Analysis (CHIA) for review.[1] The bill is identical to House Bill 948,[2] sponsored by Representative Scibak of South Hadley and Representative Sannicandro of Ashland, and the two bills will be referenced as one. Massachusetts General Laws, chapter 3, section 38C requires CHIA to review and evaluate the potential fiscal impact of each mandated benefit bill referred to the agency by a legislative committee.

WHAT DOES THE BILL PROPOSE?

Massachusetts S.B. 483,[3] as submitted in the 189th General Court, would repeal and replace the current health insurance benefit mandate regarding hormone replacement therapy (HRT) and contraceptive services.[4] Subsequent to referral of the bill to CHIA for review, CHIA and its consultants discussed the intent of the bill with sponsoring legislators and staff. This review reflects the stated intent of the sponsors, even if that intent differs from the draft's wording. The sponsors intend to:

- Leave untouched the effect of the existing mandate statute on coverage for HRT drugs and related services for peri- and post-menopausal women.
- Require coverage for voluntary female sterilization and U.S. Food and Drug Administration (FDA)-approved contraceptive drugs and devices for women, when lawfully prescribed. If versions, covered by the plan, of an FDA-approved contraceptive drug, device, or product are not available or are deemed medically inadvisable by a member's provider, require the plan to cover an alternative.
- Require coverage for FDA-approved emergency contraceptive pills available lawfully over-the-counter (OTC) without a prescription, but not for other OTC drugs/devices.
- Prohibit plans from requiring the member to use one method or version before she is eligible for coverage of an alternative if she and the provider deem the alternative advisable.
- Require coverage for services associated with drugs and devices for which coverage is mandated, including education, counseling, insertion and removal of devices, and follow-up.
- Prohibit member cost-sharing (copayment, coinsurance, or requiring payment toward a deductible) for the mandated contraceptive services, drugs, and devices.
- Exempt employers that are churches or qualified church-controlled organizations from the provisions regarding contraceptive services, drugs, and devices.
- Exclude from this mandate any requirements for coverage for contraceptives or sterilization for men.

MEDICAL EFFICACY OF S.B. 483

In general, when used correctly and consistently, contraceptives are effective at preventing unintended pregnancies and related negative health impacts on women and children.[5] Contraceptive effectiveness varies by method: permanent sterilization is most effective, and the next most effective contraceptives are long-acting reversible methods.[6] Consistent and effective use of contraception can be improved by reducing cost and other barriers to access, as well as by providing women with access to methods that are medically-appropriate and consistent with their social, cultural, emotional, and sexual lifestyles.[7,8,9]

CURRENT COVERAGE

Current Massachusetts law requires insurers to cover outpatient contraceptive services, including "consultations, examinations, procedures and medical services provided on an outpatient basis and related to the use of all contraceptive methods to prevent pregnancy that have been approved by the United States Food and Drug Administration."[10] Under the federal Patient Protection and Affordable Care Act (ACA), non-grandfathered health insurance plans must fully cover the costs of contraceptive methods and counseling for all women, as prescribed by a health care provider.[11] When provided by an in-network provider, these services shall require no patient cost-sharing. Coverage must include at least one method from each of 18 categories[12] of clinician-prescribed contraception for women approved by the FDA, and, if the method covered without cost-sharing within a given category is not medically appropriate, the plan must have a mechanism for waiving the cost-sharing applicable to a method that is appropriate.[13] Over-the-counter contraception obtained without a prescription, drugs to induce abortions, and sterilization surgery for men are not included in the ACA benefit language. Health plans sponsored by certain exempt religious organizations may not be covered and may require out-of-pocket payment. Some non-profit religious organizations that certify religious objections do not have to contract, arrange, pay, or refer for contraceptive coverage; for these types of organizations, insurers or third party administrators may make separate payments for contraceptive services to in-network providers without patient cost sharing.

In responses to a recent survey of insurance carriers in Massachusetts, the majority reported that they cover at least one method of prescribed contraception per FDA category without cost-sharing, and one carrier currently covers all prescribed contraceptive methods as well as over-the-counter emergency contraception without cost-sharing. Generic oral contraceptives and single-source brand names (where no generic equivalent is available) are also generally covered without cost-sharing, while brand name oral contraceptives are most often covered and subject to each plan's pharmacy tier cost-sharing. Some carriers report a small number of religiously-exempted groups; members of a portion of these groups do receive contraception coverage under carrier administrative benefits.

COST OF IMPLEMENTING THE BILL

Requiring coverage for this benefit by fully-insured health plans would result in an average annual increase, over five years, to the typical member's monthly health insurance premiums of between $0.15 (0.031%) and $0.26 (0.054%). The increase is driven largely by the provisions of S.B. 483 eliminating cost sharing for all FDA-approved prescribed contraception for women, plus its coverage for OTC emergency contraceptives. More specifically, the largest contributor to the increase is the requirement that providers cover all versions of prescribed, FDA-approved oral contraceptives without cost-sharing.

The Massachusetts Division of Insurance and the Commonwealth Health Insurance Connector Authority are responsible for determining any potential state liability associated with the proposed mandate under Section 1311 of the Affordable Care Act (ACA).

PLANS AFFECTED BY THE PROPOSED BENEFIT MANDATE

The stated intent of the sponsors, in response to questions submitted to them about the scope of the bill, is that this proposed mandate apply to the widest population reachable by a state-level insurance mandate. Therefore this review addresses coverage in commercial fully-insured health insurance plans, including individual and group accident and sickness insurance policies, corporate group insurance policies, HMO coverage, student health plans, and plans grandfathered as exempt from the essential health benefit requirements of the ACA, and to both fully- and self-insured plans operated by the Group Insurance Commission (GIC) for the benefit of public employees. (The bill as drafted made no reference the GIC.) The proposed mandate as drafted affects Medicaid/MassHealth; however, CHIA's analysis does not estimate the potential effect of the mandate on Medicaid expenditures.

PLANS NOT AFFECTED BY THE PROPOSED BENEFIT MANDATE

Self-insured plans (i.e., where the employer or policyholder retains the risk for medical expenses and uses a third-party administrator or insurer only to provide administrative functions), except for those provided by the GIC, are not subject to state-level health insurance mandates. State mandates do not apply to Medicare and Medicare Advantage plans, the benefits of which are qualified by Medicare. This analysis excludes members of commercial fully-insured plans over 64 years of age. State mandates also do not apply to federally-funded plans including TRICARE (covering military personnel and dependents), the Veterans Administration, and the Federal Employee's Health Benefit Plan.

MEDICAL EFFICACY ASSESSMENT

Massachusetts Senate Bill (S.B.) 483,[14] as submitted in the 189th General Court, would repeal and replace the current health insurance benefit mandate regarding hormone replacement therapy (HRT) and contraceptive services.[15] Subsequent to referral of the bill to CHIA for review, CHIA and its consultants discussed the intent of the bill with sponsoring legislators and staff. This review reflects the stated intent of the sponsors, even if that intent differs from the bill's current wording.

The sponsors intend to:

- Leave untouched the effect of the existing mandate statute on coverage for HRT drugs and related services for peri- and post-menopausal women.
- Require coverage for voluntary female sterilization, without cost-sharing (without copayment, coinsurance, or requiring the member to pay an amount toward meeting a deductible — i.e., on the same cost-sharing terms as preventive services).
- Require coverage for FDA-approved contraceptive drugs and devices for women, when lawfully prescribed. If versions, covered by the plan, of an FDA-approved contraceptive drug, device, or product are not available or are deemed medically inadvisable by a member's provider, require the plan to cover an alternate prescribed therapeutically-equivalent FDA-approved version.
- Require coverage for FDA-approved emergency contraceptive pills available lawfully over-the-counter (OTC) even if purchased without a prescription, but not for other OTC drugs/devices purchased without a prescription such as male or female condoms (in accordance with the sponsors' stated intent and in contrast to the bill as drafted, which requires coverage for all OTC methods).
- Prohibit plans from requiring the member to use one method or version before she is eligible for coverage of an alternative if she and the provider deem the alternative advisable (i.e., prohibit plan-imposed "step therapy").
- Require coverage for services associated with the drugs and devices for which coverage is mandated, including education, counseling, insertion and removal of devices, and follow-up.
- Prohibit member cost-sharing for the mandated contraceptive services, drugs, and devices.
- Exempt employers that are churches or qualified church-controlled organizations from the provisions regarding contraceptive services, drugs, and devices.
- Exclude from this mandate any requirements for coverage for contraceptives or sterilization for men (in accordance with the lead sponsor's instructions and in contrast to the bill as drafted, which does not explicitly exclude coverage for men).

M.G.L. c. 3 §38C charges CHIA with reviewing the medical efficacy of proposed mandated health insurance benefits. Medical efficacy reviews summarize current literature on the effectiveness and use of the mandated treatment or service, and describe the potential impact of a mandated benefit on the quality of patient care and the health status of the population.

HORMONE REPLACEMENT THERAPY

S.B. 483, as drafted, would repeal and replace the existing health insurance benefit mandate regarding HRT and related services for peri- and post-menopausal women. The sponsors' intent is to leave untouched the effect of the existing mandate statute on coverage for HRT. Therefore the intent of the bill is to have no effect on the use of HRT or on the quality of patient care or the health status of the population related to HRT, and this review will not address provisions of the bill related to HRT.

CONTRACEPTIVE SERVICES

The United States has an estimated 61 million women ages 15-44;[16] of these, 70 percent are sexually active but do not want to become pregnant.[17] Massachusetts has 1.44 million women of reproductive age, of whom 61 percent are sexually active and do not wish to become pregnant.[18] In the United States, more than half of all pregnancies are estimated to be unintended.[19] Family planning is one of the major objectives of Healthy People 2020, the set of evidence-based national health promotion and disease prevention goals outlined for the next decade by the U.S. Department of Health and Human Services.[20] According to Healthy People, "Family planning is one of the 10 great public health achievements of the 20th century. The availability of family planning services allows individuals to achieve desired birth spacing and family size and contributes to improved health outcomes for infants, children, and women."[21]

The benefits of contraception include improved women's health and well-being, reduced maternal mortality, health benefits for mother and child associated with spacing pregnancy, female workforce engagement, and economic self-sufficiency.[22] Additionally, contraceptive use may decrease menstrual period pain and bleeding, and reduce gynecological disorder risks, including those for ovarian and endometrial cancers.[23] The negative consequences of unintended pregnancies are numerous. They include: delays in initiating prenatal care; the increased risk of tobacco and alcohol use and of physical violence during pregnancy; premature birth and low birth weight; reduced likelihood of breastfeeding; poor maternal mental health; and lower relationship quality between mother and child.[24,25] Some studies show that children born from an unintended pregnancy may be more likely to suffer from poor physical and mental health in childhood, and may attain lower educational and behavioral outcomes.[26,27,28,29,30,31,32]

Outcomes are worse for unintended pregnancies in teen mothers; 82 percent of pregnancies among mothers age 15 to 19 are unintended.[33] An adolescent who experiences an unintended pregnancy is less likely to graduate from high school or attain a GED by age 30, and will earn approximately $3500 less per year on average than her peers who delay having children; teen fathers experience similarly lower educational achievement and income.[34,35] Teen mothers, on average, receive twice as much federal aid for twice as long as non-parent teens.[36] Finally, children of teenagers have more behavioral problems and lower cognitive abilities than others, on average; in fact, sons of teen mothers are more likely to be incarcerated, while daughters are more likely to become pregnant as teens.[37]

Furthermore, adequate pre-pregnancy planning allows women to receive appropriate preconception care, the importance of which is becoming increasingly evident. Care provided before pregnancy allows providers to reduce the risks of pregnancy to women, as well as some pre-term births and their associated birth defects.[38]

MEDICAL EFFECTIVENESS OF CONTRACEPTION

Contraceptive drugs and devices, used consistently and correctly, and paired with appropriate associated examination and consultation services, can play a significant role in family planning. While 30 percent of women do not need a contraceptive method,[39] 8 percent of women are at risk of unintended pregnancy but are not using contraception.[40] Of the women not using contraception and at risk of unintended pregnancy, larger percentages are under 20 years of age, have never married, and are black.[41]

The remaining 62 percent of women of reproductive age are currently using a contraceptive method.[42] While almost half of women with an unintended pregnancy report using some form of contraception,[43] 67 percent of women at risk of unintended pregnancy use contraception consistently and correctly, and account for only 5 percent of unintended pregnancies.[44] Proper use of the most effective methods of contraception "virtually eliminates" the risk of unintended pregnancy, while using any method reduces the chances by 85 percent.[45]

Slightly more than half of pregnancies in the United States each year are unintended; of these, research shows that 95 percent are in women either not using contraception or using it inconsistently.[46] Most women (64 percent) who use contraception rely on non-permanent methods, while the remainder rely on male or female sterilization.[47]

Success rates depend on either permanency or consistency of use; permanent sterilization methods result in a failure rate of less then 1 percent with typical use, while other methods vary widely, from 1 percent failure rates for implants to 28 percent failure rates for spermicide alone with typical use. However, by preventing unintended pregnancies, "[c]ompared with nonuse, even with a time horizon as short as 1 year, use of any method [of contraception]…results in financial savings and health gains."[48] Table 1 summarizes the estimated number of users of each type of contraception and the expected proportion of pregnancies expected for each.

TABLE 1 METHODS OF BIRTH CONTROL[49,50,51]

Method	Users # (000s)	Users Percent	Number of pregnancies expected per 100 women[52] Perfect use	Number of pregnancies expected per 100 women[52] Typical use
FDA-APPROVED METHODS				
Permanent				
Sterilization Implant for Women (Transcervical Surgical Sterilization Implant)	492[i]	1.3[i]	0.05	0.05
Sterilization surgery for men	3,084	8.2	0.10	0.15
Sterilization Surgery for Women, Surgical Implant (Transabdominal Surgical Sterilization)	9,443	25.1	0.5 (tubal only)	0.5 (tubal only)
Implant				
Implantable rod	492[i]	1.3[i]	<1	N/A
Intrauterine Device (IUD) w/progestin	3,884	10.3	0.2	0.2
IUD copper			0.6	0.8
Hormonal				
Shot/injection	1,697	4.5	0.2	6
Oral contraceptives/combined pill, progestin only and extended/continuous use	9,720	25.9	0.3	9
Patch	217	0.6	0.3	9
Vaginal contraceptive ring	759	2.0	0.3	9
Barrier				
Diaphragm w/spermicide	133[ii]	0.4[ii]	6	12
Sponge w/spermicide			9/20	12/24
Cervical cap w/spermicide			N/A	17/23
Male condom	5,739	15.3	2	18
Female condom	N/A	N/A	5	21
Spermicide alone	N/A	N/A	18	28
Emergency Contraception				
Plan B, Plan B One Step, Next Choice	91	0.2	88 percent[iii]	
Ella			60-70 percent[iii]	
OTHER METHODS				
Withdrawal	1,817	4.8	4	22
Fertility awareness-based[iv]	509	1.4	0.4-5	24
No method, at-risk of unintended pregnancy	4,175	N/A	85	85
No method, not at risk	19,126	N/A	N/A	N/A

i User number combines permanent sterilization implant and removable implantable rod.
ii Also includes female condom, foam, suppository, jelly/cream, and other methods.
iii Prevents pregnancy in percent of women who would have otherwise become pregnant.
iv Includes cervical mucus methods, body temperature methods, and periodic abstinence.

THE ROLE OF ACCESS

For non-permanent means of contraception, consistency of use directly impacts success in preventing unintended pregnancy; in particular, for oral contraceptives (OCPs), use must be continuous to be effective. Barriers to consistent use for OCPs include associated out-of-pocket costs; dispensing restrictions such as monthly pharmacy visits, which many women find inconvenient; and other access issues.[53,54] Given the efficacy of contraception described in the previous section, to the extent enactment of S.B. 483 would improve access to contraceptives and encourage consistent use, it would have a positive effect on public health.

Overall, insurance coverage is associated with increased use of contraception;[55] however, research has found that, on average, privately insured women paid 60 percent of out-of-pocket costs for OCPs, compared to 33 percent for other prescriptions.[56,57] While women in managed care plans had lower out-of-pocket expenses for OCPs than did women with private insurance but not in managed care plans, women covered by managed care were more likely to obtain only one pack (cycle) of their medication at a time due to insurance plan rules.[58] Research has shown that receiving more cycles of OCPs at a time is associated with more continuous use of the contraceptive, thus increasing the effectiveness of the medication.[59] One study found that women receiving 13 cycles at a time (one year plus one month) were also more likely to receive routine recommended Pap and chlamydia tests and were less likely to have a pregnancy test than women dispensed fewer cycles of medication.[60]

However, in one prospective study that removed financial barriers and offered women their choice of OCPs for three years, many women were still inconsistent in filling their prescriptions.[61] Research indicates that women are less consistent in their contraceptive use when they are not involved in the choice of contraception prescribed by their doctor, and that, to improve consistent use and thus efficacy, addressing women's contraceptive preferences and needs should consider their social, emotional, and sexual lifestyles.[62]

For long-acting reversible contraception (LARC), which are the most effective non-permanent contraceptive methods, the American College of Obstetricians and Gynecologists (ACOG) recommends increasing access to, and removing barriers to providing, contraceptive implants and intrauterine devices (IUDs).[63] These methods are associated with the highest continuation rates of contraceptives, requiring "a single act of motivation for long-term use, eliminating adherence and user dependence from the effectiveness equation."[64] However, research has found that out-of-pocket costs are a barrier to use, even for privately-insured women,[65,66] with one analysis finding that once these barriers were removed, the majority of women choose LARC methods for contraception.[67] These studies, though, were conducted prior to the implementation of the ACA, which has significantly reduced out-of-pocket expenses for these methods and may increase their utilization.[68,69] Therefore, while provisions of S.B. 483 that reduce cost-sharing may further improve use, incremental effects on access and use will more likely be attributable to the ACA.

Research on utilization of permanent sterilization focuses most often on the postpartum period (first 6 to 12 months following childbirth), when women are more likely to choose these methods. A study examining women's contraception in this period found that, while 78 percent preferred either sterilization or LARC, only 30 percent accessed these methods.[70] These researchers concluded that "[w]omen's contraceptive needs could be better met by counseling about all methods, by reducing cost barriers and by making [LARC and permanent sterilization] available at more sites."[71] In a study comparing long-term contraceptive choices for women based on insurance status, researchers found that, of women who received a LARC IUD placement or sterilization within one year of pregnancy, those with public insurance (Medicaid) were more likely to choose permanent sterilization over LARC.[72] Other researchers found that the use of sterilization and LARC varied widely geographically, possibly due to "state policies and funding for family planning services, local medical norms surrounding contraceptive practice, and women's and couples' demand or preference for different methods."[73] These researchers found that women with Medicaid coverage for their delivery were more likely to access female sterilization, LARC, or injectables in the post-partum period than were women with private insurance.[74] Again, however, these studies used data prior to the implementation of the ACA and the mandated expansion of insurance to include permanent sterilization methods for women without cost-sharing. It is unclear how the federal mandates for insurance coverage will impact access to these methods or the decisions of women to choose them, or how S.B. 483 would further change utilization of permanent sterilization.

In a review of the public health impact of emergency contraception on unintended pregnancy rates, one group of researchers concluded that, while EC is effective in preventing pregnancy following unprotected sex or contraceptive failure, and that use has increased "markedly" where EC is available OTC, "barriers to availability and use remain."[75] For example, one study analyzing adolescent access to EC through prescription found that teens were denied access to EC by pharmacists who introduced false barriers to acquiring EC, explained EC availability policies in personal or religious ethical terms, or erroneously informed teens that confidentiality of use was not guaranteed and that their parents must be informed of their use of EC.[76] Other research has shown that, while most but not all pharmacies have EC in stock for immediate access, many provide erroneous information on age restrictions for purchase.[77] While EC is effective at pregnancy prevention, one study concluded that increased access to EC increased the rate of sexually-risky behaviors in young people, including unprotected sex and the number of sexual encounters, as well as the rate of sexually-transmitted diseases (STDs).[78] However, other research found no overall change in unprotected sexual activity and a decrease in multiple partnerships resulting from increased EC access,[79] and no differences in the rate of STDs between women whose access to EC varied.[80,81] This review did not identify research related to issues of access and insurance coverage in relation to EC.

CONCLUSION

In general, when used correctly and consistently, contraceptives are effective at preventing unintended pregnancies and related negative health impacts on women and children. Contraceptive effectiveness varies by method: permanent sterilization is most effective, and the next most effective contraceptives are long-acting reversible methods. Consistent and effective use of contraception, as well as use of more effective methods, can be improved by reducing cost and other barriers to access, as well as by providing women with access to methods that are medically-appropriate and consistent with their social, cultural, emotional, and sexual lifestyles.

ENDNOTES

1 The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 483, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/Senate/S483.

2 The 189th General Court of the Commonwealth of Massachusetts, House Bill 948, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/House/H948.

3 The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 483, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/Senate/S483. The bill is identical to House Bill 948, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/House/H948.

4 M.G.L. c.175 §47W, c.176A §8W, c.176B §4W, c.176G §4O.

5 Guttmacher Institute. State Reproductive Health Profile: Massachusetts 2013. Accessed 1 December 2015: http://www.guttmacher.org/datacenter/profiles/MA.jsp.

6 U.S. Food and Drug Administration (FDA), Office of Women's Health. Birth Control Guide. Accessed 1 December 2015: http://www.fda.gov/downloads/ForConsumers/ByAudience/ForWomen/FreePublications/UCM356451.pdf.

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11 Healthcare.gov. Individuals and Families, Health benefits & coverage, Birth control benefits. Accessed 1 December 2015: https://www.healthcare.gov/coverage/birth-control-benefits/. See also: Coverage of Certain Preventive Services Under the Affordable Care Act; Final Rules. 26 CFR Part 54, 29 CFR Parts 2510 and 2590, 45 CFR Parts 147 and 156. Federal Register 78:127; 2 July 2013. Accessed 1 December 2015: http://www.gpo.gov/fdsys/pkg/FR-2013-07-02/pdf/2013-15866.pdf.

12 U.S. Department of Labor, Employee Benefits Security Administration (EBSA). FAQs about Affordable Care Act Implementation (Part XXVI). Published 15 May 2015; accessed 28 January 2016: http://www.dol.gov/ebsa/faqs/faq-aca26.html#footnotes. FAQ Q4 refers in footnote 12 to the FDA Birth Control Guide:

U.S. Food and Drug Administration (FDA). Birth Control Guide. Accessed 28 January 2016: http://www.fda.gov/downloads/ForConsumers/ByAudience/ForWomen/FreePublications/UCM356451.pdf.

The 18 birth control methods for women covered under the ACA (PHS Act 2713 and its implementing regulations) include: Sterilization surgery; Surgical sterilization implant; Implantable rod; Copper intrauterine device; IUDs with progestin (a hormone); Shot/injection; Oral contraceptives (the pill), with estrogen and progestin; Oral contraceptives with progestin only; Oral contraceptives, known as extended or continuous use that delay menstruation; The patch; Vaginal contraceptive ring; Diaphragm; Sponge; Cervical cap; Female condom; Spermicide; Emergency contraception (Plan B/morning-after pill); Emergency contraception (a different pill called Ella).

13 EBSA: FAQs about Affordable Care Act Implementation Part XII. Published 20 February 2013; accessed 28 January 2016: http://www.dol.gov/ebsa/faqs/faq-aca12.html.

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Actuarial Assessment of Senate Bill 483 and House Bill 948 Submitted to the 189th General Court: "An act relative to women's health and economic equity"

Prepared for
Commonwealth of Massachusetts
Center for Health Information and Analysis

May 2016

Prepared by
Compass Health Analytics, Inc.

Actuarial Assessment of Senate Bill 483 and House Bill 948 Submitted to the 189th General Court: "An act relative to women's health and economic equity"

Table of Contents

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Actuarial Assessment of Senate Bill 483 and House Bill 948 Submitted to the 189th General Court: "An act relative to women's health and economic equity"

Executive Summary

Massachusetts Senate Bill (S.B.) 483 and House Bill (H.B.) 948,[1] as submitted in the 189th General Court, would repeal and replace the current health insurance benefit mandate regarding hormone replacement therapy (HRT) and contraceptive services.[2] The two bills are identical and will hereafter be referenced as one bill (S.B. 483).

Massachusetts General Laws (M.G.L.) c.3 §38C charges the Massachusetts Center for Health Information and Analysis (CHIA) with, among other duties, reviewing the potential impact of proposed mandated health care insurance benefits on the premiums paid by businesses and consumers. CHIA has engaged Compass Health Analytics, Inc. (Compass) to provide an actuarial estimate of the effect enactment of the bill would have on the cost of health insurance in Massachusetts.

Background

Subsequent to referral of the bills to CHIA for review, CHIA and its consultants discussed the intent of the bill with sponsoring legislators and staff. This analysis reflects the stated intent of the sponsors, even if that intent differs from the bill's current wording. The sponsors intend to:

- Leave untouched the effect of the existing mandate statute on coverage for HRT drugs and related services for peri- and post-menopausal women.
- Require coverage for voluntary female sterilization, without cost sharing.
- Require coverage for women for contraceptive drugs and devices approved by the U.S. Food and Drug Administration (FDA), when lawfully prescribed. If versions, covered by the plan, of an FDA-approved contraceptive drug, device, or product are not available or are deemed medically inadvisable by a member's provider, require the plan to cover an alternate prescribed therapeutically-equivalent FDA-approved version.
- Require coverage for FDA-approved emergency contraceptive pills available lawfully over-the-counter (OTC) even if purchased without a prescription, but not for other OTC drugs/devices purchased without a prescription such as male or female condoms (in accordance with the sponsors' stated intent and in contrast to the bill as drafted, which requires coverage for all OTC methods).
- Prohibit plans from requiring the member to use one method or version before she is eligible for coverage of an alternative if she and the provider deem the alternative advisable (i.e., prohibit plan-imposed "step therapy").

- Require coverage for services associated with the drugs and devices for which coverage is mandated, including education, counseling, insertion and removal of devices, and follow-up.
- Prohibit member cost sharing for the mandated contraceptive services, drugs, and devices.
- Exempt employers that are churches or qualified church-controlled organizations from the provisions regarding contraceptive services, drugs, and devices.
- Exclude from this mandate any requirements for coverage for contraceptives or sterilization for men (in accordance with the lead sponsor's instructions and in contrast to the bill as drafted, which does not explicitly exclude coverage for men).

Contraception

The bill's intent is to ensure that a woman has access to the FDA-approved method of birth control she and her health care provider choose, without cost sharing.

Contraceptive drugs and devices, with appropriate associated examination and consultation services, can play a significant role in family planning. Nationally, 92 percent of fertile sexually-active women age 15 to 44 use contraception.[3] Sixty-seven percent of women at risk of unintended pregnancy use contraception consistently and correctly; these women account for only 5 percent of unintended pregnancies.[4] Proper use of the most effective methods of contraception "virtually eliminates" the risk of unintended pregnancy, while using any method reduces the chances by 85 percent.[5]

Existing laws regarding contraception

Current Massachusetts law requires insurers to cover outpatient contraceptive services, including "consultations, examinations, procedures and medical services provided on an outpatient basis and related to the use of all contraceptive methods to prevent pregnancy that have been approved by the United States Food and Drug Administration."[6] The existing Massachusetts laws have been expanded for some plans by more recent federal law. Under the federal Patient Protection and Affordable Care Act (ACA), non-grandfathered health insurance plans must fully cover the costs of contraceptive methods and counseling for all women, as prescribed by a health care provider.[7] When provided by an in-network provider, these services will require no patient cost sharing (no deductibles, coinsurances or copayments). Coverage must include at least one method from each of the 18 categories[8] of clinician-prescribed contraception (even methods available OTC) and related services for women approved by the FDA. The ACA provides that, if the method covered without cost sharing within a given category is not medically appropriate, the plan must accommodate the individual's need "by having a mechanism for waiving the otherwise applicable cost-sharing…"[9] Appendix A summarizes current coverage by carrier, as described by the carriers, for non-grandfathered plans.

For the insurance plans to which it applies, S.B. 483, as intended by the sponsors, would require coverage in some ways broader than that required under the federal law. S.B. 483 would affect both grandfathered and non-grandfathered insurance plans,[10] and would expand prohibitions on

cost sharing to cover all FDA-approved methods of contraception, not just one per category, as well as OTC emergency contraception obtained without a prescription. S.B. 483 would not address any existing provisions or exclusions in the federal law regarding male sterilization surgery, drugs to induce abortion, and non-prescribed over-the-counter contraception (except for emergency contraception), nor would it supplement the effect of federal exemptions for certain religious organizations.

Analysis

Compass estimated the impact of S.B. 483 by in turn estimating the potential contribution of each of three components:

- Cost sharing for pharmacy contraception: Measure existing cost sharing for pharmacy claims for women's contraceptive services (e.g., oral contraceptives) and estimate the cost to insurers of eliminating that cost sharing.
- Cost sharing for medical contraceptive services: Measure existing cost sharing for medical claims for women's contraceptive services (including office visits) and estimate the cost to insurers of eliminating that cost sharing.
- Over-the-counter emergency contraception not currently covered: Estimate the utilization of emergency contraception in the eligible population, the portion of users who might seek reimbursement, and the unit cost of those doses.

Compass then aggregated these components and projected them forward over the next five years (2017 to 2021) for the fully-insured Massachusetts population, and added insurer retention (administrative cost and profit) to arrive at an estimate of the bill's effect on premiums. Note the estimates assume carriers would fully comply with the provisions of the bill if it becomes law.

This analysis relies on projections of the rate at which insurance plans will lose grandfathered status and become ACA compliant, and the total number of claims filed for over-the-counter emergency contraception with or without a prescription. These uncertainties are addressed by modeling a range of assumptions within reasonable judgment-based limits, and producing a range of incremental impact estimates based on varying these parameters.

Summary results

Table ES-1 summarizes the estimated effect of S.B. 483 on premiums for fully-insured plans over five years. This analysis estimates that the mandate, if enacted as drafted for the 189th General Court, would increase fully-insured premiums by as much as 0.054 percent on average over the next five years; a more likely increase is in the range of 0.040 percent, equivalent to an average annual expenditure of $5.3 million over the period 2017 to 2021.

The impact on premiums is driven by the provisions eliminating cost sharing for all FDA-approved prescribed contraception for women, plus coverage for over-the-counter emergency contraceptives. More specifically, the largest contributor to the impact on premiums is the

requirement that providers cover all versions of prescribed, FDA-approved oral contraceptives within their formularies without cost sharing.

The impact of the bill on any one individual, employer-group, or carrier may vary from the overall results depending on the current level of benefits each receives or provides and on how those benefits would change under the proposed mandate. In particular, plans currently grandfathered as exempt from ACA contraception requirements will likely see larger increases in premiums.

Table ES-1:
Summary Results

	2017	2018	2019	2020	2021	Weighted Average	5 Yr Total
Members (000s)	2,360	2,334	2,308	2,281	2,254		
Medical Expense Low ($000s)	$2,684	$3,701	$3,644	$3,592	$3,544	$3,647	$17,166
Medical Expense Mid ($000s)	$3,284	$4,663	$4,724	$4,787	$4,854	$4,741	$22,312
Medical Expense High ($000s)	$4,234	$6,146	$6,361	$6,582	$6,813	$6,403	$30,136
Premium Low ($000s)	$3,015	$4,157	$4,094	$4,035	$3,982	$4,097	$19,283
Premium Mid ($000s)	$3,689	$5,238	$5,307	$5,378	$5,453	$5,326	$25,065
Premium High ($000s)	$4,756	$6,904	$7,146	$7,394	$7,653	$7,193	$33,853
PMPM Low	$0.15	$0.15	$0.15	$0.15	$0.15	$0.15	$0.15
PMPM Mid	$0.18	$0.19	$0.19	$0.20	$0.20	$0.19	$0.19
PMPM High	$0.24	$0.25	$0.26	$0.27	$0.28	$0.26	$0.26
Estimated Monthly Premium	$463	$473	$483	$493	$503	$483	$483
Premium % Rise Low	0.032%	0.031%	0.031%	0.030%	0.029%	0.031%	0.031%
Premium % Rise Mid	0.039%	0.040%	0.040%	0.040%	0.040%	0.040%	0.040%
Premium % Rise High	0.051%	0.052%	0.053%	0.055%	0.056%	0.054%	0.054%

Executive Summary Endnotes

[1] The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 483, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/Senate/S483. The bill is identical to House Bill 948, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/House/H948.

[2] Massachusetts General Laws (M.G.L.) c.175 §47W, c.176A §8W, c.176B §4W, c.176G §4O. Accessed 27 January 2015: https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter175/Section47W.

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[6] *Op. cit*. M.G.L. (M.G.L.) c.175 §47W, c.176A §8W, c.176B §4W, c.176G §4O.

[7] Healthcare.gov. Individuals and Families, Health benefits & coverage, Birth control benefits. Accessed 1 December 2015: https://www.healthcare.gov/coverage/birth-control-benefits/. See also: Coverage of Certain Preventive Services Under the Affordable Care Act; Final Rules. 26 CFR Part 54, 29 CFR Parts 2510 and 2590, 45 CFR Parts 147 and 156. Federal Register 78:127; 2 July 2013. Accessed 1 December 2015: http://www.gpo.gov/fdsys/pkg/FR-2013-07-02/pdf/2013-15866.pdf.

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> U.S. Food and Drug Administration (FDA). Birth Control Guide. Accessed 28 January 2016: http://www.fda.gov/downloads/ForConsumers/ByAudience/ForWomen/FreePublications/UCM356451.pdf.
>
> The 18 birth control methods for women covered under the ACA (PHS Act 2713 and its implementing regulations) include: Sterilization surgery; Surgical sterilization implant; Implantable rod; Copper intrauterine device; IUDs with progestin (a hormone); Shot/injection; Oral contraceptives (the pill), with estrogen and progestin; Oral contraceptives with progestin only; Oral contraceptives, known as extended or continuous use that delay menstruation; The patch; Vaginal contraceptive ring; Diaphragm; Sponge; Cervical cap; Female condom; Spermicide; Emergency contraception (Plan B/morning-after pill); Emergency contraception (a different pill called Ella).

[9] EBSA: FAQs about Affordable Care Act Implementation Part XII. Published 20 February 2013; accessed 28 January 2016: http://www.dol.gov/ebsa/faqs/faq-aca12.html.

[10] U.S. Centers for Medicare and Medicaid Services (CMS) Healthcare.gov, Glossary: Grandfathered Health Plan. Accessed 27 January 2016: https://www.healthcare.gov/glossary/grandfathered-health-plan/.

> As used in connection with the Affordable Care Act: A group health plan that was created—or an individual health insurance policy that was purchased—on or before March 23, 2010. Grandfathered plans are exempted from many changes required under the Affordable Care Act. Plans or policies may lose their "grandfathered" status if they make certain significant changes that reduce benefits or increase costs to consumers. A health plan must disclose in its plan materials whether it considers itself to be a grandfathered plan and must also advise consumers how to contact the U.S. Department of Labor or the U.S. Department of Health and Human Services with questions.

Actuarial Assessment of Senate Bill 483 and House Bill 948 Submitted to the 189th General Court: "An act relative to women's health and economic equity"

1. Introduction

Massachusetts Senate Bill (S.B.) 483 and House Bill (H.B.) 948,[1] as submitted in the 189th General Court, would repeal and replace the current health insurance benefit mandate regarding hormone replacement therapy (HRT) and contraceptive services.[2] The two bills are identical and will hereafter be referenced as one bill (S.B. 483).

Massachusetts General Laws (M.G.L.) c.3 §38C charges the Massachusetts Center for Health Information and Analysis (CHIA) with, among other duties, reviewing the potential impact of proposed mandated health care insurance benefits on the premiums paid by businesses and consumers. CHIA has engaged Compass Health Analytics, Inc. (Compass) to provide an actuarial estimate of the effect enactment of the bill would have on the cost of health insurance in Massachusetts.

Assessing the impact of the proposed mandate on premiums entails analyzing its incremental effect on spending by insurance plans. This in turn requires comparing spending under the provisions of the bill to spending under current statutes and current benefit plans for the relevant services.

Section 2 of this analysis outlines the provisions of the bill. Section 3 summarizes the methodology used for the estimate. Section 4 discusses important considerations in translating the bill's language into estimates of its incremental impact on health care costs and steps through the calculations. Section 5 summarizes the results.

2. Interpretation of S.B. 483

Subsequent to referral of the bill to CHIA for review, CHIA and its consultants discussed the intent of the bill with sponsoring legislators and staff. This analysis reflects the stated intent of the sponsors, even if that intent differs from the current draft's wording. The sponsors intend to:

- Leave untouched the effect of the existing mandate statute on coverage for HRT drugs and related services for peri- and post-menopausal women.
- Require coverage for voluntary female sterilization, without cost sharing (without copayment, coinsurance, or requiring the member to pay an amount toward meeting a deductible – i.e., on the same cost-sharing terms as preventive services).
- Require coverage for women for contraceptive drugs and devices approved by the U.S. Food and Drug Administration (FDA), when lawfully prescribed. If versions, covered by the plan, of an FDA-approved contraceptive drug, device, or product are not available or are deemed medically inadvisable by a member's provider, require the plan to cover an alternate prescribed therapeutically-equivalent FDA-approved version.

- Require coverage for FDA-approved emergency contraceptive pills available lawfully over-the-counter (OTC) even if purchased without a prescription, but not for other OTC drugs/devices purchased without a prescription such as male or female condoms (in accordance with the sponsors' stated intent and in contrast to the bill as drafted, which requires coverage for all OTC methods).
- Prohibit plans from requiring the member to use one method or version before she is eligible for coverage of an alternative if she and the provider deem the alternative advisable (i.e., prohibit plan-imposed "step therapy").
- Require coverage for services associated with the drugs and devices for which coverage is mandated, including education, counseling, insertion and removal of devices, and follow-up.
- Prohibit member cost sharing for the mandated contraceptive services, drugs, and devices.
- Exempt employers that are churches or qualified church-controlled organizations from the provisions regarding contraceptive services, drugs, and devices.
- Exclude from this mandate any requirements for coverage for contraceptives or sterilization for men (in contrast to the bill as drafted, which does not explicitly exclude coverage for men).[i]

2.1. Plans affected by the proposed mandate

The bill as drafted amends statutes that regulate health care insurers in Massachusetts. The bill includes four sections, each of which addresses statutes dealing with a particular type of health insurance policy:

- Section 1: Accident and sickness insurance policies (replacing M.G.L. c. 175, § 47W)
- Section 2: Contracts with non-profit hospital service corporations (replacing M.G.L. c. 176A, § 8W)
- Section 3: Certificates under medical service agreements (replacing M.G.L. c. 176B, §4W)
- Section 4: Health maintenance contracts (replacing M.G.L. 176G, § 4O)

Based on the sponsor's responses to questions about the scope of the bill and their stated intent that the bill should apply to the widest-possible insured population, and on specific instructions that bill should apply to the plans of the Group Insurance Commission (GIC), this analysis assumes the bill was intended to apply also to all plans, fully-insured and self-insured, offered by the GIC for the benefit of state and local employees and their dependents. The bill requires coverage for members under the relevant Massachusetts-licensed plans, regardless of whether they reside

[i] The sponsors intend for the proposed mandate to affect coverage for persons identifying as female, which differs from the set of persons who are biologically female. The use of gender-related terms such as "women", etc., in this analysis is not intended to exclude from the benefited population any person the sponsors intend to benefit. However, the effect of coverage for the population of biological men identifying as women on the bill's estimated impact on premiums is negligible.

within the Commonwealth or merely have their principal place of employment in the Commonwealth.

Self-insured plans, except for those managed by the GIC, are not subject to state-level health insurance benefit mandates. State mandates do not apply to Medicare or Medicare Advantage plans, the benefits of which are qualified by Medicare; this analysis excludes members of fully-insured commercial plans over 64 years of age and does not address any potential effect on Medicare supplement plans even to the extent they are regulated by state law. This analysis does not apply to Medicaid/MassHealth.

2.2. Covered services

Contraception and its use

As noted above, the bill's intent is to ensure that a woman has access to the FDA-approved method of birth control she and her health care provider choose, without cost sharing.

Contraceptive drugs and devices, used consistently and correctly and paired with appropriate associated examination and consultation services, can play a significant role in family planning. While 30 percent of women do not need a contraceptive method,[3] 8 percent of women are at risk of unintended pregnancy but are not using contraception.[4] Of the women not using contraception and at risk of unintended pregnancy, larger percentages are under 20 years of age, were never married, and are black; however, the number of women at risk does not vary by income or education level.[5]

The remaining 62 percent of women of reproductive age are currently using a contraceptive method.[6] Almost half of women with an unintended pregnancy report using some form of contraception,[7] but the 67 percent of women at risk of unintended pregnancy who use some form of contraception consistently and correctly account for only 5 percent of unintended pregnancies.[8] While use of any method of birth control reduces the risk of unintended pregnancy by 85 percent, proper and consistent use of the most effective methods "virtually eliminates" the risk.[9] Most women (64 percent) who use contraception rely on non-permanent methods, while the remainder relies on male or female sterilization.[10]

This analysis defines the services mandated by S.B. 483 to include all FDA-approved prescribed methods of contraception services, medications, and devices, with the exceptions of male sterilization surgeries, and over-the-counter contraception (except for emergency contraception). The analysis estimates incremental cost to the Massachusetts fully-insured commercial health care market for mandated coverage of these prescribed services, medications, and devices without cost sharing, and assumes full compliance by all insurance plans.

Hormone replacement therapy (HRT)

S.B. 483, as drafted, restates the existing health insurance benefit mandate regarding HRT and related services for peri- and post-menopausal women. The sponsors' intent is to leave untouched the effect of the existing mandate statute on coverage for HRT. Therefore the intent of the bill is to

have no effect on the use of, or insurance coverage for, HRT, and this analysis will not address provisions of the bill related to HRT.

2.3. Existing laws affecting the cost of S.B. 483

Under current Massachusetts law, insurers who provide outpatient services must cover "outpatient contraceptive services under the same terms and conditions as for such other outpatient services. Outpatient contraceptive services shall mean consultations, examinations, procedures and medical services provided on an outpatient basis and related to the use of all contraceptive methods to prevent pregnancy that have been approved by the United States Food and Drug Administration."[11]

The existing Massachusetts laws regarding outpatient contraceptive services have been expanded for some plans by more recent federal law. Under the federal Patient Protection and Affordable Care Act (ACA), non-grandfathered health insurance plans must fully cover the costs of contraceptive methods and counseling for all women, as prescribed by a health care provider.[12] When provided by an in-network provider, these services will require no patient cost sharing (no deductibles, coinsurance, or copayments). Coverage must include at least one method from each of the 18 categories[13] of clinician-prescribed contraception (even those available OTC) for women approved by the FDA, including female sterilization procedures, implanted devices, barrier and hormonal methods, and emergency contraception, as well as related services, education, and counseling. The ACA provides that, if the method covered without cost sharing within a given category is not medically appropriate, the plan must accommodate the individual's need "by having a mechanism for waiving the otherwise applicable cost-sharing…"[14] (Therefore, to the extent patients do not or cannot employ the specified mechanism, some cost sharing might be present.)

Over-the-counter contraception, drugs to induce abortions, and sterilization surgery for men are not included in the ACA benefit language. Health plans sponsored by certain exempt religious organizations may not be covered and may require out-of-pocket payment. Some non-profit religious organizations that certify religious objections do not have to contract, arrange, pay, or refer for contraceptive coverage; for these types of organizations, insurers or third party administrators may make separate payments for contraceptive services to in-network providers without patient cost sharing.

For the insurance plans to which it applies, S.B. 483, as intended by the sponsors, would require coverage in some ways broader than that required under the federal law. S.B. 483 would affect both grandfathered and non-grandfathered insurance plans,[15] and would expand prohibitions on cost-sharing to cover all FDA-approved methods of contraception, not just one per category, as well as OTC emergency contraception obtained without a prescription. S.B. 483 would not affect any existing provisions or exclusions in the federal law regarding male sterilization surgery, drugs to induce abortion, and non-prescribed over-the-counter contraception (except for emergency contraception), nor would it affect federal exemptions for certain religious organizations.

Appendix A summarizes current coverage by carrier, as described by the carriers, for non-grandfathered plans.

3. Methodology

3.1. Overview

Estimating S.B. 483's impact on premiums required assessing the amount of cost sharing (which the bill proposes to eliminate) currently in place for covered contraceptive services (pharmacy and medical), and the cost of covering over-the-counter emergency contraceptive services not currently covered. Combining these components, and accounting for carrier retention, resulted in a baseline estimate of the proposed mandate's incremental effect on premiums, which is then projected over the five years following the assumed January 1, 2017 implementation date of the law.

3.2. Data sources

The primary data sources used in the analysis were:

- Information about the intended effect of the bill, gathered from sponsors
- Information, including descriptions of current coverage, from responses to a survey of commercial health insurance carriers in Massachusetts
- Academic literature, published reports, and population data, cited as appropriate
- Massachusetts insurer claim data from CHIA's Massachusetts All Payer Claim Database (APCD) for calendar years 2011 to 2014, for plans covering the majority of the under-65 fully insured population subject to the mandate

3.3. Steps in the analysis

The analysis was executed in the following steps.

Estimate costs to insurers of eliminating cost sharing for all prescribed pharmacy contraception

- Use the APCD to measure the allowed and paid amount on pharmacy claims for women's contraceptive services covered by Massachusetts payers in baseline year 2014, a period in which the ACA's women's preventive health contraceptive services provisions should have been fully in effect.
- Using the difference between paid and allowed amounts, estimate the cost sharing (deductible, coinsurance, and copayment) for women's contraceptive pharmacy services in the baseline year, and divide by pharmacy member-months to calculate a baseline per-member per-month (PMPM) incremental cost for contraceptive pharmacy benefits currently requiring cost sharing.
- Use the APCD to review the distribution of drug utilization among formulary tiers in 2011 (prior to implementation of the ACA contraceptive services coverage mandate) and compare it to the 2014 mix of services across tiers. Use any measured shift as the basis for a factor to be applied to isolating the potential incremental effect of S.B. 483.

- Using projected carrier cost increases stemming from eliminating member cost sharing, and accounting for the effect of associated shifts in the utilization mix of pharmacy-related contraceptives, estimate the increased PMPM expense associated with eliminating cost sharing for all prescribed oral contraceptives through the analysis period.

Estimate costs to insurers of eliminating cost sharing for all prescribed medical contraception services for women

- Use the APCD to measure the allowed and paid amount on medical claims for women's contraceptive services covered by Massachusetts payers in baseline year 2014.
- Using the difference between paid and allowed amounts, estimate the cost sharing for women's contraceptive medical services in the baseline year, and divide by medical member-months to calculate a baseline per-member per-month (PMPM) incremental cost for contraceptive medical benefits currently requiring cost sharing.
- Based on information collected from the carrier survey, project grandfathered membership through the analysis period. (The ACA permits cost sharing for women's contraceptive services for grandfathered plans, which contributes to cost sharing measured in the APCD; membership in those plans will decline.)
- Using the projected PMPM increase in medical expense from above, and adjusting it downward to reflect declining membership in grandfathered plans, calculate the estimated PMPM incremental expense associated with eliminating cost sharing for medical contraceptive services through the analysis period.

Analyze the cost of coverage for over-the-counter emergency contraception not currently covered

- Using available literature, estimate the percentage of women between ages 15 and 44 who use emergency contraception (EC).
- Using APCD data for 2014, determine the percent of women using EC for whom the EC was paid by insurance; then estimate the percent of EC users not using coverage by subtracting the percent of users with coverage from the total.
- Using the Massachusetts age distribution, an estimate by age group of the number of women who have used EC, and a factor adjusting for the impact of age on the likelihood that women will submit claims for OTC EC purchases, estimate the percent of EC users who will not seek reimbursement for emergency contraception due to privacy or administrative reasons, and using that, reduce the percent of users (not using coverage) estimated in the previous step to estimate the percentage of incremental users of OTC EC who will submit claims.
- Using the APCD, calculate the number of commercial fully-insured women with pharmacy coverage in Massachusetts between ages 15 and 44.

- Multiply the percentage of incremental users of over-the-counter emergency contraception who will submit claims by the number of fully-insured women with pharmacy coverage to get the total number of users.
- Using APCD data, estimate the number of annual paid units (doses) of EC per user. Multiply the annual paid units per user by the number of users to calculate the annual incremental number of paid units of EC.
- Using available literature, estimate the average retail generic and brand name unit cost of emergency contraception with no prescription to calculate the weighted average price per unit based on an APCD brand vs. generic distribution of contraceptives.
- Multiply the number of annual incremental paid units of EC by the weighted average price per unit to calculate a baseline marginal cost of coverage for EC with no prescription.
- Divide the baseline cost by the number of commercial fully-insured members with pharmacy coverage in Massachusetts to obtain a baseline PMPM estimate.
- Using an estimated increase in pharmacy costs, project the baseline cost forward over the five-year analysis period.

Calculate the impact of projected claim costs on insurance premiums

- According to the carrier survey, approximately 1.2 percent of fully-insured medical members are in plans that self-insure pharmacy benefits through a separate pharmacy benefits manager. To calculate projections for all contraceptive mandate provisions on a medical membership basis, adjust all pharmacy-related PMPMs to a medical-membership based estimate.
- Add the estimated PMPM costs associated with eliminating cost sharing for all oral contraception, eliminating cost sharing for all non-oral contraception, and the cost of covering OTC EC to calculate the total incremental cost associated with this mandate.
- Estimate the fully-insured Massachusetts population under age 65, projected for the next five years (2017 to 2021).
- Multiply the aggregate marginal PMPMs related to the mandate by the projected population estimate to calculate the total estimated marginal cost of S.B. 483.
- Estimate the impact of insurer retention (administrative costs and profit) on premiums.

Section 4 describes these steps in more detail.

3.4. Limitations

While measuring cost sharing in the APCD is relatively straightforward, this analysis also rests on assumptions that hold more uncertainty. For example, this analysis relies on an estimate of the rate at which ACA-grandfathered plans will lose that status and then must comply with the ACA's mandates for women's preventive health contraceptive services coverage and its restrictions on

cost sharing. Data from the carrier survey show that grandfathered membership has fallen over time and is anticipated to continue to do so over the analysis period; however, there is uncertainty in the rate and timing of this decline. (This uncertainly does affect the magnitude of the incremental cost of eliminating medical costing sharing; however it has very little impact on the overall cost of implementing the proposed mandate. For example if all of the 2015 grandfathered membership remains in grandfathered plans – on which the bill's provisions would have greater effect – the average mid-range incremental PMPM cost over the projection period would increase from $0.004 to $0.008.)

Likewise, the model incorporates an estimate of the total number of claims filed for OTC EC with or without a prescription. To calculate the number of women using OTC EC, this analysis draws on rates published in two studies and on the APCD for one carrier whose current coverage is consistent with the proposed mandate. These estimates introduce uncertainty because of limited information on the percentage of women using OTC EC, which seems to be changing over time. Published studies on this topic present a range of results. Further, data are insufficient to estimate precisely the number of women who will not seek reimbursement for OTC EC because of privacy or administrative reasons. (This uncertainly has little impact on the overall cost of implementing the proposed mandate. For example, if privacy concerns have no impact and all women seek reimbursement for OTC EC use, the average mid-range incremental PMPM cost over the projection period would increase from $0.021 to $0.027.)

These uncertainties are addressed by modeling a range of assumptions within reasonable judgment-based limits, and producing a range of estimates of incremental cost by varying these parameters. The more detailed step-by-step description of the estimation process outlined in the next sections addresses these uncertainties further.

4. Analysis

This section describes the calculations outlined in the previous section in more detail. The analysis includes development of a best estimate "middle-cost" scenario, as well as a low-cost scenario using assumptions that produced a lower estimate, and a high-cost scenario using more conservative assumptions that produced a higher estimated impact.

The ACA mandate regarding women's contraceptive services eliminates cost sharing for one version (specified by the carrier) of prescribed contraception in each of the 18 FDA-approved methods, and requires insurers to provide a mechanism to waive otherwise-applicable cost sharing for another method if medically necessary for an individual. S.B. 483 expands this mandate to eliminate any cost sharing for all prescribed methods, as well as expands coverage to include over-the-counter emergency contraception (OTC EC) without cost sharing.

Sections 4.1 and 4.2 below describe the steps used to calculate the PMPM pharmaceutical and medical expenses associated with eliminating member cost sharing for all contraceptive services that currently require cost sharing. Section 4.3 estimates the PMPM costs of coverage for OTC EC without cost sharing. Section 4.4 adjusts pharmacy-related PMPMs to a medical membership basis,

while Section 4.5 aggregates the marginal PMPM costs for all contraception-related provisions of the mandate. Section 4.6 projects the fully-insured population age 0-64 in Massachusetts over the 2017-2021 analysis period. Section 4.7 calculates the total estimated marginal cost of S.B. 483, and Section 4.8 adjusts these projections for carrier retention to arrive at an estimate of the bill's effect on premiums for fully-insured plans.

4.1. Eliminating cost sharing for oral contraceptives (pharmacy claims)

The largest contribution to S.B. 483's effect on premiums stems from the elimination of cost sharing from all methods of oral contraception. The analysis used the APCD 2014 pharmacy claim data to measure a baseline of allowed and paid claims, which is then used to calculate cost sharing. By 2014, the ACA's women's preventive health contraceptive services provisions should have been fully in effect.

The analysis included an evaluation of the distribution of drug utilization between drug formulary tiers (which typically have different cost-sharing rules) in 2011, prior to implementation of the ACA's provisions. Between 2012 and 2014, there was no change in utilization patterns among tiers; therefore, no adjustment was made to anticipated cost-sharing amounts to account for changes in the mix of tiers.

Projecting this expense over the analysis period requires applying an estimate of cost growth for oral contraceptives. Analysis of the APCD shows that the cost trend for contraceptive pharmacy claims is decreasing. However, this report reflects a more conservative approach to projecting the costs for these contraceptive methods going forward. For example, the middle Scenario in Table 1 applies a 3 percent increase to the costs of these drugs, using the utilization trend increase observed in claim data rather than the observed decrease in costs. This estimate is based on the three-year average utilization trend, assumes the unit cost trend will flatten (as opposed to decrease), and that cost-sharing amounts will increase with the overall claim trend. The low scenario assumes no adjustment to cost-sharing amounts for pharmacy benefits over the analysis period. Instead, the factor used applies the average 3 percent increase in contraceptive pharmacy claims, attributable to utilization and calculated from the claim data, to the proportion of costs associated with deductible and coinsurance, which averages approximately 6 percent of cost sharing; the remainder of cost sharing is co-pay driven. Multiplying these results yields 0.2 percent, the low scenario factor in Table 1. The High scenario applies the long-term average national projection for cost increases to pharmaceuticals over the study period,[16] to account for any potential new oral contraceptive methods entering the market during the study period.

Table 1:
Estimated Annual Cost Increase Trend Factor for Oral Contraceptives

	Trend Factor
Low Scenario	1.002
Mid Scenario	1.030
High Scenario	1.057

The 2014 baseline pharmacy oral contraceptive cost-sharing amount is divided by the corresponding pharmacy member months of 16.2 million, and increased by the trend factors in Table 1 to project the PMPM impact of eliminating cost sharing for all prescribed methods of FDA-approved oral contraception. Table 2 displays the results.

Table 2:
Estimated Increased Expense Associated with
Elimination of Cost Sharing for Oral Contraceptives

	Baseline	2017	2018	2019	2020	2021
Low Scenario	$0.128	$0.128	$0.128	$0.129	$0.129	$0.129
Mid Scenario	$0.128	$0.139	$0.143	$0.148	$0.152	$0.157
High Scenario	$0.128	$0.151	$0.159	$0.168	$0.178	$0.188

4.2. Eliminating cost sharing for non-oral contraception (medical claims)

Cost sharing for non-oral contraception methods has fallen dramatically since the implementation of the ACA. In an analysis of APCD data, the current cost sharing associated with these methods is almost wholly attributable to currently grandfathered health insurance plans, which are exempt from the ACA but would be covered under the provisions of S.B. 483. According to a survey of commercial insurance carriers, these plans are anticipated to lose their grandfathered status over time, further shrinking the number of plans and members exempt from the ACA's contraceptive services provisions.

Based on data provided in the carrier survey, membership in grandfathered plans has fallen over time; the average of the decline in the number of grandfathered members for 2013-14 and 2014-15 is approximately 15 percent. This decline is expected to continue throughout the analysis period, and is reflected in the middle scenario membership decrease in Table 3. The low scenario applies a higher reduction at 25 percent (more plans will lose grandfathered status and their ACA exemptions), while the high scenario uses a lower assumption of 5 percent.

Table 3:
Adjustment Factors to Estimate of Membership in Grandfathered Plans

	Membership Decrease
Low Scenario	25%
Mid Scenario	15%
High Scenario	5%

Applying this adjustment in Table 3 to grandfathered membership each year over the analysis period yields the percent of members remaining in grandfathered plans compared to the 2014 baseline claims year, as reflected in Table 4.

Table 4:
Estimated Percent of Members Remaining in Grandfathered Plans versus 2014 Level

	2017	2018	2019	2020	2021
Low Scenario	46.4%	34.8%	26.1%	19.6%	14.7%
Mid Scenario	59.6%	50.7%	43.1%	36.6%	31.1%
High Scenario	74.4%	70.7%	67.2%	63.8%	60.6%

As plans lose grandfathered status over time and must comply with the ACA contraception requirements, their contraceptive services will no longer be subject to cost sharing. Therefore, the analysis assumes the cost-sharing amounts associated with medical contraceptive services – the 2014 baseline cost-sharing of $123,221 – will decrease by the same percentages over the analysis period. This total is divided by corresponding medical member-months of 13.6 million, and an average long-term average national projection for cost increases to physician and clinical services over the study period is applied.[17] Table 5 outlines the resulting PMPM estimates.

Table 5:
Estimated Increased Expense Associated with Elimination of Cost Sharing for Non-Oral Contraception

	2017	2018	2019	2020	2021
Low Scenario	$0.004	$0.003	$0.002	$0.002	$0.001
Mid Scenario	$0.006	$0.005	$0.004	$0.003	$0.003
High Scenario	$0.007	$0.007	$0.006	$0.006	$0.006

4.3. Covering over-the-counter emergency contraception without cost sharing

The ACA mandates coverage of emergency contraception without cost sharing for one method in each of two emergency contraception categories[18] when obtained with prescription. This mandate extends that coverage to include all EC methods obtainable with or without a prescription.

To project the incremental cost of covering these drugs OTC for all fully-insured women, the model first estimates the number of women who use EC annually, with or without a prescription. In a national survey, 0.2 percent of women between 15 and 44 stated they had used EC in the previous month, or about 2.4 percent annually;[19] this number is used in the middle scenario in Table 6. Data from a survey of Massachusetts insurance carriers and the APCD found one insurer in Massachusetts already covers EC, both with and without a prescription. This carrier's claims showed that with this coverage 0.36 percent of women use EC annually, which is used as the low scenario for this analysis. The high scenario is based on another study that found 5.9 percent of women use EC in a year.[20] APCD data for all carriers also show insurance paid for EC for 0.19 percent of all women, representing a mix of members of the one carrier covering EC and those that do not currently cover it. To calculate the incremental number of annual users of EC who will be covered by this mandate, this figure was subtracted from the estimates in each scenario, as in Table 6.

Table 6:
Percent of Women Who Use EC Annually

	All Users	Incremental Users
Low Scenario	0.36%	0.17%
Mid Scenario	2.40%	2.21%
High Scenario	5.88%	5.69%

The proposed mandate would cover OTC EC purchases; however, this analysis assumes a portion of women will not submit claims due to either privacy concerns or the associated administrative burdens, and will therefore pay for EC out-of-pocket which reduces the incremental impact of this bill. Under the low scenario the privacy and administrative requirement concerns are accounted for since the low scenario is based upon APCD data for a carrier whose current coverage is consistent with the proposed mandate; as a result the low scenario contains no adjustment. For the middle and high scenarios, four factors contribute to an estimate of this percentage: 1) the age distribution of women in the fully-insured population in Massachusetts; 2) an estimate by age group of the number of women who have taken or used EC in the last 12 months based on a national survey;[21] 3) a factor adjusting for the reduced likelihood that dependent children will submit claims for OTC EC purchases; and 4) a factor adjusting for the increased likelihood that older women will submit claims for OTC EC purchases. Table 7 shows the result of these calculations.

Table 7:
Estimated Percent of Women Who Will Pay for
Emergency Contraception Out-of-Pocket

	% to Pay Out-of-Pocket
Low Scenario	0%
Mid Scenario	23%
High Scenario	17%

The model assumes the remaining users of OTC EC (equal to 1 minus the Table 7 values) will submit claims to insurance for reimbursement; multiplying this calculation by the incremental percent of users shown previously in Table 6 yields the overall percentage of women who will submit claims for EC under. This percent is multiplied by the number of fully-insured women age 15 to 44 with pharmacy coverage (618,314) to estimate the number of incremental users who will submit claims for OTC EC annually, displayed in Table 8.

Table 8:
Estimated Users of Over-the-Counter Emergency Contraception
Who Submit Claims

	% Submit EC Claims	Incremental % using OTC EC and submitting claim	Incremental Users of OTC EC who submit claims
Low Scenario	100%	0.17%	1,066
Mid Scenario	77%	1.69%	10,464
High Scenario	83%	4.70%	29,060

APCD data shows that current users of EC average 1.229 units paid annually. Multiplying this by the number of incremental users of EC who submit claims from Table 8 yields the number of incremental units of EC paid annually, as shown in Table 9. Based on national data, the average cost of generic EC is $41 per unit;[22] brand-name products average $48 per unit.[23] APCD data shows that 90 percent of paid EC was generic; therefore, the weighted average cost for emergency contraception used in this analysis is $41.73. This amount is multiplied by incremental paid units to calculate each scenario's baseline cost, also displayed in Table 9.

Table 9:
Estimated Incremental Paid Units of Over-the-Counter Emergency Contraception

	Incremental Paid Units	Incremental Baseline Cost
Low Scenario	1,310	$54,649
Mid Scenario	12,860	$536,621
High Scenario	35,713	$1,490,258

The model then applies a 3.0 percent annual increase to this cost, based on the anticipated 3.0 percent annual increase in oral contraceptive claims from the APCD data. Under the low scenario this trend is used throughout the projection period since the low scenario is based upon APCD data for a carrier whose current coverage is consistent with the proposed mandate. Under the middle and high scenarios it is anticipated utilization will increase by an additional amount in the initial year of the proposed mandate since OTC EC with no prescriptions will be new coverage. This analysis assumes a 5.7 percent trend in 2017, the initial year of the proposed mandate, for the middle and high scenarios. The 5.7 percent trend is consistent with the long-term average national projection for cost increases to pharmaceuticals[24] over the study period, applies in year one of the mandate only, and is expected to revert back to the 3.0 percent trend for the remaining years in the study period. Multiplying the baseline amount by the trend assumptions and dividing by corresponding pharmacy member-months yields the estimated marginal cost of OTC EC attributable to this mandate, shown in Table 10.

Table 10:
Estimated Marginal Cost of Over-the-Counter Emergency Contraception

	2017	2018	2019	2020	2021
Low Scenario	$0.002	$0.002	$0.002	$0.002	$0.002
Mid Scenario	$0.020	$0.020	$0.021	$0.021	$0.022
High Scenario	$0.055	$0.056	$0.058	$0.060	$0.061

4.4. Adjustments to pharmacy membership

Pharmacy and medical member-months for the fully-insured population differ, as approximately 1.2 percent of the fully-insured medical members in the 2014 baseline year were in plans that self-insured pharmacy coverage through a separate pharmacy benefits manager. PMPM marginal costs based on pharmacy membership are therefore adjusted to a medical-membership basis so that the projected fully-insured medical membership can be used to calculate the projected cost of the mandate. Tables 11 and 12 show the adjustments to Tables 2 and 10, respectively.

Table 11:
Estimated Increased Expense Associated with Elimination of Cost Sharing for Oral Contraceptives, Adjusted to Medical Membership

	2017	2018	2019	2020	2021
Low Scenario	$0.002	$0.002	$0.002	$0.002	$0.002
Mid Scenario	$0.019	$0.020	$0.021	$0.021	$0.022
High Scenario	$0.054	$0.056	$0.057	$0.059	$0.061

Table 12:
Estimated Marginal Cost of Over-the-Counter Emergency Contraception, Adjusted to Medical Membership

	2017	2018	2019	2020	2021
Low Scenario	$0.127	$0.127	$0.127	$0.127	$0.128
Mid Scenario	$0.138	$0.142	$0.146	$0.150	$0.155
High Scenario	$0.149	$0.157	$0.166	$0.176	$0.185

4.5. Marginal cost per-member per-month

Adding together the estimated PMPM costs associated with the three relevant contraception provisions (from Tables 5, 11, and 12) yields the total PMPM incremental cost, shown in Table 13.

Table 13:
Estimated Marginal PMPM Cost of Contraception Mandate

	2017	2018	2019	2020	2021
Low Scenario	$0.13	$0.13	$0.13	$0.13	$0.13
Mid Scenario	$0.16	$0.17	$0.17	$0.17	$0.18
High Scenario	$0.21	$0.22	$0.23	$0.24	$0.25

4.6. Projected fully-insured population in Massachusetts

Table 14 shows the fully-insured population in Massachusetts age 0 to 64 projected for the next five years. Appendix B describes the sources of these values.

Table 14:
Projected Fully-Insured Population in Massachusetts, Ages 0-64

Year	Total (0-64)
2017	2,359,565
2018	2,334,089
2019	2,307,936
2020	2,280,676
2021	2,253,515

4.7. Total marginal medical expense

Multiplying the total estimated PMPM cost by the projected fully-insured membership over the analysis period results in the total cost (medical expense) associated with the mandate, shown in Table 15.

Table 15:
Estimated Marginal Cost of Contraception Mandate

	2017	2018	2019	2020	2021
Low Scenario	$2,684,167	$3,700,891	$3,644,305	$3,592,041	$3,544,409
Mid Scenario	$3,283,639	$4,662,905	$4,724,095	$4,787,291	$4,854,348
High Scenario	$4,233,807	$6,145,810	$6,360,933	$6,582,147	$6,812,901

4.8. Carrier retention and increase in premium

Assuming an average retention rate of 11.0 percent based on CHIA's analysis of administrative costs and profit in Massachusetts,[25] the increase in medical expense was adjusted upward to approximate the total impact on premiums. Table 16 shows the result.

Table 16:
Estimate of Increase in Carrier Premium Expense

	2017	2018	2019	2020	2021
Low Scenario	$3,015,281	$4,157,427	$4,093,861	$4,035,149	$3,981,641
Mid Scenario	$3,688,703	$5,238,113	$5,306,851	$5,377,843	$5,453,172
High Scenario	$4,756,082	$6,903,946	$7,145,607	$7,394,109	$7,653,329

5. Results

The estimated impact of the proposed mandate on medical expense and premiums appears below. The analysis includes development of a best estimate "mid-level" scenario, as well as a low-level scenario using assumptions that produced a lower estimate, and a high-level scenario using more conservative assumptions that produced a higher estimated impact.

The impact on premiums is driven by the provisions of S.B. 483 eliminating cost sharing for all FDA-approved prescribed contraception for women, plus its coverage for OTC EC. More specifically, the largest contributor to the impact on premiums is the requirement that providers cover all versions of prescribed, FDA-approved oral contraceptives without cost sharing.

Starting in 2020, the federal Affordable Care Act will impose an excise tax, commonly known as the "Cadillac Tax", on expenditures on health insurance premiums and other relevant items (health savings account contributions, etc.) that exceed specified thresholds. To the extent relevant expenditures exceed those thresholds (in 2020), S.B. 483, by increasing premiums, has the potential of creating liability for additional amounts under the tax. Estimating the amount of potential tax liability requires information on the extent to which premiums, notwithstanding the effect of S.B. 483, will exceed or approach the thresholds and is beyond the scope of this analysis.

5.1. Five-year estimated impact

For each year in the five-year analysis period, Table 17 displays the projected net impact of the mandate on medical expense and premiums using a projection of Massachusetts fully-insured membership. Note that the relevant provisions of S.B. 483 are assumed effective January 1, 2017.[26]

The low scenario impact is $4.1 million per year on average, and is due to the lower estimates of cost increases to oral contraceptives, slower transitioning of grandfathered plans to ACA-compliant plans, and lower utilization and claims filing rates for OTC EC. The high scenario has an average cost of $7.2 million per year, and reflects higher cost increases for oral contraceptives, faster transitioning of grandfathered plans, and a higher utilization and claims filing rates for OTC EC. The middle scenario has average annual costs of $5.3 million, or an average of 0.04 percent of premium.

Finally, the impact of the proposed law on any one individual, employer-group, or carrier may vary from the overall results depending on the current level of benefits each receives or provides, and on how the benefits will change under the mandate. In particular, plans currently grandfathered as

exempt from ACA contraception requirements will likely see larger increases in medical expenses and presumably in premiums.

Table 17: Summary Results

	2017	2018	2019	2020	2021	Weighted Average	5 Yr Total
Members (000s)	2,360	2,334	2,308	2,281	2,254		
Medical Expense Low ($000s)	$2,684	$3,701	$3,644	$3,592	$3,544	$3,647	$17,166
Medical Expense Mid ($000s)	$3,284	$4,663	$4,724	$4,787	$4,854	$4,741	$22,312
Medical Expense High ($000s)	$4,234	$6,146	$6,361	$6,582	$6,813	$6,403	$30,136
Premium Low ($000s)	$3,015	$4,157	$4,094	$4,035	$3,982	$4,097	$19,283
Premium Mid ($000s)	$3,689	$5,238	$5,307	$5,378	$5,453	$5,326	$25,065
Premium High ($000s)	$4,756	$6,904	$7,146	$7,394	$7,653	$7,193	$33,853
PMPM Low	$0.15	$0.15	$0.15	$0.15	$0.15	$0.15	$0.15
PMPM Mid	$0.18	$0.19	$0.19	$0.20	$0.20	$0.19	$0.19
PMPM High	$0.24	$0.25	$0.26	$0.27	$0.28	$0.26	$0.26
Estimated Monthly Premium	$463	$473	$483	$493	$503	$483	$483
Premium % Rise Low	0.032%	0.031%	0.031%	0.030%	0.029%	0.031%	0.031%
Premium % Rise Mid	0.039%	0.040%	0.040%	0.040%	0.040%	0.040%	0.040%
Premium % Rise High	0.051%	0.052%	0.053%	0.055%	0.056%	0.054%	0.054%

5.2. Impact on the GIC

The proposed mandate is assumed to apply to both fully-insured and self-insured plans operated for state and local employees by the GIC, with an effective date for all GIC policies on July 1, 2017.

Because the benefit offerings of GIC plans are similar to those of most other commercial plans in Massachusetts, with grandfathered plans not currently subject to the ACA women's preventive health contraceptive services mandates and cost-sharing restrictions, the estimated PMPM effect of the proposed mandate on GIC medical expense is not expected to differ from that calculated for the other fully-insured plans in Massachusetts.

This is consistent with carrier survey responses which, in general, did not indicate differences in coverage for the GIC, with the exception of one. This one carrier, which covers only a portion of the GIC, indicated no current differences in coverage between its grandfathered and non-grandfathered plans. (There is, therefore, for this carrier, no incremental cost of eliminating cost sharing for medical contraception services, as in Section 4.2, which may reduce the incremental PMPM estimate for that one carrier's membership by $0.006.)

As noted, at least some information from carriers suggests the GIC has grandfathered plans. However, given that complete information is not available, the analysis takes a conservative approach to estimating the bill's potential impact on GIC plans and assumes a mix of grandfathered/non-grandfathered membership in GIC plans similar to that in the rest of the fully-

insured plans. Based on these assumptions, the bill's impact on the GIC plans would be similar to its impact on most other fully-insured plans.

To estimate the medical expense separately for the GIC, the PMPM medical expense for the general fully-insured population was applied to the GIC membership starting in July of 2017.

Table 18 breaks out the GIC-only fully-insured membership and the GIC self-insured membership and the corresponding incremental medical expense and premium. Note that the total medical expense and premium values for the general fully-insured membership displayed in Table 17 also include the GIC fully-insured membership. Finally, the proposed mandate is assumed to require the GIC to implement the provisions on July 1, 2017; therefore, the results in 2017 are approximately one-half of an annual value.

Table 18:
GIC Summary Results

	2017	2018	2019	2020	2021	Weighted Average	5 Yr Total
GIC Fully-Insured							
Members (000s)	54	54	54	54	54		
Medical Expense Low ($000s)	$43	$86	$85	$85	$84	$85	$383
Medical Expense Mid ($000s)	$53	$108	$110	$113	$115	$111	$499
Medical Expense High ($000s)	$68	$142	$148	$155	$162	$150	$675
Premium Low ($000s)	$48	$96	$96	$95	$95	$96	$430
Premium Mid ($000s)	$59	$121	$124	$127	$130	$125	$560
Premium High ($000s)	$76	$160	$167	$174	$182	$169	$759
GIC Self-Insured							
Members (000s)	270	270	269	269	268		
Medical Expense Low ($000s)	$215	$427	$425	$423	$421	$425	$1,912
Medical Expense Mid ($000s)	$263	$539	$551	$564	$577	$554	$2,494
Medical Expense High ($000s)	$340	$710	$742	$775	$810	$751	$3,376

Appendix A: Contraception Coverage by Carrier for Fully-Insured Plans

The following multipage table displays the responses from ten carriers to a survey on coverage for contraception (drugs, devices, and procedures) for non-grandfathered plans. Carriers that did not respond to the survey are excluded.

	Blue Cross Blues Shield MA		BMCHP	
Method	**Services with no cost sharing**	**Services with cost sharing**	**Services with no cost sharing**	**Services with cost sharing**
1. Sterilization for women	Sterilization for women, including corresponding anesthesia, if for family planning. All services at $0 cost share	Sterilization done for reasons other than family planning	Yes (plan covers an option in this category without cost sharing)	N/A
2. Surgical sterilization implant for women	Sterilization for women, including corresponding anesthesia, if for family planning. All services at $0 cost share	Sterilization done for reasons other than family planning	Yes	N/A
3. Implantable rod	Insertion of these implants are covered at $0 cost share		Yes, (i.e. NEXPLANON)	N/A
4. IUD copper	Insertion of these implants are covered at $0 cost share		Yes, (i.e. PARAGARD)	N/A
5. IUD with progestin	Insertion of these implants are covered at $0 cost share		Yes, MIRENA	N/A
6. Shot/injection	Injections are covered at $0 cost share	Tier 2, 3 or Brand Name	MEDROXYPROGESTERONE ACETAT 150MG/ML	N/A
7. Oral contraceptive (combined pill)	All generic brands	Tier 2, 3 or Brand Name	Yes, (i.e. GILDESS)	N/A
8. Oral contraceptive (progestin only)	All generic brands	Tier 2, 3 or Brand Name	Yes, (i.e. JENCYCLA)	N/A
9. Oral contraceptive extended/continuous use	All generic brands	Tier 2, 3 or Brand Name	LEVONORGESTREL-ETHINYL ESTRADIOL 90MG-20MG/DAYSEE	N/A
10. Patch	All generic brands	Tier 2, 3 or Brand Name	Yes, (i.e. XULANE)	N/A
11. Vaginal contraceptive ring	Covered at $0 cost share if administered or supplied in doctor's office		Yes, (i.e. NUVARING)	N/A
12. Diaphragm	All generic brands		Yes, (i.e. OMNIFLEX)	N/A
13. Sponge	All generic brands		Yes	N/A
14. Cervical cap	All generic brands		Yes, (i.e. FEMCAP)	N/A
15. Female condom	All generic brands		Yes, (i.e. FC FEMALE CONDOM)	N/A
16. Spermicide	All generic brands		Yes, (i.e. VCF VAGINAL CONTRACEPTIVES)	N/A
17. Emergency contraception (Plan B/Plan B One Step/Next Choice)	All generic brands with prescription for women under 17	All brands for women over age 17	Yes, (i.e. Next Choice)	N/A
18. Emergency contraception (ELLA)	All generic brands with prescription for women under 17	All brands for women over age 17	Yes	N/A

	Fallon		Harvard Pilgrim	
Method	**Services with no cost sharing**	**Services with cost sharing**	**Services with no cost sharing**	**Services with cost sharing**
1. Sterilization for women	Yes	$0	Y	CIF (covered in full)
2. Surgical sterilization implant for women	Yes	$0	Y	
3. Implantable rod	Yes	$0	Y	CIF
4. IUD copper	Yes	$0	Y	CIF
5. IUD with progestin	Yes	$0	Y	
6. Shot/injection	Yes	See Fallon detail 1	Y	CIF
7. Oral contraceptive (combined pill)	Yes	See Fallon detail 1	See HP detail 1 below	
8. Oral contraceptive (progestin only)	Yes	See Fallon detail 1	NORETHINDRONE, DEBLITANE, SHAROBEL, LYZA, NORLYROC, NORA-BE, JOLIVETTE, ERRIN, CAMILA, JENCYCLA, HEATHER	
9. Oral contraceptive extended/continuous use	Yes	See Fallon detail 1	QUASENSE, JOLESSA, LEVONORGESTREL-ETH ESTRADIOL, DAYSEE, LEVONORG-ETH ESTRAD ETH ESTRAD, ASHLYNA, INTROVALE, CAMRESE, CAMRESE LO	
10. Patch	Yes	See Fallon detail	Y	CIF
11. Vaginal contraceptive ring	Yes	See Fallon detail	Y	CIF
12. Diaphragm	Yes	$0	WIDE SEAL DIAPHRAGM, ORTHO ALL-FLEX, CAYA CONTOURED	
13. Sponge	Yes	$0	TODAY CONTRACEPTIVE SPONGE	
14. Cervical cap	Yes	$0	Y	CIF
15. Female condom	Yes	$0	Y	
16. Spermicide	Yes	$0	CONCEPTROL, GYNOL II, VCF, ENCARE	
17. Emergency contraception (Plan B/Plan B One Step/Next Choice)	Yes	With Rx, $0; without Rx, member may submit for reimbursement	Covered under Pharmacy	
18. Emergency contraception (ELLA)	Yes	$0	Covered under Pharmacy with prescription	

Fallon detail 1: If generic, covered at $0 cost share. If brand name product with no generic available and only FDA-approved for contraception, a step through a generic products is required for $0 cost share. At POS, if evidence of generic product in history, claim will process at $0. If no evidence, documentation required from provider. If brand with generic available, claim will process at non-preferred brand tier cost share. If a product has multiple FDA-approved indications, a PA is required to determine use. If it's for contraception, requires step as above.

HP detail1: Levonest, Dasetta, Philith, Falmina, Mono-Linyah, Tri-Linyah, Elinest, Desogestrel-Ethinyl, Stradiol, Wera, Pimtrea, Larin Fe, Larin, Larin 24 Fe, Juleber, Norgestrel-Ethiny Estra, Levonorgestrel-Eth Estradiol, Norethindron-Ethinyl Estradiol, Norethin-Eth Estra, Ferrous Fum, Desogestr-Eth Estrad Eth Estra, Drospirenone-Ethinyl Estradiol, Lo Loestrin, Fe, Minastrin 24 Fe, Lo Minastrin Fe, Ovcon-50, Aubra, Tarina Fe, Chateal, Cyred, Safyral, Beyaz, Natazia, Ortho Tri-Cyclen Lo, Delyla, Tilia Fe, Layolis Fe, Necon, Leena, Microgestin Fe, Mononessa, Trinessa, Brevicon, Norinyl 1+35, Microgestin, Levora-28, Trivora-28, Zenchent Fe, Zovia 1-35e, Zovia 1-50e, Low-Ogestrel, Ogestrel, Azurette, Lutera, Zenchent, Reclipsen, Caziant, Sronyx, Zarah, Vestura, Nortrel, Lessina, Sprintec, Tri-Sprintec, Portia, Junel, Junel Fe, Tri-Legest Fe, Balziva, Apri, Aviane, Enpresse, Cryselle, Kariva, Velivet, Kelnor 1-35, Aranelle, Ocella, Gildagia, Kimidess, Cyclafem, Emoquette, Gildess, Gildess Fe, Gildess 24 Fe, Myzilra, Orsythia, Previfem, Tri-Previfem, Lomedia 24 Fe, Solia, Kurvelo, Vyfemla, Enskyce, Nikki, Pirmella, Norethindrone-Ethin Estradiol, Wymzya Fe, Norgestimate-Ethinyl Estradiol, Briellyn, Viorele, Marlissa, Alyacen, Estarylla, Tri-Estarylla, Altavera, Loryna, Syeda, Zeosa, Junel Fe 24, Gianvi

	Health New England		Minuteman	
Method	**Services with no cost sharing**	**Services with cost sharing**	**Services with no cost sharing**	**Services with cost sharing**
1. Sterilization for women	Y (plan covers an option without cost sharing)		Essure System	
2. Surgical sterilization implant for women	Y		Tubal Ligation Tubal ligation status	
3. Implantable rod	Y		Nexplanon	
4. IUD copper	Y		Paraguard	
5. IUD with progestin	Y		Mirena, Skyla	
6. Shot/injection	Y		Medroxyprogrestone injection	
7. Oral contraceptive (combined pill)	Y	Y (options with cost sharing exist)	See Minuteman detail 1	
8. Oral contraceptive (progestin only)	Y	Y	camila, deblitane, errin, heather, jencycla, jolivette, lyza, nora-be, norethindrone, norlyroc, sharobel	
9. Oral contraceptive extended/continuous use	Y	Y	amethia and amethia LO, camrese and camrese LO, daysee, introvale, jolessa, levonorgestrel and ethinyl estradiol, quasense,	
10. Patch	Y	Y	Xulane patch	
11. Vaginal contraceptive ring	Y		Nuvaring	
12. Diaphragm	Y		Omniflex diaphragm, Ortho diaphragm all flex and flat spring and coil spring kit, wide-seal silicone diaphragm kit,	
13. Sponge	Y		Today Sponge	
14. Cervical cap	Y		Femcap, Prentif Cavityrim cervical cap	
15. Female condom	Y		Fc Female Condom and Fc2 female condom	
16. Spermicide	Y		Shur-seal, Vcf vaginal contraceptive film and foam, Encare, Options conceptrol and Gynol vaginal contraceptive	
17. Emergency contraception (Plan B/Plan B One Step/Next Choice)	Y		My way, next choice one dose	
18. Emergency contraception (ELLA)	Y		Ella	

Minuteman detail 1: altavera, alyacen, apri, aranelle, aubra, avaine, azurette, balziva, briellyn, casziant, cesia, chateal, cryselle, cyclafem, dasetta, delyla, desogestrel/ethinyl estradiol, drospireone/ethinyl estradiol, elinest, emoquette, enpresse-28, enskyce, estarylla, falmina, gianvi, gildagia, gildess and gildess FE, junel and junel FE, kariva, kelnor, kurvelo, larin and larin FE, leena, lessina, levonest, levonorgestrel and ethinyl estradiol, lomedia 24 FE, loryna, low-ogestrel, lutera, marlissa, microgestin and microgestin FE, mono-linyah, mononessa, myzilra, natazia, necon and necon FE, nikki, norethindrone acetate/ethinyl estradiol, notrel, ocella, orsythia, philith, pimtrea, priemlla, portia, previfem, reclipsen, solia, sprintec, sronyx, syeda, tarina, tilia, tri legest, tri linyah, tri previfem, tri sprintec, trivora, velivet, vestura, viorele, vyfemla, wera,, wymza fe, zarah, zenchent, zovia

	Neighborhood Health Plan		Tufts	
Method	**Services with no cost sharing**	**Services with cost sharing**	**Services with no cost sharing**	**Services with cost sharing**
1. Sterilization for women	Yes	No	See Tufts detail 1	None
2. Surgical sterilization implant for women	Yes	No	Permanent implantable contraceptive intratubal occlusion device(s) and delivery system	None
3. Implantable rod	Yes	No	All products covered	None
4. IUD copper	Yes	No	All products covered	None
5. IUD with progestin	Yes	No	All products covered	None
6. Shot/injection	Yes	No	All products covered	None
7. Oral contraceptive (combined pill)	Yes	No	All products covered	None
8. Oral contraceptive (progestin only)	Yes	No	All products covered	None
9. Oral contraceptive extended/continuous use	Yes	No	All products covered	None
10. Patch	Yes	No	All products covered	None
11. Vaginal contraceptive ring	Yes	No	All products covered	None
12. Diaphragm	Yes	No	All products covered	None
13. Sponge	Yes	No	All products covered	None
14. Cervical cap	Yes	No	All products covered	None
15. Female condom	Yes	No	All products covered	None
16. Spermicide	Yes	No	All products covered	None
17. Emergency contraception (Plan B/Plan B One Step/Next Choice)	Yes	No	All products covered	None
18. Emergency contraception (ELLA)	Yes	No	All products covered	None

Tufts detail 1:
00851-Anesthesia for intraperitoneal procedures in lower abdomen including laparoscopy; tubal ligation/transection
00952-Anesthesia for vaginal procedure; hysteroscopy and/or hysterosalpingography
58555-hysteroscopy, diagnostic
58565-hysteroscopy, surgical; with bilateral fallopian tube cannulation to induce occlusion by placement of permanent implants
58600-Ligation or transection of fallopian tube(s), abdominal or vaginal approach, unilateral or bilateral
58605-Ligation or transection of fallopian tube(s), abdominal or vaginal approach, postpartum, unilateral or bilateral, during same hospitalization
58611-Ligation or transection of fallopian tube(s) when done at the time of cesarean delivery or intra-abdominal surgery (not a separate procedure)
58615-Occlusion of fallopian tube(s) by device (e.g., band, clip, Falope ring) vaginal or suprapubic approach
58670-Laparoscpy, surgical; with fulguration of oviducts (with or without transection)
58671-Laparoscopy, surgical; with occlusion of oviducts by device (e.g., band, clip, or Falope ring)
88302-Level II- Surgical pathology, gross and microscopic examination Appendix, incidental, Fallopian tube, sterilization
99144- Moderate sedation age 5 years or older, first 30 minutes intra-service time, when billed with 00952 or 58555
99145- Moderate sedation each additional 15 minutes intra-service time, when billed with 00952 or 58555
A4264-Permanent implantable contraceptive intratubal occlusion device(s) and delivery system

	Unicare		United Healthcare	
Method	**Services with no cost sharing**	**Services with cost sharing**	**Services with no cost sharing**	**Services with cost sharing**
1. Sterilization for women	Yes	no member cost	See United Health Care detail 1	
2. Surgical sterilization implant for women	Yes	no member cost	See United Health Care detail 1	
3. Implantable rod	Yes	See Unicare detail 1 below.	See United Health Care detail 1	
4. IUD copper	Yes	See Unicare detail 1 below.	See United Health Care detail 1	
5. IUD with progestin	Yes	See Unicare detail 1 below.	See United Health Care detail 1	
6. Shot/injection	Yes	See Unicare detail 1 below.	See United Health Care detail 1	
7. Oral contraceptive (combined pill)	Yes	See Unicare detail 1 below.	Select combined pill, extended use and progestin only products covered at $0	
8. Oral contraceptive (progestin only)	Yes	See Unicare detail 1 below.	Select combined pill, extended use and progestin only products covered at $0	
9. Oral contraceptive extended/continuous use	Yes	See Unicare detail 1 below.	Cover every unique progestin at $0	
10. Patch	Yes	See Unicare detail 1 below.	$0	
11. Vaginal contraceptive ring	Yes	See Unicare detail 1 below.	$0	
12. Diaphragm	Yes	See Unicare detail 1 below.	See United Health Care detail 1	
13. Sponge	Yes	See Unicare detail 2 below.	$0	
14. Cervical cap	Yes	See Unicare detail 1 below.	See United Health Care detail 1	
15. Female condom	Yes	See Unicare detail 2 below.	$0	
16. Spermicide	Yes	See Unicare detail 2 below.	$0	
17. Emergency contraception (Plan B/Plan B One Step/Next Choice)	Yes	$0- for generics and single-source brands (brands w/ no generic available). Cost share applies to brands with generic equivalents available. OTC requires prescription.	$0	
18. Emergency contraception (ELLA)	Yes	$0- for generics and single-source brands (brands w/ no generic available). Cost share applies to brands with generic equivalents available. OTC requires prescription.	$0	

Unicare detail 1: $0- for generics and single-source brands (brands w/ no generic available). Cost share applies to brands with generic equivalents available.
Unicare detail 2: $0- for generics and single-source brands (brands w/ no generic available). OTC requires prescription. OTC brands with generic equivalents available are not covered.

United Health Care detail 1: 100% with Network providers under the Preventive Care Services Benefit.

Appendix B: Membership Affected by the Proposed Mandate

Membership potentially affected by a proposed mandate may include Massachusetts residents with fully-insured employer-sponsored health insurance issued by a Massachusetts licensed company (including through the GIC), non-residents with fully-insured employer-sponsored insurance issued in Massachusetts, Massachusetts residents with individual (direct) health insurance coverage, and, in some cases, lives covered by GIC self-insured coverage. Membership projections for 2017 to 2021 are derived from the following sources.

Total Massachusetts population estimates for 2013, 2014, and 2015 from U. S. Census Bureau data[27] form the base for the projections. Distributions by gender and age, also from the Census Bureau,[28] were applied to these totals. Projected growth rates for each gender/age category were estimated from Census Bureau population projections to 2030.[29] The resulting growth rates were then applied to the base amounts to project the total Massachusetts population for 2017 to 2021.

The number of Massachusetts residents with employer-sponsored or individual (direct) health insurance coverage was estimated using Census Bureau data on health insurance coverage status and type of coverage[30] applied to the population projections.

To estimate the number of Massachusetts residents with fully-insured employer-sponsored coverage, projected estimates of the percentage of employer-based coverage that is fully-insured were developed using historical data from the Medical Expenditure Panel Survey Insurance Component Tables.[31]

To estimate the number of non-residents covered by a Massachusetts policy – typically cases in which a non-resident works for a Massachusetts employer offering employer-sponsored coverage – the number of lives with fully-insured employer-sponsored coverage was increased by the ratio of the total number of individual tax returns filed in Massachusetts by residents[32] and non-residents[33] to the total number of individual tax returns filed in Massachusetts by residents.

The number of residents with individual (direct) coverage was adjusted further to subtract the estimated number of people previously covered by Commonwealth Care who moved into MassHealth due to expanded Medicaid eligibility under the Affordable Care Act.[34]

Projections for the GIC self-insured lives were developed using GIC base data for 2013,[35] 2014,[36] and 2015,[37] and the same projected growth rates from the Census Bureau that were used for the Massachusetts population. Breakdowns of the GIC self-insured lives by gender and age were based on the Census Bureau distributions.

Endnotes

[1] The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 483, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/Senate/S483. The bill is identical to House Bill 948, "An Act relative to women's health and economic equity." Accessed 12 January 2016: https://malegislature.gov/Bills/189/House/H948.

[2] Massachusetts General Laws (M.G.L.) c.175 §47W, c.176A §8W, c.176B §4W, c.176G §4O. Accessed 27 January 2015: https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXXII/Chapter175/Section47W.

[3] These women do not need contraception because they (or their partner) are infertile; are pregnant, trying to become pregnant, or are postpartum; or are not sexually active.

Guttmacher Institute. Fact Sheet: Contraceptive Use in the United States, October 2015. Accessed 1 December 2015: http://www.guttmacher.org/pubs/fb_contr_use.html.

[4] *Op. cit.* Guttmacher Institute. Fact Sheet: Contraceptive Use in the United States, October 2015.

[5] Jones J, Mosher W, Daniels K. Current contraceptive use in the United States, 2006-2010, and changes in patterns of use since 1995. Natl Health Stat Report. 2012 Oct 18;(60):1-25. Table 3. Current use of a method of contraception by women aged 15–44 years, all women, and women at risk of unintended pregnancy, by selected characteristics: United States, 2006–2010. Accessed 3 February 2016: http://www.cdc.gov/nchs/data/nhsr/nhsr060.pdf.

[6] *Op. cit.* Jones J, Mosher W, Daniels K. Table 3.

[7] Burkman RT, Sonnenberg FA. Health Economics of Contraception. Obstet Gynecol Clin North Am. 2000 Dec;27(4):917-31. Accessed 3 February 2016: http://www.sciencedirect.com/science/article/pii/S0889854505701777.

[8] Guttmacher Institute, State Data Center. National Reproductive Health Profile 2013. Accessed 1 December 2015: http://www.guttmacher.org/datacenter/profiles/US.jsp.

[9] *Op. cit.* Guttmacher Institute, State Data Center. National Reproductive Health Profile 2013.

[10] *Op. cit.* Guttmacher Institute, State Data Center. National Reproductive Health Profile 2013.

[11] *Op. cit*. M.G.L. (M.G.L.) c.175 §47W, c.176A §8W, c.176B §4W, c.176G §4O.

[12] Healthcare.gov. Individuals and Families, Health benefits & coverage, Birth control benefits. Accessed 1 December 2015: https://www.healthcare.gov/coverage/birth-control-benefits/. See also: Coverage of Certain Preventive Services Under the Affordable Care Act; Final Rules. 26 CFR Part 54, 29 CFR Parts 2510 and 2590, 45 CFR Parts 147 and 156. Federal Register 78:127; 2 July 2013. Accessed 1 December 2015: http://www.gpo.gov/fdsys/pkg/FR-2013-07-02/pdf/2013-15866.pdf.

[13] U.S. Department of Labor, Employee Benefits Security Administration (EBSA). FAQs about Affordable Care Act Implementation (Part XXVI). Published 15 May 2015; accessed 28 January 2016: http://www.dol.gov/ebsa/faqs/faq-aca26.html#footnotes. FAQ Q4 refers in footnote 12 to the FDA Birth Control Guide:

> U.S. Food and Drug Administration (FDA). Birth Control Guide. Accessed 28 January 2016: http://www.fda.gov/downloads/ForConsumers/ByAudience/ForWomen/FreePublications/UCM356451.pdf.
>
> The 18 birth control methods for women covered under the ACA (PHS Act 2713 and its implementing regulations) include: Sterilization surgery; Surgical sterilization implant; Implantable rod; Copper intrauterine device; IUDs with progestin (a hormone); Shot/injection; Oral contraceptives (the pill), with estrogen and progestin; Oral contraceptives with progestin only; Oral contraceptives, known as extended or continuous use that delay menstruation; The patch; Vaginal contraceptive ring; Diaphragm; Sponge; Cervical cap; Female condom; Spermicide; Emergency contraception (Plan B/morning-after pill); Emergency contraception (a different pill called Ella).

[14] EBSA: FAQs about Affordable Care Act Implementation Part XII. Published 20 February 2013; accessed 28 January 2016: http://www.dol.gov/ebsa/faqs/faq-aca12.html.

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> As used in connection with the Affordable Care Act: A group health plan that was created—or an individual health insurance policy that was purchased—on or before March 23, 2010. Grandfathered plans are exempted from many changes required under the Affordable Care Act. Plans or policies may lose their "grandfathered" status if they make certain significant changes that reduce benefits or increase costs to consumers. A health plan must disclose in its plan materials whether it considers itself to be a grandfathered plan and must also advise consumers how to contact the U.S. Department of Labor or the U.S. Department of Health and Human Services with questions.

[16] U.S. Centers for Medicare and Medicaid Services (CMS), Office of the Actuary. National Health Expenditure Projections. Table 11, Prescription Drug Expenditures; Aggregate and per Capita Amounts, Percent Distribution and Annual Percent Change by Source of Funds: Calendar Years 2008-2024; Private Insurance. Accessed 29 January 2016: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html.

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