
MANDATED BENEFIT REVIEW OF SENATE BILL 543
SUBMITTED TO THE 191ST GENERAL COURT:

**AN ACT TO PROVIDE
EQUAL ACCESS TO MEDICATION
ASSISTED TREATMENT**

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Mandated Benefit Review of Senate Bill 543

Submitted to the 191st General Court:

An Act to Provide Equal Access to Medication Assisted Treatment

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1.0 Benefit Mandate Overview: S.B. 543: An Act to Provide Equal Access to Medication Assisted Treatment

1.1 History of the Bill

The Financial Services Committee referred Senate Bill (S.B.) 543, “An Act to provide equal access to medication assisted treatment,” to the Center for Health Information and Analysis (CHIA) for review. Massachusetts General Laws (MGL), 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.

This report is not intended to determine whether S.B. 507 would constitute a health insurance benefit mandate for purposes of state defrayal under the Affordable Care Act (ACA), nor is it intended to assist with state defrayal calculations if it is determined to be a health insurance benefit mandate requiring state defrayal.

1.2 What Does the Bill Propose?

Massachusetts S.B. 543, as submitted in the 190th General Court of the Commonwealth of Massachusetts (Commonwealth), requires carriers to cover and limit member cost sharing for medication-assisted treatment (MAT) programs for opioid use disorder (OUD). Subsequent to the referral of the bill to CHIA for review, CHIA and its consultants clarified 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:

- Require carriers to cover MAT programs specifically for OUD (i.e., programs that use FDA-approved medications in combination with counseling and behavioral therapies for OUD)
- Require coverage of buprenorphine, injectable naltrexone, and methadone provided by MAT programs
- Require carriers to limit member cost sharing (including copayments and co-insurance) to 20%ⁱ

The sponsors clarified that the bill’s intent is to cover medication-assisted programs in a variety of settings, including methadone treatment programs “as defined by 105 CMR 164.006, a SAMHSAⁱⁱ-certified program, licensed by the department of public health, usually comprised of a facility, staff, administration, patients, and services, that engages in supervised assessment and treatment using approved medications, of individuals who are addicted to opioids,” as well as MAT provided in other settings (e.g., buprenorphine prescribed by physicians, nurse practitioners, and physician assistants with a federal waiver in an office).

ⁱ The Sponsors clarified deductibles are not included.

ⁱⁱ SAMHSA is the Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/>.

1.3 Medical Efficacy of MAT

MAT is the use of FDA-approved medications, in combination with counseling and behavioral therapies, to provide a “whole-patient” approach to the treatment of substance use disorders.¹ Two types of medications used in MAT are agonists and antagonists. An agonist binds to the same receptors in the brain that were activated by the abused drug and produces opioid effects. In contrast, an antagonist attaches to the opioid receptors without activating them. An antagonist does not cause an opioid effect, rather it blocks full agonist opioids. The three FDA-approved medications for the treatment of opioid dependence and a brief description follow:

- Methadone (agonist) is a clinic-based opioid agonist that does not block other narcotics while preventing withdrawal while taking it. It is a liquid dispensed only in specialty-regulated clinics.
- Naltrexone (antagonist) is an office-based non-addictive opioid antagonist that blocks the effects of other narcotics. It is given as a daily pill or monthly injection.
- Buprenorphine (partial agonist) is an office-based opioid agonist/antagonist that blocks other narcotics while reducing withdrawal risk. It is administered as a daily dissolving tablet, check film, or monthly implant under the skin.

MAT is a recommended and effective treatment for opioid-addicted patients. In its 2018 report on MAT, the U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) emphasized comprehensive care including a full continuum of services for treating patients with opioid addiction, including MAT within this spectrum.² Methadone, injectable naltrexone, and buprenorphine have been found to be effective in reducing illicit opioid use in random clinical trials.^{3,4,5,6} Methadone and buprenorphine treatment have been associated with reduced risk of overdose death.^{7,8,9,10} Overall, evidence has shown that MAT is effective in treating opioid addiction, when individualized based on each patient's conditions and needs.

1.4 Current Coverage

BerryDunn surveyed 10 insurance carriers in the Commonwealth and seven insurers responded. All carriers responding currently cover buprenorphine, injectable naltrexone, and methadone treatment programs, defined by the proposed mandate. The carriers also all cover the medications buprenorphine and injectable naltrexone when provided to a member by a MAT program. Four of the seven carriers indicated that the total out-of-pocket cost to the member in the form of copayments (copays) and co-insurance might exceed 20% of the total reimbursement to the program provider. Three carriers indicated that their cost sharing was deductible only or that they did not apply cost sharing at all. Three of the carriers did not respond to the survey.

Under the federal ACA, substance use disorder treatment is considered an essential health benefit (EHB) and is required for coverage. The benefits are defined for the Commonwealth according to its benchmark health plan.¹¹

1.5 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 premium of between \$0.04 and \$0.07 per member per month (PMPM), or between 0.008% and 0.014% of premium. The impact on premiums is driven by the provisions of S.B. 543 that require that carriers limit copays and co-insurance amounts to 20% of total MAT allowed costs.

1.6 Plans Affected by the Proposed Benefit Mandate

The bill applies to commercial fully insured health insurance plans, hospital service corporations, medical service corporations, and HMOs, as well as to both fully and self-insured plans operated by the Group Insurance Commission (GIC) for the benefit of public employees.ⁱⁱⁱ The proposed mandate as drafted affects Medicaid/MassHealth; however, CHIA's analysis does not estimate the potential effect of the mandate on Medicaid expenditures.

1.7 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 to provide only administrative functions such as member services and claims processing), 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 or other federally funded plans, including TRICARE (covering military personnel and dependents), the Veterans Administration, and the Federal Employee's Health Benefit Plan, the benefits for which are determined by or under rules set by the federal government.

2.0 Background on Opioids and OUD

S.B. 543 requires carriers to cover buprenorphine, injectable naltrexone, methadone, and MAT programs and provides that the total out-of-pocket cost in the form of copays and co-insurance for the program does not exceed 20% of the total reimbursement to the program provider.

MGL Chapter 3, section 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.

The report proceeds in the following sections:

- 2.0 Background on Opioids and OUD
 - Section 2.1 describes how opioids are used and differentiates between dependence, tolerance, and OUD
 - Section 2.2 details the impact of OUD

ⁱⁱⁱ S.B. 543 does not include Hospital Service Corporations, Medical Service Corporations, or HMOs as drafted. Subsequent to referral of the bill to CHIA for review, CHIA and its consultants sought clarification from the sponsors who confirmed these three license types should be included.

- 3.0 Medical Efficacy of Medication-Assisted Treatment
 - Section 3.1 describes the use of methadone in MAT
 - Section 3.2 describes the use of naltrexone in MAT
 - Section 3.3 describes the use of buprenorphine in MAT
 - Section 3.4 describes state and federal efforts to increase access to MAT
- 4.0 Conclusion

2.1 Dependence, Tolerance, and OUD

Opioids are drugs that act on opioid receptors in both the spinal cord and brain to reduce the intensity of pain-signal perception.¹² Opioids also affect brain areas that control emotion, which further diminishes the effects of painful stimuli.¹³ In modern times, opioids have been used to treat acute pain. In the 1990s, opioids began to be used to treat chronic pain as well, despite a lack of evidence to support their effectiveness for this use.¹⁴ In fact, some patients who are treated with opioids for chronic pain experience a worsening of their pain or an increased sensitivity (i.e., hyperalgesia).¹⁵

Medications in the opioid class include hydrocodone (e.g., Vicodin), oxycodone (e.g., OxyContin, Percocet), oxymorphone (e.g., Opana), morphine (e.g., Kadian, Avinza), codeine, Fentanyl, and others.¹⁶ Hydrocodone is used to relieve severe pain,¹⁷ including dental- and injury-related pain.¹⁸ Oxycodone and oxymorphone are prescribed for moderate to severe pain relief.^{19,20} Morphine is used for moderate to severe pain. Codeine is generally prescribed for milder pain and can be used for persistent coughing in adults.²¹

Because opioids activate reward regions in the brain, they can cause a sense of euphoria or a “high,” making them amenable to misuse by a patient, which may result in a substance use disorder.²² Chemically, opioids are very similar to heroin, and research suggests that misuse of opioids may open the door to heroin use. Pooling data from the National Survey on Drug Use and Health (NSDUH) conducted annually from 2002 through 2011 found that nearly 80% of Americans using heroin (including those in treatment) reported misusing prescription opioids first.²³

When used regularly or over a longer period, opioids can lead to dependence, meaning the user’s body develops an adaptation to chronic exposure of the drug.²⁴ Dependence is frequently part of addiction, but they are not the same.²⁵ Those who are dependent on opioids will experience unpleasant side effects when they abruptly reduce or stop taking the drug. Symptoms can be lessened by gradually tapering the drug.²⁶

Tolerance occurs when the user needs a higher dose of a drug to get the same effect, and it often accompanies dependence. The prescribing provider might have difficulty determining whether the user is developing a tolerance or needs more medication to control his or her pain. Addiction, in contrast, is a chronic disease involving changes in brain circuitry that lead to compulsive drug seeking and continued use despite negative consequences.²⁷

Addictions can be to different drugs or substances and are called “substance use disorders.” OUD is a diagnosis presented in the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders, DSM-5. Criteria for diagnosis of the presence of OUD as well as its severity (mild, moderate, or severe) are provided (see Appendix A for criteria).²⁸

2.2 OUD Impact

Overdose is a significant danger with opioids, as they interact with parts of the brain stem that control breathing.²⁹ Taking too much of an opioid or taking one in combination with other drugs or alcohol can lead to respiratory suppression and sometimes death. According to the Centers for Disease Control (CDC), opioids (including prescription opioids, heroin, and fentanyl) were responsible for 68% of the 70,200 overdose deaths nationally in 2017.³⁰ In the Commonwealth, confirmed annual opioid-related overdose deaths increased from 379 in 2000 to 2,096 in 2016.³¹ However, from 2016 to 2017, the Commonwealth experienced a decrease of 158 in the number of confirmed opioid-related overdose deaths (1,938).

Nationwide, prescriptions for opioids have been declining since a peak in 2010.³² The Commonwealth experienced a 31% drop in opioid prescriptions between 2010 and 2016, from 67.9 prescriptions per 100 persons to 47.1,³³ much lower than the national average of 66.5.³⁴ However, from 2014 to 2015, the Commonwealth experienced one of the largest absolute and percentage rate changes in deaths from synthetic opioids other than methadone of any state.³⁵ The Commonwealth had the third-highest synthetic opioid death rate in 2016, at 23.5 per 100,000.³⁶

Opioid abuse also burdens the health care system and the broader economy, including significant emergency department (ED) utilization costs. The CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) program found that from July 2016 to September 2017, ED visits for opioid overdoses rose 30% across the United States.³⁷ ESOOS analyzed 45 million ED visits in 16 states including the Commonwealth during this timeframe and found that 26.7 per 10,000 ED visits in these states were suspected opioid overdoses.³⁸

As addiction progresses, patients become sicker and require more intensive measures for stabilization. A retrospective cohort study from 162 hospitals in 44 states, discharged between January 1, 2009, and September 31, 2015, of inpatient admissions for opioid-associated overdoses showed a 34% increase over seven years in cases requiring intensive care and an increased mortality rate for these patients.³⁹

A study using 2013 data from the National Vital Statistics System, the National Survey of Drug Use and Health, health care claims, and the U.S. Department of Justice estimated the total economic burden of the opioid epidemic to be \$78.5 billion in health care, substance abuse treatment, and criminal justice costs, much of which is borne by the public sector.⁴⁰ A 2018 study of the cost of the opioid epidemic to New England states found that as a percentage of total state government spending, New England states spend more than average on opioid-related costs, about 1% of budget compared to 0.74% nationally.⁴¹ The report further estimates that the cost of medical treatment associated with opioids use disorder is as much as \$340 million per year in the Commonwealth.⁴²

3.0 Medical Efficacy of Medication-assisted treatment

MAT is the use of FDA-approved medications, in combination with counseling and behavioral therapies, to provide a “whole-patient” approach to the treatment of substance use disorders.⁴³ MAT is a broad term that generally encompasses several different approaches to treatment, including several forms of detoxification, medically supervised withdrawal, and maintenance therapy.⁴⁴ The three FDA-approved medications for the treatment of opioid dependence are methadone, naltrexone, and buprenorphine.⁴⁵ See Appendix A for a side-by-side comparison.

MAT is a recommended and effective treatment for opioid-addicted patients. In its 2018 report on MAT, SAMHSA emphasized comprehensive care including a full continuum of services for treating patients with OUD, including MAT within this spectrum.⁴⁶ The World Health Organization (WHO) reports the ultimate achievement of a drug-free state is the ideal and ultimate objective, but it is not feasible for all individuals with OUD, especially in the short term.⁴⁷ MAT for addiction, including both medication and psychosocial therapy, has proven effective in helping patients to stop using illicit opioids, remain in treatment, reduce criminal activity, and reduce risks of associated infectious diseases.^{48,49}

The most appropriate approach to MAT will vary by individual; no one therapy or treatment approach will be effective for all patients.⁵⁰ Patients benefit from different medications and treatment for varying lengths of time, including lifelong treatment.⁵¹

3.1 Methadone

Methadone was the first medication approved for the treatment of OUD order, and it has been used for this purpose since 1964. As a long-acting opioid agonist^{iv} that activates the body’s opioid receptors, methadone imitates the action of an opioid but not the euphoria of short-acting forms such as heroin.⁵² Methadone is a Schedule II drug per the U.S. Drug Enforcement Administration (DEA), meaning that it has a high potential for abuse, which may lead to severe psychological or physical dependence. As such, it is only available at federally regulated Opioid Treatment Programs (OTPs) and acute inpatient hospital settings for OUD treatment. Methadone is used for medically supervised withdrawal and maintenance therapy.

Numerous clinical trials and meta-analyses of studies conducted in many countries have shown that methadone retains patients in treatment and reduces illicit opioid use more effectively than placebo, medically supervised withdrawal, or no treatment.⁵³ In a review of 31 trials (5,430 participants), methadone was found to be effective to retain patients in treatment and suppress illicit opioid use.⁵⁴

Longitudinal studies have found that methadone treatment is associated with the following:^{55,56,57,58,59,60,61}

- Reduced risk of overdose-related deaths
- Reduced risk of HIV and hepatitis C infection
- Lower rates of cellulitis

^{iv} A chemical entity that binds to a receptor and activates it, mimicking the action of the natural (or abused) substance that binds there.

- Lower rates of HIV risk behavior
- Reduced criminal behavior

Given the substantial evidence supporting methadone in MAT, WHO has included methadone in its list of Essential Medications since 2005.^{62,63}

3.2 Naltrexone

An opioid antagonist^v pharmacotherapy approved in 2010 by the FDA as a long-acting injectable for the prevention of opioid dependence, naltrexone (brand name Vivitrol®)⁶⁴ is used to prevent relapse to opioid dependence, after opioid detoxification.⁶⁵ Naltrexone has few, if any, intrinsic actions besides its opioid blocking properties. Vivitrol® is an extended-release formulation of naltrexone designed to be administered by intramuscular injection once a month.⁶⁶ In its oral tablet form, naltrexone has not been found to be superior to placebo or to no medication in clinical trials.⁶⁷ In addition, oral naltrexone has been found to have high dropout rates, and as such, is not recommended for maintenance treatment.⁶⁸

When used for MAT as a drug injected monthly, naltrexone does not carry the risk of abuse or overdose as with methadone or buprenorphine and is not associated with the development of tolerance or dependence.⁶⁹ Unlike the restrictions on providers and/or settings of methadone and buprenorphine therapies as described in Sections 3.1 and 3.3, dispensing providers do not need additional training or certification to administer the drug.⁷⁰ However, the injection form must be provided at the provider's treatment setting, creating barriers to treatment for some patients. Further, patients who subsequently may need pain management therapy while taking naltrexone require additional interventions to counteract the effect of this antagonist therapy.

As a maintenance medication, naltrexone “can essentially eliminate the rewarding effects of self-administered opioids, thereby dramatically reducing use.”⁷¹ However, compared with maintenance therapies such as methadone or buprenorphine, patient adherence rates are “very poor,” and patients are much less likely to remain in treatment using naltrexone except when “externally motivated” such as through court-ordered or employer-stipulated treatment programs, or a strong social support system.⁷² An explanation for this relapse is the difficulty in initiating naltrexone therapy given the extensive detoxification period required before therapy may be initiated.⁷³ Once effectively initiated, naltrexone has been recently found to be as equally safe and effective as buprenorphine-naloxone with similar relapse rates.⁷⁴ However, there is an increased risk of overdose in patients who relapse while using naltrexone due to their reduced tolerance to opioids.⁷⁵

3.3 Buprenorphine

Buprenorphine is a partial agonist and is used for medically supervised withdrawal and maintenance therapy of OUD.⁷⁶ It is a Schedule III drug per the U.S. DEA, meaning it has a moderate to low potential for physical and psychological dependence.⁷⁷ Buprenorphine's routes of administration include sublingual, buccal, subdermal implant (Probuphine), and subcutaneous extended release. Individual health care practitioners (physicians, nurse

^v A substance that has an affinity for opioid receptors in the central nervous system without producing the physiological effects of opioid agonists. Mu-opioid receptor antagonists, like naltrexone, can block the effects of exogenously administered opioids. Medications for Opioid Use Disorder: SAMHSA. TIP 63: <https://store.samhsa.gov/system/files/sma18-5063fulldoc.pdf>.

practitioners, and physician assistants) must obtain federal waiver to prescribe buprenorphine. Prescribers must obtain special certifications for the implant and subcutaneous routes of administration.⁷⁸

In a review of 31 randomized controlled trials (5,430 participants), buprenorphine was found to be superior to placebo medication in retention of participants in treatment at all doses examined, and at high doses (16 mg), it was found to reduce illicit opioid use effectively compared to placebo.⁷⁹

Buprenorphine is frequently combined with naloxone, a short-acting opioid agonist, to discourage diversion to injected misuse (common brands: Suboxone, Zubsolv, Cassipa, and Bunavail). The combined medication contains of 4:1 ratio of buprenorphine/naloxone. In a 24-week, open-label, randomized controlled, comparative effectiveness trial that began with eight U.S. community-based inpatient locations and followed participants as outpatients, self-administered buprenorphine-naloxone sublingual film was compared to extended-release naltrexone intramuscular injections.⁸⁰ The buprenorphine/naloxone was found to have a lower relapse rate than naltrexone initially, although both medications were found safe and comparably effective after induction to the medications.

Given the substantial evidence supporting buprenorphine in MAT, WHO has included it in its list of Essential Medications since 2005.⁸¹

3.4 Federal and state efforts to increase MAT access

Federal efforts, such as the passage of the Comprehensive Addiction and Recovery Act of 2016, have encouraged access of MAT through mechanisms to improve MAT education, allowing nurse practitioners and physician assistants to prescribe buprenorphine under the direction of a qualified physician and increasing the total number of patients a physician can have for the purposes of dispensing buprenorphine from 30 to 100 per year.⁸² The impact of allowing nurse practitioners and physician assistants to prescribe MAT is projected to increase the number of rural patients treated with buprenorphine by 10,777 (15.2%) nationally, with New England expected to have a larger population-adjusted increase.⁸³

In the Commonwealth, Chapter 208, Section 103 of the Acts of 2018 provides for the creation of a MAT Commission to study and make recommendations regarding the use of MAT for OUD in the Commonwealth, including methadone, buprenorphine, and injectable long-acting naltrexone.⁸⁴ In addition, Chapter 208 does the following:

- Increases state detainee and prisoner access to MAT
- Encourages referral to medication-assisted programs for certain patients after a substance use disorder evaluation when appropriate
- Provides for a creation of a section 35 involuntary commitment commission to study, among other things, the recommended time following detoxification to begin MAT for non-court involved individuals diagnosed with a substance use disorder who have had an involuntary inpatient admission

4.0 Conclusion

OUD has significant personal and social costs. Opioids, including prescription drugs, heroin, and fentanyl, account for two-thirds of overdose deaths in the United States. Overdose deaths in the Commonwealth, specifically, increased over 400% in 16 years, despite an impressive drop in opioid prescriptions from their peak in 2010. The cost to the Commonwealth's health care system to treat patients with OUD has been estimated at \$340 million per year.

MAT has been proven effective in the treatment of OUD. Research demonstrates that access to MAT, especially when combined with psychosocial interventions and support, can be the key to recovery for some who battle an OUD. Numerous federal and state efforts and initiatives are being undertaken to increase access to MAT. The Commonwealth has already made significant progress in its effort to increase access to MAT. To the extent that this mandate would provide improved access, it would be expected to improve the health of the intended population.

Appendix A

COMPARISON OF MEDICATIONS FOR OPIOID USE DISORDER⁸⁵

Prescribing Considerations	Methadone	Naltrexone	Buprenorphine
Phase of Treatment	Medically supervised withdrawal, maintenance	Prevention of relapse to opioid dependence, following medically supervised withdrawal	Medically supervised withdrawal, maintenance
Route of Administration	Oral	Oral, intramuscular extended-release	Sublingual, buccal, subdermal implant, subcutaneous extended release
Possible Adverse Effects	Constipation, hyperhidrosis, respiratory depression, sedation, QT prolongation, sexual dysfunction, severe hypotension including orthostatic hypertension and syncope, misuse potential, neonatal abstinence syndrome	Nausea, anxiety, insomnia, precipitated opioid withdrawal, hepatotoxicity, vulnerability to opioid overdose, depression, suicidality, muscle cramps, dizziness or syncope, somnolence or sedation, anorexia, decreased appetite or other appetite disorders Intramuscular: Pain, swelling, induration (including some cases requiring surgical intervention)	Constipation, nausea, precipitated opioid withdrawal, excessive sweating, insomnia, pain, peripheral edema, respiratory depression (particularly combined with benzodiazepines or other Central Nervous System depressants), misuse potential, neonatal abstinence syndrome Implant: Nerve damage during insertion/removal, accidental overdose or misuse if extruded, local migration or protrusion Subcutaneous: Injection site itching or pain, death from intravenous injection
Regulations and Availability	Schedule II; only available at federally certified OTPs and the acute inpatient hospital setting for OUD treatment	Not a scheduled medication; not included in OTP regulations; requires prescription; office-based treatment or specialty substance use treatment programs, including OTPs	Schedule III; requires waiver to prescribe outside OTPs Implant: Prescribers must be certified in the Probuphine Risk Evaluation and Mitigation Strategy (REMS) Program. Providers who wish to insert/remove implants are required to obtain special training and certification in the REMS Program Subcutaneous: Healthcare settings and pharmacies must be certified in the Sublocade REMS Program and only dispense medication directly to a provider for administration

Endnotes

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AN ACT TO PROVIDE EQUAL ACCESS TO MEDICATION ASSISTED TREATMENT

COST REPORT

This report was prepared by Larry Hart; Valerie Hamilton, RN, MHA, JD; Andrea Clark, MS; and Jennifer Elwood, FSA, MAAA, FCA.

1.0 Executive Summary

The Joint Committee on Financial Services referred Senate Bill (S.B.) 543, “An Act to provide equal access to medication assisted treatment,” in the 190th General Court, to the Massachusetts (Commonwealth) Center for Health Information and Analysis (CHIA) for review.

Massachusetts S.B. 543, as submitted in the 190th General Court, requires carriers to cover and limit member cost sharing for medication-assisted treatment (MAT) programs for opioid use disorder (OUD). Subsequent to the referral of the bill to CHIA for review, CHIA and its consultants clarified 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:

- Require carriers to cover MAT programs specifically for OUD (i.e., programs that use FDA-approved medications in combination with counseling and behavioral therapies for OUD)
- Require coverage of buprenorphine, injectable naltrexone, and methadone provided by MAT programs
- Require carriers to limit member cost sharing (including copays and co-insurance) to 20%^{vi}

The sponsors clarified that the bill’s intent is to cover medication-assisted programs in a variety of settings, including methadone treatment programs “as defined by 105 CMR 164.006, a SAMHSA^{vii}-certified program, licensed by the Department of Public Health, usually comprised of a facility, staff, administration, patients, and services, that engages in supervised assessment and treatment using approved medications of individuals who are addicted to opioids,” as well as MAT provided in other settings (e.g., buprenorphine prescribed by physicians, nurse practitioners, and physician assistants with a federal waiver in an office).

Massachusetts General Laws (MGL) chapter 3, section 38C charges the CHIA with reviewing the potential impact of proposed mandated healthcare insurance benefits on the premiums paid by businesses and consumers. CHIA has engaged BerryDunn^{viii} to provide an actuarial estimate of the effect enactment of the bill would have on the cost of health insurance in the Commonwealth.

This report is not intended to determine whether S.B. 543 would constitute a health insurance benefit mandate for purposes of Commonwealth defrayal under the Affordable Care Act (ACA), nor is it intended to assist with Commonwealth defrayal calculations if it is determined to be a health insurance benefit mandate requiring Commonwealth defrayal.

^{vi} The sponsors clarified that deductibles are not included.

^{vii} SAMHSA is the Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/>.

^{viii} Formerly Compass Health Analytics, Inc.

1.1 Current Insurance Coverage

BerryDunn surveyed 10 insurance carriers in the Commonwealth with seven responding. All of the responding carriers currently cover buprenorphine, injectable naltrexone, and methadone treatment programs, as defined by the proposed mandate. The responding carriers also cover the medications buprenorphine and injectable naltrexone when provided to a member by a methadone treatment program or other settings (e.g., a physician's office). Four of the seven responding carriers indicated that the total out-of-pocket cost to the members in the form of copays and coinsurance might exceed 20% of the total reimbursement to the program provider. Three indicated that the only cost sharing they applied was the deductible, or that they did not apply cost sharing at all.

Under the federal ACA, substance use disorder treatment is considered an essential health benefit (EHB), and is required for coverage. The EHBs for the Commonwealth are defined according to its benchmark health plan.¹

1.2 Analysis

BerryDunn estimated the impact of S.B. 543 in insurance premiums by assessing the incremental effects of two components:

- Incremental effect on carrier expense of limiting copays and coinsurance on medical costs to a maximum of 20% of total provider reimbursement
- Incremental effect on carrier expense of limiting copays and coinsurance on pharmacy costs to a maximum of 20% of total allowed costs

The 20% maximum cost sharing is intended to be calculated on the combined medical and pharmacy costs. However, it is likely for some benefit structures that carriers would implement the proposed mandate using a separate maximum allowable cost share for medical and pharmacy claims when adjudicating the claims for each portion of the service. Calculating the cost separately for MAT medical and pharmacy claims rather than on a combined basis is conservative in that it can lead to a higher incremental claim cost but will never lead to a lower incremental claim cost. For example, the combined out-of-pocket cost to a member could be below the 20% threshold in a situation with lower than 20% cost sharing on the medical portion of the service and greater than 20% cost sharing on the pharmacy portion of the service. For clarity, an example of the two methods of calculating incremental claims cost is provided in Figure 1, on the following page. The cost of the mandate is calculated as the amount of member cost sharing in excess of the 20% cost share threshold.

Figure 1: Estimated Annual Medical MAT Trends

SEPARATE APPROACH	ALLOWED AMOUNT	20% THRESHOLD	MEMBER COST SHARE	S.B. 543 COST
Medical	\$500	\$100	\$0	\$0
Pharmacy	\$100	\$20	\$30	\$10
Total	\$600	\$120	\$80	\$10

COMBINED APPROACH	ALLOWED AMOUNT	20% THRESHOLD	MEMBER COST SHARE	S.B. 543 COST
Total	\$600	\$120	\$80	\$0

The incremental cost of limiting copays and coinsurance amounts to 20% of total provider reimbursement, including the cost of the medication, is estimated using claims data from the Massachusetts All-Payer Claims Database (APCD). BerryDunn used the APCD to measure the allowed cost and member cost share (by type) for each service. The member copay amount and coinsurance amount for each service was compared to 20% of the allowed claim cost. The incremental cost of the mandate is based on claims where the out-of-pocket amounts for these two types of member cost sharing exceed 20%. The member cost-share amounts for each claim in excess of the allowable amount under the mandate are summed separately for medical and pharmacy claims to calculate the incremental cost.

BerryDunn aggregated these components and projected them forward over the next five years (2020–2024) for the fully-insured Commonwealth population, using the bill's effective date of January 1, 2020. BerryDunn added carrier retention (administrative cost and profit) to arrive at an estimate of the bill's effect on premiums. Note the estimates assume carriers will fully comply with the provisions of the bill if it becomes law.

1.3 Summary Results

Table ES-1, on the following page, summarizes the estimated effect of S.B. 543 on premiums for fully-insured plans over five years. This analysis estimates that the bill, if enacted, would increase fully-insured premiums by as much as 0.014% on average over the next five years; a more likely increase is in the range of 0.010%, equivalent to an average annual expenditure of \$1.4 million over the period 2020–2024.

The impact on premiums is driven by the provisions of S.B. 543 that require that carriers limit copays and coinsurance amounts to 20% of total allowed MAT costs. 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 language of the bill.

Table ES-1: Summary Results

	2020	2021	2022	2023	2024	WEIGHTED AVERAGE	FIVE-YEAR TOTAL
Members (000s)	2,144	2,137	2,130	2,123	2,115		
Medical Expense Low (\$000s)	\$707	\$954	\$918	\$883	\$849	\$915	\$4,311
Medical Expense Mid (\$000s)	\$863	\$1,223	\$1,236	\$1,249	\$1,262	\$1,238	\$5,832
Medical Expense High (\$000s)	\$1,035	\$1,536	\$1,625	\$1,718	\$1,817	\$1,641	\$7,731
Premium Low (\$000s)	\$817	\$1,103	\$1,061	\$1,020	\$981	\$1,057	\$4,982
Premium Mid (\$000s)	\$997	\$1,413	\$1,428	\$1,443	\$1,458	\$1,431	\$6,740
Premium High (\$000s)	\$1,196	\$1,775	\$1,877	\$1,986	\$2,100	\$1,896	\$8,934
Per Member Per Month (PMPM) Low	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04
PMPM Mid	\$0.05	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06
PMPM High	\$0.07	\$0.07	\$0.07	\$0.08	\$0.08	\$0.07	\$0.07
Estimated Monthly Premium	\$516	\$531	\$547	\$563	\$580	\$548	\$548
Premium % Rise Low	0.009%	0.008%	0.008%	0.007%	0.007%	0.008%	0.008%
Premium % Rise Mid	0.011%	0.010%	0.010%	0.010%	0.010%	0.010%	0.010%
Premium % Rise High	0.013%	0.013%	0.013%	0.014%	0.014%	0.014%	0.014%

Executive Summary Endnotes

¹ Centers for Medicare and Medicaid Services (CMS), Center for Consumer Information and Insurance Oversight, Information on Essential Health Benefits (EHB) Benchmark Plans. Accessed 11 July 2018: <https://www.cms.gov/ccio/resources/data-resources/ehb.html>.

2.0 Introduction

The Joint Committee on Financial Services referred S.B. 543, “An Act to provide equal access to medication assisted treatment,” in the 190th General Court, to CHIA for review. MGL, chapter 3, section 38C, requires CHIA to review and evaluate the potential impact on health insurance costs of each mandated benefit bill referred to the agency by a legislative committee.

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.

This report is not intended to determine whether S.B. 543 would constitute a health insurance benefit mandate for purposes of state defrayal under the Affordable Care Act, nor is it intended to assist with state defrayal calculations if it is determined to be a health insurance benefit mandate requiring state defrayal.

Massachusetts S.B. 543, as submitted in the 190th General Court of the Commonwealth of Massachusetts (Commonwealth), requires carriers to cover and limit member cost sharing for medication-assisted treatment (MAT) programs for OUD. Subsequent to the referral of the bill to CHIA for review, CHIA and its consultants clarified 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:

- Require carriers to cover MAT programs specifically for OUD (i.e., programs that use FDA-approved medications in combination with counseling and behavioral therapies for OUD)
- Require coverage of buprenorphine, injectable naltrexone, and methadone provided by MAT programs
- Require carriers to limit member cost sharing (including copays and co-insurance) to 20%^{ix}

The sponsors clarified that the bill’s intent is to cover medication-assisted programs in a variety of settings, including methadone treatment programs “as defined by 105 CMR 164.006, a SAMHSA^x-certified program, licensed by the Department of Public Health, usually comprised of a facility, staff, administration, patients, and services, that engages in supervised assessment and treatment using approved medications, of individuals who are addicted to opioids,” as well as MAT provided in other settings (e.g., buprenorphine prescribed by physicians, nurse practitioners, and physician assistants in an office with a federal waiver).

This analysis assumes an effective date of January 1, 2020. Section 3.0 of this analysis outlines the provisions and interpretations of the bill. Section 4.0 summarizes the methodology used for the estimate. Section 5.0 discusses important considerations in translating the bill’s language into estimates of its incremental impact on healthcare costs and steps through the calculations. Section 6.0 summarizes the results.

^{ix} The sponsors clarified deductibles are not included.

^x SAMHSA is the Substance Abuse and Mental Health Services Administration: <https://www.samhsa.gov/>.

3.0 Interpretation of S.B. 543

Under the federal ACA, substance use disorder treatment is considered an EHB, and is required for coverage. The EHBs for the Commonwealth are defined according to its benchmark health plan.¹

This report includes estimating the cost to carriers of limiting out-of-pocket expenses to members in the form of copays and coinsurance to 20% of the total reimbursement to the program provider, including the cost of medications.

3.1 Plans Affected by the Proposed Mandate

The bill amends statutes that regulate healthcare carriers in the Commonwealth. It includes the following sections, each of which addresses statutes dealing with a particular type of health insurance policy:

- Section 1: Chapter 32A – Plans Operated by the Group Insurance Commission (GIC) for the Benefit of Public Employees
- Section 2: Chapter 175 – Commercial Health Insurance Company Plans
- Section 3: Chapter 176A – Hospital Service Corporation Plans
- Section 4: Chapter 176B – Medical Service Corporation Plans
- Section 5: Chapter 176G – Health Maintenance Organization (HMO) Plans

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 MassHealth.

3.2 Covered Services

BerryDunn surveyed 10 insurance carriers in the Commonwealth, and seven responded. All of the responding carriers currently cover buprenorphine, injectable naltrexone, and methadone treatment programs, defined by the proposed mandate. The responding carriers also cover the medications buprenorphine and injectable naltrexone when provided to a member by a methadone treatment program. Four of the seven responding carriers indicated that the total out-of-pocket cost to members in the form of copays and coinsurance might exceed 20% of the total reimbursement to the program provider. Three indicated that their cost sharing was deductible only or that they did not apply cost sharing at all.

3.3 Existing Laws Affecting the Cost of S.B. 543

The proposed mandate is not redundant to, or in conflict with, any existing state or federal mandates.

4.0 Methodology

4.1 Overview

Estimating the impact of S.B. 543 on premiums requires assessing the incremental effects of two components:

- Incremental effect on carrier expense of limiting copays and coinsurance on medical costs to maximum of 20% of total provider reimbursement
- Incremental effect on carrier expense of limiting copays and coinsurance on pharmacy costs to maximum of 20% of total allowed costs

The 20% maximum cost sharing is intended to be calculated on the combined medical and pharmacy costs. However, it is likely for some benefit structures that carriers would implement the proposed mandate using a separate maximum allowable cost share for medical and pharmacy claims when adjudicating the claims for each portion of the service. Calculating the cost separately for MAT medical and pharmacy claims rather than on a combined basis is conservative in that it can lead to a higher incremental claim cost but will never lead to a lower incremental claim cost. For example, the combined out-of-pocket cost to a member could be below the 20% threshold in a situation with lower than 20% cost sharing on the medical portion of the service and greater than 20% cost sharing on the pharmacy portion of the service. For clarity, an example of the two methods of calculating incremental claims cost is provided in Figure 1, on the following page. The cost of the mandate is calculated as the amount of member cost sharing in excess of the 20% cost share threshold.

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COMBINED APPROACH	ALLOWED AMOUNT	20% THRESHOLD	MEMBER COST SHARE	S.B. 543 COST
Total	\$600	\$120	\$80	\$0

The incremental cost of limiting copays and coinsurance amounts to 20% of total provider reimbursement, including the cost of the medication, is estimated using claims data from the Massachusetts All Payer Claims Database (APCD). BerryDunn used the APCD to measure the allowed cost and member cost share (by type) for each service. The member copay amount and coinsurance amount for each service was compared to 20% of the allowed claim cost. The incremental cost of the mandate is based on claims where the out-of-pocket amounts for these two types of member cost sharing exceed 20%. The member cost-share amounts for each claim in excess of the allowable amount under the mandate are summed separately for medical and pharmacy claims to calculate the incremental cost.

Combining the components, and accounting for carrier retention, results in a baseline estimate of the proposed mandate's incremental effect on premiums, which is projected over the five years following the assumed January 1, 2020, implementation date of the proposed law.

4.2 Data Sources

The primary data sources used in the analysis are:

- 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 the Commonwealth
- The Massachusetts APCD
- Academic literature, published reports, and population data, cited as appropriate

4.3 Steps in the Analysis

To implement the analysis, BerryDunn performed the steps summarized in this section.

1. **Estimated marginal costs to carriers of limiting copay and coinsurance amounts to no more than 20% of the total provider reimbursement for medical MAT services**

To estimate the impact of member copay and coinsurance maximums for medical MAT services, BerryDunn:

- A. Used claims data from the APCD to calculate copay and coinsurance amounts as a percent of allowed claims for each MAT medical claim
- B. For each MAT claim, measured the amount of cost sharing that exceeded 20% of the allowed amount.
- C. Summed the excess amounts determined in Step B above and divided the total by corresponding member months to calculate a baseline incremental PMPM cost
- D. Projected the baseline cost forward by applying estimated increases in physician service unit costs over the analysis period to the allowed claims cost, and repeating Steps A through C under different scenarios of changes to copay and coinsurance amounts over time
- E. Combined a separate estimate of utilization increases with cost increases from Step D to project PMPM amounts over the five-year analysis period

2. Estimated marginal costs to carriers of limiting copay and coinsurance amounts to no more than 20% of the total allowed costs for MAT pharmacy claims

To estimate the impact of member copay and coinsurance maximums for pharmacy MAT claims, BerryDunn:

- A. Used claims data from the APCD to calculate copay and coinsurance amounts as a percent of allowed claims for each MAT claim
- B. For each MAT claim, measured the amount of cost sharing that exceeded 20% of the allowed amount
- C. Summed the excess amounts determined in Step B above and divided the total by corresponding member months to calculate a baseline incremental PMPM cost
- D. Projected the baseline cost forward using estimated increases in pharmacy service unit costs over the analysis period to the allowed claims cost, and repeating Steps A through C under different scenarios of changes to copays and coinsurance amounts over time
- E. Combined a separate estimate of utilization increases with cost increases from Step D to project PMPM amounts over the five-year analysis period

3. Calculated the impact of the combined projected claim costs on insurance premiums

To add the other components of health insurance premiums to the estimated claims costs, BerryDunn:

- A. Summed the estimated incremental PMPM costs for medical and pharmacy MAT services
- B. Estimated the fully-insured Commonwealth population under age 65, projected for the next five years (2020–2024)
- C. Multiplied the estimated aggregate incremental PMPM cost of the mandate by the projected population estimate to calculate the total estimated marginal claims cost of S.B. 543
- D. Estimated carrier retention (administrative costs, taxes, and profit) and applied the estimate to the final incremental claims cost calculated in Step C

4.4 Limitations

Carriers currently cover MAT services. However, some carriers' total out-of-pocket costs to members in the form of copays and coinsurance exceed 20% of the total allowed costs. It is unclear how the carrier benefit offerings will change over time and what effect that will have on the prevalence and levels of the different types of member cost sharing during the analysis period. There is also uncertainty around how the level of OUD diagnoses will change over the projection period and what proportion of individuals with an OUD will utilize MAT. While numerous federal and Commonwealth efforts seek to increase access to MAT, a 2017 Blue Cross Blue Shield report of the nation's commercially-insured population states that the Commonwealth's utilization rate of MAT for members with OUD is already high at 84%.² It is uncertain how much higher this could realistically go over the projection period. Detailed descriptions of the estimation process in the next sections further address these uncertainties.

5.0 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 cost impact.

Section 5.1 describes the steps used to calculate the impact of carriers limiting copay and coinsurance amounts to no more than 20% of the total provider reimbursement for medical MAT services. Section 5.2 describes the impact of carriers limiting copay and coinsurance amounts to no more than 20% of the total allowed costs for MAT pharmacy claims. Section 5.3 aggregates the incremental PMPM costs. Section 5.4 projects the fully-insured population age 0–64 in the Commonwealth over the 2020–2024 analysis period. Section 5.5 calculates the total estimated marginal cost of S.B. 543, and Section 5.6 adjusts these projections for carrier retention to arrive at an estimate of the bill’s effect on premiums for fully-insured plans.

5.1 Limit Copay and Coinsurance Amounts to 20% of Total Reimbursement for Medical MAT Services

Estimated the impact of requiring a maximum of 20% of copay plus coinsurance amounts for medical MAT services

S.B. 543 requires carriers to limit copay and coinsurance amounts to no more than 20% of the total provider reimbursement for medical MAT services. BerryDunn used claims data from the APCD to calculate copay and coinsurance amounts as a percent of allowed claims for each MAT medical claim. BerryDunn used the APCD to determine the 20% maximum cost-share threshold for each MAT medical claim by multiplying the allowed claim amounts in the APCD by 20% to calculate the threshold for each claim. For claims with coinsurance plus copay amounts greater than the threshold amount, BerryDunn calculated the difference between the cost share and the threshold amounts. BerryDunn then summed the differences for all claims and divided the total by corresponding member months to calculate a baseline incremental PMPM. Results are displayed in Table 1.

Table 1: Estimated Incremental Claims Cost for Medical MAT

INCREMENTAL COST	MEMBER MONTHS	INCREMENTAL PMPM COST
\$513,094	20,650,672	\$0.025

To predict how the cost of the proposed mandate will change over time, BerryDunn took into account how carriers might change their copay levels. Predicting this is difficult. The impact of the proposed mandate is based upon the difference between cost share amounts and 20% of the allowed cost. The cost of the mandate will go down over time if the carriers do not increase copays. For example, the 20% threshold grows as the total allowed cost grows. If copay amounts stay the same, the difference between the copay amounts and the higher threshold amount is less; based on the mix of copays in commercial fully-insured market, the cost of the proposed mandate decreases by 4.7% per year.

For the low scenario, BerryDunn assumed carriers would not adjust their copay levels over the five-year period. However, to help manage insurance premium levels, carriers often make changes to their copay structures to try to keep pace with the increases in allowed claims cost over time. In doing so, the member cost share remains at the same percentage of the total allowed cost each year, and ensures that the health plan liability does not increase at a faster rate than the growth in the allowed claims cost. Therefore, the high scenario assumes the carriers would adjust their copays on average, over the analysis period, at the same percentage as the allowed claims cost trend. In this scenario, the incremental cost would increase by the allowed claims cost trend each year and cost would increase by 4% per year. BerryDunn based the allowed claims cost trend on the long-term average national projection for cost increases to physical and clinical services over the study period.³ As carriers don't tend to change their copay levels annually (given that copays are usually set at increments of five dollars), it is more likely that carrier copay increases, on average over the five-year period, will be below allowed cost increases over the same period. Therefore the most likely scenario assumes that, on average, carriers will increase copays over time so that incremental costs remain flat through the projection period.

The Commonwealth has fewer commercially insured people with an opioid-based substance use disorder compared to the national average, and a high usage of MAT services for those with an OUD. A study conducted by the BCBS Association⁴ indicated that in 2016, on average, Commonwealth residents with commercial insurance had approximately 27% fewer individuals with an OUD compared to the national average. In addition, in 2016, 84% of the commercial fully-insured population in the Commonwealth with an opioid substance use disorder was treated with MAT, as compared to a national average of 37% receiving MAT services. This suggests there is little room for MAT service use to grow in the Commonwealth, as it already has one of the highest treatment rates in the nation.

However, according to a November 2017 update by the Massachusetts Governor's working group on opioids,⁵ there are plans to use an 1115 Medicaid demonstration waiver to expand access to MAT, focusing on increasing the number of primary care prescribers. The waiver was approved for a July 2017–June 2022 demonstration period.⁶ To help support this public health response to the opioid epidemic and improve access to treatment and recovery services, the Commonwealth received an \$11.7 million federal grant in May 2018. This was the second year the Commonwealth has received funding, bringing the two-year total to \$23.8 million.⁷ While these efforts will have the greatest impact on the Medicaid population, it will likely address access needs in the commercial population as well. Given that the timing of the waiver is close to the implementation date of the proposed mandate, BerryDunn anticipates that utilization will begin to increase in 2020—the assumed implementation date of the proposed mandate. BerryDunn assumed that over the analysis period the number of commercial fully-insured members with an opioid substance use disorder receiving MAT would increase to 90% from 84%. This implies a 1.4% increase in utilization per year beginning in 2020 and continuing through the analysis period.

Combining the cost increases and the utilization increases results in the overall annual trend adjustments. Table 2 displays cost, utilization, and total estimated annual trend amounts.

Table 2: Estimated Annual Medical MAT Trends

	COST	UTILIZATION	TOTAL
Low Scenario	-4.7%	1.4%	-3.4%
Mid Scenario	0.0%	1.4%	1.4%
High Scenario	4.0%	1.4%	5.5%

BerryDunn divided the annual incremental cost by the corresponding membership to estimate the incremental PMPM amounts. BerryDunn multiplied the incremental PMPM amounts by the cost trends to project PMPM amounts to 2019, the year prior to the proposed mandate implementation. BerryDunn multiplied the incremental 2019 PMPM amounts by the total annual trends over the analysis period to project the PMPM impact of requiring a maximum of 20% copay and coinsurance cost share amount. Table 3 displays the incremental claims costs, and Table 4 displays incremental PMPM amounts.

Table 3: Estimated Marginal Annual Cost of Medical MAT

	2016	2020	2021	2022	2023	2024
Low Scenario	\$513,094	\$429,147	\$414,703	\$400,745	\$387,256	\$374,222
Mid Scenario	\$513,094	\$520,277	\$527,561	\$534,947	\$542,436	\$550,030
High Scenario	\$513,094	\$608,650	\$641,858	\$676,878	\$713,809	\$752,754

Table 4: Estimated Marginal PMPM Cost of Medical MAT

	2016	2020	2021	2022	2023	2024
Low Scenario	\$0.025	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
Mid Scenario	\$0.025	\$0.03	\$0.03	\$0.03	\$0.03	\$0.03
High Scenario	\$0.025	\$0.03	\$0.03	\$0.03	\$0.03	\$0.04

5.2 Limit Copay and Coinsurance Amounts to 20% of Total Allowed Costs for Pharmacy MAT Claims

Estimated the impact of adding a maximum of 20% of copay plus coinsurance amounts for pharmacy MAT services

The second component of S.B. 543 requires carriers to limit copay and coinsurance amounts to no more than 20% of the total allowed amount reimbursement for pharmacy MAT services. BerryDunn used claims data from the APCD to calculate copay and coinsurance amounts as a percent of allowed claims for each MAT pharmacy claim. BerryDunn then used the APCD to determine the 20% maximum cost share threshold for each MAT pharmacy claim. Next, BerryDunn multiplied allowed claim amounts in the APCD by 20% to calculate the threshold for each claim. For claims with coinsurance plus copay amounts greater than the threshold amount, BerryDunn calculated the difference between the cost share amount and the threshold amounts. BerryDunn then summed the differences and divided the total by corresponding member months to calculate a baseline incremental PMPM. Results are displayed in Table 5.

Table 5: Estimated Incremental Claims Cost for Pharmacy MAT

INCREMENTAL CLAIMS COST	MEMBER MONTHS	INCREMENTAL PMPM COST
\$444,656	20,650,672	\$0.022

Similar to the analysis for MAT medical services, pharmacy copays were varied over the study period to develop a range of results. For the low scenario, BerryDunn assumed that the carriers would not adjust their copay levels over the five-year period, resulting in an incremental cost decrease of 5.0% per year. The high scenario assumes that the carriers would adjust their copays at the same percentage, on average, as the allowed claims cost trend. BerryDunn based the allowed claims cost trend on the long-term average national projection for increases to prescription drug costs over the projection period.⁸ In this scenario, the cost would increase by 5.4% per year. Similar to the analysis for MAT medical services, the most likely scenario assumes that on average carriers will increase their copays over time so that costs remain flat through the projection period.

Combining the cost changes and the anticipated utilization increases discussed in Section 5.1 results in the overall annual trend adjustments. Table 6 displays cost, utilization, and total estimated annual trend amounts.

Table 6: Estimated Annual Pharmacy MAT Trends

	COST	UTILIZATION	TOTAL
Low Scenario	-5.0%	1.4%	-3.7%
Mid Scenario	0.0%	1.4%	1.4%
High Scenario	5.4%	1.4%	6.9%

BerryDunn divided the annual incremental cost by the corresponding membership to estimate the incremental PMPM amounts. BerryDunn then multiplied the incremental PMPM amounts by the cost trends to project PMPM amounts to 2019, the year prior to the proposed mandate implementation. Next, BerryDunn multiplied the incremental 2019 PMPM amounts by the total annual trends over the analysis period to project the PMPM impact of requiring a maximum of 20% copay and coinsurance cost share amount. Table 7 displays the incremental claims costs, and Table 8 displays incremental PMPM amounts.

Table 7: Estimated Marginal Annual Cost of Pharmacy MAT

	2016	2020	2021	2022	2023	2024
Low Scenario	\$444,656	\$367,246	\$353,768	\$340,784	\$328,278	\$316,230
Mid Scenario	\$444,656	\$450,881	\$457,194	\$463,594	\$470,085	\$476,666
High Scenario	\$444,656	\$556,448	\$594,707	\$635,597	\$679,298	\$726,004

Table 8: Estimated Marginal PMPM Cost of Pharmacy MAT

	2016	2020	2021	2022	2023	2024
Low Scenario	\$0.022	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
Mid Scenario	\$0.022	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
High Scenario	\$0.022	\$0.03	\$0.03	\$0.03	\$0.03	\$0.04

5.3 Marginal Cost PMPM

Adding together the estimated PMPM costs associated with the two relevant provisions (from Tables 4 and 8) yields the total PMPM marginal cost, shown in Table 9.

Table 9: Estimated Marginal PMPM Cost of S.B. 543

	2020	2021	2022	2023	2024
Low Scenario	\$0.04	\$0.04	\$0.04	\$0.03	\$0.03
Mid Scenario	\$0.05	\$0.05	\$0.05	\$0.05	\$0.05
High Scenario	\$0.06	\$0.06	\$0.06	\$0.07	\$0.07

5.4 Projected Fully-Insured Population in the Commonwealth

Table 10 shows the fully-insured population in the Commonwealth ages 0–64 projected for the next five years. Appendix A describes the sources of these values.

Table 10: Projected Fully-Insured Population in the Commonwealth, Ages 0 – 64

YEAR	TOTAL (0 – 64)
2020	2,143,554
2021	2,137,204
2022	2,130,078
2023	2,122,832
2024	2,115,005

5.5 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 (carrier medical expense) associated with the proposed requirement, shown in Table 11. This analysis assumes the bill, if enacted, would be effective January 1, 2020.^{xi}

Table 11: Estimated Marginal Cost of S.B. 543

	2020	2021	2022	2023	2024
Low Scenario	\$707,291	\$954,378	\$917,848	\$882,659	\$848,578
Mid Scenario	\$862,504	\$1,222,985	\$1,235,972	\$1,249,012	\$1,261,828
High Scenario	\$1,034,746	\$1,535,714	\$1,624,552	\$1,718,491	\$1,817,421

^{xi} The analysis assumes the mandate would be effective for policies issued and renewed on or after January 1, 2020. Based on an assumed renewal distribution by month, by market segment, and by the Commonwealth market segment composition, 71.3% of the member months exposed in 2020 will have the proposed mandate coverage in effect during calendar year 2020. The annual dollar impact of the mandate in 2020 was estimated using the estimated PMPM and applying it to 71.3% of the member months exposed.

5.6 Carrier Retention and Increase in Premium

Carriers include their retention expenses in fully-insured premiums. Retention expenses include general administration, commissions, taxes, fees, and contribution to surplus or profit. Assuming an average retention rate of 13.5% based on CHIA's analysis of fully-insured premium retention in the Commonwealth,⁹ the increase in medical expenses was adjusted upward to approximate the total impact on premiums. Table 12 shows the result.

Table 12: Estimate of Increase in Carrier Premium Expense

	2020	2021	2022	2023	2024
Low Scenario	\$817,373	\$1,102,915	\$1,060,700	\$1,020,035	\$980,650
Mid Scenario	\$996,742	\$1,413,328	\$1,428,336	\$1,443,406	\$1,458,217
High Scenario	\$1,195,791	\$1,774,729	\$1,877,394	\$1,985,953	\$2,100,281

6.0 Results

The estimated impact of the proposed requirement on medical expenses 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. 543 that require that carriers limit copays and coinsurance amounts to 20% of total allowed MAT costs. Variation between scenarios is attributable to the uncertainty surrounding how carriers will adjust their cost sharing levels.

Starting in 2021, the federal ACA will impose an excise tax, commonly known as the “Cadillac Tax,” on expenditures on health insurance premiums and other relevant items (e.g., health savings account contributions) that exceed specified thresholds. To the extent that relevant expenditures exceed those thresholds (in 2021), S.B. 543—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. 543, will exceed or approach the thresholds, and is beyond the scope of this analysis.

6.1 Five-Year Estimated Impact

For each year in the five-year analysis period, Table 13 displays the projected net impact of the proposed language on medical expense and premiums using a projection of Commonwealth fully-insured membership. Note that the relevant provisions of S.B. 543 are assumed effective January 1, 2020.¹⁰

The low scenario impact is \$1.1 million per year on average. This scenario assumes carriers will not adjust copay amounts over the projection period. The high scenario impact is \$1.9 million and is based on an assumption that carriers will increase the copay amounts to keep up with allowed cost increases. The middle scenario assumes

carriers will manage copays such that costs remain flat over the projection period. The middle scenario has average annual costs of \$1.4 million, or an average of 0.010% 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 proposed language.

Table 13: Summary Results

	2020	2021	2022	2023	2024	WEIGHTED AVERAGE	FIVE-YEAR TOTAL
Members (000s)	2,144	2,137	2,130	2,123	2,115		
Medical Expense Low (\$000s)	\$707	\$954	\$918	\$883	\$849	\$915	\$4,311
Medical Expense Mid (\$000s)	\$863	\$1,223	\$1,236	\$1,249	\$1,262	\$1,238	\$5,832
Medical Expense High (\$000s)	\$1,035	\$1,536	\$1,625	\$1,718	\$1,817	\$1,641	\$7,731
Premium Low (\$000s)	\$817	\$1,103	\$1,061	\$1,020	\$981	\$1,057	\$4,982
Premium Mid (\$000s)	\$997	\$1,413	\$1,428	\$1,443	\$1,458	\$1,431	\$6,740
Premium High (\$000s)	\$1,196	\$1,775	\$1,877	\$1,986	\$2,100	\$1,896	\$8,934
PMPM Low	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04
PMPM Mid	\$0.05	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06	\$0.06
PMPM High	\$0.07	\$0.07	\$0.07	\$0.08	\$0.08	\$0.07	\$0.07
Estimated Monthly Premium	\$516	\$531	\$547	\$563	\$580	\$548	\$548
Premium % Rise Low	0.009%	0.008%	0.008%	0.007%	0.007%	0.008%	0.008%
Premium % Rise Mid	0.011%	0.010%	0.010%	0.010%	0.010%	0.010%	0.010%
Premium % Rise High	0.013%	0.013%	0.013%	0.014%	0.014%	0.014%	0.014%

6.2 Impact on the GIC

The proposed legislative change 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, 2020.

Benefit offerings of GIC plans are similar to those of most other commercial plans in the Commonwealth; however, based on BerryDunn's carrier surveys, the GIC plans have—on average—lower copay levels than other commercial plans. BerryDunn used the APCD, as described above for fully-insured commercial plans, to develop GIC-specific calculations. The estimated incremental PMPM of the proposed legislative language on GIC medical expenses is estimated to be approximately 38% lower than that calculated for the other fully-insured plans in the Commonwealth.

This is consistent with carrier survey responses that, in general, did not indicate differences in coverage for the GIC but did indicate lower copay levels.

To estimate the medical expense separately for the GIC, the GIC-specific PMPMs were applied to the GIC membership starting in July 2020.

Table 14 breaks out the GIC-only fully-insured membership and the GIC self-insured membership, as well as 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 13 also include the GIC fully-insured membership. Finally, the proposed legislative requirement is assumed to require the GIC to implement the provisions on July 1, 2020; therefore, the results in 2020 are approximately one-half of an annual value.

Table 14: GIC Summary Results

	2020	2021	2022	2023	2024	WEIGHTED AVERAGE	FIVE-YEAR TOTAL
GIC Fully-Insured							
Members (000s)	72	72	72	72	71		
Medical Expense Low (\$000s)	\$10	\$20	\$20	\$19	\$18	\$19	\$87
Medical Expense Mid (\$000s)	\$13	\$25	\$26	\$26	\$26	\$26	\$116
Medical Expense High (\$000s)	\$15	\$32	\$34	\$36	\$38	\$35	\$156
Premium Low (\$000s)	\$12	\$23	\$23	\$22	\$21	\$22	\$101
Premium Mid (\$000s)	\$15	\$29	\$30	\$30	\$30	\$30	\$134
Premium High (\$000s)	\$18	\$37	\$39	\$42	\$44	\$40	\$180
GIC Self-Insured							
Members (000s)	270	270	269	269	268		
Medical Expense Low (\$000s)	\$39	\$76	\$73	\$71	\$69	\$73	\$328
Medical Expense Mid (\$000s)	\$47	\$96	\$97	\$98	\$99	\$97	\$436
Medical Expense High (\$000s)	\$57	\$121	\$128	\$136	\$144	\$130	\$585

Endnotes

¹ Centers for Medicare and Medicaid Services (CMS), Center for Consumer Information and Insurance Oversight, Information on Essential Health Benefits (EHB) Benchmark Plans. Accessed 11 July 2018: <https://www.cms.gov/ccio/resources/data-resources/ehb.html>.

² Blue Cross Blue Shield. America's opioid epidemic and its effect on the nation's commercially-insured population. Published June 29, 2017. Accessed 29 January 2019: <https://www.bcbs.com/the-health-of-america/reports/americas-opioid-epidemic-and-its-effect-on-the-nations-commercially-insured>.

³ U.S. Centers for Medicare and Medicaid Services (CMS), Office of the Actuary. National Health Expenditure Projections. Table 7, Physician and Clinical Services Expenditures; Aggregate and per Capita Amounts, Percent Distribution and Annual Percent Change by Source of Funds: Calendar Years 2010-2026; Private Insurance. Accessed 23 January 2019: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html>.

⁴ Blue Cross Blue Shield (BCBS) Association, America's opioid epidemic and its effect on the nation's commercially-insured population. Accessed 24 January 2019: <https://www.bcbs.com/the-health-of-america/reports/americas-opioid-epidemic-and-its-effect-on-the-nations-commercially-insured>.

⁵ Commonwealth of Massachusetts, Governor's Working Group on Opioids Update, Action Items November 14, 2017, Accessed 23 January 2019: <https://www.mass.gov/files/documents/2017/11/15/2017-annual-update-action-items-gov-working-group.pdf>[Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html](https://www.mass.gov/files/documents/2017/11/15/2017-annual-update-action-items-gov-working-group.pdf).

⁶ Medicaid.gov, 1115 Substance Use Disorder Demonstrations. Accessed 25 January 2019: <https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/program-areas/reducing-substance-use-disorders/1115-sud-demonstrations/index.html>.

⁷ Mass.gov. Press Release: \$11.7 Million Awarded for Opioid Prevention, Treatment and Recovery Programs in Massachusetts. Accessed 29 January 2019: <https://www.mass.gov/news/117-million-awarded-for-opioid-prevention-treatment-and-recovery-programs-in-massachusetts>.

⁸ U.S. Centers for Medicare and Medicaid Services (CMS), Office of the Actuary. National Health Expenditure Projections. Table 7, Physician and Clinical Services Expenditures; Aggregate and per Capita Amounts, Percent Distribution and Annual Percent Change by Source of Funds: Calendar Years 2010-2026; Private Insurance. Accessed 23 January 2019: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html>.

⁹ Massachusetts Center for Health Information and Analysis. Annual Report on the Massachusetts Health Care System, September 2018. Accessed 05 December 2018: <http://www.chiamass.gov/annual-report>.

¹⁰ With an assumed start date of January 1, 2020, dollars were estimated at 71.3% of the annual cost, based upon an assumed renewal distribution by month (Jan through Dec) by market segment and the Massachusetts market segment composition.

Appendix A: Membership Affected by the Proposed Language

Membership potentially affected by a proposed mandated change to the use of medical necessity criteria may include Commonwealth residents with fully-insured employer-sponsored health insurance issued by a Commonwealth-licensed company (including through the GIC); non-residents with fully-insured employer-sponsored insurance issued in the Commonwealth; Commonwealth residents with individual (direct) health insurance coverage; and lives covered by GIC self-insured coverage. BerryDunn's 2020–2024 membership projections for these populations are derived from the following sources.

The 2016 MA APCD formed the base for the projections. The MA APCD provided fully-insured and self-insured membership by insurance carrier. The MA APCD was also used to estimate the number of non-residents covered by a Commonwealth policy. These are typically cases in which a non-resident works for a Commonwealth employer that offers employer-sponsored coverage. Adjustments were made to the data for membership not in the MA APCD, based on published membership reports available from CHIA and the Massachusetts Division of Insurance (DOI).

CHIA publishes a quarterly enrollment trends report and supporting data book (July 2016 Enrollment Trends¹), which provides enrollment data for Commonwealth residents by insurance carrier for most carriers. (Some small carriers are excluded.) CHIA used supplemental information beyond the data in the MA APCD to develop its enrollment trends report and provided BerryDunn with details regarding the use of supplemental carrier information for its December 2016 reported enrollment. The supplemental data was used to adjust the resident totals from the MA APCD.

The DOI published reports titled Quarterly Report of HMO Membership in Closed Network Health Plans as of September 30, 2016² and Massachusetts Division of Insurance Annual Report Membership in MEDICAL Insured Preferred Provider Plans by County as of September 30, 2016.³ These reports display fully-insured covered members for licensed Commonwealth carriers where the member's primary residence is in Commonwealth. The DOI report includes all insurance carriers and was used to supplement the MA APCD membership for small carriers not in the MA APCD.

The distribution of members by age and gender was estimated using MA APCD population distribution ratios, and was checked for reasonableness and validated against U.S. Census Bureau (Census Bureau) data.⁴ Membership was projected from 2016 through 2024 using Census Bureau population growth rate estimates by age and gender.⁵

Projections for the GIC self-insured lives were developed using the GIC base data for 2014⁶ and 2015,⁷ as well as the same projected growth rates from the Census Bureau that were used for the Commonwealth population. Breakdowns of the GIC self-insured lives by gender and age were based on the Census Bureau distributions.

Appendix A Endnotes

¹ Center for Health Information and Analysis. Estimates of fully insured and self-insured membership by insurance carrier. Accessed 22 September 2016: www.chiamass.gov/enrollment-in-health-insurance/.

² Massachusetts Division of Insurance. HMO Group Membership and HMO Individual Membership: <https://www.mass.gov/files/documents/2017/05/zm/4q16dist-group.pdf>, <https://www.mass.gov/files/documents/2017/05/zm/4q16dist-individual.pdf>.

³ Massachusetts Division of Insurance Annual Report. Membership in MEDICAL Insured Provider Plans by County as of December 31, 2016. Accessed 22 September 2016: <https://www.mass.gov/files/documents/2018/02/16/2016-prefprov2.pdf>.

⁴ U.S. Census Bureau. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2017. Accessed 6 December 2017: <http://www.census.gov/popest/data/state/totals/2017/index.html>.

⁵ U.S. Census Bureau. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2015. Accessed 28 April 2016: <http://www.census.gov/popest/data/state/totals/2015/index.html>.

⁶ Group Insurance Commission. GIC Health Plan Membership by Insured Status FY2016. Accessed 6 December 2018: <http://www.mass.gov/anf/docs/gic/annual-report/fy2016annual-report.pdf>.

⁷ Group Insurance Commission, Group Insurance Commission Fiscal Year 2016 Annual Report. Accessed 6 December 2018: <http://www.mass.gov/anf/docs/gic/annual-report/gic-annual-reportfy16.pdf>.

