

**CENTER FOR HEALTH
INFORMATION AND ANALYSIS**

**MANDATED BENEFIT REVIEW OF SENATE BILL 1502
SUBMITTED TO THE 189TH GENERAL COURT:
AN ACT PROVIDING ACCESS TO
FULL SPECTRUM ADDICTION TREATMENT SERVICES**

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BENEFIT MANDATE OVERVIEW: S.B. 1502: AN ACT PROVIDING ACCESS TO FULL SPECTRUM ADDICTION TREATMENT SERVICES

HISTORY OF THE BILL

The Joint Committee on Mental Health and Substance Abuse referred Senate Bill (S.B.) 1502, *An Act Providing Access to Full Spectrum Addiction Treatment Services*, sponsored by Sen. Keenan of Quincy in the 189th General Court, to the Center for Health Information and Analysis (CHIA) for review.¹ 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?

Chapter 258 of the Acts of 2014, *An Act to Increase Opportunities for Long-Term Substance Abuse Recovery*,² requires insurers to cover medically-necessary acute treatment services (ATS) and clinical stabilization services (CSS) for up to a total of 14 days, prohibits them from requiring preauthorization for those services, and provides that the medical necessity of such treatment be determined by the treating clinician. S.B. 1502 proposes to amend Chapter 258 by adding medically-necessary transitional support services (TSS) to the services for which Chapter 258 requires coverage, prohibits preauthorization, and assigns medical necessity determination to the provider. It also increases from 14 to 28 the number of days for which coverage for medically-necessary ATS, CSS, and, now, TSS is required and during which insurers are prohibited from denying these services based on utilization review.

MEDICAL EFFICACY OF S.B. 1502

No research is available specifically to measure the impact of increasing the duration of ATS or CSS or of adding TSS coverage, and Chapter 258 was implemented too recently for its effects to be measured. However, in general, if S.B. 1502 allows additional patients access to adequately-available, medically-necessary treatment of appropriate duration, and to be continuously engaged in recovery, then the bill should improve the effectiveness of substance use disorder (SUD) treatment.

Several factors might mitigate S.B. 1502's clinical impact. The Massachusetts Bureau of Substance Abuse Services (BSAS) currently funds TSS regardless of the patient's insurance coverage, as private insurance seldom pays for this level of residential care. Therefore the bill's primary effect, in the short run, would be to shift funding from BSAS to commercial insurers, rather than to put more people into treatment, because need for the services already exceeds capacity. Further, provider capacity for many of the components of the spectrum of substance abuse treatment will constrain the number of patients able to access these services, patients' ability to transition between service levels in a timely manner, and the length of treatment episodes. Improvements in outcomes will also depend on how providers use the discretion the proposed mandate grants them in delivering appropriate care for commercially-insured patients, and whether or not these decisions improve on decisions currently made by carriers.

CURRENT COVERAGE

In responses to a recent survey of insurance carriers in Massachusetts, the majority reported that they do not cover TSS and presumably will continue not to cover TSS even after the effective date of Chapter 258 (October 2015), though that law will require coverage for ATS and CSS for a total of 14 days per episode. While the majority of carriers do not cover TSS, two small carriers indicated they do; however, in Massachusetts, BSAS currently pays for essentially all TSS services directly regardless of a patient's insurance status, even for members covered by the few plans that might contract directly with TSS providers.

COST OF IMPLEMENTING THE BILL

Requiring coverage by fully-insured health plans for TSS would result in an average annual increase, over five years, to the typical member's monthly health insurance premiums of one to three cents per month, or less than 0.01 percent of premium. The magnitude of this estimate is small primarily because current and projected TSS capacity in Massachusetts is limited and individuals eligible for Medicaid or uninsured occupy most of that capacity.

An increase in capacity greater than that assumed in the analysis would result in a greater increase in premiums. The actuarial estimate of TSS utilization potentially attributable to the bill is based on current and planned bed capacity for ATS, CSS, and TSS beds in Massachusetts, all licensed by BSAS. The estimated cost range already allows for greater-than-planned expansions, but if capacity constraints were removed from all three service levels, while retaining the same rate of referral from ATS and CSS into TSS, the estimated premium increase would rise from a range of \$0.02 PMPM in 2016 to \$0.04 PMPM in 2020 to a range of \$0.04 PMPM to \$0.05 PMPM—still a small percentage change in premiums—and implies approximately 300 additional admissions from the commercially fully-insured population. Increased capacity would be used predominately by Medicaid patients, who have historically used 98.7 percent of bed capacity and for whom utilization is also capacity-constrained. Assuming commercial patients use a higher proportion of new bed capacity than they have of existing capacity, this increased capacity would imply an additional 20 beds dedicated to the commercial fully-insured population. The fully-insured population historically used about 1.3 percent of the bed capacity or about 4.5 beds.

The Massachusetts Division of Insurance and the Health Connector 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

Commercial fully-insured health insurance plans, including individual and group accident and sickness insurance policies, corporate group insurance policies, and HMO coverage issued pursuant to Massachusetts General Laws, and both fully-insured and self-insured plans operated by the Group Insurance Commission (GIC) for the benefit of public employees and their dependents would be subject to this proposed mandate. The proposed mandate would apply to members covered under the relevant plans, regardless of whether they reside within the Commonwealth or merely have their principal place of employment in the Commonwealth. The proposed mandate also affects Medicaid/MassHealth, which provides coverage to a large portion of the population receiving substance abuse treatment; however, CHIA's analysis does not estimate the 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. These 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: ACUTE TREATMENT, CLINICAL STABILIZATION, AND THERAPEUTIC SUPPORT SERVICES

Massachusetts Senate Bill (S.B.) 1502, submitted in the 189th General Court, requires health insurance plans to provide coverage for medically necessary “acute treatment services, medically necessary clinical stabilization services, and medically necessary transitional support services for up to a total of 28 days and shall not require preauthorization prior to obtaining such services.”³ This bill amends specified sections of Chapter 258 of the Acts of 2014, *An Act to Increase Opportunities for Long-Term Substance Abuse Recovery*.⁴ Table 1 outlines selected changes enacted by Chapter 258 (effective October 1, 2015), and the incremental changes to the law proposed by S.B. 1502.

Table 1: Comparison of Chapter 258 and S.B. 1502

Chapter 258 Provisions	S. B. 1502 Incremental Changes
Creates mandatory minimum coverage for 14 days for medically-necessary acute treatment and clinical stabilization services (ATS and CSS).	Adds mandatory coverage for medically-necessary TSS and increases minimum coverage for ATS, CSS, and TSS to a total of 28 days.
Eliminates an insurer's ability to terminate authorization through utilization review for the first 14 days of an ATS/CSS treatment episode.	Eliminates an insurer's ability to terminate authorization through utilization review for the first 28 days of an ATS/CSS/TSS treatment episode.
Shifts the determination of medical necessity for ATS and CSS from the carrier to the provider.	Additionally shifts the determination of medical necessity for TSS from the carrier to the provider.
Forbids insurers from requiring prior authorization for substance abuse treatment in general, including ATS, CSS, and TSS. ⁵	None: Prior authorization for TSS, as one component of substance abuse treatment, is already prohibited by c. 258.

Massachusetts General Laws C. 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. A detailed explanation of the relevant provisions of Chapter 258 can be found in CHIA's *Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to Increase Opportunities for Long-Term Substance Abuse Recovery*.¹

SUBSTANCE ABUSE, DEPENDENCE, ADDICTION, AND WITHDRAWAL

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the American Psychiatric Association, “substance use disorder” (SUD) is a “cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems.”⁶ Symptoms may include some combination of “impaired control, social impairment, risky use and [tolerance and/or withdrawal].”⁷ While not applied as a diagnostic term in the DSM, addiction, as defined by the National Institute of Drug Abuse (NIDA), is a chronic illness affecting “multiple brain circuits, including those involved in reward and motivation, learning and memory, and inhibitory control over behavior.”⁸ The likelihood of relapse for someone with this illness is similar to that of other chronic illnesses with both behavioral and physiological components, such as diabetes, hypertension, and asthma.⁹

i Portions of this document have been previously published in CHIA's Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to Increase Opportunities for Long-Term Substance Abuse Recovery. [Published December 2014: http://www.chiamass.gov/assets/Uploads/Substance-Abuse-Mandates-Chapter-258-of-the-Acts-of-2014.pdf](http://www.chiamass.gov/assets/Uploads/Substance-Abuse-Mandates-Chapter-258-of-the-Acts-of-2014.pdf)

Acute Withdrawal

When a patient abruptly discontinues use of a psychoactive substance,¹⁰ he or she will experience “the onset of a predictable constellation of signs and symptoms...”¹¹ Generally the symptoms are the “opposite of the intoxication effects of the particular substance,” and can begin within hours or days of last use.¹² The symptoms, as well as the timeframe for withdrawal, vary by the substance used as well as by the individual; Table 2 shows general acute withdrawal timeframes.¹³

Table 2: Acute Withdrawal Timeframes for Specific Substances

Substance	Acute Withdrawal Timeframe
Alcohol	5-7 days
Benzodiazepines	1-4 weeks; 3-5 weeks with gradual dosage reduction (tapering)
Cannabis (Marijuana)	5 days
Opioids	4-10 days (14-21 days for methadone)
Stimulants (e.g. amphetamines, methamphetamines, cocaine)	1-2 weeks

Post-Acute Withdrawal

After the end of these timeframes, many patients experience continuing symptoms, as well as “non-substance-specific signs and symptoms that persist, evolve, or appear well past the expected timeframe for acute withdrawal.”¹⁴ This is known as protracted withdrawal, or post-acute withdrawal syndrome (PAWS). Given its variability and limited research on these symptoms for substances other than alcohol, no consensus definition exists for PAWS.¹⁵ However, clinical reporting of the syndrome is widespread, and it is important to treat, as “[t]hese symptoms may lead clients to seek relief by returning to substance use.”¹⁶ The U.S. Substance Abuse and Mental Health Services Administration (SAMHSA) has issued an advisory on PAWS to provide information on best practices for behavioral health providers.^{17,18}

Chronic use of psychoactive substances changes the molecular, cellular, and neurologic circuitry of the brain, as well as a patient’s central nervous system.^{19,20} This affects a person’s emotions and behavior in ways which may persist after acute withdrawal, with symptoms varying by the substance used.²¹ In addition to acute withdrawal symptoms, patients may experience symptoms including anxiety, depression, mood swings, disinterest in sex, insomnia, memory problems, and pain, among others. Impulsive behavior, alcohol or drug cravings, and difficulties with decision making, concentration, and problem-solving are also common, and especially problematic in early recovery.²²

According to SAMHSA’s advisory, “[c]lients affected by [PAWS] may want to alleviate those symptoms by returning to substance use at a time when they have a weakened ability to resist such impulses.” Additionally, while these symptoms may be substance-use related and may resolve over time, they may also indicate a co-occurring medical or behavioral disorder, making diagnosis and treatment for SUD patients especially challenging. Specifically for PAWS, SAMHSA states that providers “can improve their clients’ chances for long-term recovery by educating clients about [PAWS], offering support and understanding, monitoring them regularly, and intervening early with clients who seem headed for relapse.”²³

SERVICES FOR DETOXIFICATION AND WITHDRAWAL: ATS AND CSS

Treatment for substance use disorders generally falls along a spectrum of services, including, from most to least intensive: inpatient acute detoxification and medically managed withdrawal (referred to as ATS), CSS, residential rehabilitation (including TSS, as well as other types of long-term residential rehabilitation), intensive outpatient and partial hospitalization, outpatient, and early intervention. (See Appendix A for a more detailed description of these levels.) Comprehensive, effective treatment provides access to the full spectrum of services medically necessary for the individual patient, and focuses on long-term, sustained abstinence and recovery from this chronic illness. Chapter 258 establishes minimum coverage requirements for a portion of that spectrum (ATS and CSS); S.B. 1502 builds upon Chapter 258 by adding TSS to the services for which minimum coverage is mandated.

NIDA reports that most patients begin treatment for substance use disorders with detoxification and medically-managed withdrawal. Detoxification is “the process by which the body clears itself of drugs, [and] is designed to manage the acute and potentially dangerous physiological effects of stopping drug use.”²⁴ Patients whose acute withdrawal requires inpatient detoxification and medical management or monitoring may enter ATS, characterized by 24-hour nursing or medical care in a facility that can manage severe biomedical, emotional, behavioral, or cognitive problems. Not all patients require this level of service; appropriate treatment depends on each patient’s health and co-occurring conditions, the substance used, the length of use, and other individual factors.

Detoxification includes reducing physiological and psychological withdrawal symptoms, as well as interrupting the patient’s compulsive use.²⁵ This compulsion, and the difficulty of overcoming it, often requires “a greater intensity of services initially [in this phase of treatment] to establish participation in treatment activities...”²⁶ Patients who need additional inpatient treatment for medical and behavioral symptoms following acute detoxification may be referred to clinical stabilization services (CSS); as with ATS, whether a patient needs this level of treatment will depend on the substance used and his/her individual needs. CSS provide a less-medically-intense inpatient level of treatment for patients who do not require acute medical detoxification, but who still require clinical supervision and nursing care to stabilize their symptoms. Patients are supervised for 24 hours daily, and are provided with at least four hours of nursing care in addition to other services. According to BSAS, CSS is “designed to stabilize clients and increase retention in treatment.”²⁷

TRANSITIONAL SUPPORT SERVICES

It is important to distinguish between detoxification²⁸ and the broader realm of substance abuse treatment,²⁹ as “[d]etoxification, in and of itself, does not constitute complete substance abuse treatment.”³⁰ According to NIDA, “detoxification alone does not address the psychological, social, and behavioral problems associated with addiction and therefore does not typically produce lasting behavioral changes necessary for recovery.”³¹ Detoxification focuses on helping a patient withdraw safely from acute intoxication or dependency, and includes evaluation, stabilization, and preparation for entry into treatment, but does not necessarily wholly encompass substance abuse treatment.³²

S.B. 1502 adds coverage for medically necessary TSS, a type of residential rehabilitation for adults that includes a clinical component and is intended to retain patients in treatment until they are prepared and placed in a long-term residential rehabilitation program. TSS moves patients along the continuum of services as their needs change while keeping them engaged in recovery, providing further clinical and other treatment and support during later stages of withdrawal and PAWS while developing skills and strategies to prevent relapse.³³ TSS differs from long-term residential rehabilitation in that TSS providers continue to clinically address PAWS through daily nursing services while focusing on identifying sources of cravings and helping patients to develop coping skills.³⁴ Again, depending on the individual, the

substance used, and other factors, not all patients will need TSS as part of recovery. According to BSAS, TSS is designed for adult patients referred from public ATS, CSS, or a homeless shelter who need intensive case management and further stabilization in a structured, safe environment to prepare them to move from detoxification to long-term residential rehabilitation, engaging patients in recovery while preventing relapse until long-term placement becomes feasible.³⁵ In general, TSS programs are designed for a length of stay of up to 30 days.³⁶ Appendix A contains additional detail about TSS.

Based on a survey of TSS providers in Massachusetts, the average length of stay for TSS patients who complete their stay (less than 50 percent of patients) in 2014 is 29 days. In the last six months of 2014, over 2,100 patients enrolled in TSS programs statewide.³⁷ Every TSS provider in the state has a waitlist for beds at this level of care.³⁸ Although most patients used multiple substances, 67 percent cited heroin as their primary drug, and another four percent cited other opiates; alcohol was the primary substance of abuse for 23 percent of enrollees.³⁹ Thirty-six percent of enrollees were homeless, while over 24 percent lived with a parent or spouse.⁴⁰ Almost 60 percent of patients had five or more prior detoxification episodes before their TSS enrollment, and 69 percent had at least one previous stay in residential treatment.⁴¹ Over 48 percent of patients completed their TSS stay, while almost 43 percent dropped out or were disenrolled for administrative or non-compliance reasons.⁴² Forty-three percent of enrollees were subsequently referred to residential rehabilitation treatment by the TSS provider.⁴³

In Massachusetts, BSAS currently pays for all TSS services directly regardless of a patient's insurance status, as private insurance has seldom reimbursed for this level of residential care. Seventy-two percent of patients for whom BSAS funded TSS in 2014 were covered by Medicaid insurance, and seven percent by either commercial insurance or Medicare.⁴⁴ This may change, however, with the implementation of Chapter 258, effective October 2015. Even though BSAS currently pays for TSS regardless of a patient's insurance coverage, TSS patients may be referred only from public ATS, CSS, and homeless shelters. Since many commercial patients have not had access to CSS services prior to the implementation of Chapter 258, and very few residents of homeless shelters have commercial insurance, fewer commercially-insured patients have been referred from these two sources for TSS placements. With implementation of Chapter 258, fully-insured patients have coverage for CSS and may be in programs able to refer patients to TSS; this in turn may change the overall insurance profile of TSS patients. In other words, as commercial patients gain access to CSS, and patients in CSS can be referred to TSS, more commercial patients may be referred to TSS.

MEDICAL EFFICACY OF SUBSTANCE ABUSE TREATMENT

According to the National Institute on Drug Abuse (NIDA), substance abuse is a chronic condition for which effective treatment is long-term, holistic, and tailored to the needs and situation of the individual.^{45,46} Sustained abstinence and recovery requires repeated episodes of care, and a variety of treatment approaches and strategies over time.⁴⁷ Organizations such as NIDA, SAMHSA, and the American Society of Addiction Medicine (ASAM) recommend that the level of care and length of any treatment be flexible, respond to the needs of the individual, and depend on the patient's overall situation, illness, response, progress, and outcomes.^{48,49,50} No one treatment program, duration, or progression is appropriate for all patients; each will need different services and supports of various lengths and intensities at various times as part of an adaptive treatment for this chronic illness. Instead, research has shown that effective treatment is based on a set of principles that should underpin any individual's recovery services (See Appendix B for an outline of NIDA's Principles of Effective Treatment).

In general, substance abuse treatment has been evaluated and found to be effective compared to non-treatment. A meta-analysis combined the effects of 78 studies of drug treatment and "...analyses indicated that drug abuse treatment has both a statistically significant and a clinically meaningful effect in reducing drug use and crime."⁵¹ Extensive literature exists on the characteristics of effective treatment, including treatment duration, treatment continuity, and patient-specific characteristics related to health and living situation.

Duration and continuity of treatment are associated with patient outcomes. Overall, studies have found that clients retained for longer periods in substance abuse treatment have better outcomes than those with shorter treatment duration.^{52,53} Program specifics, including lengths of appropriate treatment, will vary in part on the type of substance used. One study found that longer residential stays resulted in lower readmission rates for substance abuse treatment.⁵⁴ Research, including studies of patients abusing a range of substance including alcohol and opioids, has shown that continuing treatment and program flexibility along the spectrum of services, individualized to a patient's specific needs, is beneficial, finding that "retention, duration, and increased aftercare" were important to the effectiveness of inpatient substance abuse treatment.^{55,56,57}

There is also clear evidence that patient characteristics are an important aspect of appropriate treatment, with effectiveness depending in part on the patient's overall health and social support system.^{58,59} In general, patients with more conditions at the start of treatment, including co-occurring psychiatric and substance abuse diagnoses and/or psychosocial problems, have been found to experience better outcomes with longer and more intensive treatment.⁶⁰ Other research found that "[p]atients with high psychiatric severity and/or a poor social support system are predicted to have a better outcome in inpatient treatment, while patients with low psychiatric severity and/or a good social support system may do well as outpatients without incurring the higher costs of inpatient treatment."⁶¹ These findings highlight the importance of an individualized approach to treatment, including consideration of co-occurring conditions and the patient's living environment and social situation.

Overall, evidence indicates that effective treatment for substance abuse and addiction must recognize the chronic nature of the illness, the likelihood of relapse, and the social factors affecting the progression of the disease and recovery. Furthermore, it suggests that better treatment is flexible and individualized along a spectrum of services, with consideration given to the patient's individual characteristics, co-occurring conditions, the substance used, social, emotional, and behavioral health, and social support system. For some patients, longer treatment is central to recovery. Continuity of treatment at the appropriate level tailored to the needs of the individual patient is associated with better outcomes.

There are many types of substance abuse treatment, with endless variations of specific services and supports within each program, as well as significant variability in the characteristics of the populations and individuals receiving each type of treatment. Studies that review the efficacy of the exact treatment model provided through Massachusetts TSS have not been published. However, while these studies are not available, there is evidence that the services offered and concepts underlying their provision are effective in improving outcomes for certain patients.

MEDICAL EFFICACY OF CHANGES TO COVERAGE UNDER S.B. 1502

Isolating the effect of S.B. 1502 on the health status of the commercially-insured population—beyond the effect of Chapter 258 itself—is complex. As noted, the general efficacy of SUD treatment—employing the full spectrum of services in a way that recognizes the needs of the individual patient—is well-established. Furthermore, within a well-integrated spectrum of care, longer treatment periods have been shown to be more effective, especially for patients with co-occurring conditions or with a less-supportive living situation. However, no research is available specifically to measure the impact of increasing the duration of ATS or CSS beyond that mandated by Chapter 258, or of adding TSS coverage. Other service types—more or less intensive and/or of longer or shorter duration—may be appropriate for some individuals at various times in a treatment and recovery cycle. Because the proposed mandate does not require a standard length of stay for ATS, CSS, or TSS, and presumably allows providers more flexibility in delivering specific medically-necessary services of length sufficient to address individual needs, the mandate may improve outcomes if services are adjusted by patient to adhere to the evidence-based principles of substance use disorder treatment.

Moreover, given the evidence cited previously, it is possible that reducing insurance-imposed limitations to care recommended solely at the provider's discretion might improve the chances that more commercially-insured patients will gain access to additional individualized, full-spectrum treatment options of sufficient duration, thus increasing the potential for successful recovery. Yet even with this possibility, several factors might mitigate S.B. 1502's impact on population health status.

First, as noted, TSS is currently funded by BSAS regardless of the patient's insurance coverage. To the extent BSAS is funding TSS for patients with commercial coverage, S.B. 1502 might shift cost from BSAS to commercial insurers, but it will not affect the health status of those patients. In fact, if an insurer does not fund ATS/CSS/TSS treatment beyond the bill's 28-day minimum coverage requirement, a patient might run out before the typical 30-day TSS stay is finished and thereby receive less TSS care than he/she does with BSAS funding, unless BSAS continues to pay for days not funded by commercial insurance.

Second, provider capacity for many of the components of the spectrum of services—CSS, TSS, residential rehabilitation, outpatient services, and medication-assisted treatment—will constrain the number of patients able to access these services, patients' ability to transition between service levels in a timely manner, and the length of treatment episodes, further diminishing the effectiveness of S.B. 1502.⁶² Given the extensive waitlist for patients for CSS, TSS, and residential rehabilitation, providers currently have little incentive to keep patients in treatment for longer than medically necessary, as their beds are always full. However, capacity constraints across various levels of the treatment spectrum may lead providers to keep patients in more intensive levels of treatment than is medically necessary rather than discharge them and risk a lapse in treatment and support resulting in relapse. According to the CHIA report *Access to Substance Abuse Treatment in Massachusetts* published in April 2015, there are currently nearly three times the number of ATS beds in Massachusetts as there are CSS or TSS beds.⁶³ And as the length of stay for ATS is shorter than for CSS or TSS, the number of patients leaving ATS is higher than the number of CSS or TSS beds vacated and available for placement at any time.⁶⁴ The lack of capacity at various points along the continuum of care may further increase lengths of stay at more intensive levels. For example, a patient may not need TSS care for a full 30 days but may need residential rehabilitation. If a placement is not available, the patient may remain in TSS longer than clinically necessary as he/she is also not ready for non-residential treatment. On the other hand, patients discharged from a level of service without timely access to the next appropriate level remain at risk of relapse.

Third, placements in TSS beds are made primarily through referrals from public ATS and CSS programs. As CSS has generally not been covered for the commercial population, commercial patients have not had access to CSS and have, therefore, not typically been "in the pipeline" for referral to TSS. With commercial coverage for CSS required beginning in October 2015 under Chapter 258, more commercial patients may be referred to TSS programs from CSS. But if the supply of accessible TSS beds remains unchanged, increased use by commercial patients (for which higher payment rates are sometimes available⁶⁵) might displace other patients—such as Medicaid patients—from TSS beds.

Any improvements in outcomes resulting from the specific mechanisms in this bill—increasing minimum coverage for ATS and CSS and requiring coverage for TSS—will depend on how providers use the discretion the proposed mandate grants them in delivering adequate and appropriate care for commercially-insured patients, and whether or not these decisions improve on decisions currently made by carriers. Should the proposed mandate lead to overutilization/overly-long stays in ATS/CSS/TSS—stays not justified by medical necessity or the individual patient's social condition, but within the 28-day minimum—and patients do not receive the most appropriate treatment, the result may be repeated utilization of certain services (e.g., readmission for detoxification) without related recovery.

In general, if the provisions of S.B. 1502—adding TSS to the set of mandated services and increasing the minimum covered days for ATS/CSS/TSS—allow additional patients access to adequately available treatment of appropriate, and in some cases longer, duration, and to be continuously engaged in recovery, then S.B. 1502 should improve SUD treatment effectiveness. The extent to which the potential mitigating factors identified previously will offset this general conclusion is not measurable from available evidence.

APPENDIX A: SUBSTANCE ABUSE LEVELS OF CARE SPECTRUM AND DESCRIPTION

Chapter 258 defines substance abuse treatment similarly to the spectrum of services outlined by ASAM.⁶⁶ In the law, substance abuse treatment includes early intervention, outpatient, intensive outpatient and partial hospitalization, residential or inpatient, and medically-managed intensive inpatient services. Chapter 258 also includes specific provisions regarding crisis stabilization services and acute treatment services.

The following is a general mapping of the levels of care described in Chapter 258 cross-referenced to the ASAM criteria, provided as an aid to the reader not familiar with substance abuse treatment. This is not intended as a definitive or detailed explanation or reconciliation of the two sources.

Chapter 258 Substance Abuse Services ⁶⁷	ASAM Levels of Care ⁶⁸	Services Subject to S.B.1502
Early Intervention	Level 0.5 Early Intervention	
Outpatient	Level 1 Outpatient	
Intensive Outpatient and Partial Hospitalization	Level 2.1 Intensive Outpatient	
	Level 2.5 Partial Hospitalization	
Residential or Inpatient	Level 3.1 Clinically Managed Low-Intensity Residential Services	Transitional Support Services (proposed mandate)
	Level 3.3 Clinically Managed Population-Specific High-Intensity Residential Services (Adults only)	
	Level 3.5 Clinically Managed High-Intensity Residential Services (Adults)	Clinical Stabilization Services (CSS)
	Clinically Managed Medium-Intensity Residential Services (Adolescents)	
	Level 3.7 Medically Monitored Intensive Inpatient Services (Adults)	Acute Treatment Services (ATS)
Medically Monitored High-Intensity Inpatient Services (Adolescents)		
Medically Managed Intensive Inpatient	Level 4 Medically Managed Intensive Inpatient Services	

Early intervention services are not defined in the Massachusetts Department of Public Health Licensure of Substance Abuse Treatment Programs (Licensure of SATP) regulations, but have been defined by the state Division of Insurance to include screening, brief intervention and referral to treatment (SBIRT), as well as programs licensed under 105 CMR 164.200 (Outpatient) and 164.211 (First Offender Driver Alcohol Education).⁶⁹ Clarification of services in the legislation is made for “Acute treatment services” and “Clinical stabilization services.” According to officials at the Massachusetts Department of Health BSAS, the state agency that licenses substance abuse treatment programs and facilities, “Acute treatment services” are equivalent to ASAM Levels of Care 3.7 and 4.0, while “Clinical stabilization services” are equivalent to ASAM Level of Care 3.5.⁷⁰ Licensing regulations term these services differently than both Chapter 258 and the ASAM Criteria.⁷¹ All programs are required to provide Minimum Treatment Services (Appendix C) in addition to those specified for each level of care.

Service	ASAM Level	MA DPH Licensing Regulations: 105 CMR 164 ⁷²	
Early Intervention	0.5		Various licensing regulations may apply to these levels of care
		211	First Offender Driver Alcohol Education
Outpatient	1	200	Outpatient Services
		221	Outpatient
		223	Operating Under the Influence Second and Multiple Offenders for Aftercare Treatment Services
		231	Day Treatment
		300	Opioid Treatment
Intensive Outpatient	2.1		Various licensing regulations may apply to these levels of care depending on the specific services provided
Partial Hospitalization	2.5		
Residential Rehabilitation Adults	3.1	440	Adolescents
		423(B)	Transitional Support Services
		423(C)	Social Model Recovery Home
		423(D)	Recovery Home
		423(E)	Therapeutic Community
		430	Adults with Families
		450	Operating Under the Influence Second Offenders
Clinical Stabilization	3.5	133(A)(1)(c)	Clinically Managed Detoxification
Acute Treatment	3.7	133(A)(1)(b)	Medically Monitored Inpatient Detoxification
	4	133(A)(1)(a)	Medically Managed Intensive Inpatient Detoxification

EARLY INTERVENTION

Early intervention, ASAM Level of Care 0.5, is for individuals who are at specific risk of developing substance abuse problems, but whose behaviors have not reached the level sufficient to diagnose an addictive disorder.⁷³ Individuals have no risk of withdrawal symptoms, and have either no or stable co-occurring biomedical, emotional, behavioral or cognitive conditions. The goal is to help the individual gain an understanding of high-risk behaviors related to substance abuse, as well as the skills needed to change.⁷⁴ Services can be offered in a variety of settings, including primary care physician offices or hospital emergency rooms, as well as schools, work sites, and community centers.⁷⁵

One form of early intervention is an evidence-based practice known as Screening, Brief Intervention, and Referral to Treatment (SBIRT). Based on a U.S. Institute of Medicine recommendation calling for community-based screening to reduce health risk behaviors, this service is intended to intervene early with those who are not yet addicted but who exhibit such behaviors, and to identify those who do have a substance abuse disorder and need referral to more formal treatment.^{76,77}

A recent bulletin issued through the Massachusetts Office of Consumer Affairs and Business Regulation (OCABR) defines early intervention as follows:

Early intervention services: American Society of Addiction Medicine (ASAM) level of care level 0.5 - services provided to a person in a variety of settings designed to identify and address problems or risk factors that appear to be related to substance use and addictive behavior. Examples of early intervention services include screening, brief intervention and referral to treatment (SBIRT), first offender driver alcohol education, and programs licensed under 105 CMR 164.200 or 105 CMR 164.211.⁷⁸

Because of the nature of these community-based screenings, the types of healthcare professionals who may conduct the services, and the variety of settings in which they may be provided, various licensure rules may apply in Massachusetts for early intervention, except for CMR 164.211, which defines the specific licensure requirements for First Offender Driver Alcohol Education.⁷⁹ Patients receiving these services are not required to have a substance use disorder diagnosis, and are referred by a Massachusetts court, or by the Registrar of Motor Vehicles if the client is under age 21.⁸⁰ Treatment is to include appropriate group education sessions, or alternative or special programming as needed, and development of an individual treatment plan.^{81,82}

OUTPATIENT SERVICES

Outpatient services are categorized by ASAM as Level 1, and are delivered in a variety of settings to patients whose illness severity and level of function do not warrant more intensive levels of treatment.⁸³ Patients may enter directly into outpatient treatment, may step down from more intensive care levels, may use outpatient treatment for chronic disease management for their substance abuse disorder, or may be unwilling or unable to accept placement into a more intensive level of care.⁸⁴ Following a “defined set of policies and procedures or clinical protocols,” ASAM advises that “[s]uch services are provided in regularly scheduled sessions of (usually) fewer than nine contact hours a week for adults and fewer than six hours for adolescents.⁸⁵ Services include individual and group counseling, psychotherapy, motivation enhancement, family and occupational therapy, educational groups, and medication management, among others.⁸⁶

According to Licensure of SATP regulations,

Outpatient Services encompass levels of care to persons not at risk of suffering withdrawal symptoms, and who can participate in organized ambulatory services including intensive day treatment services, counseling, and educational services...⁸⁷

Outpatient services licensed in Massachusetts include several different types of treatment:

- Outpatient Detoxification is for patients whose current and potential withdrawal symptoms are not severe enough to require inpatient detoxification (ATS or CSS), but who “need a structured program with frequent contact in order to engage in treatment,” and for whom an assessment disproves that “the community in which the client resides poses a threat to the client’s abstinence.”⁸⁸ Regulations require treatment in these programs to include at least nine hours of service programming each week.⁸⁹
- Outpatient counseling is for patients who are found to have no withdrawal symptoms, who have the ability to engage and remain in treatment, and for whom community support for withdrawal is available.⁹⁰ Treatment is to include individual, group, couple, and family therapy as needed.^{91,92}
- Operating Under the Influence Second and Multiple Offenders for Aftercare Treatment Services (SOA) is for patients who have been convicted of more than one charge of operating a motor vehicle under the influence, and who have either completed a 14-day residential driving under the influence program, or are awaiting placement in such a program.⁹³ Counseling services are required to emphasize the consequences of operating a motor vehicle under the influence of drug or alcohol, and random alcohol and drug screenings are required.⁹⁴ Providers report to the referring court or other agency, and patients are required to remain in outpatient treatment for one year.⁹⁵
- Day treatment is for patients whose substance use disorder, absence of withdrawal risk, and presence of substantial relapse risk indicate the patient’s “need for a structured program in order to engage and remain in treatment.”⁹⁶ Regulations outline that treatment must include 3½ hours of services daily in programs that must be open and available to deliver services up to five days per week (individualized client treatment plans may not recommend or reflect participation five days per week, as the intensity of services is based on the client’s need), including “counseling, psychoeducational groups, and family counseling,” as well as case management to include referrals and aftercare service planning.⁹⁷
- Opioid treatment comprises both detoxification and maintenance for opioid addicted individuals.⁹⁸ Regulations state that opioid agonist treatment medication and counseling services must both be provided.⁹⁹ According to ASAM, individuals in opioid treatment programs are “[r]eady to change the negative effects of opioid use, but [are] not ready for total abstinence...”¹⁰⁰

INTENSIVE OUTPATIENT/PARTIAL HOSPITALIZATION

ASAM defines intensive outpatient treatment as Level 2.1, providing between 9 and 19 hours per week of structured programming for adults and between 6 and 19 hours for adolescents.¹⁰¹ Services include individual and group counseling, family and occupational therapy, educational groups, and medication management.¹⁰² Patients admitted to this level of care have a minimal risk of severe withdrawal, and either do not experience co-occurring biomedical complications and conditions, or these conditions are manageable.¹⁰³ Emotional, behavioral or cognitive complications and conditions are mild for these patients, but need to be monitored.¹⁰⁴ Patients admitted to intensive outpatient treatment have variably engaged in their treatment, and are often ambivalent about change, or “lack awareness of the substance use or mental health problem.”¹⁰⁵

Partial hospitalization, ASAM Level 2.5, provides 20 or more hours of weekly “clinically intensive programming” which is similar in scope to that described for intensive outpatient treatment.¹⁰⁶ When compared to intensive outpatient, partial hospitalization programs have increased capability to treat patients with unstable physical or psychiatric problems which require daily monitoring and management through direct access to psychiatric, hospital, and laboratory services.¹⁰⁷ Patients admitted to this level of care have a moderate risk of withdrawal, and either do not experience co-occurring biomedical complications and conditions, or these conditions are manageable.¹⁰⁸ Emotional, behavioral or cognitive complications and conditions may be moderate for these patients, and must be stabilized.¹⁰⁹ Patients admitted to partial hospitalization programs have “poor engagement in treatment,” are significantly ambivalent toward change, or “lack awareness of the substance use or mental health problem.”¹¹⁰

Settings vary for intensive outpatient and partial hospitalization programs, with some providing overnight housing for patients with problematic home environments or transportation needs.¹¹¹ However, this differs from residential rehabilitation in that the living environment is not necessarily supervised 24 hours per day.¹¹²

Intensive outpatient and partial hospitalization services are not defined in Massachusetts regulations, and are not licensed or funded by BSAS as a specific level of service. However, some providers in the state do offer these levels of service which are licensed under various regulatory sections depending on the specific program or services provided.

RESIDENTIAL REHABILITATION

The Massachusetts Department of Public Health licenses four different types of residential rehabilitation service programs, including adult individuals,¹¹³ adults with their families,¹¹⁴ adolescents,¹¹⁵ and operating under the influence second offenders.¹¹⁶ Each of these types offers “organized substance abuse treatment and education services” through structured and supportive programs in permanent, 24-hour residential facilities where clients reside temporarily to develop recovery skills in “safe and stable living environments.”¹¹⁷

Residential rehabilitation programs for adults are for patients “in the early stages of substance abuse recovery.”¹¹⁸ These programs provide:

“(1) daily clinical services to improve residents’ ability to structure and organize the tasks of daily living and recovery, such as personal responsibility, personal appearance and punctuality; and (2) advocacy and ombudsman services to support residents in obtaining needed resources and services and actively promote residents’ interests.”¹¹⁹

In Massachusetts, there are four types of residential rehabilitation programs for adults. These include three types of programs that BSAS identifies as residential treatment over 30 days,¹²⁰ including Social Model Recovery Homes,¹²¹ Recovery Homes,¹²² and Therapeutic Communities,¹²³ and Transitional Support Services,¹²⁴ a type of residential treatment under 30 days.¹²⁵

According to ASAM, residential services are generally provided in community-based facilities to patients whose living/recovery environment is “dangerous,” but for whom recovery is possible with 24-hour structure and supervision.¹²⁶ Programs are geared to demonstrate to patients “aspects of a positive recovery environment,” and to help them to apply recovery, relapse, and coping skills while promoting “personal responsibility and reintegration...into...work, education, and family life.”¹²⁷

Designated as ASAM Level 3.1, or Clinically Managed Low-Intensity Residential Services, residential rehabilitation is “qualitatively different in that it is a 24-hour supportive living environment whereas the other sublevels¹²⁸ [CSS and ATS] are 24-hour treatment settings.”¹²⁹ Comparatively, ASAM-defined Level 3.1 programs provide at minimum only 5 hours of treatment per week.¹³⁰ Admitted patients have no or minimal withdrawal risk, and either no co-occurring biomedical conditions or complications, or they are receiving medical monitoring for stable conditions, such that on-site medical services are not required at this level of care.¹³¹ According to ASAM criteria, patients admitted to residential rehabilitation most often have emotional, behavioral or cognitive conditions that are either absent, minimal or stabilized.¹³² Treatment at this level of care may include psychoeducation, medication management, and individual, group, and/or family therapy.¹³³

While no length of stay recommendation is made by ASAM for Level 3.1 residential treatment, guidelines state that stays “tend to be longer than in more intensive residential levels of care. Longer exposure to monitoring, supervision, and low-intensity treatment interventions is necessary for patients to practice basic living skills and to master the application of coping and recovery skills.”¹³⁴

Transitional Support Services

BSAS has designated TSS as ASAM Level 3.1. The programs are required to provide 24-hour services structured “to actively engage consumers in the day, afternoon, and evening” in a “daily schedule of mandatory and optional activities.”¹³⁵ These services must include “intensive case management, structured psycho-education, and recovery-oriented milieu management.”^{136,137} Programs must also provide four hours of nursing services daily, as this type of treatment is more clinically focused than other types of residential rehabilitation; daily transportation services;¹³⁸ health monitoring, education and crisis services; and post-discharge referral and follow-up for other appropriate substance abuse treatment services.¹³⁹ Psycho-education sessions must be provided for a minimum of three hours daily on twenty-one different topics per week that relate to treatment options, in addition to any self-help, resident, or administrative meetings.¹⁴⁰

Additionally, patients collaborate with a case manager to continue to develop and review an Individual Service Plan (ISP), which is “designed to facilitate consumer access to appropriate next step resources” that may include “residential rehabilitation services, supportive transitional and/or permanent housing programs, or community-based treatment and/or recovery options.”¹⁴¹ The ISP also incorporates consumer service planning elements, including “assessment of physical and emotional status/needs, occupational, housing and educational needs; family, social and community supports; consideration of legal, child care, and custody issues; and the identification and removal of barriers to next step placement.”¹⁴² According to BSAS, a patient completes a TSS stay when: they are stabilized in terms of their readiness to change, their potential for relapse, and their recovery/living environment;¹⁴³ barriers to subsequent care have been “eliminated or overcome”; the patient has met their immediate ISP goals; and a placement in aftercare is available.¹⁴⁴

CLINICAL STABILIZATION SERVICES

As described in a recent Request for Response (RFR) document prepared by BSAS:¹⁴⁵

CSS services are designed to stabilize clients and increase their retention in treatment. CSS programs can include adults, who have completed a medical detoxification, as well as adults who do not meet criteria for medical detoxification but have other substance use disorders and other, current, related complications. The goal of the CSS is to provide the needed service interventions and program supports to enable clients to engage in a structured process and to plan and implement any services needed for a successful transition to the next level of substance use disorder treatment or other care, based on an assessment process tailored to each client. CSS services enable clients to focus on recovery, increase treatment acceptance and readiness to change, and identify skills and strategies to prevent continued use and/or to reduce risk of harm due to continued use... The CSS recovery oriented services and supports can help transition the client to appropriate next step care in the substance use disorder treatment continuum.

Patients admitted to CSS, defined as Clinically Managed Detoxification by state licensing regulations, do not have severe withdrawal symptoms and are supervised for 24-hours per day in a “non-medical setting,” with at least four hours of daily nursing care, along with other services as described in Appendix C.¹⁴⁶ There are currently 12 providers managing 331 licensed adult beds in the state at this level of service.¹⁴⁷

ASAM’s criteria outline counseling as the primary treatment at this level of care, which is designed to serve patients who “need safe and stable living environments in order to develop...sufficient recovery skills so that they do not immediately relapse or continue to use.... [CSS] assists individuals whose addiction is currently [such] that they need a 24-hour supportive treatment environment to initiate or continue a recovery process that has failed to progress.”¹⁴⁸ Patients admitted to this level of care are at minimal risk for severe withdrawal symptoms, and either have no or stable co-occurring biomedical conditions, or these are sufficiently monitored.¹⁴⁹ However, patient’s emotional, behavioral or cognitive conditions may demonstrate the patient’s “inability to control impulses, or [their] unstable and dangerous signs/symptoms require stabilization.”¹⁵⁰ The recovery/living environment may also be found to be dangerous, and the patient lacks the skills to prevent relapse outside of a “highly structured 24-hour setting.”¹⁵¹

The focus of the treatments offered through CSS is on a patient’s social, emotional, behavioral, cognitive, and living conditions.¹⁵² ASAM further states that a patient’s “limitations require comprehensive, multifaceted treatment that can address all of the patient’s interrelated problems.”¹⁵³ For such patients, “standard rehabilitation methods are inadequate.”¹⁵⁴ Goals of CSS treatment include substance use abstinence, improvement of other addictive or antisocial behaviors, and creating positive change in other elements of patients’ “lifestyles, attitudes, and values.”¹⁵⁵ CSS is designed to foster and reinforce “prosocial” values and skill development in a supportive and stable living environment in order to ensure successful “reintegration into family living,” especially when a patient’s current living situation is not entirely supportive of recovery.¹⁵⁶

According to interviews with several CSS providers throughout the state, depending on their insurance coverage, some privately-insured patients are currently admitted to this level of care as a “step-down” from more intensive detoxification treatments, or as a “step-up” when outpatient rehabilitation treatments prove inadequate to help patients achieve and sustain sobriety and abstinence.¹⁵⁷

ACUTE TREATMENT SERVICES

ATS are inpatient detoxification services spanning two different levels of care. The lower level of ATS, defined in state regulations as Medically Monitored Inpatient Detoxification Services, is provided in a freestanding medical (as opposed to hospital) setting and includes 24-hour nursing care and medical supervision, in addition to those services outlined in Appendix C.¹⁵⁸ Patients are admitted to this level of care when their health and well-being are at risk, and when withdrawal symptoms require medical monitoring.¹⁵⁹ Different from the Medically Managed level of ATS, physician care is not required 24-hours per day, but must be available as needed. There are currently 22 providers managing 750 licensed adult beds in the state at this level of service.¹⁶⁰

According to ASAM, this level of care is appropriate “for patients whose subacute biomedical and emotional, behavioral, or cognitive problems are so severe that they require inpatient treatment, but who do not need the full resources of an acute care general hospital or a medically managed inpatient treatment program.”¹⁶¹ Services are focused on withdrawal, co-occurring biomedical conditions, or emotional, behavioral, or cognitive complications.¹⁶² Patients admitted to this level of care may have poor impulse control and a low interest in treatment, may be “[u]nable to control use, with imminently dangerous consequences,” and their living/recovery environment may be dangerous.¹⁶³

The higher level of ATS, defined by state licensing regulations as Medically Managed Intensive Inpatient Detoxification Services, is provided in an acute care hospital setting and includes daily physician medical management and nursing care 24 hours per day, in addition to the services outlined in Appendix C.¹⁶⁴ Patients are admitted when their health and well-being are at risk, and when withdrawal symptoms are severe enough to require “frequent medical attention”.¹⁶⁵ There are currently five providers managing 164 licensed adult beds in Massachusetts at this level of service.^{166,167}

As Medically Managed Intensive Inpatient Services are delivered in an acute care hospital setting with all of its available resources, ASAM has defined it as an appropriate level of care “for patients whose acute biomedical, emotional, and cognitive problems are so severe that they require primary medical and nursing care.”¹⁶⁸ The patient’s readiness to change, relapse risk, and living environment are not considered as part of the criteria for entry to this level of service; rather, patients require 24 hour medical and nursing care for their biomedical and or psychiatric problems. According to ASAM, as the length of stay for these services “typically is sufficient only to stabilize the patient’s acute signs and symptoms, a primary focus...is case management and coordination...to continuing treatment at another level of care.”¹⁶⁹

APPENDIX B: PRINCIPLES OF EFFECTIVE TREATMENT

National Institute of Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services (NIDA). Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition. NIH Publication No. 12-4180.

1. Addiction is a complex but treatable disease that affects brain function and behavior.
2. No single treatment is appropriate for everyone.
3. Treatment needs to be readily available.
4. Effective treatment attends to multiple needs of the individual, not just his or her drug abuse.
5. Remaining in treatment for an adequate period of time is critical.
6. Behavioral therapies—including individual, family, or group counseling—are the most commonly used forms of drug abuse treatment.
7. Medications are an important element of treatment for many patients, especially when combined with counseling and other behavioral therapies.
8. An individual's treatment and services plan must be assessed continually and modified as necessary to ensure that it meets his or her changing needs.
9. Many drug-addicted individuals also have other mental disorders.
10. Medically assisted detoxification is only the first stage of addiction treatment and by itself does little to change long-term drug abuse.
11. Treatment does not need to be voluntary to be effective.
12. Drug use during treatment must be monitored continuously, as lapses during treatment do occur.
13. Treatment programs should test patients for the presence of HIV/AIDS, hepatitis B and C, tuberculosis, and other infectious diseases, as well as provide targeted risk-reduction counseling, linking patients to treatment if necessary.

APPENDIX C: MINIMUM TREATMENT SERVICE REQUIREMENTS

Massachusetts Department of Health, Licensure of Substance Abuse Treatment Programs (105 CMR 164.074).
Applicable to all licensees, in addition to services described for specific levels of service.

Provided directly by licensee:

- Substance abuse therapies, counseling, and education which conform to accepted standards of care
- Tobacco education and counseling
- Case management including referrals based on continuum of care and client educational, vocational, financial, legal, and housing needs
- Relapse prevention and recovery maintenance counseling and education
- Planning for client's completion of treatment provided by licensee, and identification of transitional, discharge, and aftercare supports the client may require

Provided directly by licensee or through Qualified Service Organization Agreement:

- HIV education and counseling
- TB screening, education, and treatment
- Mental health services, including psychopharmacological services, for individuals with co-occurring disorders
- Health services, including family planning services requested by the client
- Services for individuals with compulsive behaviors such as compulsive gambling

APPENDIX D: LIST OF STUDY ACRONYMS

ASAM:	American Society for Addiction Medicine
ATS:	Acute Treatment Services
BSAS:	Bureau of Substance Abuse Services
CHIA:	Center for Health Information and Analysis
CSS:	Clinical Stabilization Services
DSM:	Diagnostic and Statistical Manual of Mental Disorders
HIV:	Human Immunodeficiency Virus
ISP:	Individual Service Plan
MAT:	Medically Assisted Treatment
NIDA:	National Institute for Drug Abuse
PAWS:	Post-Acute Withdrawal Syndrome
RFR:	Request for Response
SAMHSA:	Substance Abuse and Mental Health Services Administration
SATP:	Substance Abuse Treatment Program
SB:	Senate Bill
SBIRT:	Screening, Brief Intervention, and Referral to Treatment
SUD:	Substance Use Disorder
TB:	Tuberculosis
TSS:	Transitional Support Services

ENDNOTES

- 1 The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 1502, “An Act providing access to full spectrum addiction treatment services”. Accessed 16 July 2015: <https://malegislature.gov/Bills/189/Senate/S1502>.
- 2 Chapter 258 of the Acts of 2014, “An Act to Increase Opportunities for Long-Term Substance Abuse Recovery.” Accessed 16 July 2015: <https://malegislature.gov/Laws/SessionLaws/Acts/2014/Chapter258>. Specific amendments to Sections 9, 19, 21, 23, 25 and 27.
- 3 The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 1502, “An Act providing access to full spectrum addiction treatment services”. Accessed 16 July 2015: <https://malegislature.gov/Bills/189/Senate/S1502>.
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- 5 *Op. cit.* Chapter 258 of the Acts of 2014; Sections 9, 19, 21, 23, 25 and 27.
- 6 American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders (Fifth edition, text review; DSM-V). 2013.
- 7 *Op. cit.* APA. *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-V)*.
- 8 National Institute of Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services (NIDA). Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition. NIH Publication No. 12–4180. Printed 1999, revised December 2012; accessed 17 July 2015: http://www.drugabuse.gov/sites/default/files/podat_1.pdf.
- 9 *Op. cit.* NIDA: *Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition*.
- 10 World Health Organization, Management of substance abuse: Psychoactive substances. Accessed 24 August 2015: http://www.who.int/substance_abuse/terminology/psychoactive_substances/en/.

“Psychoactive substances are substances that, when taken in or administered into one’s system, affect mental processes, e.g. cognition or affect. This term and its equivalent, psychotropic drug, are the most neutral and descriptive term for the whole class of substances, licit and illicit, of interest to drug policy. ‘Psychoactive’ does not necessarily imply dependence-producing, and in common parlance, the term is often left unstated, as in ‘drug use’ or ‘substance abuse’.”
- 11 U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). Protracted Withdrawal. Substance Abuse Treatment Advisory: July 2010, Vol. 9, Issue 1. Accessed 13 August 2015: <http://store.samhsa.gov/shin/content/SMA10-4554/SMA10-4554.pdf>.
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- 16 *Op. cit.* SAMHSA: *Protracted Withdrawal*.
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- 18 SAMHSA: Knowledge Application Program (KAP). Last updated 18 June 2015; accessed 31 August 2015: <http://www.samhsa.gov/kap>.
- 19 *Op. cit.* NIDA: *Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition*.
- 20 *Op. cit.* SAMHSA: *Protracted Withdrawal*.
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- 24 *Op. cit.* NIDA: *Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition*.
- 25 SAMHSA. Detoxification and Substance Abuse Treatment: Treatment Improvement Protocol (TIP) Series, No. 45. HHS Publication No. (SMA) 134131. Released 2006; accessed 20 July 2015: <http://store.samhsa.gov/shin/content/SMA13-4131/SMA13-4131.pdf>.
- 26 *Op. cit.* SAMHSA. *Detoxification and Substance Abuse Treatment: Treatment Improvement Protocol (TIP) Series, No. 45*.
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- 28 *Op. cit.* SAMHSA. *Detoxification and Substance Abuse Treatment: Treatment Improvement Protocol (TIP) Series, No. 45*.
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- 30 *Op. cit.* SAMHSA. *Detoxification and Substance Abuse Treatment: Treatment Improvement Protocol (TIP) Series, No. 45*.
- 31 *Op. cit.* NIDA: *Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition*.
- 32 *Op. cit.* SAMHSA. *Detoxification and Substance Abuse Treatment: Treatment Improvement Protocol (TIP) Series, No. 45*.

- 33 105 CMR 164.000: Department of Public Health, Licensure of Substance Abuse Treatment Programs. Accessed 26 August 2014: https://www.sec.state.ma.us/reg_pub/pdf/100/105164.pdf. 105 CMR 164.432(B): Program Components, Transitional Support Services.
- 34 Survey of TSS providers in Massachusetts. Distributed 22 July 2015.
- 35 Massachusetts Department of Public Health, Bureau of Substance Abuse Services (MA-DPH BSAS). Request for Response (RFR). Document Title: Substance Abuse Transitional Support Services (ASAM Level III.3). DPH RFR Document Number: 300221. March 2013; received by email 6 August 2015.
- 36 *Op. cit. MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.*
- 37 MA-DPH BSAS: Admission/Enrollment Profile, Transitional Support Services. Report period Jul 1, 2014 – Dec 31, 2014; reported 11 February, 2015.
- 38 *Op. cit. Survey of TSS providers in Massachusetts.*
- 39 *Op. cit. MA-DPH BSAS: Admission/Enrollment Profile, Transitional Support Services.*
- 40 *Op. cit. MA-DPH BSAS: Admission/Enrollment Profile, Transitional Support Services.*
- 41 *Op. cit. MA-DPH BSAS: Admission/Enrollment Profile, Transitional Support Services.*
- 42 MA-DPH BSAS: Discharge/Disenrollment Profile, Transitional Support Services. Report period Jul 1, 2014 – Dec 31, 2014; reported 11 February, 2015. Remaining disenrollments were reported over 10 additional categories: assessment only (0.14%); transferred to other SA program (2.01%); relapse (0.61%); incarcerated (0.19%); hospitalized, medical (0.79%); hospitalized, mental health (0.28%); inappropriate (0.28%); deceased (0.05%); other (0.61%); missing reason (3.64%).
- 43 *Op. cit. MA-DPH BSAS: Discharge/Disenrollment Profile, Transitional Support Services.*
- 44 *Op. cit. MA-DPH BSAS: Admission/Enrollment Profile, Transitional Support Services. Remaining patients' insurance status was categorized as Missing, None, Not Collected, or Other.*
- 45 NIDA DrugFacts: Treatment Approaches for Drug Addiction. Revised September 2009; accessed 20 July 2015: <http://www.drugabuse.gov/publications/drugfacts/treatment-approaches-drug-addiction>.
- 46 Grella CE, Hser YI, Hsieh SC. Predictors of drug treatment re-entry following relapse to cocaine use in DATOS. *J Subst Abuse Treat.* 2003 Oct;25(3):145-54. Accessed 20 July 2015: [http://www.journalofsubstanceabusetreatment.com/article/S0740-5472\(03\)00128-4/abstract](http://www.journalofsubstanceabusetreatment.com/article/S0740-5472(03)00128-4/abstract).
- 47 *Op. cit. NIDA: Principles of Drug Addiction Treatment: A Research-Based Guide, Third Edition.*
- 48 *Op. cit. NIDA DrugFacts: Treatment Approaches for Drug Addiction.*
- 49 Mee-Lee D, Shulman GD, Fishman MJ, et. al., eds. The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions, Third Edition. Carson City, NV: The Change Companies, 2013.
- “Outcomes research in addiction treatment has not yet provided a scientific basis for determining precise lengths of stay for optimum results. Thus, addiction treatment professionals recognize that length of stay must be individualized, based on the severity of the patient’s illness and the patient’s level of functioning at the point of service entry, as well as based on their response to treatment, progress and outcomes. At the same time, research does show a positive correlation between longer participation in the continuum of care and better outcomes.”
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- 81 *Op. cit. 105 CMR 164.212 (C): First Offender Driver Alcohol Education, Provision of Services, Treatment.*
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- 89 *Op. cit. 105 CMR 164.123(C): Outpatient Detoxification, Provision of Services, Treatment.*
- 90 *Op. cit. 105 CMR 164.221(A): Outpatient Counseling, Provision of Services, Admission.*
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- 92 Separate provisions are in place for First Offender Driver Alcohol Education (105 CMR 164.211), and for those Operating Under the Influence Second and Multiple Offenders for Aftercare Treatment Services (105 CMR 164.223).
- 93 *Op. cit. 105 CMR 164.223: Day Admission of Operating Under the Influence Second and Multiple Offenders for Aftercare Treatment Services.*

- ⁹⁴ *Op. cit.* 105 CMR 164.223: *Day Admission of Operating Under the Influence Second and Multiple Offenders for Aftercare Treatment Services.*
- ⁹⁵ *Op. cit.* 105 CMR 164.223: *Day Admission of Operating Under the Influence Second and Multiple Offenders for Aftercare Treatment Services.*
- ⁹⁶ *Op. cit.* 105 CMR 164.232(A): *Day Treatment, Provision of Services, Admission.*
- ⁹⁷ *Op. cit.* 105 CMR 164.232(C): *Day Treatment, Provision of Services, Treatment.*
- ⁹⁸ To be admitted, individuals must consent to treatment, and have been addicted for at least one year, or are pregnant, seeking opioid detoxification, or have been released from prison within the previous six months or discharged from opioid treatment within the past two years. *Op. cit.* 105 CMR 164.302(A): *Opioid Treatment, Provision of Services – All Opioid Treatment Programs, Admission.*
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- ¹⁰⁰ *Op. cit.* *ASAM Criteria, Level of Care Placement.*
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- ¹⁰³ *Op. cit.* *The ASAM Criteria, Level of Care Placement.*
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- ¹⁰⁸ *Op. cit.* *The ASAM Criteria, Level of Care Placement.*
- ¹⁰⁹ *Op. cit.* *The ASAM Criteria, Level of Care Placement.*
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- ¹¹² *Op. cit.* *The ASAM Criteria, Level 2.*
- ¹¹³ Admission to programs for individual adults is open to those age 18 and older who are “open to recovery and can understand relapse” but whose “home, community or social environment...is unresponsive of recovery or constitutes a risk to maintenance of abstinence.” (105 CMR 164.422) Daily clinical services are provided to “improve residents’ ability to structure and organize the tasks of daily living and recovery...” as well as advocacy and ombudsman services. (105 CMR 164.423) Four different models of treatment are included within programs for individual adults, including Transitional Support Services (105 CMR 164.423(B)), Social Model Recovery Homes (105 CMR 164.423(C)), Recovery Homes (105 CMR 164.423(D)) and Therapeutic Communities (105 CMR 164.423(E)). Transitional Support Services is the only model to require medical services, in that four hours of nursing services are available daily (105 CMR 164.423(B) and 164.424). Adult individual programs may also have approval to provide services to pregnant and post-partum women and infants.
- ¹¹⁴ Programs for adults with their families admit parents age 18 or older who are pregnant, have custody of at least one child, or for whom reunification is planned within 30 days of admission; further, the family must be homeless or living in an environment that constitutes a risk to abstinence or does not support recovery (105 CMR 164.432(A)). Services must include 24 hour a day crisis intervention, and treatment plans must in part address domestic violence, child welfare, parent-child relationships and family life (105 CMR 164.432(C)). Specific services must also be provided to children residing in the program (105 CMR 164.432(H)).
- ¹¹⁵ Residential Rehabilitation programs for Adolescents admit patients between 13 and 17 years old who do not require 24-hour daily nursing care, when consent for service is given by both patients and their parents; this level of care explicitly references patient placement criteria defined by ASAM for Clinically Managed Residential Treatment for adolescents (105 CMR 164.442(A)). Programs must provide developmentally appropriate services which include components focused on education as well as family involvement in treatment (105 CMR 164.442(E) and (F)).
- ¹¹⁶ Programs for Operating Under the Influence Second Offenders are provided to those referred by the court (105 CMR 164.452(A)). Structured for at least 14 consecutive days of programming, services are more strictly defined in the state regulations, including the type, number and length of individual and group counseling sessions, written curriculum and physical education (105 CMR 164.452(B) and (C)).
- ¹¹⁷ *Op. cit.* 105 CMR 164.400: *Residential Rehabilitation.*
- ¹¹⁸ *Op. cit.* 105 CMR 164.421: *Scope.*
- ¹¹⁹ *Op. cit.* 105 CMR 164.432(A): *Program Components.*
- ¹²⁰ Massachusetts Department of Public Health, Bureau of Substance Abuse Services (DPH-BSAS): Substance Abuse Services Descriptions. Accessed 4 August 2015: <http://www.mass.gov/eohhs/gov/departments/dph/programs/substance-abuse/providers/substance-abuse-services.html#30days>.
- ¹²¹ *Op. cit.* 105 CMR 164.423(C): *Social Model Recovery Homes.*
- ¹²² *Op. cit.* 105 CMR 164.423(D): *Recovery Homes.*
- ¹²³ *Op. cit.* 105 CMR 164.423(E): *Therapeutic Communities.*

- 123 *Op. cit. 105 CMR 164.423(E): Therapeutic Communities.*
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- 134 Guidelines further state that although treatment is focused on re-integration into the community and a transition to a lower level of care, “[i]n some situations, there may initially be no effective substitute for residential secure placement and support as reliable protection from the toxic influences of substance exposure, problematic or substance-infested environments, or the cultures of substance-involved and antisocial behaviors.” *Op. cit. ASAM Criteria, Level 3.1.*
- 135 *Op. cit. MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.*
- 136 *Op. cit. MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.*
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- Milieu Therapy is a planned treatment environment in which everyday events and interactions are therapeutically designed for the purpose of enhancing social skills and building confidence. Academics are woven into the daily routine using an integrative and interactive approach that incorporates learning styles and areas of interest. The milieu, or “life space,” provides a safe environment that is rich with social opportunities and immediate feedback from...staff. The milieu is not static but, flexible and features normalizing and developmental perspectives that use common structures intended to be familiar to all....
- 138 *Op. cit. MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.*
- Transportation services are provided to “aftercare interviews, placements, resource visits, community-based self-help meetings, medical and psychiatric appointments, methadone dosing appointments and required court appearances.”
- 139 *Op. cit. 105 CMR 164.432(B): Program Components, Transitional Support Services.*
- 140 *Op. cit. MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.*
- Recommended topics include, but are not limited to: relapse prevention, health education (including HIV, STDs, Hep C and TB), medication assisted treatment options, housing and employment search, introduction to and understanding self-help programs, and staff or peer led discussion groups within the TSS program.
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- 145 *Op. cit. MA-DPH BSAS: Clinical Stabilization Services – Franklin County. RFR 501123.*
- 146 *Op. cit. 105 CMR 164.133(A)(1)(c): Clinically Monitored Detoxification.*
- 147 Email correspondence, 8 July 2015, Quality Assurance and Licensing, Bureau of Substance Abuse Services, Massachusetts Department of Public Health (QAL, BSAS, MA-DPH). Bed counts as of July 2015.
- 148 *Op. cit. The ASAM Criteria, Level 3.5.*
- 149 *Op. cit. ASAM Criteria, Level of Care Placement.*
- 150 *Op. cit. ASAM Criteria, Level of Care Placement.*
- 151 *Op. cit. ASAM Criteria, Level of Care Placement.*
- 152 *Op. cit. The ASAM Criteria, Level 3.5.*
- 153 *Op. cit. The ASAM Criteria, Level 3.5.*
- 154 *Op. cit. The ASAM Criteria, Level 3.5.*
- 155 *Op. cit. The ASAM Criteria, Level 3.5.*
- 156 *Op. cit. The ASAM Criteria, Level 3.5.*
- 157 Phone interviews by Compass staff conducted July and August 2014 with Massachusetts provider staff from: AdCare, High Point Treatment Centers, Spectrum Health Systems.
- 158 *Op. cit. 105 CMR 164.133(A)(1)(b)1: Medically Monitored Inpatient Detoxification Services.*

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- 160 *Op. cit.* Email correspondence, 8 July 2015, QAL, BSAS, MA-DPH. Bed counts as of July 2015.
- 161 *Op. cit.* The ASAM Criteria, Level 3.7.
- 162 *Op. cit.* The ASAM Criteria, Level 3.7.
- 163 *Op. cit.* ASAM Criteria, Level of Care Placement.
- 164 *Op. cit.* 105 CMR 164.133(A)(1)(a)1: Medically Managed Intensive Inpatient Detoxification Services.
- 165 *Op. cit.* 105 CMR 164.133(A)(1)(a)2.
- 166 *Op. cit.* Email correspondence, 22 August 2014, QAL, BSAS, MA-DPH.
- 167 ATS and CSS licensed beds are combined for adolescents in the state. Currently 2 providers manage 48 licensed beds. *Op. cit.* Email correspondence, 22 August 2014, QAL, BSAS, MA-DPH.
- 168 *Op. cit.* The ASAM Criteria, Level 4.
- 169 *Op. cit.* The ASAM Criteria, Level 4.



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**Actuarial Assessment of Senate Bill 1502
Submitted to the 189th General Court:
An Act providing access to
full spectrum addiction treatment services**

Prepared for
Commonwealth of Massachusetts
Center for Health Information and Analysis

March 2016

Prepared by
Compass Health Analytics, Inc.



Actuarial Assessment of Senate Bill 1502: “An Act to provide access to full spectrum addiction treatment services”

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Actuarial Assessment of Senate Bill 1502: “An Act to provide access to full spectrum addiction treatment services”

Executive Summary

S.B. 1502 amends selected sections of Chapter 258 of the Acts of 2014¹ (effective October 1, 2015). It defines transition support services (TSS), adds them to services for which Chapter 258 already requires coverage (acute treatment and clinical stabilization services – ATS and CSS), and increases the number of days of minimum coverage carriers must provide for ATS, CSS, and TSS combined.

Massachusetts General Laws (M.G.L.) c. 3 § 38C charges the Massachusetts Center for Health Information and Analysis (CHIA) with 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. to provide an actuarial estimate of the effect the law has on the cost of health care insurance in Massachusetts.

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

Background

This analysis requires isolating the effects of S.B. 1502 given that the relevant provisions of Chapter 258 are in place as of October 1, 2015. The following summarizes the incremental effect of the bill.

**Table ES1:
Chapter 258 Provisions and S.B. 1502 Proposed Incremental Changes**

Chapter 258 Provisions	S.B. 1502 Incremental Changes
Creates mandatory minimum coverage for 14 days for medically-necessary acute treatment and clinical stabilization services (ATS and CSS).	Adds mandatory coverage for medically-necessary TSS and increases minimum coverage for ATS, CSS, and TSS to a total of 28 days.
Eliminates an insurer’s ability to terminate authorization through utilization review for the first 14 days of an ATS/CSS treatment episode.	Eliminates an insurer’s ability to terminate authorization through utilization review for the first 28 days of an ATS/CSS/TSS treatment episode.
Shifts the determination of medical necessity for ATS and CSS from the carrier to the provider.	Additionally shifts the determination of medical necessity for TSS from the carrier to the provider.
Forbids carriers from requiring prior authorization for substance abuse treatment in general, including ATS, CSS, and TSS. ²	None: Prior authorization for TSS, as one component of substance abuse treatment, is already prohibited by Chapter 258.

Transitional support services (TSS), coverage for which S.B. 1502 mandates, is a type of short-term residential substance abuse rehabilitation for adults that includes a clinical component and is intended to retain patients in treatment until they are prepared for and placed in a long-term

residential rehabilitation program. TSS moves patients along the continuum of services as their needs change while keeping them engaged in recovery, providing further clinical and other treatment and support – including four hours of daily nursing services – during later stages of withdrawal and post-acute withdrawal syndrome (PAWS) while developing skills and strategies to prevent relapse.³ (Historically TSS has not been treated as a medical benefit but fits within a continuum of care for substance use disorder (SUD) services. Long-term programs and other residential rehabilitation programs in Massachusetts are not required to provide daily physician or nursing services.) According to the Massachusetts Bureau of Substance Abuse Services (BSAS), TSS is designed for adult patients referred from ATS, CSS, or a homeless shelter who need intensive case management and further stabilization in a structured, safe environment to prepare them to move from detoxification to long-term residential rehabilitation, engaging patients in recovery while preventing relapse until long-term placement becomes feasible.⁴ In general, TSS programs are designed for a length stay of up to 30 days.⁵

Coverage before implementation of Chapter 258

Until implementation of the relevant provisions of Chapter 258 in October 2015, commercial insurers in Massachusetts could require prior authorization for substance abuse treatment (SAT) services.⁶ For patients who received prior authorization for treatment, insurers most often provided preliminary approval for a set number of treatment days. If a provider determined that treatment needed to extend beyond this initially-approved timeframe, the insurer could conduct a utilization review (UR) to determine if additional treatment was medically necessary. The insurer both defined the medical necessity criteria used and determined whether a patient met the criteria outlined for treatment.

In responses to a recent survey of ten of the largest insurance carriers in Massachusetts, the majority reported that they currently do not cover TSS. Two small carriers indicated they do in general; however, in Massachusetts, BSAS currently pays for all TSS directly regardless of a patient's insurance status, even for members covered by the few plans that do cover it, as private insurance has seldom reimbursed for this level of residential care.

Current coverage under Chapter 258

Chapter 258 shifts the balance of decision-making about treatment approval for various levels of substance abuse services from the insurer to the provider; under the new law, the provider determines into which level of service a patient is admitted without need for prior authorization from the insurer. For ATS and CSS specifically, the law goes further and transfers to the provider the ability to both define and determine the medical necessity of treatment for the first 14 days of a treatment episode.⁷ This is a significant change, as the respective definitions of medical or treatment necessity held by commercial insurers and substance abuse treatment providers are often different. Note that because the relevant provisions of Chapter 258 were not effective until October 15, 2015, insufficient time has passed to gather data on their effects.

By adding TSS to the services for which coverage is mandated by Chapter 258, S.B. 1502 applies the provisions of that chapter, including prohibiting utilization review and shifting decisions about

medical necessity from carrier to provider, to TSS. Presumably, without enactment of S.B. 1502, carriers will continue not to cover TSS, even after the effective date of Chapter 258, although that law will require coverage for ATS and CSS.

Analysis

Estimating the impact of S.B. 1502 on insurance premiums requires quantifying the effects of: (i) increasing the minimum combined coverage requirement to 28 days for ATS, CSS, and TSS from 14 days for ATS and CSS under Chapter 258, and (ii) mandating coverage for TSS.

Although referrals and admissions to TSS for fully-insured commercial members will likely increase under the proposed mandate, it is important to note that only about 66, or 1.5 percent, of recent TSS patients had fully-insured commercial coverage, despite BSAS's practice of paying for patients served regardless of coverage. Given the absolute size of these baseline numbers and constraints on the potential for additional referrals from the main referral sources to TSS (ATS and CSS), the projected impact of the proposed mandate is small, even after accounting for the potential that fully-insured commercial members might displace members with other insurance types.

The cost of S.B. 1502's change in the minimum coverage requirements (from 14 to 28 days) is estimated to be insignificant. Given that utilization of services is constrained throughout the five-year projection period, even with planned bed expansions, any increase in average length of stay would be offset by fewer patients being admitted, resulting in no additional bed-days.ⁱ

Estimating the impact on premiums of mandated TSS coverage first requires calculating additional admission referrals from ATS and CSS for fully-insured commercial members and adding these to the current fully-insured commercial admissions. However, since all Massachusetts TSS providers are at capacity, these total potential commercial referrals must be adjusted to reflect that capacity based on the "share" of total admissions that will go to these fully-insured commercial admissions. Additionally, the adjustment must account for how this share will change with Chapter 258 and S.B. 1502 implementation.

Next, projecting the impact over five years requires considering how bed capacity of BSAS-licensed TSS facilities could change, and the effect of that expansion on fully-insured commercial utilization. Finally, TSS unit cost for commercial insurers is estimated and projected over the next five years and applied to the estimated fully-insured commercial utilization to estimate insurers' increased medical expenses and, after accounting for administrative costs, the increase in premiums.

Summary results

The impact on premiums estimated in this analysis arises entirely from the provision of S.B. 1502 mandating coverage for TSS. In contrast, due to capacity constraints, the impact of the proposed change in required minimum coverage from 14 days for ATS and CSS under Chapter 258 to 28 days for ATS, CSS, and TSS is expected to be insignificant and assumed to be zero.

ⁱ As discussed in section 4.1, while increases in ATS or CSS length of stay would increase the average cost per day of individual care episodes, they would have an immaterial impact on overall S.B. 1502 cost.

For each year in the five-year analysis period, Table ES2 displays the projected net impact of the mandate on medical expense and premiums using a projection of Massachusetts fully-insured membership. This analysis assumes the bill, if enacted, would be effective January 1, 2016.⁸

The analysis estimates low-, medium-, and high-cost scenarios based on ranges in estimates of how many TSS beds will be allocated to fully-insured commercial members and of costs per bed-day. The middle scenario estimates average annual costs of \$443,000 per year, or an average of 0.003 percent of premium.

As noted above, the large majority of current TSS patients are not in the fully-insured commercial population despite “coverage” from BSAS, and therefore the number of projected fully-insured admissions, and their cost impact, is small, even after adjusting for the effects of Chapter 258 and S.B. 1502.

Estimates of TSS utilization potentially attributable to the proposed mandate are based on the current and planned bed capacity for ATS, CSS, and TSS beds in Massachusetts, all licensed by BSAS. Although the estimated cost range already allows for greater-than-planned expansions – the mid- and high- cost scenarios reflect capacity increases even larger than those announced by BSAS – it is worth considering how the estimates would change if capacity constraints were removed from all three service levels. Removing the bed capacity constraints but retaining the same rate of referral from ATS and CSS into TSS would raise the estimated premium increase from a range of \$0.02 PMPM in 2016 to \$0.04 PMPM in 2020 to a range of \$0.04 PMPM in 2016 to \$0.05 PMPM in 2020, and implies approximately 300 additional admissions per year from the commercially fully-insured population. Increased capacity would be utilized predominately by Medicaid patients, who have historically used 98.7 percent of the bed capacity and for whom utilization is also capacity-constrained. Assuming commercial patients use a higher proportion of new bed capacity than they have of existing capacity, this increased capacity would imply an additional 20 beds dedicated to the commercial fully-insured population. The fully-insured population historically used about 1.3 percent of the bed capacity or about 4.5 beds.

Finally, the impact of the proposed mandate 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 group’s or employer’s benefit plan will change under the mandate.

Table ES2: Summary Results

	2016	2017	2018	2019	2020	Weighted Average	5 Yr Total
Members (000s)	2,329	2,305	2,279	2,253	2,226		
Medical Expense Low (\$000s)	\$165	\$249	\$265	\$284	\$289	\$267	\$1,253
Medical Expense Mid (\$000s)	\$228	\$346	\$399	\$449	\$456	\$400	\$1,878
Medical Expense High (\$000s)	\$358	\$663	\$843	\$1,047	\$1,066	\$846	\$3,976
Premium Low (\$000s)	\$183	\$276	\$294	\$315	\$320	\$295	\$1,388
Premium Mid (\$000s)	\$253	\$384	\$442	\$497	\$506	\$443	\$2,081
Premium High (\$000s)	\$396	\$734	\$934	\$1,160	\$1,180	\$937	\$4,404
PMPM Premium Low	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
PMPM Premium Mid	\$0.01	\$0.01	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
PMPM Premium High	\$0.02	\$0.03	\$0.03	\$0.04	\$0.04	\$0.03	\$0.03
Estimated Monthly Premium	\$473	\$487	\$501	\$515	\$530	\$487	\$487
Premium % Rise Low	0.002%	0.002%	0.002%	0.002%	0.002%	0.002%	0.002%
Premium % Rise Mid	0.003%	0.003%	0.003%	0.004%	0.004%	0.003%	0.003%
Premium % Rise High	0.004%	0.005%	0.007%	0.008%	0.008%	0.007%	0.007%

Executive Summary Endnotes

¹ Chapter 258 of the Acts of 2014, “An Act to Increase Opportunities for Long-Term Substance Abuse Recovery.” Accessed 16 July 2015: <https://malegislature.gov/Laws/SessionLaws/Acts/2014/Chapter258>. Specific amendments to Sections 9, 19, 21, 23, 25 and 27.

² *Op. cit.* Chapter 258 of the Acts of 2014; Sections 9, 19, 21, 23, 25 and 27.

³ *Op. cit.* 105 CMR 164.432(B): Program Components, Transitional Support Services.

⁴ Massachusetts Department of Public Health, Bureau of Substance Abuse Services (MA-DPH BSAS). Request for Response (RFR). Document Title: Substance Abuse Transitional Support Services (ASAM Level III.3). DPH RFR Document Number: 300221. March 2013; received by email 6 August 2015.

⁵ *Op. cit.* MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.

⁶ Phone interviews by Compass staff conducted July and August 2014 with Massachusetts provider staff from: AdCare, High Point Treatment Centers, Spectrum Health Systems.

⁷ Preliminary interpretation of the law might suggest that provider-defined criteria will be used for determining medical necessity of stays for ATS and/or CSS through the first 14 days of treatment, presuming that the criteria have been formally published and/or adopted by a relevant professional organization such as ASAM. After 14 days of treatment, insurers may define and determine the medical necessity of a continuing stay. Moreover, for levels of service other than ATS or CSS, the definition and determination of the medical necessity of substance abuse treatment remains with the insurer (as defined by contract/policy terms).

⁸ With an assumed start date of January 1, 2016 dollars were estimated at 70.7% of the annual cost, based upon an assumed renewal distribution by month (Jan through Dec), by market segment, and by the Massachusetts market segment composition.

Actuarial Assessment of Senate Bill 1502: “An Act to provide access to full spectrum addiction treatment services”

1. Introduction

Massachusetts Senate Bill 1502 (S. B. 1502), as drafted for the 189th General Court, would require commercial health insurance plans to cover medically necessary “acute treatment services, medically necessary clinical stabilization services, and medically necessary transitional support services for up to a total of 28 days and shall not require preauthorization prior to obtaining such services.”¹ This bill amends specified sections of Chapter 258 of the Acts of 2014, “An Act to increase opportunities for long-term substance abuse recovery.”²

Massachusetts General Laws (M.G.L.) c. 3 § 38C charges the Massachusetts Center for Health Information and Analysis (CHIA) with 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. to provide an actuarial estimate of the effect the proposed law would have on the cost of health care 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 Senate Bill 1502

The following subsections describe the provisions of S.B. 1502.

2.1. Plans affected by the proposed mandate

Senate Bill 1502 would amend Chapter 258, which addresses the following types of health insurance plans:

- Insurance for persons in service of the Commonwealth (amending M.G.L. c. 32A, §§ 17M and 17N, as established by Chapter 258 of the Acts of 2014)
- Accident and sickness insurance policies (amending M.G.L. c. 175, §§ 47FF and 47GG, as established by Chapter 258)
- Contracts with non-profit hospital service corporations (amending M.G.L. c. 176A, §§ 8HH and 8II, as established by Chapter 258)

- Certificates under medical service agreements (amending M.G.L. c. 176B, §§ 4HH and 4II, as established by Chapter 258)
- Health maintenance contracts (amending M.G.L. 176G, §§ 4Z and 4AA, as established by Chapter 258)

The law requires coverage for members under the relevant plans, regardless of whether they reside within the Commonwealth or merely have their principal place of employment in the Commonwealth.

Self-insured plans, except for those managed by the Group Insurance Commission (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 assumes that this mandate does not affect Medicare extension/supplement plans even to the extent they are regulated by state law. Finally, this analysis does not apply to Medicaid/MassHealth.

The proposed mandate applies to fully-insured commercial insurance policies and self-insured plans operated for state and local employees by the GIC. The relevant provisions of S. B. 1502 are assumed to be effective to policies issued or renewed on or after January 1, 2016.³

2.2. Covered Services

S.B. 1502 amends selected sections of Chapter 258 of the Acts of 2014 (effective October 1, 2015). It defines transitional support services (TSS), adds them to services for which Chapter 258 already requires coverage (acute treatment and clinical stabilization services – ATS and CSS), and increases the number of days of minimum coverage carriers must provide for ATS, CSS, and TSS combined.

**Table 1:
Chapter 258 Provisions and S.B. 1502 Proposed Incremental Changes**

Chapter 258 Provisions	S.B. 1502 Incremental Changes
Creates mandatory minimum coverage for 14 days for medically-necessary acute treatment and clinical stabilization services (ATS and CSS).	Adds mandatory coverage for medically-necessary TSS and increases minimum coverage for ATS, CSS, and TSS to a total of 28 days.
Eliminates an insurer’s ability to terminate authorization through utilization review for the first 14 days of an ATS/CSS treatment episode.	Eliminates an insurer’s ability to terminate authorization through utilization review for the first 28 days of an ATS/CSS/TSS treatment episode.
Shifts the determination of medical necessity for ATS and CSS from the carrier to the provider.	Additionally shifts the determination of medical necessity for TSS from the carrier to the provider.
Forbids carriers from requiring prior authorization for substance abuse treatment in general, including ATS, CSS, and TSS. ⁴	None: Prior authorization for TSS, as one component of substance abuse treatment, is already prohibited by Chapter 258.

Transitional support services (TSS), coverage for which S.B. 1502 mandates, is a type of short-term residential substance abuse rehabilitation for adults that includes a clinical component and is intended to retain patients in treatment until they are prepared for and placed in a long-term residential rehabilitation program. TSS moves patients along the continuum of services as their

needs change while keeping them engaged in recovery, providing further clinical and other treatment and support – including four hours of daily nursing services – during later stages of withdrawal and post-acute withdrawal syndrome (PAWS) while developing skills and strategies to prevent relapse.⁵ (Historically TSS has not been treated as a medical benefit but fits within a continuum of care for substance use disorder (SUD) services. Long-term programs and other residential rehabilitation programs in Massachusetts are not required to provide daily physician or nursing services.) TSS differs from long-term residential rehabilitation in that TSS has a clinical component: TSS providers continue to address PAWS clinically through daily nursing services while focusing on identifying sources of cravings and helping patients to develop coping skills.⁶ According to the Massachusetts Bureau of Substance Abuse Services (BSAS), TSS is designed for adult patients referred from public ATS, CSS, or a homeless shelter who need intensive case management and further stabilization in a structured, safe environment to prepare them to move from detoxification to long-term residential rehabilitation.⁷ In general, TSS programs are designed for a length of stay of up to 30 days.⁸

2.3. Carrier Coverage

Coverage requirement changes introduced by Chapter 258

Before implementation of Chapter 258 in October 2015, private insurers in Massachusetts could require prior authorization for substance abuse services, including ATS and CSS, under most circumstances.⁹ Chapter 258 requires mandatory minimum coverage for 14 days for medically-necessary ATS and CSS, and eliminates an insurer’s ability to terminate authorization through utilization review for the first 14 days of an ATS and CSS treatment episode. It enables providers to control initial access to specified substance abuse services and limits the ability of insurers to impose prior authorization requirements or medical necessity criteria.

Until implementation of Chapter 258, for patients who received prior authorization for treatment or admission, insurers most often provided preliminary approval for a set number of treatment days. If a provider determined that treatment needed to extend beyond this initially-approved timeframe, the insurer could conduct a utilization review (UR) to determine if a longer stay or additional treatment was medically necessary. The insurer both defined the medical necessity criteria used and determined whether a patient met the criteria outlined for a longer stay or treatment.

Chapter 258 shifts the balance of decision-making about approval for various levels of substance abuse services from the insurer to the provider; under the new law, the provider determines into which level of service a patient is admitted without need for prior authorization from the insurer. For ATS and CSS specifically, the law goes further and transfers to the provider the ability to both define and determine the medical necessity of treatment for the first 14 days of a patient’s treatment episode.¹⁰ This is a significant change, as the definitions of medical or treatment necessity used by commercial insurers and substance abuse treatment providers are generally different.

A more detailed explanation of the relevant provisions of Chapter 258 can be found in CHIA's "Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to increase opportunities for long-term substance abuse recovery."¹¹

Coverage requirements in S.B. 1502

By adding TSS to the services for which coverage is mandated by Chapter 258, S.B. 1502 applies the provisions of that chapter, including prohibiting utilization review and shifting decisions about medical necessity from carrier to provider, to TSS.

In responses to a recent survey of ten of the largest insurance carriers in Massachusetts, the majority reported that they do not cover TSS and presumably will continue not to cover TSS even after the effective date of Chapter 258 (October 1, 2015), though that law will require coverage for ATS and CSS. While the majority of carriers do not cover TSS, two small carriers indicated they do in general; however, in Massachusetts, BSAS currently pays for all TSS directly regardless of a patient's insurance status, even for members covered by the few plans that do cover it.

S.B. 1502's provisions would modify commercial health insurance coverage by requiring coverage for TSS – under the conditions of Chapter 258 – and expanding the number of days for which commercial plans must cover medically-necessary ATS, CSS, and TSS from a combined 14 days (for ATS and CSS only) to a combined total of 28 days. Note this analysis assumes the insurer is prohibited from applying its medical necessity determination for 28 days, but after that it may do so. Chapter 258 and S.B. 1502 also allow the insurer to initiate utilization review after 7 days, which presumably allows the insurer to review the patient's progress in treatment, but nonetheless excludes medical necessity review and the ability to deny authorization until 28 days have passed.

2.4. Existing laws affecting the cost of S.B. 1502

To the extent existing laws require insurers to cover the services required by S.B. 1502, the incremental cost of the bill is reduced, since insurers would have to cover the services anyway. This analysis has uncovered no current Massachusetts or federal insurance mandates regarding insurance coverage explicitly for TSS. However, understanding existing laws that affect coverage for the spectrum of substance abuse treatment is worthwhile.

Chapter 258 preauthorization restrictions

Chapter 258 is (as of October 2015) an existing mandate with provisions that overlap those of S.B. 1502. The incremental effects of S.B. 1502 are outlined elsewhere in this analysis, but it is worth noting that Chapter 258 prohibits insurers from requiring preauthorization for any substance abuse treatment they cover, including services that would qualify as TSS. Therefore if a carrier happened to cover TSS, it could not require preauthorization, regardless of the provisions of S.B. 1502; the bill's incremental effect lies in mandatory coverage for TSS, the shift to providers for the definition and application of medical necessity criteria, and its restrictions on concurrent utilization review. Note that because the relevant provisions of Chapter 258 were not effective until October 15, 2015, insufficient time has passed to gather data on their effects.

Overlap with mental health parity statutes

The Massachusetts mental health parity statutes¹² require insurers to cover biologically-based mental disorders, including substance abuse disorders. Subsection (g) of the relevant chapters specifies the range of inpatient, intermediate, and outpatient services for which coverage is required, including inpatient services in a substance abuse facility and intermediate services such as “Level III community-based detoxification, acute residential treatment, partial hospitalization, day treatment and crisis stabilization.” See CHIA’s review of the medical efficacy of these provisions of Chapter 258 for more detail on the scope of these services.¹³

The overlap between services related to S.B. 1502 and those in the parity statutes is imperfect. This analysis assumes the parity statutes do not require coverage for TSS, an assumption supported by a survey of Massachusetts carriers that showed almost none currently cover TSS. Carriers indicate that they do not cover TSS due in some degree to their understanding of the service as lacking a clinical (medical) component, even though (as noted in Section 2.2 above) it includes nursing services; evaluating whether that reasoning is sufficient to exclude TSS from the services for which the mental health parity mandates require coverage is beyond the scope of this analysis.

3. Methodology

3.1. Steps in the analysis

Estimating the impact of S.B. 1502 on insurance premiums requires quantifying the effects of: (i) increasing the minimum combined coverage requirements to 28 days for ATS, CSS, and TSS from 14 days for ATS and CSS under Chapter 258, and (ii) mandating coverage for TSS.

Although referrals and admissions for fully-insured commercial members will likely increase under the proposed mandate, it is important to note that the large majority of current TSS patients are not commercially covered: in 2014, only 147, or 3.4 percent, of BSAS-reported TSS disenrollments were for commercially-insured individuals (self-insured and fully-insured), despite BSAS’s practice of paying for patients served regardless of coverage. Given that fully-insured membership comprised about 45 percent of Massachusetts commercially-insured membership in 2012 (according to Massachusetts All Payer Claim Database eligibility records), fully-insured commercial disenrollments were likely in the range of 1.5 percent, or about 66. Given the absolute size of these baseline numbers and constraints on the potential for additional referrals from the main referral sources to TSS (ATS and CSS), the projected impact of the proposed mandate is small, even after accounting for the potential that fully-insured commercial members might displace members with other insurance types.

The cost of S.B. 1502’s change in the minimum coverage requirements (from 14 to 28 days) is estimated to be insignificant. Any reasonable estimated change in ATS average length of stay (ALOS) would remain well under the Chapter 258 14-day threshold and would not be an incremental impact of S.B. 1502. Given that utilization of CSS is constrained by capacity limits throughout the five-year projection period, any increase in ALOS would be offset by fewer patients

admitted, resulting in no additional bed-days. In fact, increases in ATS and CSS ALOS would reduce TSS referrals and reduce TSS's share of the 28-day minimum coverage period. These effects would reduce the cost estimate,ⁱ but in the absence of information suggesting these effects are material, Compass has made the conservative assumption that these effects will not reduce estimated cost.

All Massachusetts TSS providers are currently at capacity, and thus the projected impact of mandated TSS coverage is driven more by supply constraints than by demand. Referrals to TSS for the fully-insured commercial population (demand) will likely increase as more commercially-insured patients receive CSS due to the mandatory coverage requirement of Chapter 258 and thus become eligible for referral to TSS; but to the degree capacity (supply) does not increase correspondingly, any additional commercial admissions may displace admissions of patients with other coverage types. Therefore, the core analyses required to estimate the cost of the mandated TSS coverage are (i) determining the proportion of current (2014) TSS admissions attributable to the commercial fully-insured population and (ii) estimating how that proportion may change with Chapter 258 and S.B. 1502 implementation.

Next, projecting the impact over five years requires considering how bed capacity of BSAS-licensed TSS facilities could change, and the effect of that expansion on fully-insured commercial service utilization. Finally, TSS unit cost under mandated coverage is projected over the next five years and applied to the estimated fully-insured commercial utilization.

The general approach outlined above was executed in the following steps.

Analyze demand for services

- Determine the cost of increasing the required minimum coverage for combined length of stay from 14 days (for ATS and CSS) to 28 days (for ATS, CSS, and TSS).
- As ATS and CSS are the primary referral sources to TSS, determine the additional number of ATS and CSS fully-insured commercial admissions anticipated after the implementation of Chapter 258 for the years 2016 to 2020.
- Obtain Bureau of Substance Abuse Services (BSAS) utilization reports for calendar year 2014 by patient insurer type to estimate the portion of TSS admissions for patients with commercial insurance.
- Use the 2014 BSAS TSS data as a baseline and estimate commercial and total 2016 admissions in the absence of capacity constraints. Using the Massachusetts All Payer Claim Database (APCD), adjust the baseline commercial admissions by the proportion of commercial membership that is fully-insured.
- Use the BSAS utilization reports to determine the TSS average length of stay (ALOS).

ⁱ As discussed in Section 4.1, increased ATS or CSS ALOS would increase the average per-day cost of individual treatment episodes, but clinical and capacity constraints on this effect suggest the TSS “crowding-out” effect would be larger. However, as noted above, Compass has treated these effects as immaterial.

- Multiply the ALOS by the estimated number of TSS admissions to calculate the number of fully-insured commercial and total TSS bed-days in the absence of capacity constraints.

Analyze service delivery capacity

- From BSAS, obtain the current licensed bed capacity for TSS treatment units and expected future bed expansions. Multiply bed capacity by ALOS to estimate total bed-day capacity.
- TSS beds are consistently at full capacity. Where estimated total bed-day demand under the proposed mandate exceeds bed-day capacity, apply the bed-day capacity constraint to the estimated number of fully-insured commercial TSS bed-days, accounting for estimated shifts in the distribution of payer types (i.e., displacement of other payer types by fully-insured commercial insurance) driven by the proposed mandate.
- Obtain the BSAS per day unit costs for TSS. Estimate fully-insured commercial TSS unit costs for each year in the projection period.
- Multiply the cost per day by the estimated fully-insured commercial bed-days to calculate incremental claim cost.

Calculate the impact of projected spending on insurance premiums

- Divide the total incremental claim cost by the corresponding membership to calculate per-member per-month (PMPM) costs.
- Estimate the impact of insurer retention (administrative costs and profit) on premiums.
- Estimate the fully-insured Massachusetts population under age 65, projected for the next five years (2016 to 2020).
- Project the estimated premium impact over the next five years.

3.2. Data sources

The primary data sources used in the analysis are:

- Information provided by clinicians and billing staff in provider organizations
- Information from a survey of private health insurance carriers in Massachusetts
- Information from BSAS, including a 2014 utilization report for licensed ATS, CSS, and TSS providers on disenrollments, average length of stay, and patient insurance coverage
- Academic literature, published reports, and population data, cited as appropriate
- Massachusetts insurer claim data from CHIA's Massachusetts APCD for calendar year 2012, for plans covering the under-65 fully-insured and self-insured populations

The more detailed step-by-step description of the estimation process below addresses limitations in some of these sources and the uncertainties they contribute to the cost estimate.

3.3. Limitations

Areas of uncertainty in this analysis include: (i) the amount of expansion in the number of licensed TSS beds, (ii) the number of additional total and commercial TSS admissions from expanded ATS and CSS coverage under Chapter 258, and (iii) projections of the per day cost for TSS for commercial carriers. Assumptions are varied to account for this uncertainty.

4. Analysis

To estimate the impact of the bill, the calculations outlined in the previous section were executed; this section describes that execution in detail. The analysis includes development of a best estimate “mid-level” cost scenario, as well as a low-level cost scenario using assumptions that produced a lower estimate, and a high-level cost scenario using more conservative assumptions that produced a higher estimated impact.

4.1. Effect of minimum coverage on average length of stay

S. B. 1502 has two provisions with a potential effect on premiums: it mandates TSS coverage and increases the required combined minimum coverage from 14 days for ATS and CSS under Chapter 258 to a combined 28 days for ATS, CSS, and TSS.

To determine whether the increase in days of combined minimum coverage will increase cost by increasing ATS, CSS, or TSS bed-days for commercial fully-insured members, Compass reviewed the analysis of the ATS and CSS coverage provisions of Chapter 258 in the actuarial assessment of Chapter 258, which states that in all three cost scenarios calculated, CSS utilization is “constrained by projected bed capacity”¹⁴ throughout the projection period. With CSS beds expected to be at capacity throughout the projection period, any increase in length of stay would be offset by fewer patients being served.ⁱⁱ That is, when all available beds are utilized, an increase in ALOS will necessarily result in fewer patients being served, with no increase in total bed-days provided or covered, and therefore no increase in cost of the proposed mandate over Chapter 258.

In fact, to the extent ATS and CSS ALOS increases, discharges per year will decrease (with no change in bed-days). This implies fewer opportunities for referrals to other services, and thus a likely decrease in TSS admissions. In addition, to the extent ALOS for a reduced number of ATS or CSS stays increases, fewer days in the 28-day minimum coverage period remain for TSS, “crowding-out”

ⁱⁱ ATS programs are not constrained in the Chapter 258 analysis. However, given the typical length of stay for an ATS episode (four days, according to BSAS) and its clinical content, any reasonable projected increase in ALOS for this service would not impinge upon the Chapter 258 14-day minimum coverage requirement, and thus not be an incremental impact of S.B. 1502.

TSS days from the minimum coverage period.ⁱⁱⁱ These effects would reduce the cost estimate. However, in the absence of information suggesting these effects are material, we assume they have no effect, estimating the cost of this provision at zero and assuming no effect on aggregate TSS bed-days provided to fully-insured commercial members.

4.2. TSS referral sources

Given that the provision increasing minimum covered days does not contribute to an increase in reimbursement for TSS bed-days, the analysis turns to the provision mandating TSS coverage. Throughout, this analysis makes the following assumptions regarding effects of the proposed mandated coverage:

- All TSS costs paid by commercial insurers in the projection period are assumed to be incremental costs of S.B. 1502, despite responses to Compass's carrier survey by two carriers indicating TSS may already be covered in some cases.
- The commercial carrier, not BSAS, will pay for all TSS provided under the proposed mandate terms to fully-insured commercial members receiving TSS during the projection period.
- No self-insured plans, except those managed by the GIC, will adopt any of the provisions of S.B. 1502 (and will therefore not reduce the constrained bed capacity available to commercial fully-insured members).^{iv}
- Estimates of TSS bed-day utilization are not reduced for cases where the combined ATS and CSS days in an episode are greater than the difference between the 28-day minimum coverage limit and the (BSAS-reported) TSS ALOS used to calculate the TSS utilization estimates.

According to responses to a survey of BSAS-licensed TSS providers in Massachusetts, nearly 90 percent of TSS patients are referred from ATS or CSS. Given that, prior to the implementation of Chapter 258, CSS was rarely covered by commercial insurers, the number of CSS admissions for individuals covered by commercial insurance is expected to increase with the implementation of Chapter 258. Subsequently, referrals to TSS for commercially insured individuals would be expected to increase, given that Chapter 258 mandates commercial coverage for ATS and CSS.

In the cost study included in the mandated benefit review of Chapter 258,¹⁵ Compass calculated the number of additional admissions for ATS and CSS in the commercial market. Table 2 shows these projected additional admissions for ATS and CSS for commercial fully-insured business.

ⁱⁱⁱ Given that TSS has a significantly lower unit cost than either ATS or CSS, the average per-day cost of any combined ATS, CSS, and TSS treatment episode will increase if ATS or CSS length of stay increases. However, as noted above, an increase in CSS length of stay cannot increase aggregate bed-days because the service operates at capacity, and while ATS services may not be at capacity, any reasonable projected increase in its ALOS would not materially impact the estimate.

^{iv} The additional admissions expected for GIC self-insured plans due to the implementation of Chapter 258 were not considered in developing the fully-insured cost estimate, as their exclusion was deemed immaterial.

**Table 2:
Fully-insured Additional Admissions from CSS and ATS due to Chapter 258**

	2016	2017	2018	2019	2020
ATS Admissions Low Scenario	339	341	341	341	341
ATS Admissions Mid Scenario	509	518	522	522	522
ATS Admissions High Scenario	670	679	688	697	697
CSS Admissions Low Scenario	81	103	125	147	147
CSS Admissions Mid Scenario	126	154	220	286	286
CSS Admissions High Scenario	227	315	403	491	491

These additional admissions were used to adjust the 2014 BSAS TSS discharge data to reflect the change in the distribution of TSS referral sources and patient insurance types due to the implementation of Chapter 258.^v

4.3. TSS commercial admission rates by source

BSAS currently funds all TSS, collects utilization data on all of their licensed facilities, and collects data on insurance coverage for each patient. BSAS provided Compass with a 2014 utilization report of disenrollment counts by type of insurance. For purposes of this study, disenrollment was used as a proxy for admissions.

For 2014, BSAS reports 4,293 total TSS disenrollments. Results of a survey of all Massachusetts TSS providers showed that approximately 51 percent of admissions are referrals from ATS and 38 percent from CSS, with the remainder coming from other referral sources. Applying the distribution of referral source to the total TSS disenrollments yields an estimated 2,172 referrals from ATS and 1,650 referrals from CSS.

The referral rate to TSS from ATS and CSS can be calculated by dividing ATS and CSS referrals by the total of ATS and CSS disenrollments. In 2014 there were 41,320 disenrollments for ATS and 7,326 disenrollments for CSS. This implies a 5.3 percent referral rate from ATS and a 22.5 percent referral rate from CSS. This analysis assumes referral rates are consistent across insurance types.

Table 3 illustrates the calculation of TSS referral rates from ATS and CSS.

**Table 3:
TSS Referral Rates from ATS and CSS**

	ATS	CSS	Other	Total
TSS Admits by Referral Source	50.6%	38.4%	11.0%	100.0%
Allocated TSS Admits by Referral Source	2,172	1,650	471	4,293
Disenrollments by Type of Service	41,320	7,326		
Implied Referral Rate	5.3%	22.5%		

^v Given that the disenrollment data cover 2014, the additional admission data reflected in Table 2 were adjusted to a 2014 population basis.

When applied to the projected additional ATS and CSS fully-insured commercial referrals shown in Table 2, these referral rates would, in the absence of projected capacity constraints, result in the additional TSS admissions shown in Table 4.

**Table 4:
Total Additional Fully-Insured Commercial TSS Referrals
pursuant to Chapter 258 without Regard to Bed Capacity**

	2016	2017	2018	2019	2020
TSS Commercial Admissions Low	36	41	46	51	51
TSS Commercial Admissions Mid	55	62	77	92	92
TSS Commercial Admissions High	86	107	127	147	147

BSAS reported 147 disenrollments from TSS in 2014 for commercially insured individuals, both fully-insured and self-insured. To adjust these total commercial disenrollments to reflect only the fully-insured commercial population, Compass used 2012 APCD eligibility data to estimate that fully-insured commercial membership comprises 45 percent of total commercial membership. Multiplying this percentage by the total commercial disenrollments yields an estimate of 66 TSS disenrollments of fully-insured commercial members in 2014.

Table 5 adjusts the 66 2014 commercial TSS admissions and 4,293 total TSS admissions for the Chapter 258 additions shown in Table 4.

**Table 5:
Total TSS Admissions Adjusted for Chapter 258
without Regard to Bed Capacity, Fully-Insured Commercial and Overall**

	2016	2017	2018	2019	2020
TSS Commercial Admissions Low	102	107	112	117	117
TSS Commercial Admissions Mid	121	128	143	158	158
TSS Commercial Admissions High	153	173	193	213	213
TSS Total Admissions Low	4,329	4,334	4,339	4,344	4,344
TSS Total Admissions Mid	4,348	4,355	4,370	4,385	4,385
TSS Total Admissions High	4,379	4,400	4,420	4,440	4,440

4.4. TSS average length of stay and number of bed-days

The TSS average length of stay (ALOS) for commercial carriers is somewhat lower than the ALOS for other payers (19 days vs. 22 days, respectively). Furthermore, commercial carriers are not required to cover more than 28 days of ATS, CSS, and TSS combined. In the middle-level cost scenario the ALOS was assumed to be the current 19 days for commercial carriers. In the high-cost scenario commercial members are assumed to have the same 22-day ALOS as other members, and in the low-cost scenario the commercial members are assumed to have an ALOS of 17 days. In all scenarios ALOS was assumed to be 22 days for all other patients. These ALOS estimates are multiplied by the potential fully-insured commercial admissions in Table 5 to calculate total

potential fully-insured commercial bed-days. The overall TSS ALOS of 22 days^{vi} is multiplied by total TSS 2014 admissions and summed with the potential fully-insured commercial bed-days to calculate the bed-day demand across all payers. These bed-days are displayed in Table 6.^{vii}

**Table 6:
TSS Bed-Days Adjusted for Chapter 258 without Regard to Bed Capacity**

	2016	2017	2018	2019	2020
TSS FI Commercial Bed-Days Low	1,739	1,825	1,909	1,993	1,993
TSS FI Commercial Bed-Days Mid	2,308	2,435	2,721	3,004	3,004
TSS FI Commercial Bed-Days High	3,356	3,802	4,249	4,696	4,696
TSS Total Bed-Days Low	94,692	94,778	94,862	94,946	94,946
TSS Total Bed-Days Mid	95,261	95,388	95,674	95,957	95,957
TSS Total Bed-Days High	96,309	96,755	97,202	97,649	97,649

4.5. TSS licensed bed capacity and capacity-constrained TSS bed-days

BSAS licenses substance abuse treatment programs and facilities in Massachusetts. For facility services, licenses are granted on a bed capacity basis. According to BSAS, there are 9 providers with a combined total of 344 licensed adult TSS beds in the state.¹⁶

As reported by a sample of providers and by BSAS, the existing system of TSS beds is at capacity. This means the provisions of the law as they apply to these services will have limited effect unless the Commonwealth expands bed capacity. BSAS reports that, with the 2016 budget finalized, there are no funds budgeted for additional TSS capacity. In addition, patients enter TSS with the specific intention and plan to access to long-term residential rehabilitation^{viii} beds after their TSS stay; a specific long-term residential rehabilitation bed is most often identified prior to a patient’s admission to TSS. Given that, according to BSAS, plans exist to expand residential rehabilitation until 2017, this analysis assumes any TSS bed expansion will not occur until 2017, and varies the expansion assumptions by scenario. The middle-cost scenario assumes a capacity expansion of 38 beds (the average facility bed size) in each of 2018, 2019, and 2020. The low-cost scenario assumes the capacity will expand by the size of the second smallest facility (27 beds) in both 2019 and 2020, and the high-cost scenario assumes the capacity will expand by the size of the second largest facility (48 beds) in each of 2017, 2018, and 2019.

Table 7 shows projected licensed capacity for TSS.

^{vi} Overall and non-commercial ALOS are the same owing to the small proportion of TSS patients with commercial coverage.

^{vii} In practice, to the extent combined length of stay for ATS and CSS exceeds the difference of 28 days and the BSAS TSS ALOS figures used here, that is, to the extent length of stay for a combined episode of care in the three services exceeds 28 days, costs of the “excess” TSS days would not be incremental costs of the proposed mandate. However, due to data limitations, Compass did not model the magnitude of this effect and has therefore taken the conservatively high position of assuming the commercial carrier will pay all TSS days calculated here.

^{viii} Long-term residential rehabilitation services are the next step in the continuum of chemical dependency care for patients accessing TSS specifically.

**Table 7:
Projected Licensed Bed Capacity**

	2015	2016	2017	2018	2019	2020
Transitional Support Services (TSS)						
Low Scenario	344	344	344	344	371	398
Mid Scenario	344	344	344	382	420	458
High Scenario	344	344	392	440	488	488

Total TSS bed-day capacity is calculated by multiplying the percent growth in licensed bed capacity by year from Table 7 to the total 2014 TSS bed-days. Table 8 displays the resulting bed-day capacity.

**Table 8:
Total TSS Bed-Day Capacity**

	2015	2016	2017	2018	2019	2020
Transitional Support Services (TSS)						
Low Scenario	94,209	94,209	94,209	94,209	94,946	94,946
Mid Scenario	94,209	94,209	94,209	95,674	95,957	95,957
High Scenario	94,209	94,209	107,354	120,500	133,645	133,645

Note that in each scenario total adjusted bed-days with unconstrained demand in Table 6 exceed total bed-day capacity in Table 8 in 2016. This relationship then reverses when bed capacity is projected to expand in each scenario (2019 in the low-cost scenario, 2018 in the middle-cost scenario, and 2017 in the high-cost scenario).

For the period prior to expansion, while there may be limited to no increase in TSS admissions in total, the distribution by insurance type is anticipated to shift toward more commercially-insured patients under mandated commercial coverage. For this period, estimated fully-insured commercial TSS bed-days are calculated as the product of total TSS bed-day capacity from Table 8 and the ratio of the Chapter 258-adjusted fully-insured commercial TSS bed-days to the adjusted total TSS bed-days from Table 6, for all cost scenarios.

For the later periods in which estimated TSS bed-day capacity exceeds estimated total Chapter 258-adjusted TSS bed-day capacity, applying the same calculation methodology as above would yield final fully-insured commercial TSS bed-days estimates greater than the Chapter 258-adjusted fully-insured commercial estimates in Table 6. Increasing the final estimated fully-insured commercial bed-days beyond the estimates in Table 6 implies the existence of pent-up demand for these services in the commercial market beyond the Chapter 258-adjusted ATS and CSS referral capacity (please see Section 4.3). Compass has no information confirming or refuting the existence of such excess demand. Therefore, in the low- and middle-cost scenarios, Compass has capped the estimate of total fully-insured commercial TSS bed-days at the level of the Chapter 258-adjusted commercial estimates in Table 6; but Compass estimates the high-cost scenario total fully-insured commercial

bed-days as the product of total bed capacity and the ratio of the Chapter 258-adjusted fully-insured commercial TSS bed-days to the adjusted total TSS bed-days, as above.^{ix}

Table 9 shows projected fully-insured commercial TSS bed-days under the proposed mandate for the projection period.

**Table 9:
Fully-insured Commercial Constrained TSS Bed-Days**

	2016	2017	2018	2019	2020
TSS FI Commercial Bed-Days Low	1,730	1,814	1,896	1,993	1,993
TSS FI Commercial Bed-Days Mid	2,283	2,405	2,721	3,004	3,004
TSS FI Commercial Bed-Days High	3,282	4,219	5,268	6,427	6,427

4.6. TSS unit cost

In 2015 BSAS paid \$131 per day for TSS. This rate was developed by a consulting group utilizing facility financial reporting and utilization reports to model the cost of the program.

Public-payer rates, particularly Medicaid rates, are typically significantly lower than those paid by commercial insurers, suggesting there will be some upward pressure on unit cost in 2016 as providers seek to contract with commercial payers at a higher rate. However, Medicaid reimbursement rates for many services are set below provider cost, requiring commercial carriers to pay substantially higher rates to providers with significant Medicaid caseloads to keep those providers' services available to their members. Thus, given that the BSAS per diem rate of \$131 is at or near the cost of TSS, this analysis assumes an increase in unit cost for commercial carriers more modest than would be expected when comparing commercial and Medicaid rates more generally.

In the middle-cost "best estimate" scenario, Compass estimates the commercial TSS unit cost will increase by 10 percent in 2016. The low-cost scenario estimates fees will increase five percent in 2016, and in the high-cost scenario the unit cost is anticipated to increase by 20 percent in 2016. In subsequent years (2017 to 2020), Compass applies a three percent medical inflation rate.^{17,x}

Table 10 displays the TSS cost per day for the 2015 base period and over the projection period.

^{ix} Given that fully-insured commercial comprises a small portion of total TSS bed-days, and fewer bed-days are projected in the low- and middle-cost scenarios, applying the high-cost scenario pent-up demand assumption to the low- and middle-cost scenarios results in an immaterial increase to the cost estimate.

^x The three-year average over the period 2012 to 2014 of the U.S. city medical consumer price index calculated by the U.S. Bureau of Labor Statistics.

**Table 10:
Projected Commercial TSS Cost per Day**

	2015	2016	2017	2018	2019	2020
Transitional Support Services (TSS)						
Low Scenario	\$131	\$138	\$142	\$146	\$150	\$155
Mid Scenario	\$131	\$144	\$148	\$153	\$157	\$162
High Scenario	\$131	\$157	\$162	\$167	\$172	\$177

4.7. Incremental cost calculation

Multiplying the estimated number of bed-days for TSS for fully-insured commercial members (from Table 9) by the estimated unit cost rates (from Table 10) yields the incremental claim cost of the proposed mandate. The total estimated annual costs are then divided by projected annual fully-insured commercial member months, yielding the incremental per-member per-month (PMPM) medical expense. Table 11 displays the weighted average annual result over the projection period.

**Table 11:
Estimate of Weighted Average Annual Increase in Carrier Medical Expense PMPM**

Low Scenario	\$0.01
Mid Scenario	\$0.01
High Scenario	\$0.03

4.8. Carrier retention and increase in premium

Assuming an average retention rate of 9.7 percent, based on CHIA’s analysis of administrative costs and profit in Massachusetts,¹⁸ the increase in medical expense was adjusted upward to approximate the total impact on premiums. Table 12 shows the result.

**Table 12:
Estimate of Weighted Average Annual Increase in PMPM Premium**

	<u>Claim</u> <u>PMPM</u>	<u>Premium</u> <u>PMPM</u>	<u>%Change</u>
Low Scenario	\$0.01	\$0.01	0.002%
Mid Scenario	\$0.01	\$0.02	0.003%
High Scenario	\$0.03	\$0.03	0.007%

The mid-level weighted average PMPM premium impact of \$0.02 results in an annual total of approximately \$443,000.

4.9. Projected fully-insured population in Massachusetts

Projecting the five-year cost impact of the law requires projecting the fully-insured commercial membership for the 2016 to 2020 projection period. The projected membership is multiplied by the PMPM costs in Tables 11 and 12 to calculate the estimated claim and premium cost impact of the law.

Table 13 shows the fully-insured population in Massachusetts ages 0 to 64 projected for the next five years. Appendix A describes the sources of these values.

Table 13:
Projected Fully-Insured Population in Massachusetts, Ages 0-64

<u>Year</u>	<u>Total (0-64)</u>
2016	2,329,040
2017	2,304,658
2018	2,279,367
2019	2,253,405
2020	2,226,328

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 reported in this section is derived entirely from the provision of S. B. 1502 mandating coverage for TSS. In contrast, due to bed capacity constraints on CSS, the impact of the proposed change in required minimum coverage without preauthorization from 14 days combined for ATS and CSS under Chapter 258 to 28 days for ATS, CSS, and TSS is expected to be insignificant and assumed to be zero.

Starting in 2018, 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 2018), S.B. 1502, 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. 1502, 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 14 displays the projected net impact of the mandate on medical expense and premiums using the projected Massachusetts fully-insured

membership in Table 13. The relevant provisions of S. B. 1502 are assumed to be effective January 1, 2016.¹⁹

As noted above, the large majority of current TSS patients are not in the fully-insured commercial population, despite the fact that BSAS has paid for admissions of commercially-insured members, and therefore the number of projected fully-insured admissions, and their cost impact, is small, even after adjusting for the effects of Chapter 258 and S.B. 1502.

The low-cost scenario impact is \$295,000 per year on average, and assumes a lower number of commercial fully-insured bed-days and a lower cost per day. The high scenario has an annual average cost of \$937,000 per year, and reflects an estimate with a higher portion of bed-days occurring for commercial fully-insured members and a higher cost per day. The middle scenario has average annual costs of \$443,000 per year, or an average of 0.003 percent of premium.

Estimates of TSS utilization potentially attributable to the proposed mandate are based on the current and planned bed capacity for ATS, CSS, and TSS beds in Massachusetts, all licensed by BSAS. Although the estimated cost range already allows for greater-than-planned expansions – the mid- and high- cost scenarios reflect capacity increases even larger than those announced by BSAS – it is worth considering how the estimates would change if capacity constraints were removed from all three service levels. Removing the bed capacity constraints but retaining the same rate of referral from ATS and CSS into TSS would raise the estimated premium increase from a range of \$0.02 PMPM in 2016 to \$0.04 PMPM in 2020 to a range of \$0.04 PMPM in 2016 to \$0.05 PMPM in 2020, and implies approximately 300 additional admissions per year from the commercially fully-insured population. Increased capacity would be utilized predominately by Medicaid patients, who have historically used 98.7 percent of the bed capacity and for whom utilization is also capacity-constrained. Assuming commercial patients use a higher proportion of new bed capacity than they have of existing capacity, this increased capacity would imply an additional 20 beds dedicated to the commercial fully-insured population. The fully-insured population historically used about 1.3 percent of the bed capacity or about 4.5 beds.

Finally, the impact of the proposed mandate 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 group's or employer's benefit plan will change under the mandate.

**Table 14:
Summary Results**

	2016	2017	2018	2019	2020	Weighted Average	5 Yr Total
Members (000s)	2,329	2,305	2,279	2,253	2,226		
Medical Expense Low (\$000s)	\$165	\$249	\$265	\$284	\$289	\$267	\$1,253
Medical Expense Mid (\$000s)	\$228	\$346	\$399	\$449	\$456	\$400	\$1,878
Medical Expense High (\$000s)	\$358	\$663	\$843	\$1,047	\$1,066	\$846	\$3,976
Premium Low (\$000s)	\$183	\$276	\$294	\$315	\$320	\$295	\$1,388
Premium Mid (\$000s)	\$253	\$384	\$442	\$497	\$506	\$443	\$2,081
Premium High (\$000s)	\$396	\$734	\$934	\$1,160	\$1,180	\$937	\$4,404
PMPM Premium Low	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
PMPM Premium Mid	\$0.01	\$0.01	\$0.02	\$0.02	\$0.02	\$0.02	\$0.02
PMPM Premium High	\$0.02	\$0.03	\$0.03	\$0.04	\$0.04	\$0.03	\$0.03
Estimated Monthly Premium	\$473	\$487	\$501	\$515	\$530	\$487	\$487
Premium % Rise Low	0.002%	0.002%	0.002%	0.002%	0.002%	0.002%	0.002%
Premium % Rise Mid	0.003%	0.003%	0.003%	0.004%	0.004%	0.003%	0.003%
Premium % Rise High	0.004%	0.005%	0.007%	0.008%	0.008%	0.007%	0.007%

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 Group Insurance Commission (GIC), with an effective date for all GIC policies on July 1, 2016.

Because the benefit offerings of GIC plans are similar to most other commercial plans in Massachusetts, and likewise do not currently cover treatment for TSS, the estimated PMPM effect of the proposed mandate on GIC coverage is not expected to differ from that calculated for the other fully-insured plans in Massachusetts. 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 2016.

Table 15 breaks out the GIC fully-insured and self-insured membership and the corresponding incremental medical expenses and premiums. Note that all results for the fully-insured commercial population above, including the total medical expense and premium values for the general fully-insured membership displayed in Table 14, include the GIC fully-insured membership. Finally, the proposed mandate is assumed to require the GIC to implement the provisions on July 1, 2016; therefore, the results in 2016 are approximately one-half of an annual value.

**Table 15:
GIC Summary Results**

	2016	2017	2018	2019	2020	Weighted Average	5 Yr Total
GIC Fully-Insured							
Members (000s)	59	59	59	59	59		
Medical Expense Low (\$000s)	\$3	\$6	\$7	\$7	\$8	\$7	\$31
Medical Expense Mid (\$000s)	\$4	\$9	\$10	\$12	\$12	\$10	\$47
Medical Expense High (\$000s)	\$6	\$17	\$22	\$27	\$28	\$22	\$101
Premium Low (\$000s)	\$3	\$7	\$8	\$8	\$8	\$8	\$35
Premium Mid (\$000s)	\$5	\$10	\$11	\$13	\$13	\$12	\$52
Premium High (\$000s)	\$7	\$19	\$24	\$30	\$31	\$25	\$112
GIC Self-Insured							
Members (000s)	263	263	263	262	262		
Medical Expense Low (\$000s)	\$13	\$28	\$31	\$33	\$34	\$31	\$139
Medical Expense Mid (\$000s)	\$18	\$40	\$46	\$52	\$54	\$47	\$210
Medical Expense High (\$000s)	\$29	\$76	\$97	\$122	\$125	\$100	\$449

Appendix A: Membership Affected by the Mandate

Membership potentially affected by a proposed mandate may include Massachusetts residents with fully-insured employer-sponsored health insurance (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 2016 to 2020 are derived from the following sources.

Total Massachusetts population estimates for 2012, 2013, and 2014 from U. S. Census Bureau data²⁰ form the base for the projections. Distributions by gender and age, also from the Census Bureau,²¹ were applied to these totals. Projected growth rates for each gender/age category were estimated from Census Bureau population projections to 2030.²² The resulting growth rates were then applied to the base amounts to project the total Massachusetts population for 2016 to 2020.

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 coverage²³ 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.²⁴

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 residents²⁵ and non-residents²⁶ 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.²⁷

Projections for the GIC self-insured lives were developed using GIC base data for 2012,²⁸ 2013,²⁹ and 2014³⁰ and the same projected growth rates from the Census Bureau that were used for the Massachusetts population. Calculations of GIC self-insured lives used breakdowns of the population by gender and age based on Census Bureau distributions.

Endnotes

¹ The 189th General Court of the Commonwealth of Massachusetts, Senate Bill 1502, “An Act providing access to full spectrum addiction treatment services”. Accessed 16 July 2015: <https://malegislature.gov/Bills/189/Senate/S1502>.

² Chapter 258 of the Acts of 2014, “An Act to Increase Opportunities for Long-Term Substance Abuse Recovery.” Accessed 16 July 2015: <https://malegislature.gov/Laws/SessionLaws/Acts/2014/Chapter258>. Specific amendments to Sections 9, 19, 21, 23, 25 and 27.

³ With an assumed start date of January 1, 2016 dollars were estimated at 70.7% of the annual cost, based upon an assumed renewal distribution by month (Jan through Dec) by market segment and the Massachusetts market segment composition.

⁴ *Op. cit.* Chapter 258 of the Acts of 2014; Sections 9, 19, 21, 23, 25 and 27.

⁵ 105 CMR 164.000: Department of Public Health, Licensure of Substance Abuse Treatment Programs. Accessed 26 August 2014: https://www.sec.state.ma.us/reg_pub/pdf/100/105164.pdf. 105 CMR 164.432(B): Program Components, Transitional Support Services.

⁶ Survey of TSS providers in Massachusetts. Distributed 22 July 2015.

⁷ Massachusetts Department of Public Health, Bureau of Substance Abuse Services (MA-DPH BSAS). Request for Response (RFR). Document Title: Substance Abuse Transitional Support Services (ASAM Level III.3). DPH RFR Document Number: 300221. March 2013; received by email 6 August 2015.

⁸ *Op. cit.* MA-DPH BSAS: Substance Abuse Transitional Support Services (ASAM Level III.3). RFR 300221.

⁹ Phone interviews by Compass staff conducted July and August 2014 with Massachusetts provider staff from: AdCare, High Point Treatment Centers, Spectrum Health Systems.

¹⁰ Preliminary interpretation of the law might suggest that provider-defined criteria will be used for determining medical necessity of stays for ATS and/or CSS through the first 14 days of treatment, presuming that the criteria have been formally published and/or adopted by a relevant professional organization such as ASAM. After 14 days of treatment, insurers may define and determine the medical necessity of a continuing stay. Moreover, for levels of service other than ATS or CSS, the definition and determination of the medical necessity of substance abuse treatment remains with the insurer (as defined by contract/policy terms).

¹¹ Massachusetts Center for Health Information and Analysis (CHIA). “Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to increase opportunities for long-term substance abuse recovery.” Published December 2014: <http://www.chiamass.gov/assets/Uploads/Substance-Abuse-Mandates-Chapter-258-of-the-Acts-of-2014.pdf>.

¹² M.G.L. c.32A §22, c.175 §47B, c.176A §8A, c.176B §4A, c.176G §4M.

¹³ *Op. cit.* Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to increase opportunities for long-term substance abuse recovery.

¹⁴ CHIA: “Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to increase opportunities for long-term substance abuse recovery. Actuarial Assessment: ATS/CSS/SAT.” Published December 2014: <http://www.chiamass.gov/assets/Uploads/Substance-Abuse-Mandates-Chapter-258-of-the-Acts-of-2014.pdf>: 13.

¹⁵ *Op. cit.* CHIA: “Mandated Benefit Review of Chapter 258 of the Acts of 2014: An Act to increase opportunities for long-term substance abuse recovery. Actuarial Assessment: ATS/CSS/SAT.” Please note the figures reported in Table 3 are not found in the Chapter 258 report. They are sourced from the actuarial consultant’s work papers.

¹⁶ Email correspondence with Massachusetts Department of Public Health, Bureau of Substance Abuse Services, Quality Assurance & Licensing, 8 July 2015. Bed counts as of July 2015.

¹⁷ U.S. Department of Labor, Bureau of Labor Statistics. Databases, Tables, and Calculators by Subject, Consumer Price Index - All Urban Consumers, Medical Care. Accessed 8 October 2015: <http://data.bls.gov/timeseries/CUUR0000SAM>.

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- ¹⁸ CHIA: Annual Report on the Massachusetts Health Care Market, September 2014. Accessed 16 February 2015: <http://www.mass.gov/chia/docs/r/pubs/14/chia-annual-report-2014.pdf>.
- ¹⁹ With an assumed start date of January 1, 2016 dollars were estimated at 70.7% of the annual cost, based upon an assumed renewal distribution by month (Jan through Dec) by market segment and the Massachusetts market segment composition.
- ²⁰ U.S. Census Bureau. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2014. Accessed 23 January 2015: <http://www.census.gov/popest/data/state/totals/2014/index.html>.
- ²¹ U.S. Census Bureau. Annual Estimates of the Resident Population by Single Year of Age and Sex for the United States, States, and Puerto Rico Commonwealth: April 1, 2010 to July 1, 2012. Accessed 23 January 2014: http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2012_PEPSYASEX&prodType=table.
- ²² U.S. Census Bureau. File 4. Interim State Projections of Population by Single Year of Age and Sex: July 1, 2004 to 2030, U.S. Census Bureau, Population Division, Interim State Population Projections, 2005. Accessed 23 January 2014: <http://www.census.gov/population/projections/data/state/projectionsagesex.html>.
- ²³ U.S. Census Bureau. Table HIB-4. Health Insurance Coverage Status and Type of Coverage by State All People: 1999 to 2012. Accessed 23 January 2014: http://www.census.gov/hhes/www/hlthins/data/historical/HIB_tables.html.
- ²⁴ Agency for Healthcare Research and Quality. Percent of private-sector enrollees that are enrolled in self-insured plans at establishments that offer health insurance by firm size and State (Table II.B.2.b.1), years 1996-2012: 1996 (Revised March 2000), 1997 (March 2000), 1998 (August 2000), 1999 (August 2001), 2000 (August 2002), 2001 (August 2003), 2002 (July 2004), 2003 (July 2005), 2004 (July 2006), 2005 (July 2007), 2006 (July 2008), 2008 (July 2009), 2009 (July 2010), 2010 (July 2011), 2011 (July 2012), 2012 (July 2013), 2013 (July 2014). Medical Expenditure Panel Survey Insurance Component Tables. Generated using MEPSnet/IC. Accessed 31 January 2015: http://www.meps.ahrq.gov/mepsweb/data_stats/MEPSnetIC.jsp.
- ²⁵ IRS. Table 2. Individual Income and Tax Data, by State and Size of Adjusted Gross Income, Tax Year 2010. Accessed 6 March 2014: <http://www.irs.gov/uac/SOI-Tax-Stats-Historic-Table-2>.
- ²⁶ Massachusetts Department of Revenue. Massachusetts Personal Income Tax Paid by Non-Resident by State for TY2010. Accessed 23 January 2014: <http://www.mass.gov/dor/tax-professionals/news-and-reports/statistical-reports/>.
- ²⁷ Massachusetts Budget and Policy Center. Budget Brief: The Fiscal Year 2015 Budget for MassHealth and Health Reform Programs. Published September 2014; accessed 5 January 2015: http://www.massbudget.org/reports/pdf/FY-2015_GAA-Brief_Final.pdf.
- ²⁸ Group Insurance Commission (GIC), Group Insurance Commission Fiscal Year 2012 Annual Report. Accessed 14 March 2014: <http://www.mass.gov/anf/docs/gic/annual-report/arfy2012.pdf>.
- ²⁹ GIC: GIC Health Plan Membership by Insured Status FY2013. Accessed 22 January 2014: <http://www.mass.gov/anf/docs/gic/annual-report/annualreportfy2013.pdf>.
- ³⁰ GIC: GIC Health Plan Membership by Insured Status FY2014. Accessed 22 January 2015: <http://www.mass.gov/anf/docs/gic/annual-report/fy2014annual-report.pdf>.