MANDATED BENEFIT REVIEW OF
HOUSE BILL 1114 AND SENATE BILL 1262
SUBMITTED TO THE 192ND GENERAL COURT:

AN ACT RELATIVE TO MENTAL HEALTH PROVIDERS

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CHIA.

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TABLE OF CONTENTS

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1.0 Benefit Mandate Overview: H.B. 1114 and S.B. 1262: An Act relative to mental health providers

1.1 History of the Bill

The Committee on Financial Services referred House Bill (H.B.) 1114 and Senate Bill (S.B.) 1262, both entitled, "An Act relative to mental health providers,"[1] to the Massachusetts Center for Health Information and Analysis (CHIA) for review. Massachusetts General Law (MGL) Chapter 3 §38C requires CHIA to review the medical efficacy of treatments or services included in each mandated benefit bill referred to the agency by a legislative committee, should it become law. CHIA must also estimate each bill's fiscal impact, including changes to premiums and administrative expenses. The language in each bill is the same, and for the remainder of this report, "the bill" will collectively refer to H.B. 1114 and S.B. 1262.

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

1.2 What Does the Bill Propose?

As submitted to the 192nd General Court of the Commonwealth, the bill amends the list of "licensed mental health professionals" in each of the Commonwealth's mandated mental health coverage statutes[i] to include "or a licensed occupational therapist or occupational therapist assistant" to its list of licensed mental health professions as follows (See Appendix A for full text of Chapter 175 §47B):[ii]

"For purposes of this section, 'licensed mental health professional' shall mean a licensed physician who specializes in the practice of psychiatry, a licensed psychologist, a licensed clinical social worker, a licensed mental health counselor, a licensed nurse mental health clinical specialist, a licensed alcohol and drug counselor I, as defined in section 1 of chapter 111J, [or] a licensed marriage and family therapist within the lawful scope of practice for such therapist, **or a licensed occupational therapist or occupational therapist assistant** [emphasis added]**."**

The addition of "or a licensed occupational therapist or occupational therapist assistant" would require coverage of a range of medically necessary inpatient, intermediate, and outpatient services for mental disorders performed by OTs or OTAs, acting within the scope of their professional license. To clarify the bill's intent, CHIA and its consultants submitted an inquiry to the sponsoring legislators. The sponsors clarified the bill's intent is to statutorily recognize and require consistent coverage of OTs and OTAs as mental health professionals.

[i] The bill amends MGL Chapter 32A §22, MGL Chapter 175 §47B, MGL Chapter 176A §8A, MGL Chapter 176B §4A, MGL Chapter 176G §4M. See Appendix A for the full text of MGL Chapter 175 §47B.

[ii] The intended placement of the bill's language was confirmed with the sponsors.

1.3 Medical Efficacy of the Bill

Occupational therapy helps people of all ages who have physical, sensory, or cognitive problems. OTs and OTAs work with patients to remove barriers that adversely affect emotional, social, and physical needs. OTs and OTAs work with patients so that they can participate in their goal activities of daily living, which is often an occupation or job, but it can also refer to everyday activities that allow individuals to live independently or engage with the community. While occupational therapy takes a holistic approach (i.e., the whole person—mental and physical), the current bill pertains specifically to OT- and OTA-provided mental health treatment.

For patients with mental health diagnoses, OTs and OTAs can assist with planning and organization, social skills, developing routines, solving problems, and many other services. Although designing medical research to specifically isolate and measure the impact of occupational therapy interventions is challenging because they work aside other members of the healthcare team, there is evidence supporting the efficacy of OT- and OTA-provided services provided to individuals with mental health diagnoses. Given occupational therapy's "whole person" approach and evidence-based services OT and OTAs can provide, the bill would likely improve access to a wider array of services to address mental health conditions, thus improving the health of the population it is intended to serve.

1.4 Current Coverage

The Commonwealth does not currently require coverage of OT- and OTA-provided mental health treatment; however, some of the mental health treatment they provide is covered when provided by other healthcare providers (e.g., social workers).

The ACA prohibits discrimination by a group health plan and a health insurance issuer offering group or individual health insurance coverage against any healthcare provider acting within the scope of the provider's license or certification under the applicable state law. However, the ACA does not require that a group health plan or health insurance issuer contract with any health care provider willing to abide by the terms and conditions for participation established by the plan or issuer.

Mental health services are considered one of the 10 essential health benefits (EHBs) under the ACA. Benefits are defined for Massachusetts according to its benchmark health plan (the Blue Cross and Blue Shield of Massachusetts HMO Blue® plan[2]), which does not include OTs or OTAs in its list of covered mental health providers, although the plan does include occupational therapy services, and occupational therapists are listed in its list of "physician and other covered professional providers." Carriers offering fully insured health plans in Massachusetts are mandated by the Commonwealth to include coverage for mental health benefits[iii] and specifically care and treatment for autism spectrum disorders (ASD).[iv] Coverage of occupational therapy for ASD is statutorily required and is included in the benchmark plan.

[iii] See MGL Chapter 175 §47B, MGL Chapter 176A §8A, MGL Chapter 176B §4A, MGL Chapter 176G §4M, and MGL Chapter 32A §22 requiring coverage of mental health benefits; biologically-based mental disorders; mental disorders of rape victims; non-biologically-based mental disorders of children and adolescents under age 19. The bill would amend each law to include OTs and OTAs as covered mental health providers.

[iv] MGL Chapter 175 §47AA, MGL Chapter 176A §8DD, MGL 176B §4DD, MGL Chapter 32A §25, MGL Chapter 176G §4V.

Furthermore, under the federal Mental Health Parity and Addiction Equity Act of 2008 (MPHAEA), group health plans and health insurance issuers that offer insured mental health benefits or substance use disorder benefits may not impose less-favorable benefit limitations on those benefits than on medical/surgical benefits.

BerryDunn surveyed 10 insurance carriers in the Commonwealth, and six responded. None of the respondent carriers indicated that they provide benefits for mental health treatment performed by OTs or OTAs. Four of the six carriers indicated that they cover OT- and OTA-provided services for individuals with a mental health (MH) diagnosis, such as ASD. Several of the carriers indicated that they do not credential OTAs, and any services performed by an OTA must be supervised and billed under an OT.

1.5 Cost of Implementing the Bill

Requiring coverage for OT- and OTA-provided mental treatment by fully insured health plans would result in an average annual increase, over the next five years, to the typical member's monthly health insurance premium of between $0.04 and $0.19 per member per month (PMPM) or between 0.01% and 0.03% of premium. The impact on premiums is driven by the requirement of coverage of OT- and OTA-provided mental health treatment.

1.6 Plans Affected by the Proposed Benefit Mandate

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

- Chapter 32A – Plans Operated by the Group Insurance Commission (GIC) for the Benefit of Public Employees
- Chapter 175 – Commercial Health Insurance Companies
- Chapter 176A – Hospital Service Corporations
- Chapter 176B – Medical Service Corporations
- Chapter 176G – Health Maintenance Organizations (HMOs)

1.7 Plans Not Affected by the Proposed Benefit Mandate

Self-insured plans (i.e., where the employer or policyholder retains the risk for medical expenses and uses a third-party administrator or insurer to provide only administrative functions), except for those provided by the GIC, are not subject to state-level health insurance mandates. State mandates do not apply to Medicare and Medicare Advantage plans or other federally funded plans, including TRICARE (covering military personnel and dependents), the Veterans Administration, and the Federal Employees Health Benefit Plan, the benefits for which are determined by or under the rules set by the federal government.

Endnotes

[1] The 192nd General Court of the Commonwealth of Massachusetts, House Bill 1114 and Senate Bill 1262, "An Act relative to mental health providers." Accessed 10 August 2021: **https://malegislature.gov/Bills/192/H1114** and **https://malegislature.gov/Bills/192/S1262.**

[2] CMS.gov. Centers for Medicare & Medicaid Services. Information on Essential Benefits (EHB) Benchmark Plans. Accessed 15 February 2021: **https://www.cms.gov/CCIIO/Resources/Data-Resources/Downloads/2017-BMPSummary_MA_4816.zip/.**

2.0 Medical Efficacy Assessment

The bill, as submitted in the 192nd General Court, would amend each of the license type mandated mental health state statutes to add, "or a licensed occupational therapist [OT] or occupational therapy assistant [OTA]" to the list of "licensed mental health professionals" requiring coverage under each license type.[v]

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

This report proceeds in the following sections:

2.1 OT and OTA Profession Overview

OTs work with patients who have mentally, physically, developmentally, or emotionally disabling conditions. OT interventions are intended to help patients develop, recover, or maintain the skills needed for daily living and working. The goal of occupational therapy is to enable the patient to live more independently. OTs are trained in the social, emotional, and physical effects of an illness, injury, or disability. They work with physicians and other members of the healthcare team to provide the following services:[1]

- Evaluate patients and determine goals for treatment
- Customize treatment to each patient's current ability and goals
- Reevaluate patients to ensure goals are being met
- Adjust treatment plans to reflect changes in ability

[v] The bill amends M.G.L. Chapter 32A §22, M.G.L. Chapter 175 §47B, M.G.L. Chapter 176A §8A, M.G.L. Chapter 176B §4A, M.G.L. Chapter 176G §4M.

OTAs work under the observation of occupational therapists in offices, hospitals, and nursing care facilities to achieve the goals of occupational therapy.

2.2 OT and OTA Training and Licensure Requirements

OT Training and License Requirements

To become a licensed OT in Massachusetts, an applicant must successfully complete an accredited master's- or doctoral-level occupational therapist educational program, including fieldwork, and successfully pass an examination approved by the Board of Allied Health Professionals (Board).[2]

OTs can obtain board and specialty certifications from the American Occupational Therapy Association (AOTA), including the following:

Board areas:

- Gerontology
- Mental health
- Pediatrics
- Rehabilitation

Specialty areas:

- Driving and community mobility
- Environmental modification
- Feeding, eating, swallowing
- Low vision
- School systems

OTA Training and Licensure Requirements

To become a licensed OTA in Massachusetts, an individual must graduate from a Board-approved, accredited educational program that typically lasts two years, complete a minimum of two months supervised fieldwork, and successfully pass a licensure examination.[3]

2.3 OT and OTA Employment

OTs and OTAs provide services in a variety of settings. Based on national data, Tables 1 and 2 provide the industries with the highest levels of employment for each, as well as the annual mean salary.

Table 1: Industries With the Highest Levels of Employment for OTs (Year 2020)[vi4]

INDUSTRY	EMPLOYMENT	ANNUAL MEAN WAGE
Offices of Other Health Practitioners	33,830	88,220
General Medical and Surgical Hospitals	28,300	$88,200
Elementary and Secondary Schools	15,560	$78,890
Nursing Care Facilities (Skilled Nursing Facilities)	11,370	$91,810
Home Health Care Services	10,620	$94,270

Table 2: Industries With the Highest Levels of Employment for OTAs (Year 2020)[vii5]

INDUSTRY	EMPLOYMENT	ANNUAL MEAN WAGE
Offices of Other Health Practitioners	5,760	$53,870
Nursing Care Facilities (Skilled Nursing Facilities)	5,610	$50,360
General Medical and Surgical Hospitals	4,350	$47,380
Home Health Care Services	3,140	$62,500
Elementary and Secondary Schools	3,060	$50,150

Nationally, there are 143,300 OTs and 42,750 OTAs. The U.S. Bureau of Labor Statistics ranks the Boston-Cambridge-Nashua, MA-NH metropolitan area as having the fourth-highest employment for OTs with 3,140 or 1.21 OTs per 1,000 jobs,[6] and the sixth-highest metropolitan employment for OTAs—720 OTAs or 0.28 ATs per 1,000 jobs. There are 4,350 OTs and 1,050 OTAs in Massachusetts.[7]

The Bureau of Labor Statistics predicts OT and OTA job growth in the United States to grow much faster than average, related to the growth in the number of people with disabilities and the aging baby-boom generation.[8,9]

[vi] Does not include all OTs. Self-employed OTs are not included

[vii] Does not include all OTAs. Self-employed OTAs are not included.

2.4 OT/OTA Clinical Approach

Occupational therapists work with physicians, physical and speech therapists, nurses, social workers, psychologists, teachers, and other specialists. Occupational therapy is based on promoting health, well-being, the quality of life, and assisting people to engage in everyday life.[10] While occupational therapy and physical therapy (PT) are often provided to a patient with the same condition, OT differs from PT as it addresses the whole person—his or her cognitive, physical, and emotional status. For example, PT might focus on building strength for walking for a patient with weakness in the lower extremities (e.g., leg lifts). For the same person, OT would incorporate cognition, visual perception, and upper extremity gross and fine motor skills as related to functional abilities (e.g., lift legs to put on pants and fasten). Additionally, the OT might teach the patient how to adjust to home, work, and social environments.[11]

2.5 Medical Efficacy of OT- and OTA-Provided Mental Health Treatment: Adults

There is an increasing body of evidence supporting occupational therapy effectiveness for adults with serious mental illness (SMI).[12] Studies have found OT interventions enhance individuals' health management skills and promote independence in living a balanced and satisfying life.[13] In a systematic review to research the effectiveness of occupational therapy interventions focusing on community integration and normative roles for people with SMIs, occupation- and activity-based interventions addressing performance skills and performance patterns, aspects of context and environment, activity demands, and client factors were reviewed.[14] Evidence of the effectiveness of social skills training was moderate to strong.[15] The evidence of the effectiveness of life skills and instrumental activities of daily living (IADLs) training to improve performance was moderate, as was the evidence for neurocognitive training paired with skills training in the areas of work, social participation, and IADLs.[16]

In a different systematic review of occupational therapy interventions for individuals with SMI, evidence strongly supported the Individual Placement and Support (IPS) model[viii] and cognitive interventions tor employment engagement.[17] For education engagement, moderate evidence was found for supported education interventions.[18] The findings support the role of occupational therapy practitioners in promoting the implementation of IPS, cognitive-based, and social skills programs to improve vocational and educational outcomes for adults with SMI.[19]

Similarly, in a meta-analysis of 11 random control trials (RCTs) with a total of 520 adult participants with a mental health diagnosis, outcomes in occupational performance and well-being were measured in response to occupational therapy interventions.[20] The results indicated a medium effect of interventions on improving occupational performance and a small effect on well-being, leading the author to conclude that theory-based occupational therapy interventions may be effective in improving occupational performance and well-being among people with a mental health diagnosis and should be an integral part of rehabilitation services in mental health.[21]

Furthermore, occupational interventions that promote mental health and well-being are linked to physical health. Loneliness has been found to have a harmful effect on all-cause mortality. Nationally, life expectancy of people with SMI is shorter, and their risk of cardiovascular and metabolic disorders is higher than average.[22] Individuals with SMI often spend more time alone and less time in structured activities than the general population.[23] Occupational therapy

[viii] IPS is an evidence-based model of supported employment for people with SMI. IPS assists individuals with SMI to work at regular jobs of their choosing.

goals of active, meaningful participation in the community and healthy pursuits are consistent with both improved mental and physical health.

2.6 Medical Efficacy of OT- and OTA-Provided Mental Health Treatment: Older Adults, Alzheimer's Disease, and Dementia

Because of its focus on function and engagement in everyday life, occupational therapy interventions are well-suited for older adults who are aging at home.[24,25,26] In a systemic review and meta-analysis to assess the effectiveness of occupational therapy to improve performance in daily living activities in community-dwelling, physically frail older people, significant improvement was found in mobility, functioning in daily living activities, social participation, and fear of falling.[27] In addition, group occupational therapy interventions have been found to be beneficial for older adults with a depressed state, improving emotional well-being, sense of self-efficacy, and level of personal independence in basic activities of daily living.[28] Given the aging population in Massachusetts,[ix] it is foreseeable that occupational therapists will have an increasing role in providing services to older adults.

Similarly, occupational therapy interventions have been found beneficial for individuals with Alzheimer's disease and related dementias.[29,30] In a random control trial that measured the effectiveness of nurse- and OT-provided cognitive rehabilitation (CR), measurement to self-reported goals for patients with Alzheimer's was assessed at three- and six-month intervals by researchers blind to the participants' group allocation.[31] CR was found to be clinically effective in enabling people with early stage dementia to improve their everyday function in relation to individual goals in the therapy sessions. In a systematic review and meta-analysis including 15 studies, occupational interventions for individuals with dementia improved ability to perform ADLs and decreased the number of behavioral and psychological symptoms, and caregivers experienced less distress with behaviors.[32]

2.7 Medical Efficacy of OT- and OTA- provided Mental Health Treatment: Children

For children, occupational therapy interventions are intended to promote engagement and participation in children's daily life roles. These roles include developing personal independence, becoming productive, and participating in play or leisure pursuits. Physical or mental illness may prevent children from fully participating in these activities. Children may face marginalization, social isolation, and lowered self-esteem. A systematic review of 129 RCTs studying the efficacy of occupational therapy for pediatric patients studied the effectiveness of 52 interventions across 22 diagnoses, enabling analysis of 135 intervention indications. Evidence supported 40/135 intervention indications. Those that were rated as most effective included (among others): behavioral interventions, Cog-Fun,[x] coaching,[xi] early interventions (applied behavioral analysis [ABA], developmental care), mental health interventions, and social skills training.[33]

[ix] While 13% of the nation is 65 or older, Massachusetts is about 14% (891,303 older adults; using 2010 data). 32% live alone. https://www.mass.gov/doc/mass-healthy-aging-data-report-community-profiles-commissioned-by-tufts-health-plan-0/download#:~:text=AGInG%20In%20MAssACHuseTTs,-The%20Massachusetts%20population&text=For%20the%20nation%2C%2013%20percent,and%2032%20percent%20live%20alone.

[x] Cog-Fun is a program that develops executive strategies and self-efficacy in occupational performance through enjoyable activities.

[xi] Occupational performance coaching is an intervention for working with parents to achieve occupational goals for themselves and their children. OTs guide parents in developing strategies and supports to meet self-identified goals related to their family needs.

OTs and OTAs are among professionals who provide services to individuals with autism spectrum disorder (ASD). A variety of evidence-based occupational therapy services, such as sensory integration interventions, have been found to be effective in improving occupational performance in children.[34,35,36,37] Coverage for occupational therapy services for ASD is already statutorily required in the Commonwealth.[xii]

3.0 Conclusion

OTs and OTAs generally work as part of a larger multidisciplinary health care team, making research to isolate the effectiveness of occupational therapy more challenging. However, there is evidence in the literature supporting the efficacy of OT- and OTA-provided services to treat mental health conditions across the life span. Occupational therapy provides services to people of all ages who have physical, sensory, or cognitive problems. OTs and OTAs work with patients to remove barriers that adversely affect emotional, social, and physical needs so they can participate in their goal activities of daily living, which is often an occupation or job, but it can also refer to everyday activities that allow individuals to live independently or engage with the community. While occupational therapy takes a holistic approach, the current bill pertains specifically to OT- and OTA- provided services to treat mental health conditions. For patients with mental health diagnoses, OTs and OTAs can assist with planning and organization, social skills, developing routines, solving problems, and many other services. Given occupational therapy's "whole person" approach and evidence-based services OTs and OTAs can provide, the bill would likely improve access to a wider array of services to treat mental health conditions, thus improving the health of the population it is intended to serve.

[xii] MGL Chapter 175 §47AA, MGL Chapter 176A §8DD, MGL 176B §4DD, MGL Chapter 32A §25, MGL Chapter 176G §4V.

Appendix A: MGL 175 §47B

Mental health benefits; biologically-based mental disorders; mental disorders of rape victims; non-biologically-based mental disorders of children and adolescents under age 19

Section 47B. (a) An individual policy of accident and sickness insurance issued pursuant to section 108, which provides hospital expense and surgical expense insurance, and a group blanket or general policy of accident and sickness insurance issued pursuant to section 110, which provides hospital expense and surgical expense insurance, which is issued or renewed within or without the commonwealth, shall provide mental health benefits on a nondiscriminatory basis to residents of the commonwealth and to all policyholders having a principal place of employment in the commonwealth for the diagnosis and treatment of the following biologically-based mental disorders, as described in the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders published by the American Psychiatric Association, referred to in this section as the DSM: (1) schizophrenia; (2) schizoaffective disorder; (3) major depressive disorder; (4) bipolar disorder; (5) paranoia and other psychotic disorders; (6) obsessive-compulsive disorder; (7) panic disorder; (8) delirium and dementia; (9) affective disorders; (10) eating disorders; (11) post traumatic stress disorder; (12) substance abuse disorders; and (13) autism.

An individual policy of accident and sickness insurance issued pursuant to section 108, which provides hospital expense and surgical expense insurance, and a group blanket or general policy of accident and sickness insurance issued pursuant to section 110, which provides hospital expense and surgical expense insurance, which is issued or renewed within or without the commonwealth, shall provide mental health benefits on a nondiscriminatory basis to residents of the commonwealth and to all policyholders having a principal place of employment in the commonwealth for the diagnosis and medically necessary and active treatment of any mental disorder, as described in the most recent edition of the DSM, that is approved by the commissioner of mental health.

(b) In addition to the mental health benefits established pursuant to this section, any such policy shall also provide benefits on a non-discriminatory basis for the diagnosis and treatment of rape-related mental or emotional disorders to victims of a rape or victims of an assault with intent to commit rape, as defined by sections 22 and 24 of chapter 265, whenever the costs of such diagnosis and treatment exceed the maximum compensation awarded to such victims pursuant to subparagraph (C) of paragraph (2) of subsection (b) of section 3 of chapter 258C.

(c) In addition to the mental health benefits established pursuant to this section, any such policy shall also provide benefits on a non-discriminatory basis for children and adolescents under the age of 19 for the diagnosis and treatment of non-biologically-based mental, behavioral or emotional disorders, as described in the most recent edition of the DSM, which substantially interfere with or substantially limit the functioning and social interactions of such a child or adolescent; provided, that said interference or limitation is documented by and the referral for said diagnosis and treatment is made by the primary care provider, primary pediatrician or a licensed mental health professional of such a child or adolescent or is evidenced by conduct, including, but not limited to: (1) an inability to attend school as a result of such a disorder, (2) the need to hospitalize the child or adolescent as a result of such a disorder, or (3) a pattern of conduct or behavior caused by such a disorder which poses a serious danger to self or others. The insurer shall continue to provide such benefits to any adolescent who is engaged in an ongoing course of treatment beyond the adolescent's nineteenth birthday until said course of treatment, as specified in said adolescent's treatment plan, is completed and while the benefit contract under which such benefits first became available remains in effect, or subject to a subsequent benefits contract which is in effect.

(d) Any such policy shall be deemed to be providing such benefits on a nondiscriminatory basis if the policy does not contain any annual or lifetime dollar or unit of service limitation on coverage for the diagnosis and treatment of said mental disorders which is less than any annual or lifetime dollar or unit of service limitation imposed on coverage for the diagnosis and treatment of physical conditions.

(e) Any such policy shall also provide medically necessary benefits for the diagnosis and treatment of all other mental disorders not otherwise provided for in this section and which are described in the most recent edition of DSM during each 12 month period for a minimum of 60 days of inpatient treatment and for a minimum of 24 outpatient visits.

[There is no subsection (f).]

(g) Benefits authorized pursuant to this section shall consist of a range of inpatient, intermediate, and outpatient services that shall permit medically necessary and active and noncustodial treatment for said mental disorders to take place in the least restrictive clinically appropriate setting. For purposes of this section, inpatient services may be provided in a general hospital licensed to provide such services, in a facility under the direction and supervision of the department of mental health, in a private mental hospital licensed by the department of mental health, or in a substance abuse facility licensed by the department of public health. Intermediate services shall include, but not be limited to, Level III community-based detoxification, acute residential treatment, partial hospitalization, day treatment and crisis stabilization licensed or approved by the department of public health or the department of mental health. Outpatient services may be provided in a licensed hospital, a mental health or substance abuse clinic licensed by the department of public health, a public community mental health center, a professional office, or home-based services, provided, however, services delivered in such offices or settings are rendered by a licensed mental health professional acting within the scope of his license.

(h) An insurer may, as a condition of providing coverage pursuant to this section, require consent to the disclosure of information regarding services for mental disorders only to the same or similar extent in which it requires consent for the disclosure of information for other medical conditions. Only licensed mental health professionals shall be allowed to deny services mandated by this section. The provisions of this subsection shall not be construed as applying to denials of service resulting from an insured's lack of insurance coverage or the use of a facility or professional which, if applicable under the insured's benefits contract, has not entered into a negotiated agreement with the insurer. The benefits provided in any policy pursuant to this section shall meet all other terms and conditions of the policy not inconsistent with this section.

(i) Nothing in this section shall be construed to require an insurer to pay for mental health benefits or services: which are provided to a person who has third party insurance and who is presently incarcerated, confined or committed to a jail, house of correction or prison, or custodial facility in the department of youth services within the commonwealth or one of its political subdivisions; which constitute educational services required to be provided by a school committee pursuant to section 5 of chapter 71B; or which constitute services provided by the department of mental health.

For the purposes of this section, "licensed mental health professional" shall mean a licensed physician who specializes in the practice of psychiatry, a licensed psychologist, a licensed independent clinical social worker, a licensed mental health counselor, a licensed nurse mental health clinical specialist, a licensed alcohol and drug counselor I, as defined in section 1 of chapter 111J, or a licensed marriage and family therapist within the lawful scope of practice for such therapist. [Emphasis added.]

For the purposes of this section, psychopharmacological services and neuropsychological assessment services shall be treated as a medical benefit and shall be covered in a manner identical to all other medical services.

(j) The coverage of mental disorders required under this section shall apply to small group health benefit plans subject to chapter 176J and nongroup health benefit plans subject to chapter 176M.

Endnotes

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[2] M.G.L. Chapter 112, Section 23G.
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[15] *Op. Cit.* Gibson RW, D'Amico M, Jaffe L, Arbesman M. Occupational therapy interventions for recovery in the areas of community integration and normative life roles for adults with serious mental illness: a systematic review.

[16] *Op. Cit.* Gibson RW, D'Amico M, Jaffe L, Arbesman M. Occupational therapy interventions for recovery in the areas of community integration and normative life roles for adults with serious mental illness: a systematic review.

[17] Noyes S, Sokolow H, Arbesman M. Evidence for Occupational Therapy Intervention With Employment and Education for Adults With Serious Mental Illness: A Systematic Review. Am J Occup Ther. 2018 Sep/Oct;72(5):7205190010p1-7205190010p10. Accessed 18 October 2021: **https://pubmed.ncbi.nlm.nih.gov/30157005/.**

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AN ACT RELATIVE TO MENTAL HEALTH PROVIDERS

COST REPORT

1.0 Executive Summary

The Committee on Financial Services referred House Bill (H.B.) 1114 and Senate Bill (S.B.) 1262, both entitled, "An Act relative to mental health providers,"[1] to the Massachusetts Center for Health Information and Analysis (CHIA) for review. Massachusetts General Law (MGL) Chapter 3 §38C requires CHIA to review the medical efficacy of treatments or services included in each mandated benefit bill referred to the agency by a legislative committee, should it become law. CHIA must also estimate each bill's fiscal impact, including changes to premiums and administrative expenses. The language in each bill is the same, and for the remainder of this report, "the bill" will collectively refer to H.B. 1114 and S.B. 1262. The bill, as submitted in the 192nd General Court, would amend each of the license type mandated mental health (MH) state statutes to add, "or a licensed occupational therapist [OT] or occupational therapy assistant [OTA]" to the list of "licensed mental health providers" requiring coverage under each section.[xiii]

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

1.1 Current Insurance Coverage

The Commonwealth does not currently require coverage of licensed OT- and OTA-provided services to treat MH conditions; however, some MH services they provide are often covered when provided by other healthcare providers (e.g., social workers). The Commonwealth benchmark plan does not include OTs or OTAs in its definition of covered mental health providers.[2]

BerryDunn surveyed 10 insurance carriers in the Commonwealth, and six responded. None of the respondent carriers indicated that they provide benefits for mental health treatment performed by OTs or OTAs. Four of the six carriers indicated that they cover services performed by OTs and OTAs for individuals with an MH diagnosis, such as ASD. Several of the carriers also indicated that they do not credential OTAs, and any services performed by an OTA must be supervised and billed under an OT.

1.2 Analysis

BerryDunn estimated the impact of the bill on premiums by assessing the incremental cost due to the requirement that insurers reimburse an OT and an OTA, acting with a referral from a physician, for those services if the health insurer would reimburse another health care provider for those services to treat MH conditions. The incremental cost of the provision is estimated using claims data from the APCD to estimate the hourly rates paid to an OT and an OTA. BerryDunn used publicly available information and interviews with three Massachusetts OT clinical experts to estimate the number of OTs and OTAs who could bill insurance carriers and the number of hours that OTs and OTAs could bill insurance carriers for their services. Combining these components, and accounting for carrier retention,

[xiii] The bill amends MGL Chapter 32A §22, MGL Chapter 175 §47B, MGL Chapter 176A §8A, MGL Chapter 176B §4A, MGL Chapter 176G §4M.

results in a baseline estimate of the proposed mandate's marginal effect on premiums, which is projected over the five years following the assumed January 1, 2022, implementation date of the proposed law.

1.3 Summary Results

Table ES-1, on the following page, summarizes the estimated effect of the bill on premiums for fully insured plans over five years. This analysis estimates that the bill, if enacted as drafted for the 192nd General Court, would increase fully insured premiums by as much as 0.03% or $0.19 per member per month (PMPM) on average over the next five years; a more likely increase is approximately 0.02%, equivalent to an average annual expenditure of $2.4 million over the period 2022 – 2026. It is important to note that the cost is expected to ramp up through the projection period. Costs in the final year, in the mid scenario, are expected to be $4.0 million, 0.03% of premium, or about $0.17 PMPM. The impact on premiums is driven by expanding coverage to reimburse an OT and an OTA, acting with a referral from a physician, who acts within the scope of practice authorized by law, for those covered services if the health insurer would reimburse another health care provider for those services. Variation between scenarios is attributable to uncertainty surrounding the average hourly billing rates, the number of hours that an OT and an OTA will bill for covered services, and the number of OTs and OTAs who will bill for covered services. The impact of the bill on any one individual, employer group, or carrier might vary from the overall results, depending on the current level of benefits each receives or provides, and on how those benefits would change under the proposed language.

Table ES-1: Summary Results

	2022	2023	2024	2025	2026	WEIGHTED AVERAGE	FIVE-YEAR TOTAL
Members (000s)	2,014	2,010	2,007	2,003	2,000		
Medical Expense Low ($000s)	$185	$518	$785	$1,056	$1,332	$821	$3,876
Medical Expense Mid ($000s)	$440	$1,254	$1,932	$2,646	$3,398	$2,049	$9,669
Medical Expense High ($000s)	$798	$2,310	$3,617	$5,036	$6,574	$3,884	$18,334
Premium Low ($000s)	$217	$607	$919	$1,237	$1,560	$962	$4,541
Premium Mid ($000s)	$516	$1,469	$2,263	$3,100	$3,980	$2,400	$11,327
Premium High ($000s)	$934	$2,705	$4,237	$5,900	$7,701	$4,550	$21,477
PMPM Low	$0.01	$0.03	$0.04	$0.05	$0.07	$0.04	$0.04
PMPM Mid	$0.03	$0.06	$0.09	$0.13	$0.17	$0.10	$0.10
PMPM High	$0.05	$0.11	$0.18	$0.25	$0.32	$0.19	$0.19
Estimated Monthly Premium	$559	$578	$598	$618	$639	$598	$598
Premium % Rise Low	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%
Premium % Rise Mid	0.01%	0.01%	0.02%	0.02%	0.03%	0.02%	0.02%
Premium % Rise High	0.01%	0.02%	0.03%	0.04%	0.05%	0.03%	0.03%

Endnotes

[1] The 192nd General Court of the Commonwealth of Massachusetts, House Bill 1114 and Senate Bill 1262, "An Act relative to mental health providers." Accessed 10 August 2021: **https://malegislature.gov/Bills/192/H1114** and **https://malegislature.gov/Bills/192/S1262**.

[2] CMS.gov. Centers for Medicare & Medicaid Services. Information on Essential Benefits (EHB) Benchmark Plans. Accessed 15 February 2021: **https://www.cms.gov/CCIIO/Resources/Data-Resources/Downloads/2017-BMPSummary_MA_4816.zip/**.

2.0 Introduction

House Bill (H.B.) 1114 and Senate Bill (S.B.) 1262, both entitled, "An Act relative to mental health providers,"[1] were submitted to the Massachusetts Center for Health Information and Analysis (CHIA) for review. Massachusetts General Law (MGL) Chapter 3 §38C requires CHIA to review the medical efficacy of treatments or services included in each mandated benefit bill referred to the agency by a legislative committee, should it become law. CHIA must also estimate each bill's fiscal impact, including changes to premiums and administrative expenses. The language in each bill is the same, and for the remainder of this report, "the bill" will collectively refer to H.B. 1114 and S.B. 1262.

The bill amends the definition of "licensed health professional" to include "OTs" and "OTAs" within the Massachusetts mandated mental health benefit statutes.[xiv] CHIA and its consultants submitted an inquiry to the sponsoring legislators and staff to clarify the bill's intent. The sponsors clarified the bill's intent is to require coverage for mental health and substance use disorder (MH/SUD) treatment provided by OTs and OTAs and to provide for consistency of coverage regardless of location of OT- and OTA-provided services.

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

Section 3.0 of this analysis outlines the provisions and interpretations of the bill. Section 4.0 summarizes the methodology used for the estimate. Section 5.0 discusses important considerations in translating the bill's language into estimates of its incremental impact on healthcare costs and steps through the calculations. Section 6.0 discusses results.

3.0 Interpretation of the Bill

3.1 Reimbursement for Services Performed by OTs and OTAs to Treat Mental Health Conditions

As submitted to the 192nd General Court of the Commonwealth, the bill requires the addition of OTs and OTAs to the list of covered mental health providers, which would require reimbursement for OT- and OTA-covered services to treat mental health conditions. The sponsors indicated the bill's intent is to provide for consistent coverage of OT- and OTA-provided services regardless of the location the services are rendered (e.g., inpatient, outpatient).

3.2 Plans Affected by the Proposed Mandate

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

[xiv] See MGL Chapter 175 §47B, MGL Chapter 176A §8A, MGL Chapter 176B §4A, MGL Chapter 176G §4M, and MGL Chapter 32A §22 requiring coverage of mental health benefits; biologically-based mental disorders; mental disorders of rape victims; non-biologically-based mental disorders of children and adolescents under age 19. The bill would amend each law to include OTs and OTAs as covered mental health professionals.

- Chapter 32A – Plans Operated by the Group Insurance Commission (GIC) for the Benefit of Public Employees
- Chapter 175 – Commercial Health Insurance Companies
- Chapter 176A – Hospital Service Corporations
- Chapter 176B – Medical Service Corporations
- Chapter 176G – Health Maintenance Organizations (HMOs)

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

3.3 Covered Services

BerryDunn surveyed 10 insurance carriers in the Commonwealth, and six responded. None of the respondent carriers indicated that they provide benefits for services performed by OTs and OTAs to treat mental health conditions. Four of the six carriers indicated that they cover services performed by OTs for services with an MH diagnosis (e.g., ASD). Several of the carriers also indicated that they do not credential OTAs, and any services performed by an OTA must be supervised and billed under an OT.

3.4 Existing Laws Affecting the Cost of the Bill

The Commonwealth does not currently require coverage of OT- and OTA-provided services to treat mental health conditions; however, some of the services they provide are covered when provided by other healthcare providers (e.g., social workers).

The ACA prohibits discrimination by a group health plan or a health insurance issuer offering group or individual health insurance coverage against any health care provider acting within the scope of the provider's license or certification under the applicable state law. However, the ACA does not require that a group health plan or health insurance issuer contract with any health care provider willing to abide by the terms and conditions for participation established by the plan or issuer.

Mental health services are considered one of the ACA's 10 essential health benefits (EHBs). Benefits are defined for Massachusetts according to its benchmark health plan (the Blue Cross and Blue Shield of Massachusetts HMO Blue® plan), which does not include OTs or OTAs in its list of covered mental health providers, although occupational therapy and occupational therapists for included "physician and other covered professional providers."

Carriers offering fully insured health plans in Massachusetts are mandated by the state to include coverage for mental health benefits[xv] and specifically care and treatment of ASD.[xvi] Coverage of occupational therapy for ASD is statutorily required.

Furthermore, under the federal Mental Health Parity and Addiction Equity Act of 2008 (MPHAEA), group health plans and health insurance issuers that offer insured mental health benefits or substance use disorder benefits may not impose less-favorable benefit limitations on those benefits than on medical/surgical benefits.

[xv] See MGL Chapter 175 §47B, MGL Chapter 176A §8A, MGL Chapter 176B §4A, MGL Chapter 176G §4M, and MGL Chapter 32A §22 requiring coverage of mental health benefits; biologically-based mental disorders; mental disorders of rape victims; non-biologically-based mental disorders of children and adolescents under age 19. The bill would amend each law to include OTs and OTAs as covered mental health professionals.

[xvi] MGL Chapter 175 §47AA, MGL Chapter 176A §8DD, MGL 176B §4DD, MGL Chapter 32A §25, MGL Chapter 176G §4V.

4.0 Methodology

4.1 Overview

Estimating the impact of the bill on premiums requires assessing the incremental cost due to the requirement that insurers reimburse a licensed OT and an OTA, acting with a referral from a physician, for treatment of certain biologically-based mental disorders; mental disorders of victims of rape; and non-biologically-based mental disorders of children and adolescents under age 19.[xvii]

The incremental cost of the provision is estimated using claims data from the APCD to estimate the hourly rate paid to an OT and an OTA. BerryDunn used publicly available information and interviews with two Massachusetts OT clinical experts to estimate the number of hours that OTs and OTAs could bill insurance carriers for their services and the number of OTs and OTAs who could bill for these services. Combining these components, and accounting for carrier retention, results in a baseline estimate of the proposed mandate's incremental effect on premiums, which is projected over the five years following the assumed January 1, 2022, implementation date of the proposed law.

4.2 Data Sources

The primary data sources used in the analysis are:

- Information about the intended effect of the bill, gathered from legislative sponsors
- Information, including descriptions of current coverage, from responses to a survey of commercial health insurance carriers in the Commonwealth
- The Massachusetts APCD
- Academic literature, published reports, and population data, cited as appropriate
- Discussion with clinical experts and providers

4.3 Steps in the Analysis

BerryDunn performed analytic steps summarized in this section to estimate the impact of the bill on premiums.

1. Estimated the incremental cost to insurers to pay for covered services when performed by an OT.
In order to estimate the cost of covering services performed by OTs, BerryDunn:

A. Used claims data from the APCD to determine total claims cost for OTs and OTAs.

B. Divided the total claims cost by the number of hourly units to determine the cost per hour for OTs and OTAs.

C. Projected the hourly unit cost forward over the five-year analysis period using both historical changes in unit cost and estimated increases in physician services over the period.

D. Used publicly available information to determine the number of licensed OTs and OTAs in Massachusetts and estimated the number who are qualified to provide the services included in the proposed bill.

[xvii] See MGL Chapter 32A, §22; 175, §47B; Chapter 176A; §8A; Chapter 176B, §4A; Chapter 176G, §4M.

E. Used publicly available information, including population data, and data from the APCD to determine the relative number of OTs and OTAs available to provide services for the fully insured population in Massachusetts.

F. Used input from clinical experts and publicly available literature to determine the number of hours per week that an OT and an OTA will bill insurance carriers.

G. Estimated the number of hours that will be billed to insurance carriers for the fully insured commercial population by using the number of OTs and OTAs and the average number of billable hours per OT and OTA.

H. Multiplied the time available from Step G by the hourly unit cost from Step C to calculate the incremental claims cost.

I. Divided the incremental cost in the above step by the fully insured commercial membership to determine the incremental PMPM.

2. Calculated the impact of the projected claim costs on insurance premiums.

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

A. Estimated the fully insured Commonwealth population under age 65, projected for the next five years (2022 – 2026).

B. Multiplied the estimated incremental PMPM cost of the mandate by the projected population estimate, to calculate the total estimated marginal claims cost of S.B. 1262.

C. Estimated insurer retention (administrative costs, taxes, and profit) and applied the estimate to the final incremental claims cost calculated in Step B.

4.4 Limitations

Carriers in Massachusetts do not currently provide coverage for services when performed by an OT or an OTA to treat mental health conditions, and the utilization could not be calculated from APCD claims. The APCD does contain cost-per-service information for OTs and OTAs. The annual increase in the hourly rate over the projection period is uncertain. The number of OTs and OTAs who will bill insurance carriers for services is uncertain. This number is dependent upon the work setting of the OTs and OTAs. There is no Massachusetts-specific data on work setting, so this analysis relies upon national statistics to estimate work setting. It is also uncertain how many hours of their time would be spent on covered services that could be billed to insurance. This is dependent in part on the training and interest to perform MH services for the OTs and OTAs. BerryDunn received input from OTs and clinical practices that employ OTs and OTAs to help estimate these parameters.

It is uncertain whether the bill, if enacted, will attract new OTs and OTAs to Massachusetts, further increasing the number of services that can be billed to insurance companies. It is also uncertain how much billable time OTs and OTAs would spend on services that would shift from other providers, such as social workers. Hours that are shifted would have no marginal impact. Based on input from clinical experts, there is currently an unmet demand for OT services to treat mental health conditions. In certain areas of Massachusetts, primarily rural, there are a lack of mental health providers for the relevant population.[2] Coverage for OTs and OTAs performing services to treat mental health conditions could attract new OTs and OTAs which would increase the marginal cost of the bill. These two

uncertainties have an offsetting impact to the cost of the bill. This analysis conservatively assumes that all of the time billed to insurance companies by OTs is marginal claims cost.

COVID-19 has impacted the number of commercial, fully insured members in 2020. Fully insured membership declined due to decreased enrollment in employer-sponsored insurance (ESI). The impact that COVID-19 will have on unemployment in the 2022 – 2026 projection period is uncertain.

BerryDunn details the assumptions made in this analysis and, to the extent possible, addresses these limitations further in the following section through a detailed, step-by-step description of the estimation process.

5.0 Analysis

This section describes the calculations outlined in Section 4.3 in more detail. The analysis includes development of a best-estimate middle-cost scenario, as well as a low-cost scenario using assumptions that produced a lower estimate, and a high-cost scenario using more conservative assumptions that produced a higher estimated cost impact.

Section 5.1 describes the steps used to calculate the average cost per hour paid to OTs and OTAs by insurance carriers. Section 5.2 describes the steps used to calculate the number of OTs and OTAs in Massachusetts and the number who work in a setting such that they could bill insurance for their services. Section 5.3 describes the steps used to estimate the number hours on average that an OT and an OTA could bill an insurance company and the total number of hours billable to insurance carriers for all Massachusetts OTs and OTAs. Section 5.4 describes the steps used to calculate the PMPM marginal claims cost. Section 5.5 describes the steps used to project the fully insured population age 0 – 64 in the Commonwealth over the 2022 – 2026 analysis period. Section 5.6 describes the steps used to combine the estimated marginal cost of OTs and OTAs and calculate the total estimated marginal cost of the bill over the projection period, and Section 5.7 describes the steps used to adjust these projections for carrier retention to arrive at an estimate of the bill's effect on premiums for fully insured plans.

5.1 OT Cost per Hour

Estimated the hourly treatment costs for services performed by an OT and an OTA.

Currently, Massachusetts carriers do not cover mental health treatment when performed by OTs. However, the APCD does contain other claims data for OTs and OTAs. The APCD was used to calculate an hourly unit cost. Allowed claim amounts from 2016 through 2018 were divided by the number of hourly units and converted to an hourly allowed reimbursement rate. Allowed costs per hour increased between 2016 and 2018 by about 1.1% per year. The average allowed reimbursement in 2018 was $176 per hour for OTs and $174 per hour for OTAs. BerryDunn used the 2018 unit cost rates in the mid scenario. Given that the cost mix for the new mental health services could vary from the current cost mix, this analysis assumes a range of paid reimbursement rates. For allowed cost, the low scenario assumes $172 per hour for OTs and $170 per hour for OTAs. The high scenario assumes $180 per hour for OTs and $178 per hour for OTAs. BerryDunn multiplied the allowed unit cost by the OT and OTA allowed-to-paid ratio, calculated from the APCD, in order to estimate the average paid reimbursement per hour for OTs and OTAs. Results are shown in Table 1.

Table 1: Estimated 2018 Paid Cost per Hour for OTs and OTAs

ALLOWED COST PER HOUR	OT ALLOWED COST	ALLOWED -TO-PAID RATIO	OT PAID COST	OTA ALLOWED COST	ALLOWED -TO-PAID RATIO	OTA PAID COST
		OTs			OTAs	
Low Scenario	$172.00	70%	$120.40	$170.00	70%	$119.00
Mid Scenario	$176.00	70%	$123.20	$174.00	70%	$121.80
High Scenario	$180.00	70%	$126.00	$178.00	70%	$124.60

To project hourly rates in the high scenario, this analysis used the long-term average national projection of 4.6%[3] for cost increases to physician services over the study period. Given that the APCD observed trends for OT hourly costs were 1.1% on average, BerryDunn assumed a 1.1% trend for hourly rates in the low scenario. BerryDunn assumed the average trend rate of 2.9% in the mid scenario. BerryDunn multiplied the PMPM amounts from Table 1 by the annual trend factors to estimate the hourly costs for coverage over the projection period (Table 2).

Table 2: Projection Period Estimated Paid Cost per Hour for OTs and OTAs

	2018	2022	2023	2024	2025	2026
OTs						
Low Scenario	$120.40	$125.79	$127.17	$128.57	$129.98	$131.41
Mid Scenario	$123.20	$138.12	$142.13	$146.25	$150.49	$154.86
High Scenario	$126.00	$150.83	$157.77	$165.03	$172.62	$180.56
OTAs						
Low Scenario	$119.00	$124.32	$125.69	$127.07	$128.47	$129.88
Mid Scenario	$121.80	$136.56	$140.52	$144.59	$148.78	$153.10
High Scenario	$124.60	$149.16	$156.02	$163.20	$170.70	$178.55

5.2 The Number of OTs and OTAs in Massachusetts

Estimated the number of OTs and OTAs in Massachusetts and the number who will bill insurance carriers for services for the fully insured population.

Based on the data from the Bureau of Labor Statistics, there are currently 4,350 OTs and 1,050 OTAs in Massachusetts.[4] OTs and OTAs who work in a hospital setting are currently reimbursed by the hospital for MH treatment they perform. The hospital includes OT and OTA mental health treatment costs in the room rate. Similarly, OTs and OTAs who work in a school setting are reimbursed directly by the school. OTs and OTAs who work in an outpatient setting, or offices of other health practitioners, could provide mental health services that would be reimbursed under the bill. There is no Massachusetts-specific data on OT and OTA work setting. Based on data from

the Bureau of Labor Statistics,[5] [6] approximately 33.9% of OTs and 52.9% of OTAs work in a setting where they could bill insurance carriers under the bill. BerryDunn assumed a similar distribution is applicable for Massachusetts.

To account for the number of OTs and OTAs who would serve the fully insured market, BerryDunn used the population distribution between private and public payers. The fully insured market is approximately 25% of the Massachusetts population that are covered by all payers. The over-65 population uses significantly more OT and OTA services. Based on claims-per-member data from the APCD, BerryDunn estimated that the fully insured market uses about 8.1% of OT and OTA service time. To estimate the number of OTs and OTAs who would provide MH treatment to the fully insured population, BerryDunn multiplied the number of licensed OTs and OTAs by the portion who work in a billable setting, and by the estimated portion of fully insured service time. Results are displayed in Table 3.

Table 3: The Number of OTs and OTAs Who Could Bill Insurance Carriers for Fully Insured Population

	LICENSED THERAPISTS	BILLABLE SETTING PORTION	FI PORTION	NUMBER WHO BILL
OTs	4,350	33.9%	8.1%	119
OTAs	1,050	52.9%	8.1%	45

Based on input from three clinical experts, it is not expected that all OTs and OTAs will bill for services to treat mental health conditions. A small portion of the OTs and an even smaller portion of OTAs will likely focus and bill the majority of their time on services to treat mental health conditions. According to one clinical expert, member data collected at the American Occupational Therapy Association (AOTA) indicates that only 2% of OTs list services to treat mental health conditions as their primary interest. This is based on older association member surveys. More recent data from the AOTA indicates that 6.4% of Massachusetts OTs work primarily in mental health. For many OTs and OTAs, services to treat mental health conditions will be a minority of their billable time, and a portion will not bill for any services to treat mental health conditions. Using the available data from the AOTA, and input from the clinical experts, BerryDunn estimated ranges of the portion of time billable for services to treat mental health conditions, for five cohorts of OTs and OTAs. In the low scenario, BerryDunn assumed 6% as the portion that will focus their time on services to treat mental health conditions. If the bill is enacted, it is likely that number of OTs with a mental health focus will grow to as high as 10%, which was based upon clinical input, and is used in the high scenario. Only 2% of OTAs are expected to primarily focus on services to treat mental health conditions. Using a weighted average, BerryDunn estimated on average, for a full time therapist, billable time spent on services to treat mental health conditions as a portion of the total billable time. Range assumptions for each cohort and weighted average results are displayed in Tables 4A – 4D.

Table 4A: Estimated Mental Health Portion of OTs Billable Time Low Scenario

Portion of OTs	5%	6%	15%	30%	44%	MH Portion
Portion of OT Time	25.0%	50.0%	5.0%	1.0%	0.0%	5.3%

Table 4B: Estimated Mental Health Portion of OTs Billable Time Mid-Scenario

Portion of OTs	5%	8%	15%	30%	42%	MH Portion
Portion of OT Time	37.5%	75.0%	15.0%	2.5%	0.0%	10.9%

Table 4C: Estimated Mental Health Portion of OTs Billable Time High Scenario

Portion of OTs	5%	10%	15%	30%	40%	MH Portion
Portion of OT Time	49.0%	100.0%	24.0%	4.0%	0.0%	17.3%

Table 4D: Estimated Mental Health Portion of OTAs Billable Time

Portion of OTAs	2%	5%	15%	30%	48%	MH Portion
Portion of OTA Time Low	50%	25.0%	5.0%	1.0%	0.0%	3.3%
Portion of OTA Time Mid	75%	37.5%	15.0%	2.5%	0.0%	6.4%
Portion of OTA Time High	100%	49.0%	24.0%	4.0%	0.0%	9.3%

BerryDunn multiplied the number of OTs and OTAs from Table 3 by the FTE (Full Time Equivalent) portions from Table 4 to estimate the number of FTEs serving the fully insured market. Based on input from the clinical experts, not all OTs and OTAs will bill for services to treat mental health conditions at their full capacity initially. Experts indicated that it could take five years to fully ramp up. There would need to be education for other providers about the availability of services, and time to build referral networks. Some of the services would begin immediately, because OTs and OTAs could bill for the full scope of practice with existing clients. This analysis assumes that one-fifth of the OTs and OTAs who will bill at the end of the projection period will bill in the initial year. It further assumes that the number of OTs and OTAs billing will increase consistently each year, until year five in the projection period. Table 5 shows the estimated number of OT and OTA FTEs who will bill each year in the projection period.

Table 5: Estimated Number of OT and OTA FTEs Billing Insurance Carriers for Mental Health Services

	2022	2023	2024	2025	2026
OTs					
Low Scenario	1	3	4	5	6
Mid Scenario	3	5	8	10	13
High Scenario	4	8	12	16	21
OTAs					
Low Scenario	0	1	1	1	1
Mid Scenario	1	1	2	2	3
High Scenario	1	2	2	3	4

The next section discusses how many hours each OT and OTA will bill the insurance carriers.

5.3 The Average Number of Hours OTs and OTAs Will Bill Insurance Carriers

Estimated the average number of hours that an OT and an OTA will bill an insurance company and the total number of hours for all OTs and OTAs billing for services for the fully insured population.

BerryDunn developed the average number of annual billable hours charged by OTs and OTAs based on a standard 40-hour work week. Accounting for time between appointments and administrative work, the standard workweek was reduced by eight hours in the mid scenario to estimate the average number of billable hours per week. In the low scenario, 10 administrative hours were assumed, and in the high scenario, six hours of administrative work were assumed. BerryDunn based billable weeks per year on 52 weeks in a calendar year, reduced by eight weeks for vacation, holidays, and sick time, resulting in an estimate of 44 productive billable weeks per year for OTs and OTAs. BerryDunn multiplied the number of billable hours per week by the number of productive weeks per year to estimate the average number of billable hours per year. Table 6 displays these assumptions and results.

Table 6: Average Annual Billable Hours for OT and OTAs

	HOURS PER WEEK	WEEKS PER YEAR	HOURS PER YEAR
Low	30	44	1,320
Mid	32	44	1,408
High	34	44	1,496

To calculate total billable hours per year attributable to this mandate under each scenario, BerryDunn multiplied the number of hours available per OT and OTA from Table 6 by the estimated number of OT and OTA FTEs who will bill insurance carriers for services from Table 5. The results are displayed in Table 7.

Table 7: Estimated Total Billable Hours per Year for OTs and OTAs

	2022	2023	2024	2025	2026
OTs					
Low Scenario	1,663	3,326	4,989	6,653	8,316
Mid Scenario	3,640	7,280	10,920	14,560	18,200
High Scenario	6,135	12,270	18,404	24,539	30,674
OTAs					
Low Scenario	390	779	1,169	1,558	1,948
Mid Scenario	803	1,605	2,408	3,210	4,013
High Scenario	1,237	2,475	3,712	4,949	6,187

5.4 Projected Fully Insured Population in the Commonwealth

Membership potentially affected by the bill includes Commonwealth residents with fully insured, employer-sponsored health insurance issued by a Commonwealth-licensed company (including through the GIC); nonresidents with fully insured, employer-sponsored insurance issued in the Commonwealth; Commonwealth residents with individual (direct) health insurance coverage; and lives covered by GIC self-insured coverage.

Table 8 presents the projected potentially affected members in the Commonwealth (ages 0 to 64) through the projection period from 2022 through 2026. Appendix A describes the projection methodology and sources of these values.

Table 8: Projected Fully Insured Population in the Commonwealth, Ages 0 – 64

2022	2023	2024	2025	2026
2,014,007	2,010,132	2,006,510	2,003,142	1,999,776

5.5 Marginal Claims Cost for OTs and OTAs

Estimated the PMPM marginal claims costs for services performed by an OT and an OTA.

BerryDunn multiplied the total number of estimated hours billed by OTs and OTAs from Table 7 by the average paid hourly reimbursement rates from Table 2, to estimate the total marginal claims costs for services performed by OTs and OTAs. BerryDunn divided the total marginal claims cost by the corresponding membership to calculate the PMPM marginal claims cost. Results are shown in Table 9.

Table 9: Estimated Marginal Claims PMPM of OTs and OTAs

	2022	2023	2024	2025	2026
OTs					
Low Scenario	$0.01	$0.02	$0.03	$0.04	$0.04
Mid Scenario	$0.02	$0.04	$0.07	$0.09	$0.12
High Scenario	$0.04	$0.08	$0.13	$0.17	$0.23
OTAs					
Low Scenario	$0.00	$0.00	$0.01	$0.01	$0.01
Mid Scenario	$0.00	$0.01	$0.01	$0.02	$0.03
High Scenario	$0.01	$0.02	$0.03	$0.04	$0.05

5.6 Total Marginal Medical Expense

Adding together the estimated PMPM costs associated with OT and OTAs (from Table 8) yields the total PMPM marginal cost, shown in Table 10.

Table 10: Total Estimated Marginal PMPM claims Cost of OTs and OTAs (Rounded)

	2022	2023	2024	2025	2026
Low Scenario	$0.01	$0.02	$0.03	$0.04	$0.06
Mid Scenario	$0.03	$0.05	$0.08	$0.11	$0.14
High Scenario	$0.05	$0.10	$0.15	$0.21	$0.27

Multiplying the total estimated PMPM cost by the projected fully insured membership over the analysis period (2022 – 2026) results in the total cost (medical expense) associated with the proposed requirement, as shown in Table 11. BerryDunn's analysis assumes the bill, if enacted, would be effective on January 1, 2022.[xviii]

[xviii] The analysis assumes the mandate would be effective for policies issued and renewed on or after January 1, 2022. Based on an assumed renewal distribution by month, by market segment, and by the Commonwealth market segment composition, 72.1% of the member months exposed in 2022 will have the proposed mandate coverage in effect during calendar year 2022. The annual dollar impact of the mandate in 2022 was estimated using the estimated PMPM and applying it to 72.1% of the member months exposed.

Table 11: Estimated Incremental Cost of OTs

	2022	2023	2024	2025	2026
Low Scenario	$185,180	$518,325	$784,624	$1,055,898	$1,332,149
Mid Scenario	$440,116	$1,253,836	$1,931,809	$2,645,992	$3,397,689
High Scenario	$797,517	$2,309,564	$3,617,177	$5,036,288	$6,573,881

5.7 Carrier Retention and Increase in Premium

Carriers include their retention expense in fully insured premiums. Retention expense includes general administration, commissions, taxes, fees, and contribution to surplus or profit. Assuming an average retention rate of 14.6% based on CHIA's analysis of fully insured premium retention in the Commonwealth,[7] the increase in medical expense was adjusted upward to include carrier retention and approximate the total impact on premiums in Table 12.

Table 12: Estimate of Increase in Carrier Premium Expense

	2022	2023	2024	2025	2026
Low Scenario	$216,921	$607,171	$919,116	$1,236,889	$1,560,492
Mid Scenario	$515,556	$1,468,755	$2,262,939	$3,099,540	$3,980,084
High Scenario	$934,219	$2,705,445	$4,237,195	$5,899,555	$7,700,706

6.0 Results

The estimated impact of the proposed requirement on medical expense and premiums is explained in Section 6.1 and is summarized in Table 13. The analysis includes development of a best estimate "mid-level" scenario, as well as a low-level scenario using assumptions that produced a lower estimate and a high-level scenario using more conservative assumptions that produced a higher estimated impact.

The impact on premiums is driven by the provisions of the bill that require carriers to reimburse an OT and an OTA, acting with a referral from a physician, who acts within the scope of practice authorized by law, for those covered services if the health insurer would reimburse another health care provider for those services. Variation between scenarios is attributable to uncertainty surrounding the average hourly billing rate, the number of hours that OTs and OTAs will bill for covered services, and the number of OTs and OTAs who will bill for covered services.

6.1 Five-Year Estimated Impact

Table 13 (on the following page) presents the projected net impact of the bill on medical expense and premiums for each year over the 2022 – 2026 period using a projection of Commonwealth fully insured membership. The low scenario would result in almost $1.0 million per year on average. It assumes on average that OTs will be paid $120 per hour, OTAs will be paid $119 per hour, bill 30 hours per week, and that six FTE OTs and one FTE OTA will bill insurance carriers for fully insured members. The high scenario's projected impact is roughly $4.6 million and assumes on average that OTs will be paid $126 per hour, OTAs will be paid $125 per hour, bill 34 hours per week, and that 21 FTE OTs and four FTE OTAs will bill insurance carriers for fully insured members. The middle scenario would result in average, annual costs of $2.4 million, or an average of 0.02% of premiums. It assumes on average that OTs will be paid $123 per hour, OTAs will be paid $122 per hour, bill 32 hours per week, and that 13 FTE OTs and three OTA FTEs will bill insurance carriers for fully insured members. It is important to note that the cost is expected to ramp up through the projection period. Costs in the final year, in the mid scenario, are expected to be just under $4.0 million, 0.03% of premium, or about $0.17 PMPM.

The impact of the proposed law on any one individual, employer group, or carrier may vary from the overall results, depending on the current level of benefits each receives or provides, and on how benefits would change under the proposed language.

Table 13: Summary Results

	2022	2023	2024	2025	2026	WEIGHTED AVERAGE	FIVE-YEAR TOTAL
Members (000s)	2,014	2,010	2,007	2,003	2,000		
Medical Expense Low ($000s)	$185	$518	$785	$1,056	$1,332	$821	$3,876
Medical Expense Mid ($000s)	$440	$1,254	$1,932	$2,646	$3,398	$2,049	$9,669
Medical Expense High ($000s)	$798	$2,310	$3,617	$5,036	$6,574	$3,884	$18,334
Premium Low ($000s)	$217	$607	$919	$1,237	$1,560	$962	$4,541
Premium Mid ($000s)	$516	$1,469	$2,263	$3,100	$3,980	$2,400	$11,327
Premium High ($000s)	$934	$2,705	$4,237	$5,900	$7,701	$4,550	$21,477
PMPM Low	$0.01	$0.03	$0.04	$0.05	$0.07	$0.04	$0.04
PMPM Mid	$0.03	$0.06	$0.09	$0.13	$0.17	$0.10	$0.10
PMPM High	$0.05	$0.11	$0.18	$0.25	$0.32	$0.19	$0.19
Estimated Monthly Premium	$559	$578	$598	$618	$639	$598	$598
Premium % Rise Low	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%
Premium % Rise Mid	0.01%	0.01%	0.02%	0.02%	0.03%	0.02%	0.02%
Premium % Rise High	0.01%	0.02%	0.03%	0.04%	0.05%	0.03%	0.03%

6.2 Impact on GIC

Findings from BerryDunn's carrier surveys indicate that benefit offerings for GIC and other commercial plans in the Commonwealth are similar. For this reason, the bill's estimated impact on GIC's incremental PMPM medical expense is assumed the same as other fully insured plans in the Commonwealth. To separately estimate the total medical expense for the GIC, BerryDunn applied the PMPM medical expense to the GIC membership.

BerryDunn assumed the proposed legislative change will apply to self-insured plans that the GIC operates for state and local employees, with an effective date of July 1, 2022. Because of the July effective date, the results in 2022 are approximately one-half of an annual value. Table 14 breaks out the GIC's self-insured membership, as well as the corresponding incremental medical expense.

Table 14: GIC Summary Results

	2022	2023	2024	2025	2026	WEIGHTED AVERAGE	FIVE-YEAR TOTAL
GIC Self-Insured							
Members (000s)	313	312	312	311	311		
Medical Expense Low ($000s)	$20	$81	$122	$164	$207	$132	$593
Medical Expense Mid ($000s)	$47	$195	$300	$411	$528	$329	$1,481
Medical Expense High ($000s)	$86	$359	$562	$782	$1,021	$625	$2,811

Endnote

[1] The 192nd General Court of the Commonwealth of Massachusetts, House Bill 1114 and Senate Bill 1262, "An Act relative to mental health providers." Accessed 10 August 2021: **https://malegislature.gov/Bills/192/H1114** and **https://malegislature.gov/Bills/192/S1262**.

[2] Data.HSRA.gov. Shortage Areas. Accessed 26 October 2021: **https://data.hrsa.gov/topics/health-workforce/shortage-areas**.

[3] U.S. Centers for Medicare & Medicaid Services (CMS), Office of the Actuary. National Health Expenditure Projections. Table 7, Hospital Care Expenditures; Aggregate and per Capita Amounts, Percent Distribution and Annual Percent Change by Source of Funds: Calendar Years 2018-2027; Private Insurance. Accessed: 12 August 2021; **https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html**.

[4]U.S. Bureau of Labor Statistics. Occupational Employment and Wage Statistics. May 2020 State Occupational Employment and Wage Estimates, Massachusetts, Accessed 12 August 2021: **https://www.bls.gov/oes/current/oes_ma.htm**.

[5]U.S. Bureau of Labor Statistics. Occupational Employment and Wage Statistics. May 2020 State Occupational Employment and Wage Estimates, National Estimates for Occupational Therapists , Accessed 12 August 2021: **https://www.bls.gov/oes/current/oes291122.htm#nat**

[6]U.S. Bureau of Labor Statistics. Occupational Employment and Wage Statistics. May 2020 State Occupational Employment and Wage Estimates, National Estimates for Occupational Therapist Assistants , Accessed 12 August 2021: **https://www.bls.gov/oes/current/oes312011.htm#nat**

[7] Massachusetts Center for Health Information and Analysis. Annual Report on the Massachusetts Health Care System, September 2019. Accessed 29 October 2020**:** **http://www.chiamass.gov/annual-report**.

Appendix A: Membership Affected by the Proposed Language

Membership potentially affected by proposed mandated change criteria includes Commonwealth residents with fully insured, employer-sponsored health insurance issued by a Commonwealth-licensed company (including through the GIC); nonresidents with fully insured, employer-sponsored insurance issued in the Commonwealth; Commonwealth residents with individual (direct) health insurance coverage; and lives covered by GIC self-insured coverage.

Please note these are unprecedented economic circumstances due to COVID-19, which makes the estimation of membership extremely challenging. The membership projections are used to determine the total dollar impact of the proposed mandate in question; however, variations in the membership forecast will not affect the general magnitude of the dollar estimates. As such, given the uncertainty, BerryDunn took a simplified approach to the membership projections as described below. These membership projections are not intended to be used for any other purpose than producing the total dollar range in this study. Further, to assess how recent volatility in commercial enrollment levels might affect these cost estimates, please note that the PMPM and percentage of premium estimates are unaffected because they are per-person estimates, and the total dollar estimates will vary by the same percentage as any percentage change in enrollment levels.

The 2018 Massachusetts APCD formed the base for the projections. The Massachusetts APCD provided fully insured membership by insurance carrier. The Massachusetts APCD was also used to estimate the number of nonresidents covered by a Commonwealth policy. These are typically cases in which a nonresident works for a Commonwealth employer that offers employer-sponsored coverage. Adjustments were made to the data for membership not in the Massachusetts APCD, based on published membership reports available from CHIA and the Massachusetts Department of Insurance (DOI).

CHIA publishes monthly enrollment summaries in addition to its biannual enrollment trends report and supporting databook (enrollment-trends-March-2020-databook[xlix] and Monthly Enrollment Summary – August 2020[l]), which provides enrollment data for Commonwealth residents by insurance carrier for most carriers. (Some small carriers are excluded.) CHIA uses supplemental information beyond the data in the Massachusetts APCD to develop its enrollment trends report. The supplemental data was used to adjust the resident totals from the Massachusetts APCD. In 2020, commercial, fully insured membership is 2.9% less than in 2019 with a shift to both uninsured and MassHealth coverage. The impact of COVID-19 on fully insured employers over the five-year projected period is uncertain. BerryDunn took a high-level conservative approach and assumed that membership would revert to 2019 levels by January 1, 2022.

The DOI published reports titled Quarterly Report of HMO Membership in Closed Network Health Plans as of December 31, 2018[li] and Massachusetts Division of Insurance Annual Report Membership in MEDICAL Insured Preferred Provider Plans by County as of December 31, 2018.[lii] These reports provide fully insured covered members for licensed Commonwealth insurers where the member's primary residence is in the Commonwealth. The DOI reporting includes all insurance carriers and was used to supplement the Massachusetts APCD membership for small carriers not in the Massachusetts APCD.

The distribution of members by age and gender was estimated using Massachusetts APCD population distribution ratios and was checked for reasonableness and validated against U.S. Census Bureau data.[liii] Membership was projected from 2019 – 2026 using Massachusetts Department of Transportation population growth rate estimates by age and gender.[liv]

Projections for the GIC self-insured lives were developed using the GIC base data for 2018 and 2019, that BerryDunn received directly from the GIC, as well as the same projected growth rates from the Census Bureau that were used for the Commonwealth population. Breakdowns of the GIC self-insured lives by gender and age were based on the Census Bureau distributions.

Appendix A Endnotes

[xlix] Center for Health Information and Analysis. Estimates of fully insured and self-insured membership by insurance carrier. Accessed 15 November 2020: **https://www.chiamass.gov/enrollment-in-health-insurance/**.

[l] Center for Health Information and Analysis. Estimates of fully insured and self-insured membership by insurance carrier. Accessed 15 November 2020: **https://www.chiamass.gov/enrollment-in-health-insurance/**.

[li] Massachusetts Department of Insurance. HMO Group Membership and HMO Individual Membership Accessed 12 November 2020: **https://www.mass.gov/doc/group-members/download; https://www.mass.gov/doc/individual-members/download**.

[lii] Massachusetts Department of Insurance. Membership 2018. Accessed 12 November 2020: **https://www.mass.gov/doc/2018-ippp-medical-plans/download**.

[liii] U.S. Census Bureau. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2018. Accessed 12 November 2020: **https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk**.

[liv] Massachusetts Department of Transportation. Socio-Economic Projections for 2020 Regional Transportation Plans. Accessed 12 November 2020: **https://www.mass.gov/lists/socio-economic-projections-for-2020-regional-transportation-plans**.

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