

**CENTER FOR HEALTH  
INFORMATION AND ANALYSIS**

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**MANDATED BENEFIT REVIEW OF H.B. 267  
SUBMITTED TO THE 189<sup>TH</sup> GENERAL COURT:  
AN ACT ADVANCING AND EXPANDING  
ACCESS TO TELEMEDICINE SERVICES**

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## HEALTH BENEFIT MANDATE OVERVIEW:

### H.B. 267: AN ACT ADVANCING AND EXPANDING ACCESS TO TELEMEDICINE SERVICES

#### HISTORY OF THE BILL

The Joint Committee on Health Care Financing referred House Bill (H.B.) 267, “An Act advancing and expanding access to telemedicine services,” sponsored by Rep. Scibak of South Hadley in the 189<sup>th</sup> General Court, to the Center for Health Information and Analysis (CHIA) for review.<sup>1</sup> Massachusetts General Laws chapter 3 §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?

The proposed health benefit plan mandate would replace an existing telemedicine mandate, and affect delivery of services via telemedicine in several ways. The bill would:

- Redefine telemedicine to accommodate development of new technologies.
- Require changes to rules for multi-state licensing and credentialing of providers for telemedicine services.
- Forbid carriers from requiring in-person contact for delivery of services appropriate to telemedicine and prohibit limitations on provider or patient settings.
- Require carriers to cover telemedicine services under the same terms and cost-sharing requirements as in-person services (a provision already in place for some policies).
- Require carriers to pay the same amount to a provider for a given service whether delivered in-person or via telemedicine, if the service is appropriate for telemedicine delivery.
- Eliminate the carrier’s ability to limit coverage of telemedicine services to providers in a telemedicine network approved by the carrier (currently in place for some policies).

#### MEDICAL EFFICACY OF H.B. 267

A survey of research literature found the use of telemedicine effective when delivered in a variety of settings for many different conditions. H.B. 267 addresses some of the barriers reported in numerous studies, such as state licensing and credentialing of telemedicine providers. The literature search did not reveal studies specifically measuring the effectiveness of streamlining these procedures.

#### CURRENT COVERAGE

Neither current statutes nor the proposed mandate require coverage for telemedicine services. In a survey of the largest insurance carriers in Massachusetts, all responded that they currently cover telemedicine for a variety of conditions and services and that equivalent coverage and cost-sharing terms currently apply. Some carriers reported lower reimbursement rates for services delivered via telemedicine versus in-person.

## **COST OF IMPLEMENTING THE BILL**

Requiring coverage for this benefit by fully-insured plans would increase premiums by as much as 0.002 percent on average over the next five years; a more likely result is that the bill's incremental impact will be too small to measure with any precision. The only provision of the bill that has a potential impact on premiums is the requirement that carriers pay the same amount to a provider for a given service whether delivered in person or via telemedicine; this provision might limit a carrier's ability to reimburse providers for telemedicine services at lower rates.

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

## **PLANS AFFECTED BY THE PROPOSED BENEFIT MANDATE**

H.B. 267 reaches all commercial insurance types through Chapter 1760 (Health Insurance Consumer Protections), including indemnity plans, HMOs, and Blue Cross/Blue Shield. It also applies to both fully- and self-insured plans sponsored by the Group Insurance Commission for the benefit of public employees. 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 bill as drafted affects Medicaid/MassHealth; however, CHIA's analysis does not estimate the potential effect of the mandate on Medicaid expenditures.

## **PLANS NOT AFFECTED BY THE PROPOSED BENEFIT MANDATE**

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

## MEDICAL EFFICACY ASSESSMENT

Massachusetts House Bill (H.B.) 267,<sup>2</sup> as submitted in the 189<sup>th</sup> General Court, amends statutes governing licensure of health care providers and insurance carriers. It instructs the Board of Registration in Medicine to “promulgate regulations allowing telemedicine licensure/credentialing that is consistent with federal regulations, including but not limited to: (1) allowing physicians to practice telemedicine between different states; and (2) allowing physicians or healthcare facilities to have either a written agreement or the proxy credentialing and privileging for telemedicine services with other healthcare providers or facilities [consistent with Medicare standards].” H.B. 267 instructs the Division of Professional Licensure within the Department of Public Health to similarly amend the applicable regulations for other clinicians with authority to deliver health care or behavioral health services.

H.B. 267 also imposes requirements on carriers, providing:

- In-person contact between a health care provider and a patient shall not be required for services appropriately provided through telemedicine.
- For the purpose of telemedicine coverage, a carrier “shall not limit the type of setting where services are provided for the patient or by the health care provider.”
- Coverage of telemedicine services “shall be at a rate no less than the applicable coverage for health care services provided through in-person consultation or in-person delivery of services.”

M.G.L. c. 3 §38C charges the Massachusetts Center for Health Information and Analysis (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.

## TELEMEDICINE

According to the American Telemedicine Association (ATA), telemedicine is “the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.”<sup>3</sup> This definition broadly includes two-way video, email, smart phones, wireless tools and other telecommunications technologies, and encompasses patient video conference consultations, the transmission of still images, patient portals, remote vital sign monitoring, continuing medical education, nursing call centers, and consumer-focused patient wireless applications.<sup>4</sup>

The federal Center for Medicare and Medicaid Services (CMS) defines telemedicine more narrowly as a method “to improve a patient’s health by permitting two-way, real time interactive communication between the patient, and the physician or practitioner at the distant site. This electronic communication means the use of interactive telecommunications equipment that includes, at a minimum, audio and video equipment.”<sup>5</sup> The CMS definition does not include telephone, facsimile machines, or email, but instead groups these telecommunications methods under the broader definition of telehealth.<sup>6,7</sup> This definition is consistent with that used in the current and proposed telemedicine health benefit plan mandates in Massachusetts.

While the technological definition is somewhat more narrow than that defined under the broad CMS umbrella of telehealth, the Massachusetts mandate does not limit the use of telemedicine further by type of provider, patient, disease, service, or location of patient or provider, as do Medicare regulations, for example. (See Appendix A.)

Telemedicine is not a distinct specialty, but is instead the use of interactive telecommunication technologies to deliver a variety of healthcare services to treat many different diseases and conditions. The following table is a sample of services, specialties, and diseases involved in studies—conducted or underway—to review the effectiveness of telemedicine for use in specific patient populations.

<b>Services<sup>8</sup></b>	<b>Specialties</b>	<b>Diseases</b>
■ Disease screening <sup>9</sup>	■ Audiology <sup>18</sup>	■ Chronic illnesses <sup>36</sup>
■ Diagnosis <sup>10</sup>	■ Cardiology <sup>19</sup>	■ Asthma <sup>37</sup>
■ Monitoring/Status assessments <sup>11</sup>	■ Dentistry <sup>20, 21</sup>	■ Chronic kidney disease <sup>38</sup>
■ Patient education <sup>12</sup>	■ Dermatology <sup>22</sup>	■ Chronic wounds <sup>39</sup>
■ Evaluation <sup>13</sup>	■ Endocrinology <sup>23</sup>	■ Diabetes <sup>40</sup>
■ Consultations <sup>14</sup>	■ Neuropsychology <sup>24</sup>	■ Heart disease <sup>41</sup>
■ Rehabilitation/Therapy <sup>15</sup>	■ Occupational therapy <sup>25</sup>	■ Hypertension <sup>42</sup>
■ Behavioral health sessions <sup>16</sup>	■ Ophthalmology <sup>26</sup>	■ Irritable Bowel Syndrome <sup>43</sup>
■ Medication management <sup>17</sup>	■ Pediatrics <sup>27</sup>	■ Pain management <sup>44</sup>
	■ Pharmacy <sup>28</sup>	■ Smoking cessation <sup>45</sup>
	■ Physical therapy <sup>29</sup>	■ Multiple sclerosis <sup>46</sup>
	■ Primary care <sup>30</sup>	■ Parkinson's disease <sup>47</sup>
	■ Psychiatry/Psychology <sup>31, 32</sup>	■ Mental health <sup>48, 49</sup>
	■ Speech-language pathology <sup>33</sup>	■ Attention-deficit hyperactivity disorder <sup>50</sup>
	■ Surgery (pre- and post-operative) <sup>34</sup>	■ Agoraphobia/panic disorders <sup>51</sup>
	■ Urgent care <sup>35</sup>	■ Anxiety disorders <sup>52</sup>
		■ Depression <sup>53</sup>
		■ Post-traumatic stress disorder <sup>54</sup>
		■ Schizophrenia <sup>55</sup>
		■ Acute conditions
		■ Stroke <sup>56</sup>

Given the large body of evidence that continues to develop across a wide range of topics in telemedicine, many specialty associations, as well as the American Telemedicine Association and the Federation of State Medical Boards, have issued and continue to develop position papers, standards, and guidelines regarding the use of telemedicine for various patients, conditions, or technologies. Appendix B lists examples of these. Some of these are evidence-based guidelines that may be used by clinicians when “feasible and practical...in order to provide quality telehealth care.”<sup>57</sup>



## MEDICAL EFFECTIVENESS OF SERVICES DELIVERED THROUGH TELEMEDICINE

The use of telemedicine continues to grow, through both the expansion of the technology to new services, and additional patient-clinician encounters. Many studies and reviews have found the use of telemedicine effective for a variety of conditions and situations, but researchers caution that the evidence itself may be limited, inconsistent, and sometimes contradictory, prompting the need for more rigorous and expansive studies before broad conclusions may be drawn.

For example, in a review of 80 separate systematic reviews, researchers found that in 21 reviews telemedicine was found to be effective, 19 concluded that telemedicine is promising or has potential but that more research is needed, and 22 found the evidence of effectiveness to be inconclusive or inconsistent.<sup>58</sup> Another study reviewed 141 randomized control trials (RCTs) analyzing 148 telemedicine interventions for five common chronic diseases (asthma, COPD, diabetes, heart failure, hypertension). Here researchers found the reviewed source articles showed positive effects from telemedicine in 108 of the RCTs, and negative effects in only two, with similar effects across all of the diseases studied. However, the study authors again summarized that the evidence base for the value of telemedicine for managing chronic conditions is “weak and contradictory,” citing publication bias and the short-term duration of the studies as reasons for their cautionary conclusion.<sup>59</sup>

While additional research remains to be conducted and an overall conclusion about the effectiveness of telemedicine cannot be broadly drawn, telemedicine has been found to be effective for specific conditions and situations. Specifically, studies have found telemedicine to:

- Improve self-management of chronic conditions for young people in pediatric care.<sup>60</sup>
- Enable more timely access to surgical care for patients with head and neck cancer.<sup>61</sup>
- Reduce geographic barriers to initial oral medical consultation for remote patients, resulting in additional expert clinical examination for the “significant majority of patients.”<sup>62</sup>
- Improve outcomes “in almost all areas in the continuum of cardiovascular disease,” including early diagnosis, second consultation, communication between clinicians, rate of follow-up, and secondary prevention efforts.<sup>63</sup>
- Improve quality of life indicators and lead to similar health outcomes as routine care for patients with heart failure.<sup>64</sup>
- Increase delivery of outpatient dermatologic care in “resource-poor primary care settings.”<sup>65</sup>
- Improve timely access to neurological expertise, and reduce geographic disparity in the diagnosis and treatment of acute stroke.<sup>66</sup> Reduce stroke disability and death for rural populations,<sup>67</sup> and reduce mortality after stroke in a population-wide study.<sup>68</sup>
- Improve relapse duration, disease activity, short-term medication adherence, quality of life measures, disease knowledge, and remote disease management while reducing acute outpatient clinic visits for patients with Irritable Bowel Disease.<sup>69</sup>
- Result in equivalent outcomes between in-person and video-teleconference-based geropsychiatry neurocognitive screenings.<sup>70</sup>
- Create a “feasible care delivery strategy in patients with” chronic kidney disease, as health outcomes were comparable to usual care.<sup>71</sup>

- Significantly decrease the rate of emergency department use for ambulatory care sensitive conditions over one year for older residents residing in senior living communities through the use of high-intensity acute illness telemedicine care.<sup>72</sup>
- Improve outcomes for adult asthma patients by decreasing the use of short-acting  $\beta$ -agonist (SABA) use, increasing SABA-free days, and improving Asthma Control Test scores for adults previously lacking asthma control.<sup>73</sup>
- Increase the use of pharmacotherapy and patient satisfaction for those in a tobacco-cessation program.<sup>74</sup>
- Address “barriers to care related to both logistics and stigma” for patients provided evidence-based psychotherapy for post-traumatic stress disorder (PTSD) and depression, with outcomes “paralleling those of clinic-based care delivered in person.”<sup>75</sup>
- Improve patient and provider satisfaction ratings, resulting in outcomes “equivalent to in-person care”, especially for PTSD, depression, and attention-deficit hyperactivity disorders, and for underserved ethnic groups, Native American, Hispanic, and Asian populations.<sup>76</sup>
- Improve medication adherence, patient responsiveness, quality of life, and remission rates for patients with depression treated in a Telemedicine-Based Collaborative Care model.<sup>77</sup>
- Improve blood glucose control for patients with diabetes.<sup>78</sup>
- Provide advantages over non-telehealth alternative procedures for providing distance care in a variety of speech-language-hearing science (SLHS) areas related to hearing, speech, language, and swallowing assessments and interventions.<sup>79</sup>

Authors of several studies have cited barriers to the effectiveness of telemedicine, including issues of training, regulation, reimbursement, licensing, technology, business processes, prescription policies, and the acceptance and recognition of the benefit by both the public and providers.<sup>80,81</sup> Moreover, the overall effectiveness of these interventions may depend on a variety of factors, including: the study population, including condition severity and participant disease trajectory; the specific function of the intervention or service provided, and its appropriate provision via telecommunication platforms; and the training, skill, processes, and support of the delivering provider or healthcare system.<sup>82</sup> Other authors have cautioned that telemedicine may increase clinician workload, create duplication, or encourage redundancy or the inefficient use of resources.<sup>83</sup> Some models may diminish the quality of care, by limiting patients to one reason per visit, discouraging continuity of care by restricting visits to the same provider, and by relinquishing responsibility for patient outcomes by requiring patients to sign disclaimers and releases prior to their telemedicine encounters.<sup>84</sup> Such “telemedicine strategies... fail to meet the professional standards for a clinical encounter [and] jeopardize patient care.”<sup>85</sup>

## LICENSING OF TELEMEDICINE PROVIDERS

H.B. 267 instructs the Board of Registration in Medicine (the Board) to promulgate regulations to allow physicians to practice telemedicine between different states. The Board includes telemedicine within its definition of “practice of medicine,” defining it as, “the provision of services to a patient by a physician from a distance by electronic communication in order to improve patient care, treatment, or services.”<sup>86</sup> Since the practice of medicine occurs where the patient is physically located at the time of the telemedicine encounter,<sup>87</sup> physicians are required to have a license to practice medicine in Massachusetts when providing services to a patient located in Massachusetts. Currently, Massachusetts allows for an out of state exception for “a physician or surgeon resident in another state who is a legal practitioner therein, when in actual consultation with a legal practitioner of the commonwealth...”<sup>88</sup> This provision allows for peer-to-peer consultation of a Massachusetts licensed physician with another physician licensed in a different state.

There are several approaches to facilitating physician licensing in additional states. One approach is the formation of the Interstate Medical Licensure Compact (Compact). For physicians who wish to become licensed in multiple states, the Compact offers a new, voluntary expedited pathway to additional state licenses.<sup>89</sup> States participating in the Compact agree to share information and work together in new ways to streamline the licensing process.<sup>90</sup> The Compact must be adopted by participating states, however, and at present, Massachusetts has not enacted or introduced Compact legislation.<sup>91</sup> To date, twelve states have enacted Compact legislation, and fourteen states have introduced legislation.<sup>92</sup> Proponents of the Compact contend that it strengthens public protection by enhancing the ability of states to share investigative and disciplinary information.<sup>93</sup> In an article in the *Journal of the American Medical Association (JAMA)*, the author noted that widespread enactment of the Compact would address the physician shortage in rural and other underserved areas by facilitating the practice of telemedicine.<sup>94</sup> Since there are national standards for physician treatment, training, and testing, proponents of the Compact contend that requiring physicians to go through individual licensing requirements for additional states provides little added benefit.<sup>95</sup>

The nursing profession has a similar method for multiple state licensures, referred to as the Nursing Licensure Compact (NCL), launched in 2000, with half of the states participating.<sup>96</sup> After over a decade since its enactment, its reported benefits include facilitation of continuity of patient care, improved access to providers, and enhanced discipline and information sharing among participating NCL states.<sup>97</sup>

In addition to the Interstate Medical Licensure Compact, states have facilitated telemedicine practice across state lines in other ways. Some states offer a special purpose telemedicine, or conditional, license,<sup>98</sup> and some states offer license reciprocity with bordering states.<sup>99</sup>

A survey of the literature did not reveal studies pertaining to the impact on patient care of streamlining physician state licensure in additional states.

## CREDENTIALING BY PROXY OR AGREEMENT

H.B. 267 directs the Board and the Division of Professional Licensure within the Department of Health to promulgate and amend regulations allowing for a system of credentialing and privileging of physicians or healthcare facilities, as well as other healthcare providers, that provide for either a written agreement or the proxy credentialing and privileging for telemedicine services with other healthcare providers consistent with federal Medicare Conditions of Participation credentialing standards.

Credentialing is the process of obtaining, verifying, and assessing the qualifications of a licensed medical provider to deliver health care or services in or for a health care organization.<sup>100</sup> These qualifications include documented evidence of the licensure, education, and training of a medical provider.<sup>101</sup> Each time a licensed provider delivers health care at a new health care organization, the provider's credentials must be verified.<sup>102</sup> If the credentialing process is favorable, the provider is granted "privileges" that authorize the provider to practice within a specific scope of services at or for the healthcare organization.<sup>103</sup>

Because this is a time-consuming and burdensome process, the CMS enacted regulations in 2011 to streamline the process of telemedicine services, upholding the Joint Commission's<sup>104</sup> practice of allowing an originating site (where the patient is located) to use the credentialing and privileging information from a distant site (where the provider of services is located) when making privileging decisions for telemedicine providers.<sup>105,106,107</sup> Under the "credentialing by proxy" rules, if a physician is currently credentialed at Hospital A, and subsequently applies for privileges to provide telemedicine services to patients at Hospital B, Hospital B may rely on the credentialing information gathered by Hospital A when deciding whether to grant the physician privileges.<sup>108</sup> To use Medicare's credentialing by proxy, certain additional requirements, in addition to a written agreement between the two parties, must be met:<sup>109</sup>

- The distant-site hospital providing the telemedicine services is a Medicare-participating hospital or telemedicine entity.
- The distant-site physician or practitioner is privileged at the distant site hospital providing the telemedicine services, which provides a current list of the distant-site physician's or practitioner's privileges at the distant-site hospital.
- The distant site physician or practitioner holds a license issued or recognized by the state of the originating-site hospital.
- The originating-site hospital reviews the performance of the distant site physician or practitioner and provides this information to the distant-site hospital including, at a minimum, all adverse events that result from the telemedicine services.

A survey of the literature revealed reported benefits of streamlining of the credentialing process, but did not reveal studies of its impact on patient care.

## PHYSICIAN-PATIENT PROXIMITY/STANDARD OF CARE

H.B. 267 provides that in-person contact between a patient and a health care provider “shall not be required for services appropriately provided through telemedicine.” Establishing a “physician-patient” relationship is fundamental to care (and has legal consequences, such as triggering communication privilege), and states vary in how they define when this occurs, as well as whether it can be established through telemedicine. Generally, a patient-physician relationship is formed when a physician affirmatively acts in a patient’s case by examining, diagnosing, treating, or agreeing to do so.<sup>110</sup> For telemedicine services, the Federation of State Medical Boards (FSMB) provides that “the relationship is clearly established when the physician agrees to undertake diagnosis and treatment of the patient, and the patient agrees to be treated, whether or not there has been an encounter in person between the physician (or other appropriately supervised health care practitioner) and patient.”<sup>111</sup>

Establishing a patient-physician relationship is also central to prescribing medications. Remote prescription through telemedicine presents a challenge in some states. The Massachusetts Board of Registration in Medicine has stated that a prescription needs to be issued, “within a physician-patient relationship that is for the purpose of maintaining the patient’s well-being,” and “the physician must conform to certain minimum standards of patient care, such as taking an adequate medical history, doing a physical and/or mental status examination and documenting the finding.”<sup>112</sup> Furthermore, the Board provides, “Issuance of a prescription, by any means, including the Internet or other electronic process, that does not meet these requirements is therefore unlawful.”<sup>113</sup> Some states have revisited their pharmacy policies to address the growth of telemedicine and allow for remote prescribing.<sup>114</sup>

H.B. 267 provides that for telemedicine coverage, a carrier “shall not limit the type of setting where services are provided for the patient or by the health provider.” The FSMB discourages physicians from rendering medical advice and/or care using telemedicine without (1) fully verifying the location and, to the extent possible, identifying the requested patient; (2) disclosing and validating the provider’s identity and applicable credential(s); and (3) obtaining appropriate consents from requesting patients, including any special informed consents regarding the use of telemedicine technologies.<sup>115</sup>

Telemedicine, while “fundamentally different from...a face-to-face encounter” due to the physical separation of clinician and patient, introduces the new parameters and dynamics of a technology platform into the clinician-patient interaction and relationship.<sup>116</sup> Ideally, these encounters follow the standards of those present during the traditional visit, and include a thorough evaluation, evidence-based recommendations, necessary follow-up and referrals, and documentation.<sup>117</sup> The technology also creates new opportunities for encounters that may not otherwise be possible due to geography, patient condition or situation, or other factors. Moreover, these technology platforms offer the clinician the unique possibility to evaluate a patient’s home environment and risk factors, interact with family members and other caregivers, communicate diagnostic and therapeutic information efficiently, and record visits for future reference, thus enabling the patient to review complex information and recommendations at a future time.<sup>118</sup> In an article published in JAMA, the authors stated that, “In its ideal form, telemedicine meets the standards of traditional encounters...[and] creates opportunities not present during traditional office encounters.”<sup>119</sup> It is often through utilization of telemedicine as an adjunct to traditional office encounters, particularly in the case of chronic conditions, which leads to improved patient outcomes. Rather than displacing in-person encounters, review of the literature found that telemedicine was often found efficacious as a supplemental treatment option for specific conditions and situations, although some of the evidence was weak and contradictory, and more rigorous research remains to be done. H.B. 267 would support the growth of telemedicine as a supplemental treatment option.

Physicians and other practitioners delivering telemedicine services must comply with scope of practice laws in the state where the patient receives services.<sup>120</sup> The standards and scope of telemedicine services should be consistent with related in-person services and with the FSMB’s guidelines.<sup>121</sup> Provision of telemedicine services must include care coordination with the patient’s medical home and/or treating physicians, just as is the case in in-person visits.<sup>122</sup> Telemedicine providers should consider the nature of the services, the patient’s needs and conditions, and the acceptable standards for diagnosis and treatment.<sup>123</sup>

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## CONCLUSION

A survey of the literature has found the use of telemedicine effective when delivered in a variety of settings for many different conditions. H.B. 267 addresses some of the barriers that have been reported in numerous studies, such as state licensing of physicians and credentialing of clinicians. The literature search did not reveal studies measuring the effectiveness of streamlining these processes.

## APPENDIX A: MEDICARE RULES REGARDING TELEHEALTH<sup>i</sup>

(a) Definitions. For the purposes of this section the following definitions apply:

(1) Asynchronous store and forward technologies means the transmission of a patient's medical information from an originating site to the physician or practitioner at the distant site. The physician or practitioner at the distant site can review the medical case without the patient being present. An asynchronous telecommunications system in single media format does not include telephone calls, images transmitted via facsimile machines and text messages without visualization of the patient (electronic mail). Photographs visualized by a telecommunications system must be specific to the patient's medical condition and adequate for furnishing or confirming a diagnosis and or treatment plan. Dermatological photographs, for example a photograph of a skin lesion, may be considered to meet the requirement of a single media format under this provision.

(2) Distant site means the site where the physician or practitioner delivering the service is located at the time the service is provided via a telecommunications system.

(3) Interactive telecommunications system means multimedia communications equipment that includes, at a minimum, audio and video equipment permitting two-way, real-time interactive communication between the patient and distant site physician or practitioner. Telephones, facsimile machines, and electronic mail systems do not meet the definition of an interactive telecommunications system.

(4) Originating site means the location of an eligible Medicare beneficiary at the time the service being furnished via a telecommunications system occurs. For asynchronous store and forward telecommunications technologies, the only originating sites are Federal telemedicine demonstration programs conducted in Alaska or Hawaii.

(b) General rule. Medicare Part B pays for office or other outpatient visits, subsequent hospital care services (with the limitation of one telehealth visit every 3 days), subsequent nursing facility care services (not including the Federally-mandated periodic visits under § 483.40(c) and with the limitation of one telehealth visit every 30 days), professional consultations, psychiatric diagnostic interview examinations, neurobehavioral status exams, individual psychotherapy, pharmacologic management, end-stage renal disease-related services included in the monthly capitation payment (except for one "hands on" visit per month to examine the access site), individual and group medical nutrition therapy services, individual and group kidney disease education services, individual and group diabetes self-management (DSMT) training services (except for one hour of in-person services to be furnished in the year following the initial DSMT service to ensure effective injection training), and individual and group health and behavior assessment and intervention services, and smoking cessation services furnished by an interactive telecommunications system if the following conditions are met:

(1) The physician or practitioner at the distant site must be licensed to furnish the service under State law. The physician or practitioner at the distant site who is licensed under State law to furnish a covered telehealth service described in this section may bill, and receive payment for, the service when it is delivered via a telecommunications system.

<sup>i</sup> 42 CFR § 410.78 Telehealth services. Accessed 9 March 2016: <https://www.law.cornell.edu/cfr/text/42/410.78>.

- (2) The practitioner at the distant site is one of the following:
- (i) A physician as described in § 410.20.
  - (ii) A physician assistant as described § 410.74.(iii) A nurse practitioner as described in § 410.75.
  - (iv) A clinical nurse specialist as described in § 410.76.
  - (v) A nurse-midwife as described in § 410.77.
  - (vi) A clinical psychologist as described in § 410.71.
  - (vii) A clinical social worker as described in § 410.73.
  - (viii) A registered dietitian or nutrition professional as described in § 410.134.
- (3) The services are furnished to a beneficiary at an originating site, which is one of the following:
- (i) The office of a physician or practitioner.
  - (ii) A critical access hospital (as described in section 1861(mm)(1) of the Act).
  - (iii) A rural health clinic (as described in section 1861(aa)(2) of the Act).
  - (iv) A Federally qualified health center (as defined in section 1861(aa)(4) of the Act).
  - (v) A hospital (as defined in section 1861(e) of the Act).
  - (vi) A hospital-based or critical access hospital-based renal dialysis center (including satellites).
  - (vii) A skilled nursing facility (as defined in section 1819(a) of the Act).
  - (viii) A community mental health center (as defined in section 1861(ff)(3)(B) of the Act).
- (4) Originating sites must be located in either a rural health professional shortage area as defined under section 332(a)(1)(A) of the Public Health Service Act (42 U.S.C. 254e(a)(1)(A)) or in a county that is not included in a Metropolitan Statistical Area as defined in section 1886(d)(2)(D) of the Act. Entities participating in a Federal telemedicine demonstration project that have been approved by, or receive funding from, the Secretary as of December 31, 2000 qualify as an eligible originating site regardless of geographic location.
- (5) The medical examination of the patient is under the control of the physician or practitioner at the distant site.
- (c) Telepresenter not required. A telepresenter is not required as a condition of payment unless a telepresenter is medically necessary as determined by the physician or practitioner at the distant site.
- (d) Exception to the interactive telecommunications system requirement. For Federal telemedicine demonstration programs conducted in Alaska or Hawaii only, Medicare payment is permitted for telehealth when asynchronous store and forward technologies, in single or multimedia formats, are used as a substitute for an interactive telecommunications system.
- (e) Limitations.
- (1) A clinical psychologist and a clinical social worker may bill and receive payment for individual psychotherapy via a telecommunications system, but may not seek payment for medical evaluation and management services.
  - (2) The physician visits required under § 483.40(c) of this title may not be furnished as telehealth services.
- (f) Process for adding or deleting services. Changes to the list of Medicare telehealth services are made through the annual physician fee schedule rulemaking process.



## APPENDIX B: SAMPLE OF TELEMEDICINE GUIDELINES, STANDARDS, AND POSITION PAPERS

American Telemedicine Association:<sup>124</sup>

- Practice Guidelines for Live, On Demand Primary and Urgent Care (2014)
- Clinical Guidelines for Telepathology (August 2014)
- Guidelines for TeleICU Operations (May 2014)
- Core Operational Guidelines for Telehealth Services Involving Provider-Patient Interactions (May 2014)
- A Lexicon of Assessment and Outcome Measures for Telemental Health (November 2013)
- Practice Guidelines for Video-Based Online Mental Health Services (May 2013)
- Quick Guide to Store-Forward and Live-Interactive Teledermatology for Referring Providers (April 2012)
- Expert Consensus Recommendations for Videoconferencing-Based Telepresenting (October 2011)
- Telehealth Practice Recommendations for Diabetic Retinopathy (February 2011)
- A Blueprint for Telerehabilitation Guidelines (October 2010)
- Practice Guidelines for Videoconferencing-Based Telemental Health (October 2009)
- Practice Guidelines for Teledermatology (December 2007)
- Home Telehealth Clinical Guidelines (2003)

American Academy of Dermatology Association:

- AAD Position Statement on Teledermatology (May 2015)<sup>125</sup>
- AAD Position Statement on Telemedicine (November 2013)<sup>126</sup>

American Academy of Neurology: AAN Legislative Position Statement on Telemedicine<sup>127</sup>

American Medical Association: H-480.946 Coverage of and Payment for Telemedicine<sup>128</sup>

American Occupational Therapy Association: Telehealth Position Paper (November/December 2013)<sup>129</sup>

American Psychological Association: Guidelines for the Practice of Telepsychology (2013)<sup>130</sup>

Society of American Gastrointestinal and Endoscopic Surgeons: SAGES Guidelines for the Surgical Practice of Telemedicine (2004)<sup>131</sup>

Federation of State Medical Boards: Model Policy for the Appropriate Use of Telemedicine Technologies in the Practice of Medicine (April 2014)<sup>132</sup>

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**Actuarial Assessment of  
House Bill 267  
Submitted to the 189<sup>th</sup> General Court:  
“An Act advancing and expanding access to  
telemedicine services”**

Prepared for  
Commonwealth of Massachusetts  
Center for Health Information and Analysis

October 2016

Prepared by  
Compass Health Analytics, Inc.



**Actuarial Assessment of House Bill 267**  
**Submitted to the 189<sup>th</sup> General Court:**  
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**Actuarial Assessment of House Bill 267**  
**Submitted to the 189<sup>th</sup> General Court:**  
**“An Act advancing and expanding access to telemedicine services”**

## **Executive Summary**

Massachusetts House Bill (H.B.) 267,<sup>i</sup> as submitted in the 189<sup>th</sup> General Court, would replace the current statute governing how some health insurance plans cover telemedicine services and expand the new terms to include additional insurance carriers.<sup>ii</sup> The bill would replace the current statutory definition of telemedicine and amend licensure and credentialing statutes directed at telemedicine.<sup>iii</sup> It would eliminate language in the current statute that allows carriers to limit coverage of telemedicine services to providers in a carrier’s telemedicine network.

Massachusetts General Law (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. (Compass) to provide an actuarial estimate of the effect enactment of the bill would have on the cost of health insurance in Massachusetts.

### Background

According to the American Telemedicine Association (ATA), telemedicine is “the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.”<sup>iv</sup> Telemedicine is not a distinct medical specialty or a particular service, but is instead the use of interactive telecommunication technologies to deliver a variety of healthcare services to diagnose or treat many different diseases and conditions.

The use of telemedicine continues to grow, through both the expansion of the technology to new services, and additional patient-clinician encounters. Many studies and reviews have found the use of telemedicine effective for a variety of conditions and situations, but researchers caution that the evidence itself may be limited, inconsistent, and sometimes contradictory, prompting the need for more rigorous and expansive studies before broad conclusions may be drawn. With its growth, numerous legal and regulatory considerations have surfaced, including issues related to licensing, prescriptive ability, and credentialing. In response, evidenced-based guidelines, model policies, and federal and state laws continue to evolve to manage the use of telemedicine to streamline provision of services and assure quality.

### Provisions of the bill

The current Massachusetts statute related to insurance coverage for telemedicine applies only to policies regulated by Chapter 175, which governs accident and sickness policies. It requires carriers that cover telemedicine services to do so under terms consistent with coverage for in-person consultations, including any applicable cost-sharing. A carrier may limit coverage to

providers in its telemedicine network. The proposed health benefit plan mandate would replace the existing Chapter 175 telemedicine language. In response to questions to the sponsors about the types of health insurance plans they intend the bill to reach, they indicated they intend it to apply to all types of commercial fully-insured plans and to fully- and self-insured plans sponsored by the Group Insurance Commission. The proposed mandate would affect delivery of services via telemedicine in several ways:

- A. Redefine telemedicine to accommodate development of new technologies.
- B. Require changes to rules for multi-state licensing and credentialing of providers for telemedicine services.
- C. Forbid carriers from requiring in-person contact for delivery of services appropriate to telemedicine and prohibit limitations on provider or patient settings.
- D. Require carriers to cover telemedicine services under the same terms and cost-sharing requirements as in-person services (a provision currently in place for policies governed by Chapter 175).
- E. Require carriers to pay the same amount to a provider for a given service whether delivered in-person or via telemedicine, if it is appropriate for telemedicine delivery.
- F. Eliminate the carrier's ability to limit coverage of telemedicine services to providers in a telemedicine network approved by the carrier (currently in place for chapter 175 plans).

### Analysis

Only item E in the above list contributes to the potential impact of H.B. 267 on premiums. Items A and C still allow carriers to control which services are allowable via telemedicine and by which technologies; item B does not affect costs significantly; and carriers already abide by item D for all license types. Item F on its own might have the potential to generate new utilization (as opposed to just shifting it between in-person and telemedicine delivery), but the combination of items E and F are just as likely to induce carriers to slow down expansion of telemedicine that might otherwise occur. These interpretations are addressed in more detail in Section 2 of the main body of the report. Compass estimated the impact of H.B. 267 on carrier medical expense by analyzing the impact of item E as follows:

- The total projected cost of telemedicine services in expansions of provider networks projected to result from passage of the bill
- Costs associated with the elimination of discounts that have been or may be applied to telemedicine service reimbursement
- Costs stemming from shifts to telemedicine services provided by carriers' regular provider networks from vendors specializing in telemedicine (also referred to as "telemedicine-only" vendors)

Compass then aggregated these components and projected them forward over the next five years (2017 to 2021) for the fully-insured Massachusetts population under age 65, forecasting the growth

of utilization for telemedicine services as well as medical inflation, and adding carrier retention (administrative cost and profit) to arrive at an estimate of the bill's effect on premiums.

This analysis relies on estimates of the discounted rate applied by some carriers to services delivered via telemedicine, the growth in utilization of telemedicine services, and the proportion of services provided by vendors specializing in telemedicine versus carriers' regular networks. These uncertainties are addressed by modeling a range of assumptions within reasonable judgment-based limits, and producing a range of incremental impact estimates based on varying these parameters.

### Summary results

Table ES-1 summarizes the estimated effect of H.B. 267 on premiums for fully-insured plans over five years. This analysis estimates that the health benefit plan mandate, if enacted as drafted, would increase fully-insured premiums by as much as 0.002 percent on average over the next five years; a more likely result is that the bill's incremental impact will be too small to measure with any precision.

The magnitude of the estimate is small, affected by the very small base of telemedicine services evident in recent claim data and because the only provision of the bill contributing to carrier cost only limits the availability of a discount on provider fees – a relatively small percentage. Also affecting the cost are the estimates of growth in utilization of telemedicine services, estimates of discounts that may be applied by insurance carriers to telemedicine services (paying less for telemedicine services than they would pay for in-person services from the same provider), and the proportion of services provided by telemedicine-only vendors (compared to telemedicine services provided within a carrier's regular provider network). The uncertainty in several assumptions driving the estimate leads to a proportionately large range of values for the potential increase to premiums; however the absolute magnitude of even the high-level estimate is very small.

Finally, the impact of the bill on any one individual, employer-group, or carrier may vary from the overall results depending on the current level of benefits each receives or provides and on how those benefits would change under the proposed mandate.

**Table ES-1:  
Summary Results**

	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Weighted Average</b>	<b>5 Yr Total</b>
Members (000s)	2,159	2,156	2,154	2,150	2,146		
Medical Expense Low (\$000s)	\$2	\$3	\$3	\$4	\$4	\$3	\$15
Medical Expense Mid (\$000s)	\$14	\$27	\$38	\$53	\$74	\$44	\$206
Medical Expense High (\$000s)	\$38	\$98	\$178	\$323	\$587	\$260	\$1,225
Premium Low (\$000s)	\$2	\$3	\$3	\$4	\$5	\$4	\$17
Premium Mid (\$000s)	\$16	\$31	\$43	\$60	\$83	\$49	\$232
Premium High (\$000s)	\$43	\$110	\$200	\$363	\$660	\$292	\$1,376
PMPM Low	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PMPM Mid	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PMPM High	\$0.00	\$0.00	\$0.01	\$0.01	\$0.03	\$0.01	\$0.01
Estimated Monthly Premium	\$463	\$473	\$483	\$493	\$503	\$483	\$483
Premium % Rise Low	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Premium % Rise Mid	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
Premium % Rise High	0.001%	0.001%	0.002%	0.003%	0.005%	0.002%	0.002%

## Executive Summary Endnotes

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<sup>i</sup> The 189<sup>th</sup> General Court of the Commonwealth of Massachusetts, House Bill 267, “An Act advancing and expanding access to telemedicine services.” Accessed 6 May 2016:

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<sup>ii</sup> M.G.L. c.175 §47BB.

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<sup>iv</sup> American Telemedicine Association (ATA). What Is Telemedicine? Accessed 9 March 2016:

[http://www.americantelemed.org/about-telemedicine/what-is-telemedicine#.VuBh1\\_krLIV](http://www.americantelemed.org/about-telemedicine/what-is-telemedicine#.VuBh1_krLIV).



# **Actuarial Assessment of House Bill 267 Submitted to the 189<sup>th</sup> General Court: “An Act advancing and expanding access to telemedicine services”**

## **1. Introduction**

Massachusetts House Bill (H.B.) 267,<sup>1</sup> as submitted in the 189<sup>th</sup> General Court, would replace the current statute governing how some health insurance plans cover telemedicine services and expand the new terms to include additional insurance carriers.<sup>2</sup> The bill would replace the current statutory definition of telemedicine and amend licensure and credentialing statutes directed at telemedicine.<sup>3</sup> It would eliminate language in the current statute that allows carriers to limit coverage of telemedicine services to providers in a carrier’s telemedicine network.<sup>4</sup>

Massachusetts General Law (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. (Compass) to provide an actuarial estimate of the effect enactment of the bill would have on the cost of health insurance in Massachusetts.

Assessing the impact of the proposed health benefit plan 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 H.B. 267**

### **2.1. Telemedicine**

According to the American Telemedicine Association (ATA), telemedicine is “the use of medical information exchanged from one site to another via electronic communications to improve a patient’s clinical health status.”<sup>5</sup> Telemedicine is not a distinct medical specialty or a particular service, but is instead the use of interactive telecommunication technologies to deliver a variety of healthcare services to diagnose or treat many different diseases and conditions.

The use of telemedicine continues to grow, through both the expansion of the technology to new services and additional patient-clinician encounters. Many studies and reviews have found the use of telemedicine effective for a variety of conditions and situations, but researchers caution that the

evidence itself may be limited, inconsistent, and sometimes contradictory, prompting the need for more rigorous and expansive studies before broad conclusions may be drawn. With its growth, numerous legal and regulatory considerations have surfaced, including issues related to licensing, prescriptive ability, and credentialing. In response, evidenced-based guidelines, model policies, and federal and state laws continue to evolve to manage the use of telemedicine to streamline provision of services and assure quality.

## 2.2. Provisions of the proposed health benefit plan mandate

The current Massachusetts statute related to insurance coverage for telemedicine applies only to policies regulated by Chapter 175, which governs accident and sickness policies. It requires insurance plans operating under Chapter 175 that cover telemedicine services to do so under terms consistent with coverage for in-person consultations. It allows carriers to limit coverage to providers in a telemedicine network approved by the carrier.

H.B. 267 would apply to the additional types of commercial fully-insured plans, and affects delivery of services via telemedicine in several ways through provisions related to:

- A. Definition of appropriate telemedicine services and technology
- B. Inter-state licensure and credentialing
- C. Elimination of in-person contact and service setting requirements
- D. Equivalent coverage and cost-sharing
- E. Equivalent provider reimbursement rates for in-person and telemedicine services (“Equivalent Rates”)
- F. Telemedicine network control (“Common Network”)

The following paragraphs outline the provisions in more detail.

### A. Definition of appropriate telemedicine services and technology

M.G.L. Chapter 175 §47BB currently defines telemedicine as the use of interactive audio, video, or other electronic media for diagnosis, consultation, or treatment, and does not include audio-only telephone, facsimile machine, or email. H.B. 267 changes this existing definition to “the use of interactive audio, video or other electronic media for the purpose of diagnosis, consultation or treatment” deleting the statute’s explicit exclusion of audio-only telephone, facsimile machine, or email. To a request for more information about this change, the sponsors responded:

There is nothing in HB267 that is seeking to remove or prohibit a health carrier (private or public) from denying a claim that an inappropriate online media or communication system was utilized and therefore a claim is denied. It is clear that any services or delivery of services must be done through a contract and agreement with the provider. The intention of HB267, by more broadly defining telemedicine, was to ensure that innovative technologies are being considered and utilized as part of the recognized contracted set of services or delivery of services. It is not our intention to permit audio-only telephone, facsimile machine, online questionnaires or text-only e-mail to be considered as reimbursable telemedicine services. However, it is clear to us that pace of innovation in communications technology is far exceeding the ability of regulations to keep pace with the various beneficial technologies that can now be utilized.<sup>6</sup>

So, while the bill does not preclude use of the technologies currently prohibited, it still allows carriers to manage for which services providers may use telemedicine and via which technologies. The bill does not require carriers to reimburse providers for activities for which they currently do not pay, for example, appointment setting or test result review. Given this interpretation, these provisions will not affect the cost estimate of this bill.

#### B. Inter-state licensure and credentialing

The proposed mandate as drafted directs the Department of Public Health to amend licensure regulations to make licensing and credentialing rules consistent with federal regulations. It directs the Board of Registration in Medicine (the Board) to promulgate regulations to allow physicians to practice telemedicine between different states. Since the practice of medicine occurs where the patient is physically located at the time of the telemedicine encounter,<sup>7</sup> physicians are required to have a license to practice medicine in Massachusetts when providing services to a patient located in Massachusetts, with limited exceptions for peer-to-peer consultation between a Massachusetts-licensed physician and a physician licensed in a different state. Input from the bill's sponsor indicates that the inter-state licensing provisions will be excised from the bill. (See Appendix A.) Since, regardless of that potential modification, the bill's intent was to require Massachusetts licensure for any provider serving Massachusetts patients, this does not affect the cost estimate.

H.B. 267 also directs the Board and the Division of Professional Licensure within the Department of Health to promulgate and amend regulations allowing for a system of credentialing and privileging healthcare providers that provide for either a written agreement or the proxy credentialing and privileging for telemedicine services. (Credentialing is the process of obtaining, verifying, and assessing the qualifications of a licensed medical provider to deliver health care or services in or for a health care organization.<sup>8</sup>) This provision is related to the procedural requirements involved in the credentialing processes, and therefore does not affect the cost estimate of the bill.

#### C. Elimination of in-person contact and service setting requirements

The bill provides that in-person contact between a provider and patient shall not be required for "services appropriately provided through telemedicine," nor shall documentation of barriers to in-person service delivery. Moreover, the bill prohibits limitations on "the type of setting where services are provided for the patient or by the healthcare provider." These provisions prevent carriers from imposing restrictions – restrictions on service setting, requirements for in-person contact, or requirements for justifying non-in-person delivery – on reimbursement for services delivered via telemedicine. But they do not eliminate carriers' discretion about which services are appropriately delivered via telemedicine and, as noted above, the sponsors' intent is that a carrier may still deny payment for a claimed service in which an inappropriate online media or communication system was used; therefore, this provision does not affect the cost estimate materially.

#### D. Equivalent coverage and cost-sharing

The bill requires that coverage and cost sharing for telemedicine services be the same whether the services are provided in-person or through telemedicine. This means that carriers may not impose less favorable benefit limitations for coverage of services provided through telemedicine, such as ones related to prior authorization, utilization review, visit limits, in- and out-of-network definitions, deductibles, co-payments, or co-insurance rates. These provisions are currently in place for accident and sickness policies governed by Chapter 175, and currently all carriers under all license types comply with them. They will therefore not impact the cost estimates of the bill.

#### E. Equivalent Rates

The bill requires carriers to reimburse a provider at the same rate for a given service whether that service is delivered in-person or through telemedicine, when both are appropriate means of delivery. For example, Dr. X must receive the same payment for a consultation, whether it is provided to a patient in her office or to a patient in his home via a videoconference. The mandate does not require that reimbursement for a given service must be the same across all providers. Most, but not all, carriers currently comply with this requirement; the bill would impact some carriers' reimbursement structures, and further prohibits carriers from discounting telemedicine services in the future. Therefore, this provision will result in some increased costs, described in detail in Sections 3 and 4.

#### F. Common Network

The bill eliminates a carrier's ability – currently in place for Chapter 175 plans<sup>9</sup> – to limit coverage for telemedicine services to providers in a telemedicine network approved by the carrier. According to responses from the bill's sponsors to questions about the draft, this means that if a carrier determines that a given service may be appropriately delivered via telemedicine, then any provider contracted and credentialed to deliver that service in-person under the patient's insured coverage may deliver that service via telemedicine, using a technology channel deemed appropriate by the carrier, and be reimbursed by the carrier.

For example, Dr. K is contracted to provide diabetes education services within a carrier's network. The carrier has determined that these services may be appropriately provided via telemedicine, specifically by video conference between a patient and provider. Therefore, if Dr. K and his patient have access to video conferencing, Dr. K may deliver diabetes education to his patient, and must be reimbursed by the carrier for this encounter. In other words, if a provider is contracted to provide a specific service within a carrier's network, and if that service has been determined to be appropriately delivered via telemedicine by the carrier, then the carrier must reimburse the provider for those services whether delivered in-person or via telemedicine.

To the extent carriers currently restrict provision of telemedicine services to a limited set of providers, or might do so in the future, this provision would appear to have the potential to increase carrier medical expense. But further examination makes clear that it has no effect

independent of the rate equivalence provision discussed immediately above under item E. Any impact on costs would occur through one of two channels:

- First, there might be shifts in utilization from the in-person setting to telemedicine for any given provider as the existing in-person networks became eligible to provide telemedicine services. However, owing to the rate equivalence requirement, such shifts would have no cost impact.
- Second, the increased availability of telemedicine services might encourage incremental utilization owing to its added convenience. Aside from the difficulty of predicting the size of any such utilization growth, any potential effect would be offset by the tendency of carriers to limit approvals of services and communication technologies allowed for telemedicine (powers still allowed by the bill's language) in response to the rate equivalence and common network features of the bill, and thereby dampen growth that might otherwise occur without the bill.

The relative sizes of these offsetting effects are unknown; as discussed in the body of the report, we have assumed very large rates of growth in telemedicine services, effectively assuming the first effect outweighs the second.

### Summary

This analysis interprets H.B. 267 to have only one provision that will materially affect carrier costs, i.e., item E above: equivalent rates for telemedicine and corresponding in-person services. For convenience, below we refer to item E as “Equivalent Rates.”

This analysis assumes terms of the health benefit plan mandate, if enacted, will be effective January 1, 2017.

### **2.3. Plans affected by the proposed mandate**

The bill amends statutes that regulate health care insurance carriers in Massachusetts. The bill as drafted, unlike most benefit mandate legislation, does not address fully-insured commercial plans by amending directly the statute chapters that govern the standard forms of insurance license (indemnity plans, hospital service corporations, medical service corporations, and HMOs, under M.G.L. chapters 175, 176A, 176B, and 176G, respectively). Instead it amends M.G.L. c. 175, the chapter addressing indemnity plans, and addresses a broader set of carriers defined as such in Chapter 1760 (“Health insurance Consumer Protections”). Regardless, in response to questions about which carriers should be subject to the proposed mandate, the bill’s sponsors indicated it should apply to the full set of fully-insured plans and to plans sponsored by the Group Insurance Commission (GIC) for the benefit of state and local employees and their dependents, reaching both its fully- and self-insured plans.

The bill requires coverage for members covered under health plans issued by relevant Massachusetts-licensed carriers regardless of whether the members reside within the Commonwealth or merely have their principal place of employment in the Commonwealth. Health

benefit plan mandates do not apply to plans that cover Massachusetts residents but are issued in other states.

Self-insured plans, except for those managed by the GIC when the mandate specifically addresses them, are not subject to state-level health benefit plan mandates. State mandates do not apply to Medicare or Medicare Advantage plans, the benefits of which are qualified by Medicare. This analysis excludes members of fully-insured commercial plans over 64 years of age (although their coverage could potentially be affected by the mandate) and does not address any potential effect on Medicare supplement plans even to the extent they are regulated by state law. Section 3 of the bill affects Medicaid and related programs managed by the Division of Medical Assistance. While the bill might affect such spending, depending on current coverage, this analysis does not include any impact on MassHealth expenditures.

## 2.4. Existing laws affecting the cost of H.B. 267

This analysis must estimate the incremental effect of H.B. 267, given existing statutes. As noted, current Massachusetts statutes governing coverage for telemedicine services apply only to plans regulated by Chapter 175, which governs accident and sickness policies. No current federal health benefit plan mandates related to the specific subject matter of this bill have been identified.

## 2.5. Current coverage

The incremental impact of the bill on premiums depends on its provisions relative to current law discussed above and on what carriers currently do voluntarily; to the extent carriers already comply with the provisions, the bill has no incremental effect. Neither the current statute nor the proposed mandate requires coverage for telemedicine services, but the current statute directs that any such coverage must be consistent with coverage for services provided in-person. In a survey of the largest insurance carriers in Massachusetts, all responded that they currently cover telemedicine for a variety of conditions and services, and that equivalent coverage and cost-sharing terms currently apply.

Based on responses to a survey of Massachusetts carriers on their current coverage, the rate equivalence provision of the bill that has the potential to impact premiums would in fact do so. While most fully-insured plans reimburse a given provider equivalent rates for the same service regardless of delivery mode (in-person versus telemedicine), some do not. For those that do not, if a provider delivers a given service both in-person and via telemedicine, that provider is reimbursed at a lower rate for telemedicine delivery. The bill would eliminate the ability to vary payment in this way, and so would have a cost impact for carriers currently doing so (and for those who intend to do so in the future).

As discussed above, the common network provision of the bill does not have measureable cost impacts independent of the rate equivalence provision, but it is informative to know that in the survey, carriers indicated they contract with providers within their network to provide specific services via telemedicine through telemedicine agreements, contract with separate telemedicine service vendors (vendors specializing in telemedicine), and/or allow any network

provider with the required infrastructure to perform covered telemedicine services. In these ways, carriers have managed the expansion of telemedicine services by controlling which providers may deliver which services via which technology platforms. The bill will allow carriers to control the degree to which telemedicine expands by retaining the ability to negotiate the types of services appropriately delivered via telemedicine, as well as the technology channels appropriate for those services. However, according to the sponsors, it eliminates the carrier's ability to limit which providers may deliver services via telemedicine.

## 3. Methodology

### 3.1. Overview

To estimate H.B. 267's impact on premiums, the future baseline without the bill must first be projected. This projection should reflect the growth of telemedicine service delivery based on existing trends.

As discussed in Section 2.2., the impact of the bill on premiums stems from the provision that reimbursement rates must be the same for a given provider and service whether delivered in-person or via telemedicine. This analysis assumes that in the absence of this mandate, carriers, including those already doing so, would attempt to impose a discounted rate on services delivered via telemedicine compared to those delivered in-person. The marginal cost of the mandate, therefore, is the total cost of this discount that would have otherwise been in effect for an expanded volume of telemedicine services.

Estimating this payment adjustment, and accounting for carrier retention, results in a baseline estimate of the proposed mandate's incremental effect on premiums, which is then projected over the five years following the assumed January 1, 2017 implementation date of the law.

### 3.2. Data sources

The primary data sources used in the analysis were:

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



### 3.3. Steps in the analysis

Compass estimated the impact of H.B. 267 by performing the following steps:

1. *Calculate a baseline of telemedicine service costs in 2014*
  - Summarize current coverage for telemedicine based on the carrier survey.
  - Construct a historical baseline profile of telemedicine services from claims using the MA-APCD, broken into allowed and paid amounts, utilization, and average unit cost by provider by service (procedure).
  - Adjust any payments for telemedicine services upwards to the “in-person” reimbursement level for those claims to which a discount was applied.
2. *Project the growth of telemedicine service costs over the expected future expansion of the telemedicine provider network*
  - Estimate growth in utilization of telemedicine services and projected unit cost increases for reimbursement of these services over the projection period.
  - Project the total allowed cost for telemedicine services over the study period.
  - Calculate the allowed-to-paid ratio for telemedicine, and multiply the allowed projected telemedicine cost by the allowed-to-paid ratio to determine the projected paid telemedicine cost.
3. *Estimate the proportion of this future spending delivered by dedicated telemedicine providers/networks vs. the proportion delivered by the traditional in-person network providing telemedicine as an additional method of service delivery*
  - Note that under the proposed mandate, contract terms negotiated between a carrier and a provider continue to control reimbursement rates. Thus, services performed by a vendor that provides only telemedicine would require no change in contracted reimbursement rates as a result of the passage of the bill.
4. *Estimate current and future discounts applied to telemedicine services in the traditional in-person network in the absence of this mandate, the sum of which represents the incremental cost of requiring equivalent rates for telemedicine services*
  - Estimate the average discount rate that carriers would use for telemedicine services in the absence of the mandate.
  - Estimate savings a carrier may have realized by discounting telemedicine service reimbursement rates to their regular provider network in the absence of the mandate.
  - Calculate the per-member-per-month marginal medical cost of applying equivalent rates to telemedicine services delivered within a carrier’s regular provider network.
5. *Calculate the impact on insurance premiums of projected spending*
  - Estimate the impact of carrier retention (administrative costs and profit) on premiums.



- Estimate the fully-insured Massachusetts population under age 65, projected for the next five years (2017 to 2021).
- Project the estimated cost over the next five years.

The calculations and results for these steps are presented in detail in Section 4 below.

### 3.4. Limitations

While estimating costs using data in the MA-APCD is conceptually straightforward, the source has limitations and this analysis requires additional assumptions that generate uncertainty, including the following:

- Using the MA-APCD to estimate the volume of services relies on information from carriers about how to identify such claims. To the extent carrier claim processing allowed (in 2014) claims for what are in actuality telemedicine services to be paid without correct identification as such, the analysis will underestimate telemedicine volume.
- The analysis relies on estimates of the number of services provided via telemedicine over the next five years; published reports vary widely on how quickly telemedicine will grow, and how widely these technologies will be adopted for various clinical services. We have used these ranges of estimates to produce the ranges presented in this report.
- The model includes an estimate of the discount currently applied to some claims for telemedicine services, and one that would be applied to telemedicine services in the absence of this mandate; these are based on limited data in the MA-APCD claims.
- Likewise included is an estimate of the proportion of services provided by vendors who deliver services only through telemedicine technologies, which is also subject to uncertainty in the future.

These uncertainties are addressed by modeling a range of assumptions within reasonable judgment-based limits, and producing a variety of estimates of incremental cost by varying these parameters. The more detailed step-by-step description of the estimation process outlined in the next sections addresses these uncertainties further. Nonetheless, even with high-level assumptions that allow for tremendous growth in telemedicine volume, the estimated incremental effect of the bill on premiums is small.

## 4. Analysis

This section describes the calculations outlined in the previous section in more detail. The analysis includes development of a best estimate “middle-cost” scenario, as well as a low-cost scenario using assumptions that produced a lower estimate, and a high-cost scenario using more conservative assumptions that produced a higher estimated impact. The marginal cost of the new mandate is driven by the requirement for equivalent rates for telemedicine services (item E discussed in Section 2).

The following sub sections describe the steps outlined in Section 3.3 in detail and outline the calculations used to develop the marginal cost estimate.

#### 4.1. Baseline cost of telemedicine services

According to a survey of large commercial insurance carriers in Massachusetts, all currently cover delivery of services via telemedicine for some conditions under various circumstances. Based on sponsor input regarding the intent of the mandate, H.B. 267 eliminates a carrier’s ability to limit coverage of telemedicine service to specific providers. Instead, if a service has been determined to be appropriately delivered via telemedicine, then telemedicine service coverage must be expanded to reimburse any provider contracted and credentialed in a carrier’s network to provide those services in-person, assuming the provider uses the appropriate technology.

A baseline was measured summing the allowed amount for all claims for 2014 services in the MA-APCD delivered via telemedicine; it equaled \$ 54,223. In an analysis of 2014 claims in the MA-APCD for services for which there was any reimbursement for telemedicine provision of care, approximately 0.01 percent of services were delivered via telemedicine rather than through in-person means.

H.B. 267 would require that for the same provider and the same service, reimbursement must be equivalent whether delivered in-person or via telemedicine (equivalent rates). Currently, however, some telemedicine claims are reimbursed at a rate lower than for the same service delivered by the same provider in-person (differential rate). Claims paid at a differential rate were a subset of the total; the allowed amounts on those claims totaled \$23,984. Table 1 shows the baseline allowed claim amounts for claims with equivalent and differential rates.

**Table 1:  
2014 Baseline Telemedicine Allowed Amounts**

	Equivalent Rate	Differential Rate	Total
Telemedicine Services	\$30,239	\$23,984	\$54,223

The allowed amount for claims at a differential rate was compared to the allowed amount for the corresponding in-person claims and was found to be approximately 15 percent lower. Therefore, the allowed amount for these claims is increased to reflect equivalent reimbursement, adjusting this portion of the baseline to \$28,216. Table 2 displays the total allowed amount for telemedicine service claims that include this adjustment.

**Table 2:  
2014 Adjusted Baseline Telemedicine Allowed Amounts**

	Equivalent Rate	Adjusted Differential Rate	Total
Telemedicine Services	\$30,239	\$28,216	\$58,456

## 4.2. Growth of telemedicine services

The cost of telemedicine services is predicted to increase at rapid growth rates over time from the current very small base, both as utilization is predicted to grow with additional providers and patients, and as the overall unit costs of healthcare rise. Published estimates of this expected growth vary widely, reflected in the low-, mid-, and high-scenarios outlined in Table 3 which displays the estimated increase in percent of services delivered via telemedicine from the baseline year until the end of the study period in 2021.<sup>10,11,12,13,14,15,16</sup> To capture any incentive the bill may create to encourage providers to deliver more telemedicine services, the scenarios draw on the larger estimated growth rates we found in published reports.<sup>i</sup> Regardless of the rate of growth, all growth rates are applied to the very small levels of current utilization displayed in Table 1.

**Table 3:  
Estimated Growth of Telemedicine Services**

	2015	2016	2017	2018	2019	2020	2021
Low Scenario	82%	82%	18%	18%	18%	18%	18%
Mid Scenario	82%	82%	40%	40%	40%	40%	40%
High Scenario	82%	82%	82%	82%	82%	82%	82%

These growth rates are applied to the 2014 baseline claim amount of \$58,456 for telemedicine services to project this total across the projection period. Table 4 shows the results.

**Table 4:  
Estimated Allowed Amounts for Telemedicine Services**

	2017	2018	2019	2020	2021
Low Scenario	\$228,481	\$269,608	\$318,137	\$375,402	\$442,975
Mid Scenario	\$271,080	\$379,511	\$531,316	\$743,842	\$1,041,379
High Scenario	\$352,403	\$641,374	\$1,167,301	\$2,124,488	\$3,866,568

These figures are based on allowed amounts in the MA-APCD, which includes all cost-sharing required of patients. To estimate the amount a carrier actually pays to a provider, a factor of 78.6 percent is applied, based on the ratio of paid to allowed amounts calculated from the MA-APCD for these claims. Table 5 shows the results of this adjustment.

**Table 5:  
Estimated Paid Amounts for Telemedicine Services**

	2017	2018	2019	2020	2021
Low Scenario	\$179,540	\$211,857	\$249,992	\$294,990	\$348,088
Mid Scenario	\$213,014	\$298,219	\$417,507	\$584,509	\$818,313
High Scenario	\$276,918	\$503,990	\$917,262	\$1,669,417	\$3,038,340

<sup>i</sup> As noted above, the bill may also lead to more restrictions being placed by carriers on telemedicine services and communication technologies than may have occurred without the bill; we assume for balance the incentive to increase service provision is larger.

### 4.3. Estimate of telemedicine claims paid within the carrier’s regular network

H.B. 267 requires that reimbursement for the same service to the same provider be equivalent regardless of delivery method (equivalent rate). For some services delivered via telemedicine, a carrier may contract with a “telemedicine vendor”; such a firm might specialize in telemedicine delivery – it provides no in-person service. In this analysis the amounts paid to these vendors require no adjustment to account for in-person and telemedicine reimbursement differences. Currently five of the top ten carriers in Massachusetts, representing 73 percent of fully-insured membership, have a telemedicine vendor, and an additional carrier, representing another 2 percent, is considering such a vendor.

Apart from services paid to these vendors, the remainder of telemedicine services is assumed to be provided within the carrier’s regular network by providers who deliver services both in-person and via telemedicine, for which reimbursement rates must be equivalent. Table 6 shows the estimated portion of services for which carriers contract with a telemedicine-only vendor, as well as the remaining services provided via telemedicine but within their regular provider network. It is for these remaining services that H.B. 267 requires the adjustment to reimbursement described in Section 4.2 and generates the marginal cost.

**Table 6:  
Estimated Proportion of Telemedicine Services by Provider Type**

	Telemedicine Vendors	Other Providers
Low Scenario	80%	20%
Mid Scenario	50%	50%
High Scenario	20%	80%

Table 7 displays the portion of allowed dollars estimated in Table 4 for the carriers’ regular network. Table 8 displays the portion of paid dollars estimated in Table 5 for the carriers’ regular network.

**Table 7:  
Estimated Allowed Amounts for Regular Network Telemedicine Services**

	2017	2018	2019	2020	2021
Low Scenario	\$45,696	\$53,922	\$63,627	\$75,080	\$88,595
Mid Scenario	\$135,540	\$189,756	\$265,658	\$371,921	\$520,690
High Scenario	\$281,923	\$513,099	\$933,841	\$1,699,590	\$3,093,254

**Table 8:  
Estimated Paid Amounts for Regular Network Telemedicine Services**

	2017	2018	2019	2020	2021
Low Scenario	\$35,908	\$42,371	\$49,998	\$58,998	\$69,618
Mid Scenario	\$106,507	\$149,110	\$208,753	\$292,255	\$409,157
High Scenario	\$221,534	\$403,192	\$733,810	\$1,335,534	\$2,430,672

#### 4.4. Marginal cost of requiring equivalent rates

According to its sponsors, H.B. 267 will eliminate a carrier’s ability to restrict the providers who may deliver telemedicine services to those specifically contracted for telemedicine services. Instead, for those services determined to be appropriately delivered via telemedicine, providers contracted and credentialed in a carrier’s network to deliver such services in-person and who use appropriate technology, must be reimbursed for providing these services via telemedicine. This analysis assumes carriers, in the absence of the mandate, would discount telemedicine services, and estimates various scenarios for these discounts as displayed in Table 9.

**Table 9:  
Estimated Discounts Applied to Telemedicine Services**

	Discount
Low Scenario	5%
Mid Scenario	15%
High Scenario	20%

H.B. 267 requires, though, that payment to a provider for its services must be equivalent whether delivered in-person or via telemedicine. Elimination of these discounts is a consequence of the mandate, and constitutes its marginal cost. Table 10 applies these estimated discounts to the projected paid costs of telemedicine services from the carriers’ regular networks across the study period (from Table 8).

**Table 10:  
Estimated Paid Telemedicine Discounts Not Provided by Vendor**

	2017	2018	2019	2020	2021
Low Scenario	\$1,795	\$2,119	\$2,500	\$2,950	\$3,481
Mid Scenario	\$15,976	\$22,366	\$31,313	\$43,838	\$61,373
High Scenario	\$44,307	\$80,638	\$146,762	\$267,107	\$486,134

These totals represent a cost to carriers of implementing the mandate. They are then divided by the corresponding MA-APCD membership (for the same insured population for whom the baseline claims were measured) to arrive at an initial per-member-per-month (PMPM) estimate of the cost of requiring equivalent payment to network providers for services paid when delivered via telemedicine. (See Table 11.)

**Table 11:  
Estimated Marginal Per-Member-Per-Month Medical Cost for Telemedicine Services**

	2017	2018	2019	2020	2021
Low Scenario	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Mid Scenario	\$0.001	\$0.001	\$0.001	\$0.002	\$0.003
High Scenario	\$0.002	\$0.004	\$0.007	\$0.013	\$0.023

## 4.5. Carrier retention and increase in premium

Assuming an average annual retention rate of 11.0 percent based on CHIA's analysis of administrative costs and profit in Massachusetts,<sup>17</sup> the increase in medical expense was adjusted upward to approximate the total impact on premiums. Table 12 shows the result.

**Table 12:  
Estimated Marginal Per-Member-Per-Month Premium for Telemedicine Services**

	2017	2018	2019	2020	2021
Low Scenario	\$0.000	\$0.000	\$0.000	\$0.000	\$0.000
Mid Scenario	\$0.001	\$0.001	\$0.002	\$0.002	\$0.003
High Scenario	\$0.002	\$0.004	\$0.008	\$0.014	\$0.026

## 4.6. Total increase in medical expense and premium

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

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

Year	Total (0-64)
2017	2,158,712
2018	2,156,403
2019	2,153,622
2020	2,149,554
2021	2,145,579

Multiplying the estimated PMPM medical expense (Table 11) by the projected fully-insured membership over the analysis period results in the total medical expense due to the mandate, shown in Table 14. This analysis assumes the bill, if enacted, would be effective January 1, 2017.<sup>ii</sup>

**Table 14:  
Estimated Marginal Medical Cost of Telemedicine Expansion Mandate**

	2017	2018	2019	2020	2021
Low Scenario	\$1,556	\$2,572	\$3,031	\$3,570	\$4,205
Mid Scenario	\$13,845	\$27,155	\$37,968	\$53,056	\$74,140
High Scenario	\$38,396	\$97,904	\$177,956	\$323,268	\$587,260

<sup>ii</sup> The analysis assumes the mandate would be effective for policies issued and renewed on or after January 1, 2017. Based on an assumed renewal distribution by month, by market segment, and by the Massachusetts market segment composition, 71.3 percent of the member months exposed in 2017 will have the proposed mandate coverage in effect during calendar year 2017. The annual dollar impact of the mandate in 2017 was estimated using the fully estimated PMPM and applying it to 71.3 percent of the member months exposed.

Multiplying the estimated increase in PMPM premium (Table 12) by the projected fully-insured membership over the analysis period yields the total premium increase, including retention, due to the mandate, shown in Table 15. This analysis assumes the bill, if enacted, would be effective January 1, 2017.

**Table 15:  
Estimate of Increase in Carrier Premium**

	2017	2018	2019	2020	2021
Low Scenario	\$1,748	\$2,889	\$3,405	\$4,011	\$4,724
Mid Scenario	\$15,553	\$30,505	\$42,652	\$59,600	\$83,286
High Scenario	\$43,132	\$109,982	\$199,908	\$363,146	\$659,703

## 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 analysis rests primarily on estimates of the growth of telemedicine services to include an expanded network of providers, and the requirement for payment of equivalent rates to those providers for the same services regardless of whether they are delivered in-person or via telemedicine. The magnitude of the estimate is affected by the estimates of growth in utilization of telemedicine services, by estimates of discounts that may be applied by carriers to telemedicine services (paying less for telemedicine services than they would pay for in-person services by the same provider), and by the proportion of services provided by the traditional in-person provider networks (as opposed to dedicated telemedicine-only providers). The uncertainty in several assumptions driving the estimate leads to a proportionately large range of values for the potential increase to premiums; however the absolute magnitude of even the high-level estimate is very small.

As discussed in Section 2, the bill contains several other provisions affecting delivery of telemedicine services, and for reasons discussed there, these provisions are assumed not to have cost impacts for carriers.

### 5.1. Five-year estimated impact

For each year in the five-year analysis period, Table 16 displays the projected net impact of the mandate on medical expense and premiums using a projection of Massachusetts fully-insured membership. Note the relevant provisions of H.B. 267 are assumed effective January 1, 2017.

Using the calculations from Section 4, the low scenario impact on premiums is \$4000 per year on average. Given the margin of error in the assumptions in this analysis, a result of this magnitude is

indistinguishable from one of zero. It results from the lower estimates of the growth of utilization of telemedicine services, the discount applied to services delivered via telemedicine, and the portion of services provided by a specialized telemedicine vendor. Even the middle scenario has average annual costs of \$49 thousand, which when expressed as a percent of premium, amounts to 0.000 percent. The high scenario has an average cost of \$292 thousand per year.

While the expansion of telemedicine services might appear to be significantly accelerated by the “common network” requirement of this bill (see Section 2), this expansionary potential is offset to some extent by the following factors:

- Any degree to which this expansion simply displaces in-person services has no additional cost effect given the impact of the “equivalent rates” feature of the bill.
- To have cost impact, utilization increases would need to be for service events (added consultation calls, etc.) that would not have taken place at all in the absence of the bill.
- Any such utilization increases would tend to be offset by a dampening of carrier enthusiasm (relative to a future in which the bill’s provisions did not apply) for expanding telemedicine services and technologies in the face of the common network and equivalent rate requirements of the bill.

Given this last issue, despite the fact that telemedicine-discouraging incentives of the bill may have a bigger effect than any cost-increasing incentives, to produce a conservative estimate, we have assumed the cost-increasing incentives are larger.

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

**Table 16: Summary Results**

	2017	2018	2019	2020	2021	Weighted Average	5 Yr Total
Members (000s)	2,159	2,156	2,154	2,150	2,146		
Medical Expense Low (\$000s)	\$2	\$3	\$3	\$4	\$4	\$3	\$15
Medical Expense Mid (\$000s)	\$14	\$27	\$38	\$53	\$74	\$44	\$206
Medical Expense High (\$000s)	\$38	\$98	\$178	\$323	\$587	\$260	\$1,225
Premium Low (\$000s)	\$2	\$3	\$3	\$4	\$5	\$4	\$17
Premium Mid (\$000s)	\$16	\$31	\$43	\$60	\$83	\$49	\$232
Premium High (\$000s)	\$43	\$110	\$200	\$363	\$660	\$292	\$1,376
PMPM Low	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PMPM Mid	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
PMPM High	\$0.00	\$0.00	\$0.01	\$0.01	\$0.03	\$0.01	\$0.01
Estimated Monthly Premium	\$463	\$473	\$483	\$493	\$503	\$483	\$483
Premium % Rise Low	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Premium % Rise Mid	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%
Premium % Rise High	0.001%	0.001%	0.002%	0.003%	0.005%	0.002%	0.002%

Starting in 2020, the federal Affordable Care Act will impose an excise tax, commonly known as the “Cadillac Tax”, on expenditures on health insurance premiums and other relevant items (health



savings account contributions, etc.) that exceed specified thresholds. To the extent relevant expenditures exceed those thresholds (in 2020), H.B. 267, 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 H.B. 267, will exceed or approach the thresholds and is beyond the scope of this analysis.

## 5.2. Impact on the GIC

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

Because the benefit offerings of GIC plans are similar to those of most other commercial plans in Massachusetts, the estimated PMPM effect of the proposed mandate on GIC medical expense is not expected to differ from that calculated for the other fully-insured plans in Massachusetts. This is consistent with carrier survey responses which, in general, did not indicate differences in coverage for the GIC.

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

Table 17 breaks out the GIC-only fully-insured membership and the GIC self-insured membership, and the corresponding incremental medical expense and premium. Note that the total medical expense and premium values for the general fully-insured membership displayed in Table 16 also include the GIC fully-insured membership. Finally, the proposed mandate is assumed to require the GIC to implement the provisions on July 1, 2017; therefore, the results in 2017 are approximately one-half of an annual value.

**Table 17:  
GIC Summary Results**

	2017	2018	2019	2020	2021	Weighted Average	5 Yr Total
<b>GIC Fully-Insured</b>							
Members (000s)	54	54	54	54	54		
Medical Expense Low (\$000s)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Medical Expense Mid (\$000s)	\$0	\$1	\$1	\$1	\$2	\$1	\$5
Medical Expense High (\$000s)	\$1	\$2	\$4	\$8	\$15	\$7	\$30
Premium Low (\$000s)	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Premium Mid (\$000s)	\$0	\$1	\$1	\$1	\$2	\$1	\$6
Premium High (\$000s)	\$1	\$3	\$5	\$9	\$16	\$8	\$34
<b>GIC Self-Insured</b>							
Members (000s)	270	270	269	269	268		
Medical Expense Low (\$000s)	\$0	\$0	\$0	\$0	\$1	\$0	\$2
Medical Expense Mid (\$000s)	\$1	\$3	\$5	\$7	\$9	\$6	\$25
Medical Expense High (\$000s)	\$3	\$12	\$22	\$40	\$73	\$34	\$152

## Appendix A: Sponsor Responses to Questions Regarding H.B. 267

The following questions were submitted via email on April 29, 2016 by Compass to CHIA for transmission to the sponsor of H.B. 267, and the sponsor returned answers via email on May 17, 2016. Some questions refer to an earlier set of exploratory questions, answers to which this set clarified. To resolve any remaining ambiguities CHIA, based on conversations with the sponsor, instructed Compass to interpret the bill as allowing providers more latitude in initiating telemedicine services.

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Question #1: Your response notes that "The bill seeks to eliminate the provision that permits insurers to limit services to those providers within an insurer-approved telemedicine network... However... an insurer is always allowed to structure an agreement on how telemedicine is provided, in what form and manner, and by whom. We are not looking to interfere with those discussions and agreements between an insurer and a provider who uses telemedicine." We at Compass interpret this to mean that an insurer can choose what, if any, telemedicine services to include in its contract with a given provider, but if it does choose to contract with a provider for telemedicine services, then it can't limit reimbursement based on the lack of in-person contact or where the patient is located and must pay a rate for the telemedicine version of the service at least as high as that for the in-person version. Correct?

This is correct. In order to ensure equal access to all patients, any licensed provider (whether it is a solo practitioner or a large tertiary facility) should have the ability to contract with an insurer to provide services through telemedicine. To clarify, the services being provided via telemedicine should be no different than an in-person service and, therefore, the reimbursement rate should not be lower than the applicable in-person reimbursement rate for the service that the insurer is already contracting for with the provider to offer to their patients/subscribers. An insurer can always choose not to contract with a provider, but they should not have the ability to limit coverage of telemedicine services because the provider is not part of a defined telehealth network approved by the insurer, as is permitted under current law.

Question #2: Consider the scenario: Patient A receives telemedicine services from Provider X. Provider X is in Patient A's policy's network, but X is not contracted to provide telemedicine services. Would H.267 require the services to be covered? As we understand it, the answer is "no".

Your understanding is correct. Our goal is to allow providers, as part of the contracting process, to negotiate with the insurer such that if the insurer's policy covers the treatment services for an in-person visit and the provider is contracted with the insurer (through the policy) to provide in-person treatment services, then the services should also be covered by the insurer when they are provided via telemedicine. However, the insurer can always determine what type of services are covered and can further determine whether to allow such covered services to be provided through telemedicine. While not every service can be provided via telemedicine, under the current law, providers may specifically be precluded from providing services through telemedicine if they are not part of a telemedicine network approved by the insurer. HB267 would ensure that if a provider is permitted to be reimbursed for the provision of in-person services, then, the provider should have the ability to also contract to provide those services through telemedicine.

Question #3: Patient A receives telemedicine services from Provider Y. Provider Y is not in A's policy's network for any sort of service (the insurer has no contract with Y), but A's policy allows for some reimbursement when a patient goes to an out-of-network provider. The carrier would probably include in its benefit plan a rule that says "we will not pay for telemedicine services

outside of our network of providers (except possibly for emergencies)" Would the carrier be allowed to have that rule in its benefit plan? We would assume so, and so Patient A might not get reimbursed for these services. Is that correct?

Yes, that is correct. HB267 does not prohibit an insurer from setting restrictions on what services could be provided / paid for through telemedicine. HB267 does not mandate that the insurer must cover an in/out of network service. The insurer sets the coverage/payment based for services based on medical necessity or utilization review policies. To clarify your point above, Provider Y would not be reimbursed for an out-of-network service if there is no coverage for such an out-of-network service in the policy.

Question #4: H.267 allows physicians to practice telemedicine "between different states" through regulations promulgated through the Board of Registration in Medicine. Your comment said a telemedicine provider "already holds an active Massachusetts license to provide care and is operating within their scope of practice, including education, licensure, and certification with the appropriate Board." We interpret your comment to mean that even if the provider is not physically in Massachusetts she/he must be licensed to practice in Massachusetts. Correct? Do you anticipate the Board would extend some sort of Massachusetts licensure through an expedited state license, limited or telemedicine license, or some other means? Or would they require the existing full licensure?

That is correct. There was some confusion as to the intent of this section. We did not intend to permit providers other than fully licensed Massachusetts providers from practicing in Massachusetts. The bill did not intend to offer expedited, limited or specific telemedicine licenses for providers. Additionally, given the unwieldy nature of these provisions, the proponents of the bill have agreed that the licensing provision should be excised entirely. However, we continue to support the additional goal included the provisions in this same section of the bill that would streamline the credentialing and privileging processes between providers who are fully licensed in Massachusetts. In this way, facilities can do a streamlined credentialing between providers (similar to Medicare provisions) to eliminate the administrative work of a full credentialing review at each site of care.

## Appendix B: Membership Affected by the Proposed Mandate

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

The 2014 Massachusetts All Payer Claim Database (MA APCD) formed the base for the projections. The MA APCD provided fully-insured and self-insured membership by insurance carrier. The MA APCD was also used to estimate the number of non-residents covered by a Massachusetts policy. These are typically cases in which a non-resident works for a Massachusetts employer offering employer-sponsored coverage. Adjustments were made to the data for membership not in the MA APCD, based on published membership reports available from the Massachusetts Center for Health Information and Analysis (CHIA) and the Massachusetts Department of Insurance (DOI).

CHIA publishes a quarterly enrollment trends report and supporting databook (enrollment-trends-july-2016-databook<sup>18</sup>), which provides enrollment data for Massachusetts residents by insurance carrier for most carriers (some small carriers are excluded). CHIA uses supplemental information beyond the data in the MA APCD to develop their enrollment trends reports and provided Compass with details on where they used supplemental carrier information for their December 2014 reported enrollment. The supplemental data was used to adjust the resident totals from the MA APCD.

The DOI publishes a report titled Quarterly Report of Health Maintenance Organization Membership in Closed Network Health Plans as of December 31, 2014<sup>19</sup> and Massachusetts Division of Insurance Annual Report Membership in MEDICAL Insured Preferred Provider Plans by County as of December 31, 2014<sup>20</sup>. These reports provide fully-insured covered members for licensed Massachusetts insurers where the member's primary residence is in Massachusetts. The DOI reporting includes all insurance carriers and was used to supplement the MA APCD membership for small carriers not in the MA APCD.

The distribution of members by age and gender was estimated using MA APCD population distribution ratios and was checked for reasonableness and validated against the U.S. Census<sup>21</sup>. Membership was projected forward from the 2014 base year to 2015 using the American Community Survey<sup>22</sup>, and then from 2015 through 2021 using Census Bureau population growth rate estimates by age and gender<sup>23</sup>.

Projections for the GIC self-insured lives were developed using GIC base data for 2014,<sup>24</sup> and 2015,<sup>25</sup> and the same projected growth rates from the Census Bureau that were used for the Massachusetts population. Breakdowns of the GIC self-insured lives by gender and age were based on the Census Bureau distributions.

## Endnotes

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<sup>1</sup> The 189<sup>th</sup> General Court of the Commonwealth of Massachusetts, House Bill 267, “An Act advancing and expanding access to telemedicine services.” Accessed 6 May 2016: <https://malegislature.gov/Bills/189/House/H267>.

<sup>2</sup> M.G.L. c.175 §47BB.

<sup>3</sup> M.G.L. c.112 §2, c.118E §78.

<sup>4</sup> M.G.L. c.175 §47BB.

<sup>5</sup> American Telemedicine Association (ATA). What Is Telemedicine? Accessed 9 March 2016: [http://www.americantelemed.org/about-telemedicine/what-is-telemedicine#.VuBh1\\_krLIV](http://www.americantelemed.org/about-telemedicine/what-is-telemedicine#.VuBh1_krLIV).

<sup>6</sup> Response to questions submitted via CHIA to the sponsors of H.B. 267. Sponsor response received 15 April 2016.

<sup>7</sup> This is referred to as the “originating site” by Medicare and is defined as “the location of an eligible Medicare beneficiary at the time the service furnished via a telecommunications system occurs.” Department of Health and Human Services Centers for Medicare & Medicaid Services. Telehealth Services; Accessed 29 April 2016: <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/telehealthsrvcfsctsh.pdf>.

<sup>8</sup> The Joint Commission Accreditation: Ambulatory Care. Ambulatory Care Program: The Who, What, When, and Where’s of Credentialing and Privileging. Accessed 29 April 2016: [http://www.jointcommission.org/assets/1/6/AHC\\_who\\_what\\_when\\_and\\_where\\_credentialing\\_booklet.pdf](http://www.jointcommission.org/assets/1/6/AHC_who_what_when_and_where_credentialing_booklet.pdf).

<sup>9</sup> M.G.L. c.175 §47BB.

<sup>10</sup> IHS. Global Telehealth Market Set to Expand Tenfold by 2018. Press release 17 January 2014; accessed 12 May 2016: <http://press.ihs.com/press-release/design-supply-chain-media/global-telehealth-market-set-expand-tenfold-2018>.

<sup>11</sup> Drobac K. 2015: Another Unstoppable Year for Telehealth. Institute for Health Consumerism. Accessed 12 May 2016: [http://www.theihcc.com/en/communities/health\\_access\\_alternatives/2015-another-unstoppable-year-for-telehealth\\_i7gjbohl.html](http://www.theihcc.com/en/communities/health_access_alternatives/2015-another-unstoppable-year-for-telehealth_i7gjbohl.html).

<sup>12</sup> Mordor Intelligence. Global Telemedicine Market - Growth, Trends and Forecasts (2016-2021). Published March 2016; accessed 12 May 2016: <http://www.mordorintelligence.com/industry-reports/global-telemedicine-market-industry>.

<sup>13</sup> Hall SD. Rapid growth projected for global telemedicine market. Fierce Health IT. Published 20 May 2015; accessed 12 May 2016: <http://www.fiercehealthit.com/story/rapid-growth-projected-global-telemedicine-market/2015-05-20>.

<sup>14</sup> Comstock J. InMedica predicts six times as many US telehealth patients by 2017. MobiHealthNews. Published 14 February 2013; accessed 12 May 2016: <http://mobihealthnews.com/20322/inmedica-predicts-six-times-as-many-us-telehealth-patients-by-2017>.

<sup>15</sup> Monegain B. Telehealth in growth mode worldwide, Projected to reach 1.8 million patients by 2017. Healthcare IT News. Published 22 January 2013; accessed 12 May 2016: <http://www.healthcareitnews.com/news/telehealth-growth-mode-worldwide>.

<sup>16</sup> American Hospital Association. Trendwatch: The Promise of Telehealth For Hospitals, Health Systems and Their Communities. Published January 2015; accessed 12 May 2016: <http://www.aha.org/research/reports/tw/15jan-tw-telehealth.pdf>.

<sup>17</sup> Massachusetts Center for Health Information and Analysis. Annual Report on the Massachusetts Health Care System, September 2015. Accessed 19 January 2016: <http://www.chiamass.gov/annual-report>.

<sup>18</sup> Center for Health Information and Analysis. Estimates of fully insured and self insured membership by insurance carrier. Accessed 22 September 2016. [www.chiamass.gov/enrollment-in-health-insurance/](http://www.chiamass.gov/enrollment-in-health-insurance/)

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<sup>19</sup> Massachusetts Department of Insurance. HMO Group Membership and HMO Individual Membership <http://www.mass.gov/ocabr/docs/doi/managed-care/hmo/4q14dist-group.pdf> , <http://www.mass.gov/ocabr/docs/doi/managed-care/hmo/4q14dist-individual.pdf>

<sup>20</sup> Massachusetts Department of Insurance. membership 2014. Accessed 22 September 2016 <http://www.mass.gov/ocabr/docs/doi/managed-care/prefprov/2014-prefprov2.pdf>

<sup>21</sup> U.S. Census Bureau. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2015. Accessed 28 April 2016: <http://www.census.gov/popest/data/state/totals/2015/index.html>

<sup>22</sup> American Factfinder U.S. Census Bureau, Annual estimate of populations. Accessed 22 September 2016 [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP\\_2015\\_PEPANNRES&src=pt](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2015_PEPANNRES&src=pt)  
Methodology described <http://www.census.gov/popest/methodology/2015-natstcopr-meth.pdf>

<sup>23</sup> U.S. Census Bureau. Annual Estimates of the Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2015. Accessed 28 April 2016: <http://www.census.gov/popest/data/state/totals/2015/index.html>

<sup>24</sup> Group Insurance Commission. GIC Health Plan Membership by Insured Status FY2014. Accessed 28 March 2016: <http://www.mass.gov/anf/docs/gic/annual-report/fy2014annual-report.pdf>.

<sup>25</sup> Group Insurance Commission, Group Insurance Commission Fiscal Year 2015 Annual Report. Accessed 25 January 2016: <http://www.mass.gov/anf/docs/gic/annual-report/gic-annual-reportfy15.pdf>.