

California Health Benefits Review Program

Executive Summary

Analysis of Assembly Bill 1771:
Telephonic and Electronic Patient Management

A Report to the 2013-2014 California Legislature

April 25, 2014



KEY FINDINGS

Analysis of California Assembly Bill (AB) 1771: Telephonic and Electronic Patient Management

SUMMARY TO THE 2013-14 CALIFORNIA LEGISLATURE • APRIL 25, 2014



AT A GLANCE

AB 1771 (Perez, M. — amended March 11, 2014) would make California the first state in the country to require health insurance carriers to cover and reimburse physicians for patient-initiated evaluation and management (E/M) via telephone and e-mail. The bill would also mandate coverage for other forms of telehealth.

- **The state of “Telehealth” in California?** California law currently recognizes two forms of telehealth — live videoconference and “store-and-forward,” that capture medical information (e.g. photo, recording) and transmission of that information to physicians for review later. Current law does not require coverage or specify a level of reimbursement for live videoconference or store-and-forward. AB 1771 would require coverage and reimbursement for those two recognized telehealth modalities, as well as require reimbursement of telephone and e-mail, which must be equivalent to in-person E/M visits of similar time and complexity.
- **Medical effectiveness.** Advances in technology have been outpacing the publication of studies on these technologies, limiting the research literature on telephone, e-mail, live videoconference, and store-and-forward.
 - **Telephone and e-mail.** There is insufficient evidence to determine whether E/M services provided via telephone or e-mail are as effective as medical care provided in-person.
 - **Live videoconference and store-and-forward.** For the diseases and conditions studied, the evidence suggests that medical care provided by live videoconferencing and store-and-forward is at least as effective as medical care provided in person.
- **Benefit coverage.** 49% of California’s 23.4 million enrollees with state-regulated health insurance currently have some form of benefit coverage for telephone and e-mail patient management; 79% of enrollees currently have some form of benefit coverage for live videoconference and store-and-forward technology.
- **Capacity and access.** CHBRP estimates that AB 1771 would result in an overall increase of between 2.3% and 9.9% *physician* encounters, which includes both in-person, and telephonic or electronic visits.
- **Utilization –Telephonic and electronic visits.** CHBRP estimates that between 6.2% and 25.1% of all E/M visits would occur using telephone, e-mail, live videoconference, or store-and-forward.
- **Impact on expenditures.** CHBRP estimates AB 1771 would increase overall health expenditures — premiums and out-of-pocket expenses — by between \$55.3 million and \$240.7 million.
 - **Premium per member per month impact.** CHBRP estimates premium increases to range from \$0.19 PMPM to \$0.81 PMPM for DMHC-regulated plans in the large-group market, depending on the rate of adoption. Or, from \$0.49 PMPM to \$2.13 PMPM for CDI-regulated policies in the small-group and individual markets, depending on the rate of adoption.
 - **Financial burden of copayments for telephonic and electronic visits for enrollees.** CHBRP assumes a \$20 copayment for telephone, e-mail, live videoconference, or store-and-forward visits, thereby increasing enrollees’ overall out-of-pocket expenses by between \$9.4 million and \$41.3 million collectively for additional visits.
- **Patient experience.** If enacted, CHBRP predicts that patient experience would improve as physicians increase e-mail and telephone responses to patient inquiries, increased convenience, and reduce or eliminate travel times to in-person visits.
- **Long-term impacts.** Technology will continue to drive changes in telehealth. Electronic health records, online patient portals, and increased use of smart phones, will increase demand for these types of services.

BILL SUMMARY

AB 1771 would require state-regulated health insurance, after January 1, 2015, to cover and reimburse physicians for telephonic and electronic E/M services for established patients. If passed, AB 1771 would require

carriers to pay for those services provided via telephone and e-mail, as well as live videoconference and “store-and-forward,” a method by which patients capture medical information and transmit that information to physicians to evaluate at a later time.

AB 1771 also refers to the American Medical Association’s (AMA) Current Procedural Terminology (CPT) for guidelines on physician services for E/M. The CPT codes specify that telephone and e-mail reimbursements apply only to patient-initiated interactions. Therefore, CHBRP limits analysis of services delivered via telephone and e-mail where an established patient first contacted the physician.

Finally, AB 1771 specifies that reimbursements must be “at the same level and amount” as in-person visits of “similar complexity and time expenditure.” CHBRP uses the AMA’s description of the amount of time an encounter should require and the complexity of a patient’s illness.

CONTEXT FOR BILL CONSIDERATION

Technology. Nearly 92% of Californians report having a cell phone and 58% have a smart phone (up from 39% from 2011), according to the Public Policy Institute of California in 2014. Additionally, previous surveys of adults with online access indicate that over 80% of California adults use the internet to address their health.

Telehealth. California law currently includes two methods of electronic communication in its definition of “telehealth,” live videoconference and store-and-forward. Although current law recognizes these two modalities as “telehealth,” it does not require or set standards for reimbursement. AB 1771 would require reimbursement for these modalities, and would also require coverage and reimbursement for telephone and e-mail (Table 1 in next column).

Therefore, CHBRP analyzed the impact of AB 1771 for four modalities: telephone, e-mail, live videoconference, and store-and-forward.

CHBRP KEY FINDINGS: INCREMENTAL IMPACT OF AB 1771

Medical Effectiveness

Advances in technology have been outpacing the publication of studies on telephone, e-mail, live videoconference, and store-and-forward. New, more sophisticated technologies often emerge before studies can be published.

Telephone and e-mail. There is insufficient evidence to determine whether E/M services provided via telephone or e-mail are as effective as medical care provided in-person. Further, it is unknown whether diagnoses made using these technologies are as accurate as diagnoses made during in-person visits. There are studies that showed telephone encounters did not reduce hospital or emergency department visits. CHBRP notes that the absence of evidence does not mean there is no effect; it means the effect is unknown. Research did show that multifaceted web portals that connected patients to their provider, and helped them manage and track their health, resulted in reduced in-person visits, and a higher

likelihood that patients would receive recommended screenings.

Live videoconference and “store-and-forward.” It is unclear whether these two technologies reduce hospitalizations, emergency department visits, or office visits for specialty care. For the diseases and conditions studied, the evidence suggests that medical care provided by live videoconferencing and store-and-forward is at least as effective as medical care provided in person for general health and mental health. Live videoconference may be more accurate than telephone and store-and-forward. Meanwhile, store-and-forward could potentially reduce wait times for specialty outpatient care.

Table 1. Evolution of California’s Telehealth Policy

	Live Videoconferencing	Asynchronous Store-and-Forward	Telephone /E-mail
SB 1665 (1996)	Included in telehealth definition, but does not require coverage	Not explicitly included in telehealth definition	Excluded from definition of telehealth
AB 415 (2011)	Included in telehealth definition, but does not require coverage	Included in telehealth definition, but does not require coverage	Not explicitly included in or excluded from definition of telehealth
AB 1771 proposed (2014)	Requires coverage/ payment	Requires coverage/ payment	Requires coverage/ payment

Source: California Health Benefits Review Program, 2014.

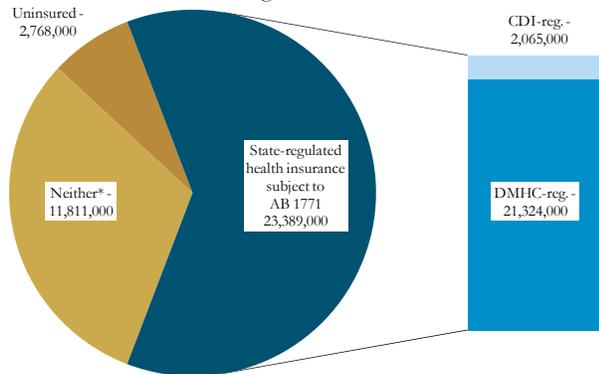
Benefit Coverage, Utilization and Cost

AB 1771 affects the health coverage of 23.4 million enrollees with state-regulated health insurance (Figure 1).

Benefit coverage: Currently, 49% of enrollees have benefit coverage for telephone and e-mail, whereas 79% have benefit coverage for live videoconference and store-and-forward. Postmandate, 100% of enrollees with state-regulated health insurance would have benefit coverage for all four telehealth modalities.

Kaiser Permanente: CHBRP relied on data from Kaiser Permanente Northern California to estimate changes in the number of E/M visits between physicians and patients. Kaiser’s experience is the only well-documented examination of the utilization of telephone and e-mail visits between physicians and patients, pre- and post-implementation of a strategy that included telephone, secure e-mail, and live videoconference visits (2008).

Figure 1. Interaction of AB 1771 With California’s Health Insurance Coverage



Source: California Health Benefit Review Program, 2014.

Notes: *Neither = Federally regulated health insurance, such as Medicare, veterans, or self-insured plans.

Data limitations: Although Kaiser’s rate of telephone and e-mail use serves as a good benchmark, it may underestimate the impact of AB 1771 on the adoption of all four modalities statewide.

- Kaiser does not impose cost sharing for its e-mail or telephone use. CHBRP assumes cost sharing, equivalent to an in-person visit, would occur, which could either dampen enrollees’ use of any of the four telehealth modalities, or prompt physicians to encourage enrollees to interact via a telehealth modality. Therefore, Kaiser’s rate of telephone and e-mail use may not generalize to noncapitated providers.
- Kaiser is a closed and integrated health system, equivalent to a staff-model HMO, where physicians are paid the same salary whether they are providing services in person or via e-mail, telephone, or live videoconference. Such a system may realize savings efficiencies from the use of telephone and e-mail, whereas the impact of AB 1771 on noncapitated (fee-for-service) health insurance may be more limited because the networks of providers may or may not be well-integrated enough to realize savings.

Utilization and cost estimates: CHBRP modeled four scenarios to provide policymakers with a range of estimates of the potential impact of AB 1771 on both utilization and cost. Two scenarios presented in Figure 2 represent low- and high-end estimates, based on how quickly physicians adopt to include telephone, e-mail, live videoconference, and store-and-forward into their workflow and practice. The scenarios assume \$20 cost sharing for telephonic and electronic visits, equivalent to an in-person visit. (Scenarios showing incremental impact of AB 1771 with no cost sharing are presented in Appendix D). CHBRP estimates utilization increase for both capitated and noncapitated health insurance. CHBRP recognizes that capitation rates for specific physician groups might not increase immediately to reflect any anticipated increase in the total cost to provide physician services. However, to the extent CHBRP assumed an increase in the utilization of the four modalities of telehealth services, and, in particular, supplemental telehealth services, the 2015 cost and

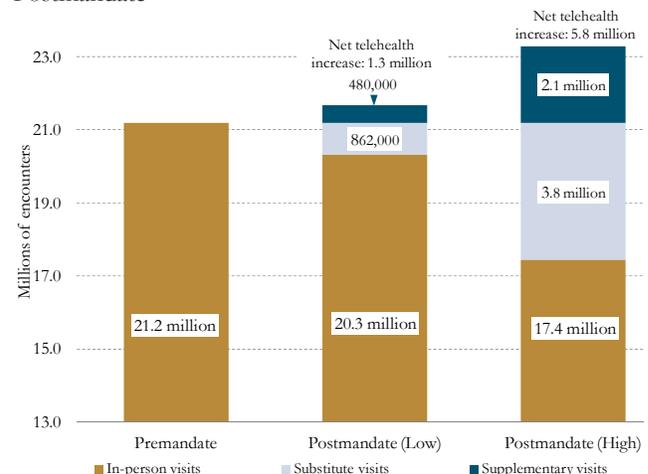
premium estimates in this report assume the impact is reflected completely in all physician capitation rates for commercial HMOs.

Utilization impact: An assumption driving the push for telehealth is that it would increase access by improving efficiencies, and increase capacity to accommodate enrollees newly covered by the Affordable Care Act and rural populations. CHBRP estimates that AB 1771 would result in an overall increase of between 2.3% to 9.9% physician encounters, which includes both in-person, and telephonic or electronic visits. The increase of capacity is constrained by AB 1771’s language, which requires coverage only for those E/M encounters performed by a physician.

CHBRP estimates that between 6.2% to 25.1% of all E/M visits would occur using telephone, e-mail, live videoconference, or store-and-forward.

- **“Substitute” vs. “Supplemental” visits.** Of the visits that would occur telephonically or electronically, CHBRP assumes 60% would be “substitute” visits – replacing existing in-person visits; and 40% would be visits that are “supplemental,” or in other words, “visits” that were previously unreimbursed because physicians could not bill for them, new time slots made because of the increased efficiency of telephonic or electronic visits over in-person visits, or an extension of a physicians’ work hours.

Figure 2. Change in Number and Type of Visit, Pre- and Postmandate



Source: California Health Benefits Review Program, 2014.

* Numbers may not sum due to rounding.

Notes: Low-end estimate assumes 25% of potential telehealth visits are billed; high-end assumes 100% of potential telehealth visits are billed. All visits are charged a \$20 copayment.

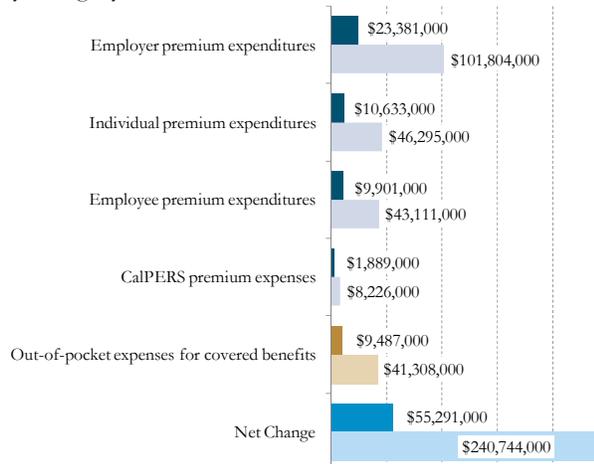
Cost impacts: CHBRP estimates total premiums and out-of-pocket expenditures will increase postmandate.

- On the low end, CHBRP estimates premium increases to range from \$0.19 PMPM for DMHC-regulated plans in the large-group market to \$0.49 PMPM for CDI-regulated policies in the small-group and individual markets.

- On the high end, CHBRP estimates premium increases to range from \$0.81 PMPM for DMHC-regulated plans in the large-group market to \$2.13 PMPM for CDI-regulated policies in the small group and individual markets.

Impact on total expenditures: CHBRP finds that AB 1771 would increase total health expenditures by 0.0431% to 0.1875% overall, due to more visits being delivered. Employers and enrollees would pay higher premiums, and enrollees would pay higher out-of-pocket costs (Fig 3).

Figure 3. Change in Total and Aggregate Expenditures by Category Postmandate, AB 1771



Source: California Health Benefits Review Program, 2014.

Notes: For each category of expenditures, darker bars on top represent low-end estimates. Lighter bars on the bottom represent high-end estimates. Low-end estimate assume 25% of potential telehealth visits are billed; high-end assumes 100% of potential telehealth visits are billed. All visits are charged a \$20 copayment.

Public Health

Health Outcomes: CHBRP estimates that use of all four modes of telehealth will increase in the first year postmandate, however CHBRP is unable to quantify the effect of AB 1771.

- **Telephone and e-mail:** The public health impact is unknown because CHBRP found insufficient evidence of the effectiveness of telephone and e-mail to produce equivalent or better morbidity or mortality outcomes than in-person visits. Note that the absence of evidence is not “evidence of no effect.” It is possible that an impact – positive or negative – could result, but current evidence is insufficient to inform an estimate.
- **Live videoconference and store-and-forward:** Evidence suggests that mortality and morbidity outcomes for live videoconferencing and store-and-forward are equivalent to in-person care; CHBRP estimates an increase of 268,000-1.2 million visits. Therefore, CHBRP estimates that positive health outcomes could occur for some newly covered enrollees; however, the public health impact is unquantifiable due to the unknown health outcomes of additional encounters for patients with a wide array of conditions.

Patient experience: CHBRP anticipates that increasing use of telehealth technologies will improve enrollees’ overall experience because:

- They would have more methods by which to communicate with their physicians;
- Distance and time travelling to and from in-person visits would be reduced along with related costs. As a result, some enrollees may have better health outcomes because the removed travel barrier eliminated otherwise delayed or avoided in-person visits;
- Time off work would also be reduced, leading to higher overall productivity.

Financial burden: CHBRP estimates that AB 1771 would result in an overall increase in enrollees’ net financial burden of between \$9.5 million and \$41.3 million, because enrollees would now be subject to copayments on telephone, e-mail, live videoconference, and store-and-forward visits (equivalent of the copayment for in-person visits.) The financial burden results from visits that (1) were previously occurring but not reimbursable, or (2) constitute visits that would not have occurred without AB 1771, due to distance, inconvenience, or time.

Potential harms: Weak literature cited potential concerns around fragmented care, misdiagnosis, or lack of adherence to security protocols, among other issues. That said, CHBRP found insufficient evidence to determine whether services provided telephonically or electronically would harm patients.

Gender and racial disparities: Although there appear to be some disparities in interest and use of e-mail by sociodemographic characteristics, CHBRP is unable to estimate the impact of AB 1771 on health disparities due to lack of evidence.

Long-Term Impacts

Technology will continue to drive changes in telehealth. Electronic health records, online patient portals, and increased use of smart phones and tablets will increase demand in these types of services from consumers. Based on the Kaiser experience, CHBRP estimates telehealth services, generally and regardless of modality, to increase by 31.2% annually. Health insurance carriers in California have already begun to partner with online-only networks to provide specialty care, or one-time live videoconference encounters. Providing telehealth options — regardless of the specific modality — could potentially be used as a tool to expand networks and provide opportunities for health plans and providers to meet a diverse set of needs for more population groups.

CHBRP is unable to estimate the long term impact of AB 1771 on overall health outcomes and disparities due to the breadth of conditions telehealth affects and the unknown impact of future technology development. To the extent that advances in telehealth technology improve access and provider capacity, CHBRP projects some improvements in patient E/M, especially for enrollees with transportation barriers or chronic conditions.

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EXECUTIVE SUMMARY

California Health Benefits Review Program Analysis of Assembly Bill 1771

The California Assembly Committee on Health requested on February 25, 2014, that the California Health Benefits Review Program (CHBRP) conduct an evidence-based assessment of the medical, financial, and public health impacts of Assembly Bill (AB) 1771, which would require state-regulated health insurance to cover telephonic and electronic patient management services beginning in January 2015. In response to this request, CHBRP undertook this analysis pursuant to the provisions of the program's authorizing statute,¹ which allows for the review of benefit mandates affecting health insurance regulated by the state.

State benefit mandates apply to a subset of health insurance plans and policies in California, those regulated by one of California's two health insurance regulators:² the California Department of Managed Health Care (DMHC)³ and the California Department of Insurance (CDI).⁴ In 2015, CHBRP estimates that approximately 23.4 million Californians (61.6% of all Californians) will have health insurance that may be subject to any state health benefit mandate law.⁵ Of the rest of the state's population, a portion will be uninsured (and therefore will have no health insurance subject to any benefit mandate), and another portion will have health insurance subject to other state laws or only to federal laws.

AB 1771 would affect the health insurance of approximately 23.4 million enrollees (61.6% of all Californians).

Bill Language, Analysis, and Analytic Approach

AB 1771 requires that after January 1, 2015, DMHC-regulated plans and CDI-regulated policies should "cover physician telephonic and electronic patient management services." Those services would have to be "reimburse(d)...at the same level and amount as face-to-face patient encounters with similar complexity and time expenditure."

Non-face-to-face coverage

If enacted, AB 1771 would require state-regulated plans and policies to reimburse physicians for *non-face-to-face* services — principally telephone and e-mail. Additionally, because the bill language specifies that state-regulated plans and policies must "cover...electronic patient management services" and defines that term to include "electronic communication tools...to

¹ Available at: www.chbrp.org/docs/authorizing_statute.pdf.

² California has a bifurcated system of regulation for health insurance. The Department of Managed Health Care (DMHC) regulates health care service plans, which offer benefit coverage to their enrollees through health plan contracts. The California Department of Insurance (CDI) regulates health insurers, which offer benefit coverage to their enrollees through health insurance policies.

³ DMHC was established in 2000 to enforce the Knox-Keene Health Care Service Plan of 1975; see Health and Safety Code (H&SC) Section 1340.

⁴ CDI licenses "disability insurers." Disability insurers may offer forms of insurance that are not health insurance. This report considers only the impact of the benefit mandate on health insurance policies, as defined in Insurance Code (IC) Section 106(b) or subdivision (a) of Section 10198.6.

⁵ CHBRP's estimates are available at: www.chbrp.org/other_publications/index.php.

enable treating physicians to evaluate and manage existing patients,” AB 1771 could potentially have the effect of requiring coverage — and reimbursement — for any communication technologies used to assist physicians only in evaluating and managing *existing* patients electronically.

Based on this language, CHBRP assumes that coverage and reimbursement would apply to four “electronic communication” modalities:

- *Telephone* and *e-mail*, because they have been specifically identified within the bill, or by the bill author;
- *Live videoconferencing*, which is explicitly included in California’s definition of “telehealth,”⁶ and means the real-time (synchronous) video interaction between patient and physician when they are in different places; and
- *Store-and-forward* (asynchronous) technology, which is also explicitly defined in California’s telehealth law and involves the capture and storage of medical information (such as an x-ray, photograph, sound recording) that is then forwarded to a physician for evaluation.

Throughout this report, CHBRP will refer specifically to each modality when discussing the efficacy or impact of that specific modality. CHBRP will refer to the four modalities collectively as “telehealth,” unless otherwise stated.

Guidelines for non–face-to-face services

AB 1771 specifies that the use of “telephonic and electronic management services” should “enable treating physicians to evaluate and manage existing patients in a manner recognized by the American Medical Association (AMA), Current Procedural Terminology (CPT) codes.”

Because the AMA’s CPT codes specify that *telephone* and *e-mail* reimbursement apply only to *patient-initiated*⁷ interactions, AB 1771 limits coverage of services delivered via telephone and e-mail to cases where an *established* patient first contacted the physician. Other evaluation and management CPT codes do not specify that interactions be patient-initiated, thereby not limiting coverage or reimbursement for live videoconferencing or store-and-forward modalities.

Based on language in AB 1771, CHBRP limits this analysis to only evaluation and management (E/M) services provided and billed by a physician for established patients. CHBRP includes CPT codes, which do not require a physical exam, for evaluation and management services performed at hospitals, nursing facilities, custodial care facilities, assisted living facilities, or at home, and specifically excluded CPT codes that required a physical exam.⁸ (Please see Table D-2 in [Appendix D](#) for the full list of CPT codes used.)

⁶ California Business and Professions Code 2290.5.

⁷ AMA’s billing codes specify that reimbursement for telephone and e-mail transactions must be patient initiated.

⁸ To simplify the analysis, CHBRP did not include any electronic encounters for emergency department E/M of enrollees with state-regulated health insurance because the codes require a physical exam.

Access

One of the central hypotheses about telehealth is that it will increase access to physicians because of increased efficiencies, thereby increasing access: (1) for patients in rural areas; (2) for in-demand specialists; and (3) to meet demand for enrollees newly covered by the Affordable Care Act (ACA).

CHBRP finds limited evidence that AB 1771 would increase the *capacity* of physicians to see additional patients because the bill:

- (1) Limits coverage and reimbursement to encounters with “similar complexity and time expenditure.” Based on this language, CHBRP assumes that most visits that occur via telephone, e-mail, live videoconference, or store-and-forward would be displacing (supplanting) a similarly timed in-person visit, thereby having a limited impact on capacity, and therefore access; and
- (2) Limits coverage and reimbursement to *physicians*, and not nonphysicians who are part of a practice. CHBRP assumes that physicians’ personal bandwidth to respond using any of the telehealth modalities is also limited.

Specifically, CHBRP assumes the AB 1771–related telehealth visits would fall into two categories:

- Substitute (or replace) current in-person visits with e-mail, telephone, live videoconference, or store-and-forward for patient-initiated evaluation and management encounters; and
- Supplement current in-person visits with added services via telehealth, and include both services that (1) would previously not have been delivered in person due to distance, inconvenience, and time, and (2) services that physicians have already been providing via telephone and e-mail, but were previously not billed or reimbursed because they were not covered. Because AB 1771 constrains the covered evaluation and management services to those that are physician-provided only, CHBRP assumes that the capacity to add supplemental services is limited based on each physician’s capacity.⁹

The full text of AB 1771 can be found in [Appendix A](#).

Background on Telehealth

Use of the four telehealth modalities for evaluation and management, relevant to AB 1771, would be accelerated in part by: increased penetration of electronic health records (EHR), associated patient portals and office management systems; increased use of mobile communication devices (such as cellular telephones and tablets); increased broadband coverage, which allows, not only better internet coverage, but also easier and more rapid transfer of large

⁹ Some telephone and e-mail services will still not be reimbursed due to CPT coding standards related to follow-up visits within 7 days for the same issue, regardless of setting. However, the supplementary services are assumed to occur within coding rules and be billable.

data files; and increased demand for these types of services from consumers, providers, and insurers.

Provider and patient use of technologies

Provider and patient use of e-mail, telephone, and other technologies covered by AB 1771 to communicate about health care is understudied due, in part, to the lack of physician billing data. Interest in (or demand for) these communication tools has been measured through surveys. Patients appear to be interested in e-mail communications with providers, but study conclusions about provider interest, taken as a whole, are ambiguous. For example, one survey found that 20.4% of physicians used e-mail to communicate with their patients, but only 2.9% e-mailed frequently. Of those who did not use e-mail, 58.4% were not interested in future e-mail use with patients (the survey did not identify the reasons for lack of interest.) However, another survey of physicians found that 66% would adopt electronic communication with patients if they were reimbursed.

Rural health disparities in California

California rural communities exhibit disparities in health status and health care access and are a key population for some telehealth services. Travel barriers and inadequate provider–patient ratios are telehealth-relevant factors that contribute to rural health disparities. About 14% (5.2 million) of California’s 37.7 million residents live in rural areas, and in about two-thirds of counties, the number of physicians per capita is less than what is considered adequate to meet demand.

Telehealth may help overcome some of the disparities in health care by redistributing knowledge and expertise when and where it is needed, including rural areas of California. However, telehealth has yet to meet rural demand according to one study. Of 60 California rural health clinics surveyed in 2012, 53% used no telehealth services in 2012, and 47% used videoconferencing; only 5% used store-and-forward and 3% home monitoring. Cost of equipment and lack of arrangements with specialists were the primary obstacles to clinic participation (52% and 48%, respectively). About half of the clinics used the Internet to contact other providers, but just 12% did so to contact patients. These clinics represented 22% of the 271 clinics that provide 44% of primary care in rural California. Physicians provided 56% of care, most of which was primary care (95%), whereas other services were lacking.

CPT codes for reimbursement of telehealth

AB 1771 requires coverage of telephonic and electronic services used to evaluate and manage existing patients (which includes e-mail, store-and-forward, and live videoconferencing). Physicians are reimbursed for their professional services through the use of standardized billing codes, entitled Current Procedural Terminology (CPT®). AB 1771 targets CPT codes 99441–99443 for telephone services, 99444 for electronic mail, and a number of in-person E/M codes that can be further defined by modifier codes GT (for interactive audio and video telecommunications systems [live videoconferencing]) and GQ (for asynchronous telecommunications system such as store-and-forward technology). With a few exceptions, the Centers for Medicare & Medicaid (CMS) do not reimburse for telephone and e-mail communications; most commercial insurance carriers follow CMS reimbursement decisions.

Therefore, most physicians are not reimbursed for services they provide by e-mail and telephone, and to a lesser extent for other electronic services. The utilization of telehealth, specifically e-mail and telephone, is difficult to ascertain, in part because of the lack of reimbursement that would document the frequency of services.

Medical Effectiveness

- Studies of the medical effectiveness of telephone, e-mail, live videoconferencing, and store-and-forward encompass patients with a wide range of diseases and conditions.
- Most studies pertinent to AB 1771 examine the use of telephone, e-mail, live videoconferencing, and store-and-forward as substitutes for in-person care. Some studies, especially studies of e-mail, assess the use of these technologies to supplement in-person care.
- A major limitation of the literature on telephone, e-mail, live videoconferencing, and store-and-forward is that advances in technology are outpacing the publication of studies of these technologies. There is often a long delay between the time a study is begun and the time it is published. By the time a study is published, more sophisticated technology may be available at a lower cost.
- There are fewer studies of the medical effectiveness of telephone calls and e-mail than there are of live videoconferences, and store-and-forward. The studies of telephone calls and e-mails also have weaker research designs on average.

Summary of findings

Telephone and e-mail. Taken collectively, the findings from studies of telephone and e-mail interventions similar to those for which AB 1771 would require coverage suggest that there is insufficient evidence to determine whether medical care provided via telephone or e-mail is as effective as medical care provided in-person. (See Figure 1.) Although there is some evidence that e-mail can reduce outpatient visits and improve health status and processes of care, all of the studies were conducted in Kaiser Permanente and other large integrated delivery systems that implemented e-mail as part of web portals with multiple functions. It cannot be determined whether findings from these studies would be replicated if patients were provided access to e-mail outside of a multifaceted web portal and outside an integrated delivery system.

Figure 1. Medical Effectiveness Findings for Telephone and E-mail

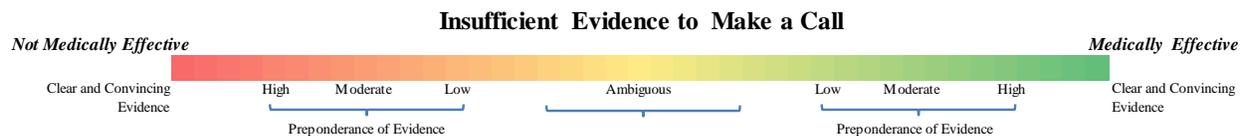


Table 1 below presents findings for the effects of telephone and e-mail on the major types of outcomes assessed by the medical effectiveness team. In all cases, findings are for diseases and conditions that have been studied. These findings may not generalize to other diseases or conditions.

Table 1. Medical Effectiveness Findings for Telephone and E-mail

	Telephone	E-mail
Access to care	Insufficient evidence ¹⁰	Insufficient evidence
Utilization	Insufficient evidence	Reduces utilization of office visits if used as part of a multifaceted web portal
Processes of care	Insufficient evidence	Patients more likely to receive recommended screening exams if used as part of a multifaceted web portal in conjunction with in-person care
Accuracy of diagnosis & management	Insufficient evidence	Insufficient evidence
Health status	Ambiguous evidence	Better than in-person care if used as part of a multifaceted web portal

Source: California Health Benefits Review Program, 2014

Telephone

For the diseases and conditions that have been studied:

- There is insufficient evidence to determine whether telephone calls improve access to specialty outpatient care or acute care.
- The preponderance of evidence from studies with strong research designs suggests that supplementing usual care with telephone calls does not affect use of other health care services.
- There is insufficient evidence to determine whether receipt of recommended care is similar for patients treated by telephone and patients treated in-person.
- There is insufficient evidence to determine whether diagnoses and treatment plans based on telephone calls are as accurate as diagnoses and treatment plans based on in-person care.¹¹
- Evidence regarding the impact of telephone visits on health outcomes is ambiguous.

E-mail

For the diseases and conditions that have been studied:

¹⁰ The absence of evidence is not evidence of no effect. It is an indication that the impact of the intervention on the outcome in question is unknown.

¹¹ The absence of evidence is not evidence of no effect. It is an indication that the impact of telephone calls on accuracy of diagnoses and treatment plans is unknown.

- There is insufficient evidence to determine whether e-mail improves access to specialty outpatient care or acute care.
- The preponderance of evidence from studies with moderate to weak research designs that examined general populations of patients suggests that use of e-mail as part of a multifaceted web portal reduces utilization of office visits for primary care and specialty care.
- There is a preponderance of evidence from studies with moderate research designs that persons who use secure e-mail within a multifaceted web portal are more likely to receive recommended screening exams.
- There is insufficient evidence to determine whether diagnoses and treatment plans based on e-mails are at least as accurate as diagnoses and treatment plans based on in-person care.
- There is a preponderance of evidence from studies with strong to moderate research designs that use of secure e-mail as part of a multifaceted web portal is associated with better health status.

Live videoconferencing and store-and-forward. Taken collectively, findings from studies of live videoconferencing and store-and-forward suggest that, for the diseases and conditions studied, there is a preponderance of evidence from studies with moderately strong research designs that medical care provided by live videoconferencing and store-and-forward is at least as effective as medical care provided in person. (See Figure 2.)

Figure 2. Medical Effectiveness Findings for Live Videoconferencing and Store-and-Forward

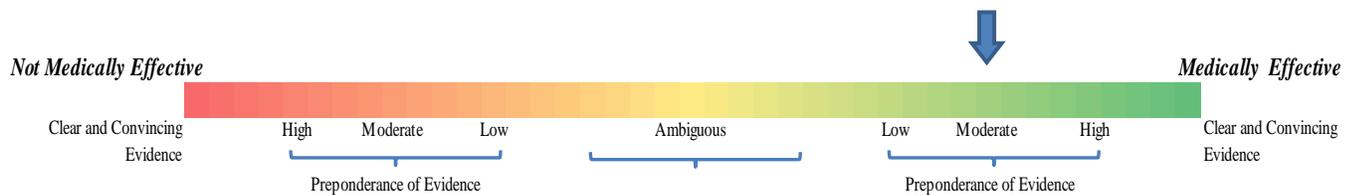


Table 2 below presents findings for the effects of live videoconferencing and store-and-forward on the major types of outcomes assessed by the medical effectiveness team. In all cases, findings are for diseases and conditions that have been studied. These findings may not generalize to other diseases or conditions. Further details regarding findings for live videoconferencing and store-and-forward follow.

Table 2. Medical Effectiveness Findings for Live Videoconferencing and Store-and-Forward

	Live Videoconference	Store-and-Forward
Access to care	Ambiguous evidence	Reduces wait times for specialty outpatient care
Utilization	No effect on utilization of other health care services	Ambiguous evidence
Processes of care	Ambiguous evidence	Patients more likely to receive recommended screening exams if store-and-forward is offered in conjunction with in-person primary care visits
Accuracy of diagnosis & management	Ambiguous evidence relative to in-person care; more accurate than telephone and store-and-forward	Not as accurate as in-person care
Health status	Equivalent to in-person care	Equivalent to in-person care

Source: California Health Benefits Review Program, 2014

Live videoconference

For the diseases and conditions that have been studied:

- Evidence regarding effects of live videoconference on access to care is ambiguous.
- The preponderance of evidence from studies with strong and moderate research designs suggests that live videoconference does not affect use of other health care services.
- Evidence regarding the effect of live videoconference on adherence to recommended treatment is ambiguous.
- Evidence regarding the accuracy of diagnoses made via live videoconference relative to diagnoses made in person is ambiguous, but there is a preponderance of evidence from studies with strong-to-moderate research designs that treatment decisions made based on live videoconference consultations are more accurate than decisions made based on telephone consultations.
- There is clear and convincing evidence that live videoconference and in-person visits have similar effects on health status.

Store-and-forward

For the diseases and conditions that have been studied:

- The preponderance of evidence from studies with strong and moderate research designs suggests that store-and-forward reduces wait times for outpatient visits for specialty care.
- Evidence regarding the impact of store-and-forward on utilization of other health care services is ambiguous.

- Findings from a single randomized controlled trial suggest that use of store-and-forward increases the likelihood that persons will receive recommended screening tests if provided in conjunction with in-person visits for primary care.
- There is a preponderance of evidence from studies with strong-to-moderate research designs that store-and-forward is not as accurate as in-person visits for diagnosis and treatment.
- Findings from studies with strong and moderate research designs suggest that the health status of patients who are treated via store-and-forward is equivalent to that of patients treated in-person.

Benefit Coverage, Utilization, and Cost Impacts

Coverage impacts

- Telephone/e-mail: Premandate, 49% of enrollees (11.4 million) had benefit coverage for telephone and e-mail; postmandate, all 23.4 million enrollees with state-regulated health insurance would have coverage for telephone and e-mail evaluation and management services. Although health insurance carriers indicated coverage — to varying degrees — of each of the four telehealth modalities, the definition of covered telehealth services differs by health insurance carrier, and it is likely that no carrier reimbursed a telehealth service at the level of an in-person visit, as is required by AB 1771.
- Live videoconference and store-and-forward: Premandate, 79% of enrollees (18.6 million) had benefit coverage for live videoconference and store-and-forward. Postmandate, 23.4 million enrollees with state-regulated health insurance would have coverage for the modalities.

Utilization impacts

Tables 4a and 4b summarize the estimated utilization, cost, and benefit coverage impacts of AB 1771. The following general assumptions are helpful in understanding the source of those impacts:

- CHBRP assumes that 60% of all new telehealth services would be *substitute* services (i.e., replacing in-person services of equivalent severity and time), while 40% would be *supplementary* (i.e., additional services that were previously provided and not reimbursed, or not previously provided).^{12,13}
- CHBRP assumes that current billing for telephone and e-mail evaluation and management services underestimates true utilization of these services because half of enrollees subject to AB 1771 do not have coverage for these services, and therefore would not be reflected in claims data. In addition, as previously mentioned, it is likely

¹² Some telephone and e-mail services will still not be reimbursed due to CPT coding standards related to follow-up visits within 7 days for the same issue, regardless of setting. However, the supplementary services are assumed to occur within coding rules and be billable.

¹³ No data were available, but content experts and claims data suggest this is a reasonable estimate.

that health insurance carriers did not reimburse telehealth services at the level of an in-person visit, as is required by AB 1771.

- Current estimates of phone and e-mail service use is based on closed models of care, like Kaiser Permanente, where telephone and e-mail services are already delivered as part of an integrated system and where fee-for-service reimbursement does not occur. The rate of telephone and e-mail utilization in Kaiser Permanente is 26.4%.^{14,15} While the Kaiser Permanente rate of telehealth use serves as a good benchmark, the first year (2015) impact of AB 1771 would be influenced by cost-sharing decisions by carriers and adoption of the technology by physicians outside of an integrated health system.
- While AB 1771 would require all state-regulated health insurance — capitated or noncapitated — to cover evaluation and management services via the four telehealth modalities, CHBRP assumes that increases in utilization of telehealth services with the introduction of AB 1771 would not occur for salary-based systems (such as Kaiser). For plans that contract with external physician groups, CHBRP assumed utilization of telehealth services would increase. CHBRP recognizes that capitation rates for specific physician groups might not increase immediately to reflect any anticipated increase in the total cost to provide physician services. However, to the extent CHBRP assumed an increase in the utilization of the four modalities of telehealth services, and, in particular, supplemental telehealth services, the 2015 cost and premium estimates in this report assume the impact is reflected completely in all physician capitation rates for commercial HMOs.
- Premandate a combined 6.1 million enrollee encounters were performed using telephone, e-mail, or other recognized telehealth modality (telephone: 3.7 million; e-mail: 1.2 million, live videoconferencing: 306,000, store-and-forward: 919,000). (Table 4a or 4b).
- Postmandate, telehealth visits for each modality would increase by between 22% to 95%, depending on the rate of adoption (percentage of potentially billable telehealth visits that are submitted for reimbursement.)

Cost impacts

Instead of assuming even implementation across all plans and providers, CHBRP modeled four separate estimates based on different rates of adoption of all four modalities of telehealth and use of cost-sharing by insurers and/or providers during 2015 to offer perspective on the lower and upper bounds of expenditures, described in Table 3 below. Two of these scenarios assume cost-

¹⁴ This represents the percentage of telephone and e-mail visits — out of all in-person and collective telehealth visits — for Kaiser’s established patients. This value was calculated using Pearl’s (2014) estimate of the level of utilization (22.8%) at Kaiser Permanente Northern California (KPNC) of virtual visits (alternatives to in-person visits conducted via secure e-mail, telephone, or live videoconference) in 2008 and estimates of new patient visits at Kaiser, calculated by subtracting the average annual rate of new visits overall at KPNC (from Milliman’s analysis of Thomson Reuters MarketScan ® data) and subtracted from the total number of visits (Pearl, 2014).

¹⁵ Kaiser’s 2008 estimate was used because this was just before the introduction of KPNC’s inpatient and ambulatory care electronic health record system that includes a suite of patient-friendly Internet, mobile, and video tools had opportunity to take effect. Pearl (2014) shows that by 2013, utilization for telephone and e-mail — as a percentage of all in-person and telehealth visits — increased to 58.3%.

sharing and the two other two assume no cost sharing. CHBRP believes cost sharing scenarios are more likely than no cost sharing once telehealth becomes reimbursable.

Table 3. Four Scenarios Describing the Potential Incremental Impact of AB 1771 (a)

	25% Adoption (b)	100% Adoption (b)
\$20 Cost sharing (equivalent to in-person)	Scenario A (low)	Scenario B (high)
\$0 Cost sharing	Scenario C (c)	Scenario D (c)

Source: California Health Benefits Review Program, 2014.

Note: (a) CHBRP modeled four scenarios, two with cost sharing and two without cost sharing. (b) Adoption means percentage of potentially billable services under full implementation that would actually be delivered and billed. (c) Scenarios C and D can be found in [Appendix D](#).

- Total net annual expenditures are estimated to increase by \$55.3 million, 0.0431% on the low end (Table 4a) or \$240.7 million, 0.1875% on the high end (Table 4b), mainly due to the added reimbursement for supplementary services with the implementation of AB 1771.
- Total premiums are estimated to increase by \$45.8 million on the low end (Table 4a) or \$199.4 million on the high end (Table 4b).
- CHBRP does not estimate any increases to Medi-Cal Managed Care plans. Medi-Cal’s capitated rates are set by the state to cover the cost of healthcare services for beneficiaries in managed care plans. The capitated rates assume that the Medi-Cal managed care plans manage the utilization and costs of healthcare services appropriately and effectively. These assumptions reflect that plans will invest in ongoing improvements, including the costs associated with emerging healthcare technology and services. CHBRP assumes that Medi-Cal Managed Care plans and their contracted physician groups would not further expand their use of any modalities of telehealth services unless it was expected to reduce the total cost of services for enrollees. As a result, CHBRP does not anticipate an increase in the capitated rate set by Medi-Cal.
- The estimated premium increases would not have a measurable impact on the number of persons who are uninsured.

Public Health Impacts

- One of the central hypotheses about expanding coverage for the four telehealth modalities is that access to physicians would increase because of efficiencies associated with the technologies (thus, assisting with accommodating newly covered persons through the ACA). Although there may be some office and individual time management efficiencies gained by physicians using telehealth for E/M services as compared with similar in-person visits, CHBRP finds that AB 1771’s impact on current capacity of physicians to see additional patients would be limited. This is because AB 1771 limits coverage to encounters with “similar complexity and time expenditure,” thus, CHBRP assumes that visits that occur telephonically, via e-mail, live videoconference, or store-and-forward, would be substituting for a similarly timed in-person visit. Additionally, because AB 1771 limits coverage and reimbursement to *physicians*, therefore CHBRP

assumes that physicians' personal bandwidth to respond to any of the telehealth modalities would also be limited.

- Another hypothesis is that expanded access to the four telehealth modalities would increase access to physicians for patients in rural areas, and improve access to in-demand specialists. CHBRP finds that telehealth may improve access from the patient's perspective for both rural and urban patients; however CHBRP is unable to quantify that change. Patients who cannot take time from work, have difficulty traveling, or questions or have problems occurring after usual office hours may find advantages to the convenience of e-mail, phone, and live videoconferencing, and store and forward.
- **Health outcomes:** Although CHBRP estimates that utilization of all four modes of telehealth would increase in the first year postmandate:
 - Telephone/e-mail: CHBRP found insufficient evidence of the effectiveness of telephone and e-mail to produce equivalent or better morbidity or mortality outcomes than in-person visits. Therefore, although telephone and e-mail encounters would increase between 1.1 million and 4.6 million encounters (low and high-end scenarios), the public health impact of AB 1771 is unknown. Note that the absence of evidence is not "evidence of no effect." It is possible that an impact — positive or negative — could result, but current evidence is insufficient to inform an estimate.
 - Store-and-forward/live videoconferencing: For the diseases and conditions studied, evidence indicates that mortality and morbidity outcomes for store-and-forward or live videoconferencing are equivalent to in-person care, and CHBRP estimates that utilization would increase between 268,000 and 1.2 million encounters. Therefore, CHBRP estimates that positive health outcomes could occur for some newly covered enrollees; however, the public health impact is unquantifiable due to the unknown health outcomes of additional encounters for patients with a wide array of conditions.
- **Patient experience:** CHBRP estimates that, postmandate, patient experience would improve as physicians increase their e-mail and telephone responses to patient-initiated inquiries. The improvement is partly attributable to increasing the overall convenience for patients, such as reduced wait times for some visits.
- **Travel burden:** CHBRP estimates, postmandate, travel costs for some enrollees using telehealth services subject to AB 1771 would decrease. As a result, some enrollees may have better health outcomes because the removed travel barrier eliminated otherwise delayed or avoided in-person visits.
- **Lost productivity:** CHBRP estimates AB 1771 would decrease lost productivity associated with travel, however CHBRP is unable to quantify the effect due to lack of data.
- **Financial burden:** CHBRP estimates that AB 1771 would modify coverage and increase enrollees' net financial burden for additional services used by between \$9.5 million and \$41.3 million, in the first year, postmandate. Under AB 1771, all enrollees would share in both the cost of substitute telehealth services and supplemental telehealth

services (patient care that would not have occurred or been billed because telehealth was not covered or reimbursed.)

- **Potential harms:** CHBRP found insufficient evidence to determine whether telehealth services would result in harms to patients. Note that the absence of evidence is not “evidence of no effect.” It is possible that an impact — positive or negative — could result, but current evidence is insufficient to inform an estimate.
- **Disparities:** Although there appear to be some disparities in interest and use of e-mail by sociodemographic characteristics, CHBRP is unable to estimate the impact of AB 1771 on health disparities due to the lack of evidence in access to and use of all telehealth services by subpopulations.

Long-Term Impacts

- **Utilization:** Kaiser reported an increase from 22.8% to 50.3% in the use of telephone, e-mail and live videoconference within a five-year period. That finding indicates that from 2016 on, there is likely to be increased use of telehealth to conduct both substitute and supplementary evaluation and management visits. However, the adoption would be based upon patient preferences (since copayments are identical) and physician capacity (use of technology for secure e-mail messaging, secure videoconferencing, documentation, billing, and ability to collect copayments for remote visits). Based on the Kaiser study, CHBRP anticipates a commensurate increase due to access to telehealth. Once offered to enrollees, telehealth services, collectively, would experience increases of 31.2% year-over-year.
- **Cost:** If telephone and e-mail visits are assumed to replace in-person evaluation and management services, the supplementary telephone and e-mail visits that would have not occurred in the absence of the mandate could have a long-term impact, especially in chronically ill populations, rural areas, and ambulatory care sensitive conditions.
- **Future utilization:** CHBRP assumes that technology will continue to drive changes in the integration of a variety of modalities of telehealth. This includes increased penetration of electronic health records (EHR), associated patient portals and office management systems; increased use of mobile communication devices (such as cellular telephones and tablets); increased broadband coverage which allows not only better internet coverage but easier and more rapid transfer of large data files; and increased demand for these types of services from consumers, providers, and insurers. CHBRP projects that these changes, along with changes in reimbursement, will lead to increased use of telephone, e-mail, and other telehealth services.
- **Long-term public health:** CHBRP is unable to estimate the long term impact of AB 1771 on overall health outcomes and disparities due to the breadth of conditions telehealth affects and the unknown impact of future technology development. To the extent that advances in telehealth technology improve access and provider capacity, CHBRP projects some improvements in patient management and evaluation, especially for those enrollees with transportation barriers or chronic conditions.

Interaction With the Federal Affordable Care Act

- **Value-based care initiatives:** The ACA encourages and promotes the use of telehealth as a way to both increase provider access to sparsely populated areas and also to improve patient care. The ACA pilots a number of “value-based” initiatives — primarily in Medicare and Medicaid — to improve care coordination for patients, and includes telehealth as one of the tools providers may use to accomplish this goal.
- **Essential health benefits:** AB 1771 does not interact with essential health benefits.

Table 4a. AB 1771 Impacts on Benefit Coverage, Utilization, and Cost, 2015

Scenario A —“Low” — \$20 Cost Sharing & 25% of potentially billable telephonic and electronic visits are billed

	Premandate	Postmandate	Increase/ Decrease	Change Postmandate
Benefit Coverage				
Total enrollees with health insurance subject to state-level benefit mandates (a)	23,389,000	23,389,000	0%	0%
Total enrollees with health insurance subject to AB 1771	23,389,000	23,389,000	0%	0%
Number of enrollees with coverage for telephone-based evaluation and management	11,381,927	23,389,000	12,007,073	105%
Number of enrollees with coverage for e-mail-based evaluation and management	11,381,927	23,389,000	12,007,073	105%
Number of enrollees with coverage for live videoconferencing	18,571,927	23,389,000	4,817,073	26%
Number of enrollees with coverage for store-and-forward	18,571,927	23,389,000	4,817,073	26%
Percentage of enrollees with coverage for telephone-based evaluation and management	49%	100%	51%	105%
Percentage of enrollees with coverage for e-mail-based evaluation and management	49%	100%	51%	105%
Percentage of enrollees with coverage for live videoconferencing	79%	100%	21%	26%
Percentage of enrollees with coverage for store-and-forward	79%	100%	21%	26%
Utilization and Cost				
Number of telephone-based evaluation and management services used	3,675,411	4,480,563	805,153	22%
Number of e-mail-based evaluation and management services used	1,225,137	1,493,521	268,384	22%
Number of live videoconferencing services used	306,284	373,380	67,096	22%
Number of store-and-forward services used	918,853	1,120,141	201,288	22%
Average per-unit cost of telephone-based evaluation and management	\$90.38	\$90.38	\$0.00	0%
Average per-unit cost of e-mail-based evaluation and management	\$62.76	\$62.76	\$0.00	0%
Average per-unit cost of live videoconferencing	\$189.93	\$189.93	\$0.00	0%
Average per-unit cost of store-and-forward	\$157.64	\$157.64	\$0.00	0%

Table 4a. AB 1771 Impacts on Benefit Coverage, Utilization, and Cost, 2015 (Cont'd)
 Scenario A — “Low” — \$20 Cost Sharing & 25% of potentially billable telephonic and electronic visits are billed

	Premandate	Postmandate	Increase/ Decrease	Change Postmandate
Expenditures				
<i>Premium Expenditures by Payer</i>				
Private Employers for group insurance	\$54,590,722,000	\$54,614,103,000	\$23,381,000	0.0428%
CalPERS HMO employer expenditures (c)	\$4,297,494,000	\$4,299,383,000	\$1,889,000	0.0440%
Medi-Cal Managed Care Plan expenditures	\$17,504,711,000	\$17,504,711,000	\$0	0.0000%
Enrollees for individually purchased insurance	\$16,930,080,000	\$16,940,713,000	\$10,633,000	0.0628%
Enrollees with group insurance, CalPERS HMOs, Covered California, and Medi-Cal Managed Care (a) (b)	\$22,232,708,000	\$22,242,609,000	\$9,901,000	0.0445%
<i>Enrollee Expenses</i>				
Enrollee out-of-pocket expenses for covered benefits (deductibles, copayments, etc.)	\$12,867,143,000	\$12,876,630,000	\$9,487,000	0.0737%
Enrollee expenses for noncovered benefits (d)	\$0	\$0	\$0	0.000%
Total Expenditures	\$128,422,858,000	\$128,478,149,000	\$55,291,000	0.0431%

Source: California Health Benefits Review Program, 2014.

Notes: (a) This population includes persons with privately funded and publicly funded (e.g., CalPERS HMOs, Medi-Cal Managed care Plans, Healthy Families Program) health insurance products regulated by DMHC or CDI. Population includes enrollees aged 0 to 64 years and enrollees 65 years or older covered by employment sponsored insurance.

(b) Premium expenditures by enrollees include employee contributions to employer-sponsored health insurance and enrollee contributions for publicly purchased insurance.

(c) Of the increase in CalPERS employer expenditures, about 57% or \$1,077,000 would be state expenditures for CalPERS members who are state employees or their dependents.

(d) Includes only those expenses that are paid directly by enrollees to providers for services related to the mandated benefit that are not currently covered by insurance. In addition this only includes those expenses that will be newly covered, post-mandate. Other components of expenditures in this table include all health care services covered by insurance

Key: CalPERS HMOs=California Public Employees' Retirement System Health Maintenance Organizations; CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

Table 4b. AB 1771 Impacts on Benefit Coverage, Utilization, and Cost, 2015

Scenario B — “High” — \$20 Cost Sharing & 100% of potentially billable telephonic and electronic visits are billed

	Premandate	Postmandate	Increase/ Decrease	Change Postmandate
Benefit Coverage				
Total enrollees with health insurance subject to state-level benefit mandates (a)	23,389,000	23,389,000	0%	0%
Total enrollees with health insurance subject to AB 1771	23,389,000	23,389,000	0%	0%
Number of enrollees with coverage for telephone-based evaluation and management	11,381,927	23,389,000	12,007,073	105%
Number of enrollees with coverage for e-mail-based evaluation and management	11,381,927	23,389,000	12,007,073	105%
Number of enrollees with coverage for live videoconferencing	18,571,927	23,389,000	4,817,073	26%
Number of enrollees with coverage for store-and-forward	18,571,927	23,389,000	4,817,073	26%
Percentage of enrollees with coverage for telephone-based evaluation and management	49%	100%	51%	105%
Percentage of enrollees with coverage for e-mail-based evaluation and management	49%	100%	51%	105%
Percentage of enrollees with coverage for live videoconferencing	79%	100%	21%	26%
Percentage of enrollees with coverage for store-and-forward	79%	100%	21%	26%
Utilization and Cost				
Number of telephone-based evaluation and management services used	3,675,411	7,181,119	3,505,708	95%
Number of e-mail-based evaluation and management services used	1,225,137	2,393,706	1,168,569	95%
Number of live videoconferencing services used	306,284	598,427	292,142	95%
Number of store-and-forward services used	918,853	1,795,280	876,427	95%
Average per-unit cost of telephone-based evaluation and management	\$90.38	\$90.38	\$0.00	0%
Average per-unit cost of e-mail-based evaluation and management	\$62.76	\$62.76	\$0.00	0%
Number of live videoconference evaluation and management services used	\$189.93	\$189.93	\$0.00	0%

Table 4b. AB 1771 Impacts on Benefit Coverage, Utilization, and Cost, 2015 (Cont'd)
 Scenario B — “High” — \$20 Cost Sharing & 100% of potentially billable telephonic and electronic visits are billed

	Premandate	Postmandate	Increase/ Decrease	Change Postmandate
Average per-unit cost of store-and-forward	\$157.64	\$157.64	\$0.00	0%
Expenditures				
<i>Premium Expenditures by Payer</i>				
Private Employers for group insurance	\$54,590,722,000	\$54,692,526,000	\$101,804,000	0.1865%
CalPERS HMO employer expenditures (c)	\$4,297,494,000	\$4,305,720,000	\$8,226,000	0.1914%
Medi-Cal Managed Care Plan expenditures	\$17,504,711,000	\$17,504,711,000	\$0	0.0000%
Enrollees for individually purchased insurance	\$16,930,080,000	\$16,976,375,000	\$46,295,000	0.2734%
Enrollees with group insurance, CalPERS HMOs, Covered California, and Medi-Cal Managed Care (a) (b)	\$22,232,708,000	\$22,275,819,000	\$43,111,000	0.1939%
<i>Enrollee Expenses</i>				
Enrollee out-of-pocket expenses for covered benefits (deductibles, copayments, etc.)	\$12,867,143,000	\$12,908,451,000	\$41,308,000	0.3210%
Enrollee expenses for noncovered benefits (d)	\$0	\$0	\$0	0.0000%
Total Expenditures	\$128,422,858,000	\$128,663,602,000	\$240,744,000	0.1875%

Source: California Health Benefits Review Program, 2014.

Notes: (a) This population includes persons with privately funded and publicly funded (e.g., CalPERS HMOs, Medi-Cal Managed care Plans, Healthy Families Program) health insurance products regulated by DMHC or CDI. Population includes enrollees aged 0 to 64 years and enrollees 65 years or older covered by employment sponsored insurance.

(b) Premium expenditures by enrollees include employee contributions to employer-sponsored health insurance and enrollee contributions for publicly purchased insurance.

(c) Of the increase in CalPERS employer expenditures, about 57%, or \$4,689,000, would be state expenditures for CalPERS members who are state employees or their dependents.

(d) Includes only those expenses that are paid directly by enrollees to providers for services related to the mandated benefit that are not currently covered by insurance. In addition this only includes those expenses that will be newly covered, postmandate. Other components of expenditures in this table include all health care services covered by insurance.

Key: CalPERS HMOs=California Public Employees' Retirement System Health Maintenance Organizations; CDI=California Department of Insurance; DMHC=Department of Managed Health Care.

ACKNOWLEDGMENTS

This report provides an analysis of the medical, financial, and public health impacts of Assembly Bill 1771. In response to a request from the California Assembly Committee on Health on February 25, 2014, the California Health Benefits Review Program (CHBRP) undertook this analysis pursuant to the program’s authorizing statute, which established CHBRP to provide independent and impartial analysis of proposed health insurance benefit mandates and repeals.

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CHBRP gratefully acknowledges all of these contributions but assumes full responsibility for all of the report and its contents. Please direct any questions concerning this report to:

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California Health Benefits Review Program Committees and Staff

A group of faculty, researchers, and staff complete the analysis that informs California Health Benefits Review Program (CHBRP) reports. The CHBRP **Faculty Task Force** comprises rotating senior faculty from University of California (UC) campuses. In addition to these representatives, there are other ongoing contributors to CHBRP from UC that conduct much of the analysis. The **CHBRP staff** coordinates the efforts of the Faculty Task Force, works with Task Force members in preparing parts of the analysis, and manages all external communications, including those with the California Legislature. As required by CHBRP's authorizing legislation, UC contracts with a certified actuary, Milliman Inc., to assist in assessing the financial impact of each legislative proposal mandating or repealing a health insurance benefit.

The **National Advisory Council** provides expert reviews of draft analyses and offers general guidance on the program to CHBRP staff and the Faculty Task Force. CHBRP is grateful for the valuable assistance of its National Advisory Council. CHBRP assumes full responsibility for the report and the accuracy of its contents.

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