

# UC Office of the President

## Report to California Legislature

### **Title**

Analysis of California Assembly Bill 32: Telehealth

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# California Health Benefits Review Program

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## Analysis of California Assembly Bill 32 Telehealth

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A Report to the 2021–2022 California State Legislature

April 16, 2021

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# Key Findings

## Analysis of California Assembly Bill 32

### Telehealth

Summary to the 2021–2022 California State Legislature, April 16, 2021



## SUMMARY

The version of California Assembly Bill (AB) 32 analyzed by CHBRP would require coverage and reimbursement at parity with the equivalent in-person service for synchronous telehealth, including live video and telephone (audio-only) visits.

In 2022, of the 21.9 million Californians enrolled in state-regulated health insurance, all of them would have insurance subject to AB 32, plus the 2.7 million beneficiaries receiving Medi-Cal benefits through County Organized Health Systems (COHS) and the Fee-for-Service program (FFS).

**Benefit Coverage:** At baseline, 100% of enrollees with commercial or CalPERS health insurance that would be subject to AB 32 have coverage for live video telehealth services, and 80.4% of enrollees have coverage for telephone services. Similarly, 100% of Medi-Cal Managed Care beneficiaries have existing benefit coverage for live video services at baseline. However, 73.5% of beneficiaries in DMHC-regulated Medi-Cal Managed Care Plans have coverage for telephone services at baseline. Federally qualified health centers (FQHCs) and Rural Health Clinics (RHCs) are unable to provide live video services outside of the clinic's four walls and do not receive reimbursement for telephone at baseline. Postmandate, benefit coverage for telephone would increase to 100%, and FQHCs/RHCs would be able to obtain reimbursement for both live video and telephone visits provided to patients outside of the clinic's physical location. AB 32 is unlikely to exceed essential health benefits (EHBs).

**Medical Effectiveness:** CHBRP found that evidence regarding whether telehealth modalities and services result in equal or better outcomes than care delivered in person is mixed depending on the disease and condition, telehealth modality, and type of outcome studied: health outcomes, process of care, or use of other services. Because telehealth studies have only focused on a limited number of diseases and conditions, the findings may not be generalizable outside of the specific diseases and conditions studied.

**Cost and Health Impacts<sup>1</sup>:** The baseline presented in this analysis is a middle-ground estimate of 2022 in a hypothetical scenario in which AB 744 Telehealth has been fully implemented and the COVID-19 public health emergency regulations terminated, both of which laid the groundwork for telehealth adoption and use more broadly than in 2019 prior to the pandemic. In 2022, AB 32 would result in increases in utilization of live video and telephone visits for enrollees with commercial, CalPERS, and Medi-Cal Managed Care coverage. These changes in utilization would result in an additional \$240,827,000 (0.18%) in annual expenditures. AB 32 would not result in offsets because of the reimbursement parity requirements between telehealth and in-person services, and because of the additional utilization of health care services.

CHBRP anticipates that AB 32 would bring coverage of telephone and live video services for ~4.85 million commercial/CalPERS and Medi-Cal enrollees (plus another 2.7 million Medi-Cal COHS and FFS enrollees) to parity with other state-regulated commercial carriers already providing coverage at baseline, thus increasing beneficiary access to and use of telehealth modalities. In turn, these beneficiaries would experience reduced delays in care (e.g., appointments, diagnoses, treatments) for conditions treated by primary care, behavioral health, orthopedic, rehabilitation, dermatology, and other specialty providers.

Because of the new coverage parity between Medi-Cal beneficiaries and commercial enrollees, CHBRP anticipates a reduction in disparities in access to health care and health outcomes for low-income people and people of color by providing equal access to all modalities of care, as well as reducing delays associated with in-person care for some conditions (appointments, diagnoses, treatment).

<sup>1</sup> Similar cost and health impacts could be expected for the following year, though possible changes in medical science and other aspects of health make stability of impacts less certain as time goes by.

## CONTEXT

Telehealth services either replace (substitute) existing in-person visits or are new (additional/supplemental) visits that would not have taken place in the absence of telehealth coverage.

A significant share of Californians lack necessary connectivity and/or devices, other than telephone, that are required to engage in telehealth visits.<sup>2</sup> Consumer access to the Internet, telephone, or other electronic communication devices is necessary for communicating with health care providers for treatment and advice via telehealth.

Access to and utilization of telehealth was increasing due to changes in reimbursement policies by purchasers and payers before the COVID-19 pandemic, but it accelerated substantially during the pandemic. A California Health Care Foundation (CHCF) survey of health care providers (across clinical specialties) in September 2020 found that the number who reported using telehealth grew from 30% (pre-pandemic) to 79% during the pandemic, along with the proportion of telehealth appointments, which grew from 24% pre-pandemic to 51% during the pandemic. Telehealth use pre-pandemic was greatest among behavioral health providers, radiologists, pathologists, and emergency medicine physicians. Although telehealth use among all provider types jumped during the COVID-19 pandemic, the adoption of telehealth had been growing pre-pandemic; this upward trend appears to be holding even as telehealth use waned during the summer of 2020.

Disparities in use of some telehealth modalities persist due to existing connectivity barriers and differential insurance reimbursement policies for certain subpopulations (rural, Medi-Cal beneficiaries). Other reasons for disparities in use among patients include unaffordable devices (e.g., smartphones, computers), Internet and data plans, and a lack of digital literacy to operate devices and troubleshoot broadband difficulties.

## BILL SUMMARY

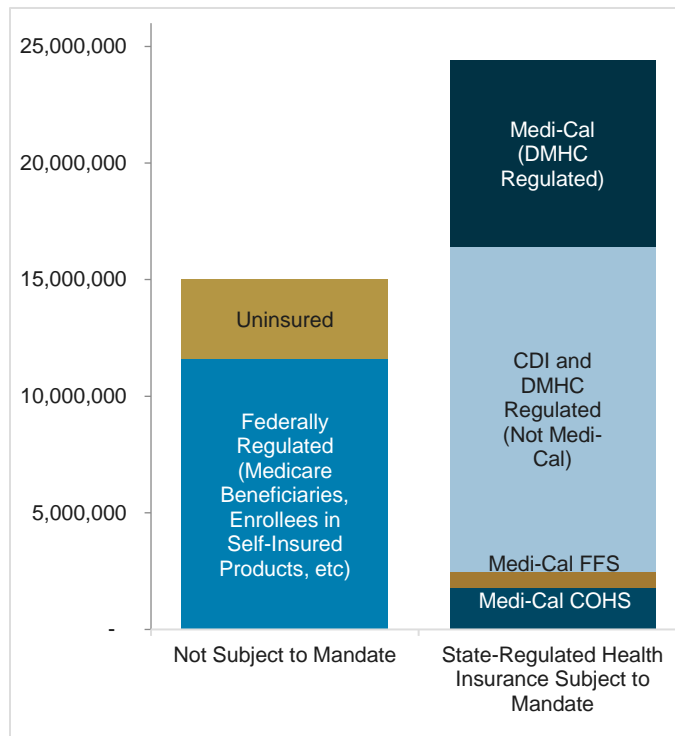
AB 32 Telehealth would require coverage and reimbursement at parity with the equivalent in-person service for synchronous telehealth, including live video and telephone (audio-only) visits. This is accomplished through amendments to the Health and Safety Code, the Insurance Code, the Welfare and Institutions Code, and the indefinite extension of Department of Health Care

<sup>2</sup> Refer to CHBRP’s full report for full citations and references.

Services (DHCS) public health emergency regulations. These changes also apply to federally qualified health centers (FQHCs) and Rural Health Clinics (RHCs), which were previously prohibited from providing and being reimbursed for synchronous telehealth unless the services were provided within the four walls of the clinic.

Figure A notes how many Californians have health insurance that would be subject to AB 32.

**Figure A. Health Insurance in CA and AB 32**



Source: California Health Benefits Review Program, 2021.

If enacted, AB 32 would apply to the health insurance of approximately 24.7 million enrollees (62.6% of all Californians). This represents 100% of the 21.9 million Californians who will have health insurance regulated by the state that may be subject to any state health benefit mandate law, which includes health insurance regulated by the California Department of Managed Health Care (DMHC) or the California Department of Insurance (CDI), plus the 2.7 million beneficiaries receiving Medi-Cal benefits through County Organized Health Systems (COHS) and the Fee-for-Service program (FFS).

### Existing Law

Existing law requires commercial and CalPERS plans and policies to cover and reimburse services appropriately delivered through telehealth on the same basis and to the same extent that the plan or policy is

responsible for covering the same service delivered in-person (enacted through the passage of AB 744 in 2019 and implemented on January 1, 2021). “Equivalency” is typically determined based on the amount of time spent with the patient or reviewing records and providing consultation (such as during an eConsult). Some telehealth visits may not be equivalent to an in-person visit. For example, an e-mail exchange between a patient and provider may not rise to the same level as an in-person interaction.

Telehealth coverage policies for Medi-Cal (Managed Care, COHS, and FFS) are determined through the Welfare and Institutions Code, as well as guidelines and All Plan Letters published by the Department of Health Care Services. However, Managed Care Plans are able to provide telehealth services to enrolled beneficiaries that exceed DHCS coverage policies. Medi-Cal Managed Care Plans could decide to cover telehealth if they believe it is helpful in managing their patients and controlling costs. However, because it is not a requirement, it is not explicitly included in the capitation rates set for each county and plan.

DHCS’ telehealth coverage policy has been evolving over the last few years. DHCS released new guidance in 2019 that expanded the number of telehealth modalities and services for which Medi-Cal provides reimbursement. Medi-Cal reimburses for live video and does not limit it to certain specialties or services. Medi-Cal only reimburses for services provided via telephone using the “virtual check-in via telephone” code. Coverage and reimbursement of this code is not limited to certain specialties or services.

There are two public health emergency regulations that AB 32 would extend indefinitely: DHCS’ COVID-19 Public Health Emergency Telehealth Policy and Welfare, and Institutions Code 14132.723. These regulations include provisions that require reimbursement for telehealth services to be equal to the equivalent in-person service and requires reimbursement for telephone (audio only) services.

## FQHCs/RHCs

FQHCs, FQHC-lookalikes, and RHCs are subject to federal statute governing Medi-Cal reimbursement. They typically provide health care to low-income and underserved populations, and are entitled to cost-related prospective payments for the services delivered. FQHCs (including “lookalikes”) and RHCs must meet certain requirements and provide certain services to obtain these specific designations. Because of this interaction, FQHCs and RHCs are subject to different rules than other Medi-Cal providers regarding telehealth. For example: all health care services must be provided

within the clinic’s “four walls”; and telephone services are not reimbursed.

In addition to providing primary care services to low-income people, FQHCs and RHCs provide dental, mental health, vision, and substance use disorder care, as well as “enabling services” (e.g., case management, enrollment assistance, interpretation, transportation, etc.). These clinics treat about 23% of all Medi-Cal beneficiaries in California. As a proportion of patients seen by FQHCs, Medi-Cal beneficiaries comprise 66% of patients seen at the more than 260 FQHCs in California.

## IMPACTS

### Benefit Coverage, Utilization, and Cost

Telehealth capacity among providers has improved during 2020 due to COVID-19. This improvement in capacity to deliver and bill for telephone and live video will enable providers to respond to new benefit coverage in 2022, regardless of the state of the pandemic or public health emergency. This increased capacity will allow FQHCs and RHCs in particular to respond differently to telehealth benefit coverage than they would have in the absence of the COVID-19 public health emergency.

The implementation of AB 744 on January 1, 2021, which required benefit coverage for synchronous telehealth services by commercial and CalPERS plans and policies, and the COVID-19 public health emergency will bolster the capacity of health care providers to deliver telehealth in 2022 whether AB 32 is enacted or not.

Telehealth will likely represent a larger proportion of health care services than in the past due to new capacity, patient convenience, patient reticence about obtaining in-person care due to the ongoing effects of the pandemic, and practice adoption.

The baseline presented in this analysis is a middle-ground estimate of 2022 in a hypothetical scenario in which AB 744 has been fully implemented and the COVID-19 public health emergency regulations terminated, both of which laid the groundwork for telehealth adoption and use more broadly than in 2019 prior to the pandemic.

### Benefit Coverage

At baseline, 100% of enrollees with commercial or CalPERS health insurance that would be subject to AB 32 have coverage for live video telehealth services,

whereas 80.4% of enrollees have coverage for telephone services. Approximately 7% of enrollees in CalPERS HMOs do not have benefit coverage for telehealth delivered via telephone.

AB 32 would require commercial and CalPERS health plans and policies to provide new benefit coverage for telephone telehealth services for 19.6% of enrollees.

At baseline, 100% of Medi-Cal Managed Care beneficiaries have existing benefit coverage for live video services. However, 73.5% of beneficiaries in DMHC-regulated Medi-Cal Managed Care Plans have coverage for synchronous telephone services. AB 32 would require Medi-Cal Managed Care Plans, COHS, and the Fee-for-Service program to provide new benefit coverage for synchronous telephone services for 26.5% of beneficiaries.

As mentioned previously, FQHCs and RHCs were unable to provide live video services outside of the clinic's four walls and did not receive reimbursement for telephone. If a Medi-Cal Managed Care beneficiary sought services from an FQHC or RHC, they would not be able to access those services via telehealth. Postmandate, FQHCs and RHCs would be able to provide and receive reimbursement for synchronous telehealth services provided outside of the clinic's physical location.

## Utilization

Of the new telehealth visits provided postmandate, CHBRP estimates that supplemental services will represent 50% of additional telehealth services and 50% will replace in-person care due to the ongoing effects of the pandemic and reticence by patients to seek in-person care.

### *For commercial and CalPERS enrollees:*

At baseline, use of telehealth will comprise 11% of all primary care visits and 8% of specialty visits among commercial and CalPERS enrollees. For behavioral health, telehealth represents 40% of use.

Due to new benefit coverage for telephonic services for 19.6% of enrollees, utilization will increase by 24% postmandate. This increase in telephone utilization results in a decrease in in-person visits for primary care and urgent care visits (-0.66%), behavioral health (-4.91%), and specialist visits (-0.45%). There were no utilization changes postmandate for live video due to AB 32 because 100% of commercial and CalPERS enrollees already had coverage for live video services.

Postmandate, use of telehealth will comprise 12% of all primary care visits and 8% of specialty visits among commercial and CalPERS enrollees. For behavioral health, telehealth represents 45% of use in the commercial market.

### *For beneficiaries of DMHC-regulated Medi-Cal Managed Care Plans:*

At baseline, use of telehealth comprises 3% of all primary care visits, 3% of specialty visits, and 3% for behavioral health for Medi-Cal Managed Care beneficiaries. Approximately 3% of primary care and behavioral health visits were provided via telehealth for FQHC/RHCs.

Due to new benefit coverage for telephonic services for 26.5% of Medi-Cal Managed Care beneficiaries, telehealth utilization for non-FQHC and RHC practices and clinics is projected to change in the following ways:

- Primary care: telephonic telehealth services will increase postmandate by over 600%. Some new telephonic visits will replace live video visits, which results in a decrease of 11% in live video visits.
- Outpatient mental health and substance use disorder (MH/SUD): telephonic telehealth services will increase postmandate by almost 550% and live video services by over 140%.
- Outpatient specialist visits: telephonic telehealth services will increase postmandate by over 400%, with a decrease in live video visits of nearly 40%.
- In-person services will decrease by approximately 5% for primary care and MH/SUD and over 3% for outpatient specialist visits.

At baseline, in FQHCs and RHCs, there were no telephonic visits and a small number of live video visits (4.10 primary care and urgent care, and 1.39 MH/SUD per 1,000 enrollees). Due to the extension of COVID-19 public health emergency regulations that allow these clinics to more broadly provide telehealth services and receive reimbursement at parity:

- There will be increases in use of telephonic services for primary care and urgent care (postmandate 15.52 visits per 1,000 enrollees), and MH/SUD (postmandate 4.61 visits per 1,000 enrollees).

- Due to some new telephonic visits replacing live video visits, the use of live video visits will decrease to 1.09 live video primary care and urgent care visits, and to 1.01 live video outpatient MH/SUD visits.
- In-person services will decrease by almost 5% for primary care, MH/SUD, and outpatient specialist visits.

Postmandate, use of telehealth will comprise 12% of all primary care visits, 8% of specialty visits, and 12% for behavioral health for Medi-Cal Managed Care beneficiaries. Approximately 12% of primary care and behavioral health would be provided via telehealth for FQHC/RHCs postmandate.

### Per-Unit Cost

There is no impact on per-unit cost for commercial or CalPERS enrollees because plans already reimburse at parity with in-person services. In the case of Medi-Cal Managed Care, the parity requirements of AB 32 would increase per-unit costs by between 5.42% and 780.67%. The primary driver of the change in average per-unit costs are the all-inclusive prospective payment service (PPS) rates that would be paid to FQHCs and RHCs for primary care, urgent care, and MH/SUD services due to the requirement to pay at parity with in-person visits for all Medi-Cal providers, including FQHCs and RHCs that are paid a cost-related PPS visit rate.

### Expenditures

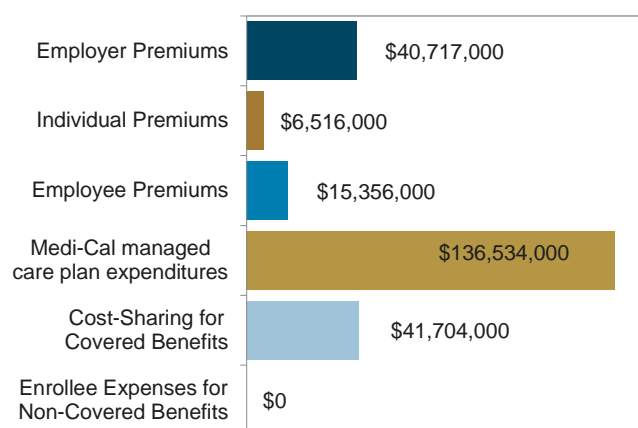
AB 32 would increase total net annual expenditures by \$240,827,000, or 0.18%, for enrollees with DMHC-regulated plans, CDI-regulated policies, and DMHC-regulated Medi-Cal Managed Care Plans. This is due to an increase in total health insurance premiums paid by DMHC-regulated large-group plans (\$0.29 per member per month [PMPM]), small-group plans (\$0.77 PMPM), individual market plans (\$0.20 PMPM), CalPERS HMOs (\$0.13 PMPM), Medi-Cal Managed Care Plans for age under 65 years (\$1.42 PMPM), Medi-Cal Managed Care for ages 65 and over (\$1.41 PMPM), CDI-regulated large-group (\$1.32 PMPM), and CDI-regulated individual market (\$0.95 PMPM) policies. The largest increases in expenditures were in Medi-Cal Managed Care for age under 65 (0.63%), Medi-Cal Managed Care for age 65+ (0.30%), and CDI-regulated large group (0.26%).

CHBRP does not project any cost offsets or savings in expenditures that would result because of the enactment of provisions in AB 32. Because AB 32 requires payment for telehealth to be at parity with in-person care and because 50% of the increased telehealth use supplements in-person visits, no cost offsets or savings

are anticipated. In addition, it is unlikely the actual cost of staff, technology, and resources used to deliver services via telehealth are less expensive than in-person care.

Overall, the increase in commercial and CalPERS expenditures are driven entirely by new benefit coverage because payment parity is already required for telehealth services. However, of the 0.57% increase in Medi-Cal Managed Care expenditures, almost all of the expenditure changes are due to parity requirements (0.56%) rather than benefit coverage changes (0.01%).

**Figure B. Expenditure Impacts of AB 32**



Source: California Health Benefits Review Program, 2021.

### Medi-Cal

In addition to the estimated \$136,534,000 increase in premiums for the 8.05 million Medi-Cal beneficiaries enrolled in DMHC-regulated Medi-Cal Managed Care plans, a proportional increase of \$42.62 million is estimated to occur for the beneficiaries enrolled in COHS managed care and the Fee-for-Service program. CHBRP assumes the two populations to be relatively similar and to have relatively similar benefit coverage. Of the \$136,534,000 increase in Medi-Cal Managed Care expenditures, \$134,005,000 would be due to parity requirements and \$2,529,000 would be due to new coverage of telehealth services. Additionally, of the \$136,534,000 increase in expenditures, \$24,450,000 (0.10%) would be due to the increase in coverage and parity requirements for telehealth services provided by FQHCs/RHCs.

### CalPERS

Premium expenditures for CalPERS HMO employer plans are expected to increase by \$1,154,000 (0.02%) due to AB 32. Per member per month total expenditures would increase by \$0.21.

## Number of Uninsured in California

Because the change in average premiums does not exceed 1% for any market segment, CHBRP would expect no measurable change in the number of uninsured persons due to the enactment of AB 32.

## Medical Effectiveness

Most studies pertinent to this analysis examine the use of telehealth modalities as a substitute for in-person care. In these cases, the relevant studies evaluated whether care provided via these technologies resulted in equal or better outcomes and processes of care than care delivered in person, and whether use of these technologies improved access to care. Some studies assessed the effects of telehealth as a supplement to in-person care; these studies evaluated whether adding these technologies improves processes of care and health outcomes relative to receiving in-person care alone.

To examine whether services delivered via telehealth are of the same quality as in-person services, CHBRP examined three sets of outcomes: (1) health outcomes, including both physiological measures and patient-reported outcomes; (2) process of care outcomes, including treatment adherence and accuracy of diagnoses and treatment plans; and (3) access to care and utilization outcomes, such as wait time for specialty care, or number of outpatient visits, emergency department visits, and hospitalizations.

CHBRP found that evidence regarding whether telehealth modalities and services result in equal or better outcomes than care delivered in person is mixed, depending on the disease and condition, telehealth modality, and type of outcome studied: health outcomes, process of care, or use of other services. Because telehealth studies have only focused on a limited number of diseases and conditions, the findings may not be generalizable outside of the specific diseases and conditions studied.

### For Live Video:

There is *preponderance of evidence*<sup>3</sup> that care delivered by live video is at least as effective as in-person care for **health outcomes** for several conditions and health care settings, including infectious disease, obesity, diabetes, and abortion.

<sup>3</sup> *Preponderance of evidence* indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective.

There is *clear and convincing*<sup>4</sup> evidence that mental health services for attention deficit/hyperactivity disorder (ADHD) depression, and posttraumatic stress disorder (PTSD) delivered by live video are at least as effective as in-person care for **processes of care** and **health outcomes**.

There is *clear and convincing* evidence that dermatology diagnoses made via live video are as accurate as diagnoses made during in-person visits. There is a *preponderance of evidence* that scores on neurocognitive tests administered via live video are similar to scores obtained when tests are administered in person. Studies have also found diagnostic concordance between live video and in-person examination for shoulder disorders, otolaryngology, and fetal alcohol syndrome.

There is a *limited evidence* that care delivered by live video is at least as effective as in-person care for **access to care and utilization**.

### For Telephone:

For the diseases and conditions studied, the *preponderance of evidence* from studies of the effect of telephone consultations suggests that telephone consultations were at least as effective as in-person consultations on **health outcomes**.

For the diseases and conditions studied, findings from studies of the effect of telephone consultations on **processes of care** and **access to care and utilization** are inconsistent; therefore, the evidence that medical care provided by telephone compared to medical care provided in person is *inconclusive*<sup>5</sup>.

### Comparing Live Video to Telephone:

There is *preponderance of evidence* that behavioral health services delivered by live video are comparable to services delivered by telephone consultation on **health outcomes**.

CHBRP found no studies that compared live video to telephone consultation on outcomes for processes of care and access to care and utilization of health

<sup>4</sup> *Clear and convincing* evidence indicates that there are multiple studies of a treatment and that the large majority of studies are of high quality and consistently find that the treatment is either effective or not effective.

<sup>5</sup> *Inconclusive evidence* indicates that although some studies included in the medical effectiveness review find that a treatment is effective, a similar number of studies of equal quality suggest the treatment is not effective.



services. CHBRP notes that absence of evidence is not evidence of no effect.

**Table A. Summary of Evidence of Medical Effectiveness of Synchronous Telehealth Compared to In-Person Care**

	Health Outcomes	Processes of Care	Access and Utilization
Live video	Preponderance of evidence – effective	Clear and convincing evidence – effective	Limited evidence – effective
Telephone	Preponderance of evidence – effective	Inconclusive evidence	Inconclusive evidence

Source: California Health Benefits Review Program, 2021.

## Public Health

Telehealth can supplant or substitute in-person visits for many diseases and health conditions. The broad nature of telehealth modalities and the multiple metrics (e.g., access, process, outcomes, etc.) across modalities and countless conditions precludes quantitative estimates of changes in public health outcomes attributable to AB 32. However, based on evidence presented in this report:

- CHBRP anticipates that AB 32 would increase access to and use of telehealth modalities for ~4.85 million commercial/CalPERS and Medi-Cal enrollees (plus an additional 2.7 million enrollees in Medi-Cal COHS and FFS), thus bringing their coverage into parity with other state-regulated commercial carriers already providing coverage at baseline. In turn, these enrollees would experience reduced delays in care (e.g., appointments, diagnoses, treatments) for conditions treated by primary care, behavioral health, orthopedic, rehabilitation, dermatology, and other specialty providers.
- CHBRP anticipates AB 32 would bring live video and telephone-based care from FQHCs and RHCs into parity with Medi-Cal and commercial plans and policies, thus mitigating income disparities in care.
- CHBRP also anticipates that, as compared with in-person visits, AB 32 would produce equivalent (or in some cases, better) health outcomes for newly covered enrollees across some, but not all, diseases and conditions.

**Disparities by income, race and ethnicity:** People of color comprise the majority of Medi-Cal beneficiaries, who, by definition, are low-income. As a group, their telehealth coverage is unequal with much of the commercial market at baseline. CHBRP projects that, postmandate, AB 32 would bring telephone and live video telehealth coverage and reimbursement for Medi-Cal beneficiaries into parity with that of commercial plans and policies. This would decrease income disparities in access to health care and health outcomes by reducing delays in in-person care for some conditions (appointments, diagnoses, treatment), as well as providing equal access to all modalities of care.

CHBRP also projects that AB 32 would decrease overall racial and ethnic disparities that are present due to the different baseline coverage between commercial plans and policies and Medi-Cal, which is predominantly comprised of people of color. This would decrease disparities in access to health care and health outcomes by reducing delays in in-person care for some conditions (appointments, diagnoses, treatment), as well as providing equal access to all modalities of care. CHBRP is unable to quantify the reduction in racial and ethnic disparities.

It is unknown whether racial or ethnic disparities in access to or use of telehealth exist among the commercially-insured population; therefore CHBRP is unable to estimate an impact for this population.

These changes would be attributable to two mechanisms in AB 32: 1) new coverage for telephone (audio only) that brings Medi-Cal beneficiaries' coverage into parity with commercial plans and policies; and 2) permanent eligibility for FQHCs and RHCs to bill Medi-Cal for telephone and live video visits with Medi-Cal patients.

**Disparities of transportation and geography:** AB 32 would increase access to health care by reducing transportation barriers to in-person care by covering telephone (audio only) visits. AB 32 would also increase health care options and reduce travel costs and travel time for those enrollees who use the newly covered telephonic visits or reimbursable live video visits with FQHC/RHC providers. These enrollees and Medi-Cal beneficiaries may have equivalent or better outcomes (compared with in-person care) because they would no longer delay or avoid in-person visits because of travel difficulties.

For those rural (and some urban) enrollees and Medi-Cal beneficiaries who have no broadband connectivity (due to lack of infrastructure in remote areas or cost of service or devices), a landline telephone would remain a viable telehealth modality, resulting in equivalent or better outcomes (compared with in-person care).

**Disparities in technology use:** CHBRP anticipates AB 32 would decrease disparities in care associated with technology barriers for many Californians who are low-income (Medi-Cal), live in broadband deserts, or lack digital literacy by permitting access to reimbursable telephone and live video visits.

## Long-Term Impacts

Although CHBRP estimates that telephonic telehealth services will increase in 2022 and 2023 due to new benefit coverage under AB 32 and the ongoing effects of the COVID-19 pandemic (as a barrier to in-person services), in the long term, CHBRP anticipates that technology capacity improvements could support additional use of live video. However, use of telephone for telehealth is likely to continue, especially for patients with technology limitations (e.g., Internet bandwidth, lack of smartphone or computer).

Under AB 32, Medi-Cal beneficiaries, especially those who access care through FQHCs/RHCs, would experience comparable coverage for telehealth care with

their commercially-insured counterparts, which would allow them access to the same telehealth choices. In the long term, CHBRP projects that this new parity could narrow racial/ethnic, income, and geographic disparities in access to care and health outcomes. CHBRP projects AB 32 would increase enrollee access to health care in the long-term, especially for those who would use audio-only services; it would also provide more data to inform future research about the appropriateness of telehealth care as compared with in-person visits and other telehealth modalities.

## Essential Health Benefits and the Affordable Care Act

AB 32 requires coverage of modes of delivery for health care services, but does not require coverage of specific tests, treatments, or services. Because AB 32 would not require coverage for a new state benefit mandate and therefore appears not to exceed the definition of EHBs in California.

A Report to the California State Legislature

Analysis of California Assembly Bill 32  
Telehealth

April 16, 2021

**California Health Benefits Review Program**  
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The California Health Benefits Review Program (CHBRP) was established in 2002. As per its authorizing statute, CHBRP provides the California Legislature with independent analysis of the medical, financial, and public health impacts of proposed health insurance benefit-related legislation. The state funds CHBRP through an annual assessment on health plans and insurers in California.

An analytic staff based at the University of California, Berkeley, supports a task force of faculty and research staff from multiple University of California campuses to complete each CHBRP analysis. A strict conflict-of-interest policy ensures that the analyses are undertaken without bias. A certified, independent actuary helps to estimate the financial impact. Content experts with comprehensive subject-matter expertise are consulted to provide essential background and input on the analytic approach for each report.

More detailed information on CHBRP's analysis methodology, authorizing statute, as well as all CHBRP reports and other publications, are available at [www.chbrp.org](http://www.chbrp.org).

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**Table 1. AB 32 Impacts on Benefit Coverage, Utilization, and Cost, 2022**

	Baseline (2022)	Postmandate Year 1 (2022)	Increase/ Decrease	Change Postmandate
<b>Benefit Coverage</b>				
Total enrollees with health insurance subject to state-level benefit mandates (a)	21,945,000	21,945,000	0	0.00%
Total enrollees with health insurance subject to AB 32	21,945,000	21,945,000	0	0.00%
<b>Commercial and CalPERS HMOs</b>				
Number of beneficiaries with coverage for...				
Telephone telehealth services	11,209,456	13,940,000	2,730,544	24.36%
Live video telehealth services	13,940,000	13,940,000	0	0.00%
Percentage of enrollees with coverage for...				
Telephone telehealth services	80.4%	100.0%	19.6%	24.36%
Live video telehealth services	100.0%	100.0%	0.0%	0.00%
<b>Medi-Cal Managed Care Plans</b>				
Number of beneficiaries with coverage for...				
Telephone telehealth services	5,881,892	8,005,000	2,123,108	36.10%
Live video telehealth services	8,005,000	8,005,000	0	0.00%
Percentage of enrollees with coverage for...				
Telephone telehealth services	73.5%	100.0%	26.5%	36.10%
Live video telehealth services	100.0%	100.0%	0.0%	0.00%
<b>Utilization and Cost</b>				
<b>Commercial and CalPERS HMOs</b>				
Average utilization per 1,000 lives				
Telehealth services				
Primary care and urgent care visits: telephone	69.8	86.9	17.0	24.36%
Primary care and urgent care visits: live video	86.9	86.9	0.0	0.00%
Outpatient mental health and SUD: telephone	165.2	205.5	40.2	24.36%
Outpatient mental health and SUD: live video	110.6	110.6	0.0	0.00%
Outpatient specialist visits: telephone	50.6	62.9	12.3	24.36%
Outpatient specialist visits: live video	62.9	62.9	0.0	0.00%
In-person services				
Primary care and urgent care visits	1,282.3	1,273.8	-8.5	-0.66%
Outpatient mental health and SUD	409.6	389.5	-20.1	-4.91%
Outpatient specialist visits	1,378.7	1,372.5	-6.2	-0.45%
Average cost per service				
Telehealth services				
Primary care and urgent care visits: telephone	\$195	\$195	\$0	0.00%
Primary care and urgent care visits: live video	\$195	\$195	\$0	0.00%
Outpatient mental health and SUD:	\$205	\$205	\$0	0.00%

telephone				
Outpatient mental health and SUD:				
live video	\$205	\$205	\$0	0.00%
Outpatient specialist visits: telephone	\$151	\$151	\$0	0.00%
Outpatient specialist visits: live video	\$151	\$151	\$0	0.00%
In-person services				
Primary care and urgent care visits	\$195	\$195	\$0	0.00%
Outpatient mental health and SUD	\$205	\$205	\$0	0.00%
Outpatient specialist visits	\$151	\$151	\$0	0.00%
<b>Medi-Cal Managed Care Plans</b>				
Average utilization per 1,000 lives				
Telehealth services				
Primary care and urgent care visits:				
telephone	23.79	175.25	151.5	636.59%
Primary care and urgent care visits:				
live video	13.88	12.29	-1.6	-11.47%
FQHCs and RHCs – primary care and urgent care visits: telephone	0.00	15.52	15.5	N/A
FQHCs and RHCs – primary care and urgent care visits: live video	4.10	1.09	-3.0	-73.44%
Outpatient mental health and SUD: telephone	3.74	24.17	20.4	546.12%
Outpatient mental health and SUD: live video	2.18	5.32	3.1	143.64%
FQHCs and RHCs – outpatient mental health and SUD: telephone	0.00	4.61	4.6	N/A
FQHCs and RHCs – outpatient mental health and SUD: live video	1.39	1.01	-0.4	-26.91%
Outpatient specialist visits: telephone	28.37	143.52	115.2	405.93%
Outpatient specialist visits: live video	16.55	10.06	-6.5	-39.19%
In-person services				
Primary care and urgent care visits	1,450.17	1,375.24	-75	-5.17%
FQHCs and RHCs – primary care and urgent care visits	128.02	121.77	-6	-4.89%
Outpatient mental health and SUD	228.04	216.25	-12	-5.17%
FQHCs and RHCs – outpatient mental health and SUD	43.40	41.28	-2	-4.89%
Outpatient specialist visits	1,729.10	1,674.76	-54	-3.14%
Average cost per service				
Telehealth services				
Primary care and urgent care visits:				
telephone	\$59	\$62	\$3	5.42%
Primary care and urgent care visits:				
live video	\$59	\$62	\$3	5.42%
FQHCs and RHCs – primary care and urgent care visits: telephone	\$25	\$218	\$193	780.67%
FQHCs and RHCs – primary care and urgent care visits: live video	\$25	\$218	\$193	780.67%
Outpatient mental health and SUD: telephone	\$125	\$283	\$159	127.40%



Outpatient mental health and SUD:				
live video	\$125	\$283	\$159	127.40%
FQHCs and RHCs – outpatient mental health and SUD: telephone	\$104	\$218	\$115	110.84%
FQHCs and RHCs – outpatient mental health and SUD: live video	\$104	\$218	\$115	110.84%
Outpatient specialist visits: telephone	\$33	\$53	\$19	57.50%
Outpatient specialist visits: live video	\$33	\$53	\$19	57.50%
In-person services				
Primary care and urgent care visits	\$62	\$62	\$0	0.00%
FQHCs and RHCs – primary care and urgent care visits	\$218	\$218	\$0	0.00%
Outpatient mental health and SUD	\$283	\$283	\$0	0.00%
FQHCs and RHCs – outpatient mental health and SUD	\$218	\$218	\$0	0.00%
Outpatient specialist visits	\$53	\$53	\$0	0.00%
<b>Expenditures</b>				
<i>Premium (expenditures) by payer</i>				
Private employers for group insurance	\$55,032,803,000	\$55,072,366,000	\$39,563,000	0.07%
CalPERS HMO employer expenditures (b) (c)	\$5,765,017,000	\$5,766,171,000	\$1,154,000	0.02%
Medi-Cal Managed Care Plan expenditures	\$24,150,529,000	\$24,287,063,000	\$136,534,000	0.57%
<i>Enrollee premiums (expenditures)</i>				
Enrollees for individually purchased insurance	\$15,847,507,000	\$15,854,023,000	\$6,516,000	0.04%
Individually purchased – outside exchange	\$4,890,852,000	\$4,893,960,000	\$3,108,000	0.06%
Individually purchased – Covered California	\$10,956,655,000	\$10,960,063,000	\$3,408,000	0.03%
Enrollees with group insurance, CalPERS HMOs, Covered California, and Medi-Cal Managed Care (c)	\$20,753,446,000	\$20,768,802,000	\$15,356,000	0.07%
<i>Enrollee out-of-pocket expenses</i>				
Cost sharing for covered benefits (deductibles, copayments, etc.)	\$13,168,032,000	\$13,209,736,000	\$41,704,000	0.32%
Expenses for noncovered benefits (d) (e)	\$0	\$0	\$0	0.00%
<b>Total Expenditures (f)</b>	<b>\$134,717,334,000</b>	<b>\$134,958,161,000</b>	<b>\$240,827,000</b>	<b>0.18%</b>

Source: California Health Benefits Review Program, 2021.

Notes: (a) Enrollees in plans and policies regulated by DMHC or CDI aged 0 to 64 years as well as enrollees 65 years or older in employer-sponsored health insurance. This group includes commercial enrollees (including those associated with Covered California or CalPERS) and Medi-Cal beneficiaries enrolled in DMHC-regulated plans.

(b) Of the increase in CalPERS employer expenditures, about 54.1%, or \$624,000, would be state expenditures for CalPERS members who are state employees or their dependents.

(c) Enrollee premium expenditures include contributions by employees to employer-sponsored health insurance, health insurance purchased through Covered California, and contributions to Medi-Cal Managed Care.

(d) Includes only expenses paid directly by enrollees (or other sources) to providers for services related to the mandated benefit that are not covered by insurance at baseline. 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.

(e) Although enrollees with newly compliant benefit coverage may have paid for some services before AB 32, CHBRP cannot estimate the frequency with which such situations may have occurred and therefore cannot estimate the related expense. Postmandate, such expenses would be eliminated, though enrollees with newly compliant benefit coverage might, postmandate, pay for some services for which coverage is denied (through utilization management review), as some enrollees who always had compliant benefit coverage may have done and may continue to do, postmandate.

(f) CHBRP estimates that the change in coverage mandated by AB 32 would result in an increase in expenditures of approximately \$1.29 PMPM for Medi-Cal COHS and FFS members. This equates to \$42.62 million in total expenditures.

*Key:* CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; COHS = County Operated Health Systems; DMHC = Department of Managed Health; FFS = Fee-for-Service program; FQHC = federally qualified health center; RHC = Rural Health Clinic; SUD = substance use disorder

## POLICY CONTEXT

The California Assembly Committee on Health has requested that the California Health Benefits Review Program (CHBRP)<sup>6</sup> conduct an evidence-based assessment of the medical, financial, and public health impacts of AB 32, Telehealth. Answers to additional questions from the Assembly Committee on Health and the Department of Health Care Services (DHCS) about telehealth have been incorporated throughout the analysis.

### Bill-Specific Analysis of AB 32, Telehealth

This section provides a high-level overview of the AB 32 bill language. More information about existing law and how AB 32 would change it is included in the “California Laws and Regulations” section below.

### Relevant Populations

If enacted, AB 32 would apply to the health insurance of approximately 24.7 million enrollees (62.6% of all Californians). This represents 100% of the 21.9 million Californians who will have health insurance regulated by the state that may be subject to any state health benefit mandate law, which includes health insurance regulated by the California Department of Managed Health Care (DMHC) or the California Department of Insurance (CDI), plus the 2.7 million beneficiaries receiving Medi-Cal benefits through County Organized Health Systems (COHS) and the Fee-for-Service program (FFS).

### Bill Language

CHBRP focuses this analysis on the impacts of coverage and reimbursement changes for telehealth services and therefore does not address potential impacts of other provisions included in AB 32. AB 32 consists of five sections that impact coverage and reimbursement for telehealth:

1. Definitions
  - a. “Synchronous interaction” is amended to specifically include audiovideo, audio only (such as telephone), and other virtual communication.
2. Telehealth coverage and reimbursement requirements for commercial and CalPERS plans and policies
  - a. AB 32 deletes the exclusion for Medi-Cal Managed Care Plans from this provision.
  - b. AB 32 adds provisions requiring entities contracting with health plans and policies (i.e. provider groups and subcontractors) to comply with this section.
3. Telehealth coverage and reimbursement requirements for County Organized Health Systems (COHS)
  - a. Similar to Medi-Cal Managed Care Plans, COHS and COHS subcontractors would be required to comply with the same telehealth coverage and reimbursement requirements as commercial and CalPERS plans and policies.
4. Reimbursement for telehealth services provided by an enrolled clinic

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<sup>6</sup> CHBRP’s authorizing statute is available at [www.chbrp.org/about\\_chbrp/faqs/index.php](http://www.chbrp.org/about_chbrp/faqs/index.php).

- a. Reimbursement for telehealth services shall be reimbursed on the same basis and to the same extent as equivalent in-person services.
  - b. Prohibits the Department of Health Care Services (DHCS) from restricting the ability of a clinic to provide and be reimbursed for services through telehealth through requirements for:
    - i. Face-to-face contact between a provider and patient;
    - ii. Patient's or provider's physical presence at the clinic or another location;
    - iii. Prior in-person contact between clinic and patient;
    - iv. Documentation of a barrier to an in-person visit or special need for a telehealth visit;
    - v. More stringent requirements on telehealth services than equivalent in-person services; and
    - vi. Limitations on the means or services through which telehealth services are furnished.
  - c. An enrolled clinic includes: community clinics; free clinics; intermittent clinics operated by primary care or free clinics; Federally Qualified Health Centers (FQHCs); Rural Health Clinics (RHCs); tribal clinics; and hospital or non-hospital-based clinics operated by the state, University of California, a city, county, city and county, or hospital authority.
5. Indefinite extension of DHCS-established telehealth flexibilities put in place during the COVID-19 public health emergency and provisions included in Welfare and Institutions Section 14132.723.

Two additional sections do not impact benefit coverage of telehealth services:

6. Enrollment for Medi-Cal programs
  - a. AB 32 would permit programs that permit onsite enrollment and recertification of individuals to enroll potential beneficiaries via virtual interaction, including telephone.
7. AB 32 also requires DHCS to establish an advisory group to provide input on the development of a revised telehealth policy and requires DHCS to complete an evaluation to assess the benefits of telehealth.

The full text of AB 32 can be found in Appendix A.

## **Analytic Approach and Key Assumptions**

CHBRP has previously analyzed bills requiring coverage and/or reimbursement parity: AB 744 in 2019, AB 2507 in 2017, SB 289 in 2015, and AB 1771 in 2014. Where applicable, this analysis builds on these previous analyses.

As mentioned above, CHBRP focuses this analysis on the impacts of coverage and reimbursement changes for telehealth services and therefore does not address potential impacts of Section 6 (enrollment via virtual interaction) or Section 7 (advisory board and evaluation of Medi-Cal policies). Nor does this analysis include potential impacts associated with concurrently proposed legislation and regulatory policies.

“Other virtual communication,” as listed in the bill language, is not defined by the bill. There are various potential interpretations of “other virtual communication”:

- CDI provided a definition of “other virtual communication” as any form of communication where the parties involved are not in the same physical location, including but not limited to audiovideo, audio only, text message, telephone, etc.<sup>7</sup>
- DHCS defines “virtual communication” as “virtual check-ins.”<sup>8</sup> These brief communication technology-based services are for patients to communicate with their providers or other skilled and trained individuals and consist of at least 5 minutes of technology-based communication or remote evaluation services to conduct an E-Visit. DHCS further clarified that generally, these virtual check-ins are for patients with established relationships with a provider or skilled and trained individual, and the communication is not related to a medical visit within the previous 7 days and does not lead to a medical visit within the next 24 hours (or soonest appointment available).
- Although it is possible E-Visits are synchronous interactions and would therefore fall under the “other virtual communication” category, CHBRP is unaware of other types of communication that would fall under this definition. Additionally, it is unlikely an E-Visit would rise to the level of being equivalent to an in-person visit. CHBRP has provided more information about e-visits in Appendix D.

Not all providers are eligible for telehealth reimbursement through current law or AB 32. This analysis focuses on providers eligible for reimbursement, including physicians and billable non-physician providers (i.e., nurse practitioner, physician assistant, mental health and substance use disorder [SUD] professional delivering a service with a supervising physician) to estimate the cost impact of AB 32.

Additionally, not all services provided via telehealth are equivalent to in-person visits. CHBRP focuses this analysis on modalities for which benefit coverage substantially changes and that are most likely to be considered equivalent to an in-person visit: live video and telephone (audio-only).

## Telehealth Terminology

### Substitute Versus Additional/Supplemental Telehealth Services

Telehealth services either replace (substitute) existing in-person visits or are new (additional/supplemental) visits that would not have taken place in the absence of telehealth coverage. More information about when telehealth services may be recommended by providers is included in the *Background* section.

### Telehealth Reimbursement Equivalent to In-Person Visits

Existing law (see below) and AB 32 require reimbursement parity for telehealth services when the telehealth service is equivalent to an in-person visit. “Equivalency” is typically determined based on the amount of time spent with the patient or reviewing records and providing consultation (such as during an eConsult). For example, if a provider spent 10 minutes speaking to a patient via telephone, the provider would bill for the equivalent 10 minute in-person visit. Alternately, although less frequently used, methods of reimbursement may require certain clinical requirements to be met in order for a provider to be

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<sup>7</sup> Personal communication with Josephine Figueroa of CDI, March 8, 2021.

<sup>8</sup> DHCS Telehealth Policy Proposal, February 1, 2021. Available at [https://www.dhcs.ca.gov/services/medical/Documents/DHCS-Telehealth-Policy-Proposal-2-1-21.pdf?utm\\_source=State+of+Reform+5+Things&utm\\_campaign=193fd45e9d-5+Things+CA+July+2\\_COPY\\_01&utm\\_medium=email&utm\\_term=0\\_37897a186e-193fd45e9d-273247429](https://www.dhcs.ca.gov/services/medical/Documents/DHCS-Telehealth-Policy-Proposal-2-1-21.pdf?utm_source=State+of+Reform+5+Things&utm_campaign=193fd45e9d-5+Things+CA+July+2_COPY_01&utm_medium=email&utm_term=0_37897a186e-193fd45e9d-273247429).

reimbursed according to an identified claim code. The claims code (HCPCS or CPT) identify what is required for a health care service or visit to fall under that code.

Some telehealth visits may not be equivalent to an in-person visit. For example, an e-mail exchange between a patient and provider may not rise to the same level as an in-person interaction.

### Coverage and Reimbursement Requirements

Telehealth coverage and reimbursement requirements are usually calibrated as an equivalent to in-person service or reimbursement. However, if there is no equivalent in-person service, telehealth coverage may still be required, but the reimbursement rate would be different from that of an in-person visit. Table 3 illustrates this.

**Table 2. Equivalency Scenarios Defining Telehealth Coverage and Reimbursement**

	Coverage Requirements	Reimbursement Requirements
Telehealth visit <i>is</i> equivalent to an in-person visit	Telehealth must be covered at parity with equivalent in-person visit.	Reimbursements paid for a covered telehealth services must be equal to the reimbursement paid for an equivalent in-person service. For example, the rate for a behavioral health appointment is the same, regardless if it is provided in-person or through telehealth.
Telehealth visit <i>is not</i> equivalent to an in-person visit	Telehealth must be covered. These requirements may be modality specific: e-mail must be covered even though it may not be equivalent to an in-person visit.	Telehealth must be reimbursed, but there is no in-person benchmark with which to compare the reimbursement rate. For example, even though an e-mail exchange is not the equivalent to an in-person visit, a provider must still be reimbursed for time spent communicating via e-mail. This rate could be different than in-person rates.

### Interaction With Existing State and Federal Requirements

Health benefit mandates may interact and align with the following state and federal mandates or provisions.

#### California Policy Landscape

##### *California law and regulations*

California’s Telehealth Advancement Act of 2011 (AB 415) became law January 1, 2012. Among several changes, the law updated legal definitions of telehealth, removed restrictions limiting where telehealth services could take place, expanded relevant providers to include all state-licensed health care providers, and allowed for patient verbal consent in addition to written consent for use of telehealth services (CCHP, 2015). AB 744 Telehealth, which was signed into law in 2019, made small changes to the definition of telehealth.

Existing definitions in the California Business and Professions Code<sup>9</sup> are:

- *Telehealth* – the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care

<sup>9</sup> Business and Professions Code 2290.5.

management, and self-management of a patient’s health. Telehealth facilitates patient self-management and caregiver support for patients and includes synchronous interactions and asynchronous store and forward transfers.

- *Synchronous interaction* – real-time interaction between a patient and a health care provider located at a distant site.
- *Asynchronous store and forward* – transmission of a patient’s medical information from an originating site to the health care provider at a distant site.

The Business and Professions Code is relevant for all providers licensed in California and is not impacted by the entity through which an enrollee’s health insurance is regulated.

As mentioned above, AB 32 would specify that “synchronous interaction” includes, but is not limited to, “audiovideo, audio only, such as telephone, and other virtual communication”.

As described in the overview of bill language, there are multiple requirements regarding coverage and reimbursement for telehealth and the requirements are the not the same for all impacted entities. Table 4 below provides a high-level overview of the changes AB 32 Telehealth would make to existing California law. Table 4 includes a column for coverage policies for FQHCs and RHCs, because these clinics are not subject to the same provisions as commercial plans and policies and other Medi-Cal providers. There are federal and other state requirements that apply directly to FQHCs and RHCs. Overall, AB 32 would change coverage of telehealth policies and require reimbursement parity mostly for live video and telephone visits. While some changes as a result of AB 32 would occur for asynchronous store and forward, eConsult, and E-Visits, these changes are marginal. CHBRP has provided more information about existing law and potential impacts of AB 32 for these services in Appendix D.

**Table 3. Comparison of Current Law and Regulations for Coverage and Reimbursement of Synchronous Telehealth With AB 32, by Modality**

	Commercial/CalPERS	DHCS Medi-Cal Policy (a)	FQHC/RHCs
<b>Live video</b>	Existing law	Current law requires coverage and reimbursement of synchronous telehealth at parity with in-person visits. Does not mention live video, although is interpreted to include live video	Covered for new and established patients
	Change as a result of AB 32	Explicitly includes live video	AB 32 requires coverage and reimbursement parity for live video for new and established patients
<b>Telephonic (audio only)</b>	Existing law	Current law requires coverage and reimbursement of synchronous telehealth at parity with in-person visits. Does not mention telephone and it is unclear whether interpretation includes telephone	Telephone is not currently covered

Commercial/CalPERS	DHCS Medi-Cal Policy (a)	FQHC/RHCs
<p>Change as a result of AB 32</p> <p>Explicitly includes telephone</p>	<p>Requires coverage and reimbursement parity for telephone for new and established patients</p>	<p>Requires coverage and reimbursement parity for telephone for new and established patients</p>

Source: California Health Benefits Review Program, 2021.

Notes: (a) Information displayed in the Medi-Cal column is according to DHCS coverage and reimbursement policy. Currently, Medi-Cal Managed Care Plans could decide to cover telehealth if they believe it is helpful in managing their patients and controlling costs. However, because it is not a requirement it is not explicitly included in the capitation rates set for each county and plan.

Key: DHCS = Department of Health Care Services; FQHC = federally qualified health center; RHC = rural health clinic

### Commercial and CalPERS Plans and Policies

Existing law<sup>10</sup> requires commercial and CalPERS DMHC-regulated plans and CDI-regulated policies to cover and reimburse services appropriately delivered through telehealth on the same basis and to the same extent that the plan or policy is responsible for covering the same service delivered in-person. Plans and policies are prohibited from restricting coverage of telehealth services to those provided by third-party corporate vendors (e.g., TelaDoc). Telehealth services are allowed to be included as part of capitated or bundled payments and cost sharing up to the equivalent cost sharing for the equivalent in-person service is permissible.

AB 32 newly specifies that entities delegated or contracted by the health plan or policy to provide health care services, such as a medical group or independent practice association, are required to comply.

### DMHC-Regulated Medi-Cal Managed Care Plans and County Organized Health Systems (COHS)

Existing law<sup>11</sup> exempts DMHC-regulated Medi-Cal Managed Care Plans from the same provisions that require DMHC-regulated commercial and CalPERS plans to cover and reimburse telehealth services at parity with the equivalent in-person services. AB 32 removes this exemption.

AB 32 also explicitly requires COHS to comply with the same Health and Safety Code provision that requires coverage and reimbursement parity for telehealth.

### Medi-Cal Telehealth Coverage

Telehealth coverage policies for Medi-Cal (Managed Care, COHS, and FFS) are determined through the Welfare and Institutions Code as well as guidelines and All Plan Letters published by the Department of Health Care Services. However, managed care plans are able to provide telehealth services to enrolled beneficiaries that exceed DHCS coverage policies. Medi-Cal Managed Care Plans could decide to cover telehealth if they believe it is helpful in managing their patients and controlling costs. However, because it is not a requirement, it is not explicitly included in the capitation rates set for each county and plan. This section is an overview of telehealth coverage policies *before* the COVID-19 public health emergency guidance went into effect. More information about the new public health emergency guidelines is included

<sup>10</sup> AB 744, passed in 2019 and implemented in 2021, created H&SC 1374.14 and IC 10123.855.

<sup>11</sup> AB 744, passed in 2019 and implemented in 2021, created H&SC 1374.14 and IC 10123.855.



in a following section. Additionally, some DHCS telehealth policies are not applicable to FQHCs and RHCs. Where policies are different, details are provided in the following section.

DHCS' telehealth coverage policy has been evolving over the last few years. DHCS released new guidance in 2019 that expanded the number of telehealth modalities and services for which Medi-Cal provides reimbursement.<sup>12</sup>

Providers are required to maintain appropriate documentation to substantiate the corresponding technical and professional components of billed codes, and these requirements are the same for services delivered through telehealth or in-person. Billing must include the appropriate telehealth modifier.

Services may be delivered via telehealth if the treating provider believes that the services being provided are clinically appropriate based upon evidence-based medicine and/or best practices. The telehealth coverage policy provides examples of services that would not be expected to be appropriately delivered via telehealth, such as services: performed in an operating room or while the patient is under anesthesia; that require direct visualization or instrumentation of bodily structures, involve sampling of tissue or insertion/removal of medical devices; and/or otherwise require the in-person presence of the patient for any reason.

### **Synchronous Interactions**

Medi-Cal reimburses for live video and does not limit reimbursement to certain specialties or services.

Medi-Cal only reimburses for services provided via telephone using the "virtual check-in via telephone" code. Coverage and reimbursement of this code is not limited to certain specialties or services.<sup>13</sup>

### **Public Health Emergency Telehealth Policy**

There are two public health emergency regulations that AB 32 would extend indefinitely: DHCS COVID-19 Public Health Emergency Telehealth Policy and Welfare and Institutions Code 14132.723. As described above, AB 32 extends certain provisions to Medi-Cal Managed Care Plans and COHS. The extension of these public health emergency regulations is the mechanism by which beneficiaries in the Medi-Cal Fee-for-Service program would gain expanded coverage of telehealth services and providers would gain increased reimbursement.

### **DHCS COVID-19 Public Health Emergency Telehealth Policy<sup>14</sup>**

These guidelines are effective during the public health emergency declaration made by the federal government.

- Reimbursement for telehealth services is required to be equal to the equivalent in-person service.<sup>15</sup>
- Reimbursement for modalities should be equal if the same service is provided and is appropriate. For example, telephone should be reimbursed at the same rate as live video if the services provided are the same.<sup>16</sup>

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<sup>12</sup> CA Department of Health Care Services. Medi-Cal Part 2 General Medicine Manual. Telehealth. (August 2020).

<sup>13</sup> CA Department of Health Care Services. Post-COVID-19 Public Health Emergency Telehealth Policy Recommendations. (February 2021).

<sup>14</sup> DHCS, Medi-Cal payment for telehealth and virtual/telephonic communications relative to the 2019-novel coronavirus (COVID-19) (January 2021).

<sup>15</sup> <https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2019/APL19-009COVID-19.pdf>.

<sup>16</sup> <https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2019/APL19-009COVID-19.pdf>.

- Any currently covered Medi-Cal benefit may be delivered via telehealth as determined appropriate by the provider.<sup>17</sup>
- Telehealth may be used to satisfy network adequacy requirements.<sup>18</sup>

### **Welfare and Institutions Code 14132.723**

AB 1494 went into effect on January 1, 2020 and waives certain Medi-Cal telehealth policies for FFS Medi-Cal providers, clinics, or facilities during a declared state of emergency. AB 32 would make these policy changes permanent.

- Neither face-to-face nor a patient's physical presence is required for provided services; and
- Reimbursement is required for telehealth services, including audio-only services.

### **Medi-Cal Clinics, including FQHCs and RHCs<sup>19</sup>**

As discussed in the bill language, Medi-Cal enrolled clinics include community and free clinics, hospital-based clinics operated by a state entity, as well as FQHCs and RHCs. Usually, clinics are reimbursed for services provided based on the beneficiaries for which they provide care. If a beneficiary with health insurance through a DMHC-regulated Medi-Cal Managed Care Plan sought care through an FQHC, FQHC-lookalike<sup>20</sup>, or RHC, the clinic would receive reimbursement for the service according to the Medi-Cal Managed Care contract of the plan. If a beneficiary receiving services through the FFS program sought care at one of these clinics, reimbursement would be in accordance with rates determined by DHCS.

However, unlike some of the clinics identified above, FQHCs, FQHC-lookalikes, and RHCs are subject to federal statute governing Medi-Cal reimbursement. They typically provide health care to low-income and underserved populations, and are entitled to cost-related prospective payments for the services delivered. FQHCs (including "lookalikes") and RHCs must meet certain requirements and provide certain services to obtain these specific designations. Because of this interaction, FQHCs and RHCs are subject to different rules than other Medi-Cal providers regarding telehealth.

Rules unique to FQHCs and RHCs include:

- Health care services, including telehealth, must be provided within the clinic's "four walls."
- Reimbursement is provided for services covered by Medi-Cal and within the FQHC's "scope of services," which includes primary care, obstetrics and gynecology, mental health, and substance use disorder treatments.

Specific telehealth reimbursement policies for FQHCs and RHCs are:

- Live video is reimbursed at the prospective payment service (PPS) rate according to the above rules and only for established patients.
- Telephone is not reimbursed.

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<sup>17</sup> <https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2019/APL19-009.pdf>.

<sup>18</sup> <https://www.dhcs.ca.gov/formsandpubs/Documents/MMCDAPLsandPolicyLetters/APL2019/APL19-009.pdf>.

<sup>19</sup> <https://www.chcf.org/wp-content/uploads/2021/01/ReimbursingFQHCsTelehealthPostCOVID19Pandemic.pdf>.

<sup>20</sup> FQHC-lookalikes are clinics that have met certain federal guidelines to obtain cost-related reimbursement, but they are not supported by federal grants from the Bureau of Primary Health Care as "official" FQHC grantees are.

## **FQHC and RHC COVID-19 Public Health Emergency Telehealth Coverage Policy Changes**

During the COVID-19 public health emergency, FQHCs and RHCs are allowed to be reimbursed for telehealth in the following circumstances:

- No longer subject to the “four walls” or face-to-face requirements.
- Telehealth can be provided to both established and new patients.
- Telephone, along with live video, is a covered modality and is reimbursed at the PPS rate.

These policies would continue under AB 32 (section 4), assuming any necessary federal approval is obtained.

### *Proposed policy changes in California*

DHCS put forward an updated telehealth policy proposal that would incorporate some, but not all, of the flexibilities extended during the pandemic.<sup>21</sup> Additionally, Governor Newsom’s proposed 2021–2022 budget would make permanent certain telehealth flexibilities put in place during the pandemic, as described in DHCS’ proposed telehealth policy.<sup>22</sup> CHBRP’s estimate of the marginal impacts of AB 32 does not include the potential impacts from the DHCS proposed guidance.

One bill introduced during the 2021–2022 legislative cycle has the potential to interact with AB 32’s provisions related to synchronous telehealth:

- *AB 14 (Aguiar-Curry) Communications: broadband services: California Advanced Services Fund* would bolster Californian’s access to broadband services. As described in the *Background* section, access to broadband is a barrier to use of telehealth services for some Californians.

### *Similar requirements in other states*

States vary greatly in the definition and regulation of telehealth. Forty-nine states and the District of Columbia have a codified definition of telehealth (or telemedicine) in law, regulations or in their Medicaid programs. Alabama is the only state that does not have an established legal definition for telehealth (CCHP, 2020).

All 50 states and the District of Columbia reimburse for some type of telehealth service in their Medicaid programs (CCHP, 2020). This is an increase from the 44 state Medicaid programs in 2014. Among these states, live video is the most commonly reimbursed form of telehealth, with all states reimbursing for live video. However, the terms and conditions related to live video reimbursement vary widely across states. As of September 2020, California is 1 of 18 states that reimburses for store-and-forward in its Medicaid program (CCHP, 2020). Prior to the COVID-19 public health emergency, audio-only telephone was rarely an acceptable form of delivery; most state Medicaid programs are either silent or explicitly exclude telephone from reimbursement. However, a few states (South Carolina, Texas, Tennessee, Utah, and New York) have begun incorporating telephone into their permanent telehealth policies, as a result of the COVID-19 public health emergency (CCHP, 2020).

Because FQHCs and RHCs bill as an organization rather than as an individual provider, these clinics are often excluded from telehealth reimbursement policy. Some states (Hawaii, West Virginia, and Wisconsin)

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<sup>21</sup> DHCS, Post-COVID-19 Public Health Emergency Telehealth Policy Recommendations: Public Document, February 2021.

<sup>22</sup> DHCS, 2021-22 Governor’s Budget Department of Health Care Services Highlights, January 2021. Available at [https://www.dhcs.ca.gov/Documents/Budget\\_Highlights/DHCS-FY-2021-22-Governors-Budget-Highlights.pdf](https://www.dhcs.ca.gov/Documents/Budget_Highlights/DHCS-FY-2021-22-Governors-Budget-Highlights.pdf). Accessed March 15, 2021.

have addressed this issue by clarifying that FQHCs are eligible providers for some or all services provided via telehealth or have addressed reimbursement differences for these entities (CCHP, 2020).

Forty-three states and the District of Columbia have laws in place that regulate telehealth reimbursement among private payers (CCHP, 2020). There is much variation among these laws; not all states require reimbursement parity between telehealth services and the same service delivered in-person. At least six states (Delaware, Georgia, Hawaii, Minnesota, New Mexico, and Washington) have laws in place that are similar to California law in that they require **reimbursement parity** between telehealth and in-person services. At least 21 states (Alaska, Arkansas, California, Connecticut, Delaware, Georgia, Indiana, Maryland, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Ohio, Oregon, Vermont, Virginia, and West Virginia) and the District of Columbia have laws in place that require **coverage parity** between telehealth and in-person services.

## Federal Policy Landscape

The following federal requirements (e.g., Medicare) provide context for the state of telehealth nationally, but some do not interact directly with AB 32. Policies and reimbursement codes established by Medicare heavily influence coverage and reimbursement policies in commercial plans and policies, as well as in state Medicaid programs. Additionally, commercial plans and policies and Medicaid programs were only able to take some actions related to the COVID-19 public health emergency after Medicare and the federal government made certain policy changes.

### *Relevant federal actions in response to the COVID-19 public health emergency*

The federal Health and Human Services Agency (HHS) issues a limited waiver of certain Health Insurance Portability and Accountability Act (HIPAA) requirements to improve data sharing and patient care during the public health emergency.<sup>23</sup> Similarly, HHS' Office for Civil Rights announced it would not impose penalties for noncompliance with HIPAA regulations against providers leveraging telehealth platforms that may not comply with the privacy rule during the public health emergency.<sup>24</sup> Unless the federal government takes actions, these flexibilities will cease once the public health emergency ends.

Providers have used these flexibilities to provide telehealth services through non-HIPAA-compliant platforms, such as Facebook Messenger and FaceTime.

### *Medicare*

Medicare telehealth policy is divided into two categories: telehealth services and communications technology-based services.

#### Telehealth services

Medicare defines “telehealth services” as services that are ordinarily furnished in-person, but are instead furnished using interactive, real-time telecommunication technology. With the exception of the COVID-19 public health emergency policy (see below), Medicare restricts the use of telehealth by both geographic region and “originating site” (the patient’s location when they receive telehealth services).

The patient cannot receive reimbursable telehealth services from their home; the originating site must be a medical facility such as a hospital, rural health clinic, or provider’s office (CMS, 2018).

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<sup>23</sup> HHS, COVID-19 & HIPAA Bulletin, March 2020. Available at <https://www.hhs.gov/sites/default/files/hipaa-and-covid-19-limited-hipaa-waiver-bulletin-508.pdf>. Accessed on March 15, 2021.

<sup>24</sup> HHS, OCR announces notification of enforcement discretion for telehealth remote communications during the COVID-19 nationwide public health emergency, March 2020. Available at <https://www.hhs.gov/about/news/2020/03/17/ocr-announces-notification-of-enforcement-discretion-for-telehealth-remote-communications-during-the-covid-19.html>. Accessed March 15, 2021.

If a patient's originating site meets the specified qualifications, Medicare will reimburse for synchronous live video.

### Communication technology–based services (CTBS)

The Calendar Year 2019 Physician Fee Schedule finalized by the Centers for Medicare & Medicaid Services (CMS) in Fall 2018 expanded telehealth reimbursement rules for Medicare Fee-for-Service and Medicare Advantage plans, effective January 1, 2019 (CMS, 2019). By differentiating “Medicare telehealth services” from “communication technology-based services,” CMS now enables providers to provide some telehealth services, regardless of geographic region or originating site. Newly reimbursable services include virtual check-ins via audio or video, remote evaluation via store and forward, interprofessional Internet consultation via telephone or Internet, and E-Visits through an online portal (CCHP, 2020; CMS, 2019). Virtual check-ins and remote evaluation must be provided by a billable provider.

### Medicare policy changes during the COVID-19 public health emergency

During the COVID-19 Public Health Emergency, the Centers for Medicare & Medicaid Services (CMS) made the following temporary policy changes for both telehealth services and CTBS. These changes will sunset once the public health emergency ends.

- Removes geographic and site location requirements for patients and providers;
- Broad reimbursement of live video;
- Reimbursement of audio-only (telephone) visits allowed for evaluation and management services and behavioral health counseling and educational services;
- Reimbursement of multiple modalities for CTBS;
- Expanded list of reimbursement codes for services provided via telehealth; and
- Some reimbursement rates are equivalent to in-person service rates and others have been increased.

CMS finalized the CY 2021 Physician Fee Schedule in late 2020 and made the following permanent changes (CMS, 2020a). Some changes made during the public health emergency would require congressional action to make permanent.

- Expanded list of codes eligible for telehealth reimbursement. Some codes have been permanently included and others are included on a provisional basis, allowing CMS to assess the codes' qualifications.
- Medicare is removing the exclusion of telephone, fax machines, and e-mail from the definition of “interactive telecommunication system.” However, Medicare will not reimburse for telephone codes.

### *Affordable Care Act*

A number of Affordable Care Act (ACA) provisions have the potential to or do interact with state benefit mandates. Below is an analysis of how AB 32 may interact with requirements of the ACA as presently

exist in federal law, including the requirement for certain health insurance to cover essential health benefits (EHBs).<sup>25,26</sup>

Any changes at the federal level may impact the analysis or implementation of this bill, were it to pass into law. However, CHBRP analyzes bills in the current environment given current law and regulations.

### Essential health benefits

Nongrandfathered plans and policies sold in the individual and small-group markets are required to meet a minimum standard of benefits as defined by the ACA as essential health benefits (EHBs). In California, EHBs are related to the benefit coverage available in the Kaiser Foundation Health Plan Small Group Health Maintenance Organization (HMO) 30 plan, the state's benchmark plan for federal EHBs.<sup>27,28</sup> CHBRP estimates that approximately 4.2 million Californians (11%) have insurance coverage subject to EHBs in 2022.<sup>29</sup>

States may require plans and policies to offer benefits that exceed EHBs.<sup>30</sup> State rules related to provider types, cost sharing, or reimbursement methods would not meet the definition of state benefit mandates that could exceed EHBs.<sup>31</sup>

AB 32 would not require coverage for a new state benefit mandate and therefore appears not to exceed the definition of EHBs in California.

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<sup>25</sup> The ACA requires nongrandfathered small-group and individual market health insurance — including but not limited to QHPs sold in Covered California — to cover 10 specified categories of EHBs. Policy and issue briefs on EHBs and other ACA impacts are available on the CHBRP website: [www.chbrp.org/other\\_publications/index.php](http://www.chbrp.org/other_publications/index.php).

<sup>26</sup> Although many provisions of the ACA have been codified in California law, the ACA was established by the federal government, and therefore, CHBRP generally discusses the ACA as a federal law.

<sup>27</sup> CCIIO, Information on Essential Health Benefits (EHB) Benchmark Plans. Available at: <https://www.cms.gov/ccio/resources/data-resources/ehb.html>.

<sup>28</sup> H&SC Section 1367.005; IC Section 10112.27.

<sup>29</sup> CHBRP, *Estimates of Sources of Health Insurance in California in 2021*. Available at: [www.chbrp.org/other\\_publications/index.php](http://www.chbrp.org/other_publications/index.php).

<sup>30</sup> ACA Section 1311(d)(3).

<sup>31</sup> Essential Health Benefits. Final Rule. A state's health insurance marketplace would be responsible for determining when a state benefit mandate exceeds EHBs, and QHP issuers would be responsible for calculating the cost that must be defrayed.









## BACKGROUND ON TELEHEALTH

This section provides context for consideration of AB 32 and includes information about patient and provider access to technology, telehealth use by patients and providers, and a description of relevant social determinants of health and disparities among subpopulations, including rural populations. This section focuses on telehealth modalities and services identified in AB 32, as described in the *Policy Context* section.

### Access to Technology in California

In order to successfully use telehealth, at least four key elements must be available to both patients and providers (Figure 1).

**Figure 1. Necessary Conditions for Facilitating Telehealth Visits**

 	<p><b>Connectivity</b> Broadband availability (wired or cell towers and cellular data plan) for patients and providers</p>
 	<p><b>Access to devices</b> To facilitate communication through smart phones, tablets, computers, electronic health records with patient portals, etc.</p>
 	<p><b>Digital literacy</b> Competency for patients and providers to operate devices</p>
 	<p><b>Access to providers</b> Providers with training, software and hardware to support HIPAA compliant telehealth visits</p>

### Connectivity

#### *Consumers/patients*

Consumer access to the Internet, telephone, or other electronic communication devices is necessary for communicating with health care providers for treatment and advice via telehealth. A significant share of Californians lack necessary connectivity and/or devices, other than telephone, that are required to engage in telehealth visits. Moreover, the quality of connectivity is also important for live video telehealth, with wired broadband<sup>32</sup> (cable, fiber optic, DSL) generally providing more stable, faster, and higher quality communication than cellular phones using data plans; reliance on smartphone cellular plans can limit some people’s access to telehealth because unlimited data plans can be unaffordable for some consumers.

Reliable broadband is necessary for full-featured synchronous video telehealth; however, a recent gap analysis of broadband access by the California Public Utilities Commission found that California’s

<sup>32</sup> Broadband is the infrastructure or pathways that connect user devices to the Internet or cellular phone service via cable, DSL (phone line), fiber optic, or satellite. Some pathways offer faster or more reliable service than others. “Mobile broadband” is a cellular service using satellites and towers as opposed to general broadband and fixed broadband, which are wired.

statewide adoption rate is 87.3% at speeds exceeding 200 Kbps.<sup>33</sup> For speeds meeting California's minimum broadband definition — 6 Mbps (download) and 1 Mbps (upload) — the statewide adoption rate is 80.2% (Huang et al., 2019). California's minimum broadband speed is below that of the Federal Communications Commission (25/3 Mbps); however, *that minimum speed is adequate for a telehealth video visit for a single user on one device* (more information is included in Appendix D). As a result of the pandemic, the work to-date on broadband access is being elevated among California policymakers and stakeholders, who are actively engaged in exploring expansion of broadband to unconnected and underconnected urban and rural communities<sup>34</sup> (CBC, 2020; CETF, 2021; CHCF, 2018; Governor Newsom, 2020).

An analysis by the National Digital Inclusion Alliance (NDIA) of U.S. household Internet access among 635 communities (>65,000 people) defined connectivity more broadly, including both wireline broadband and cellular data plans. Using U.S. census data, NDIA reported that 22% of households in California had no wired broadband, and 9% of households had no access to cellular data plans *or* wireline broadband (cable, fiber optic, or DSL). The percent of households with no cellular data plans *or* broadband ranged from a low of 1.7% (Chino Hills ranked 624 of 635 U.S. cities) to a high of 35% (Lynwood ranked third worst of 635 U.S. cities) (NDIA, 2021). (See Appendix D for a list of the "worst connected" communities in California as identified by NDIA; see the Disparities section for discussion of significant differences in type of broadband access within communities.)

Findings from these reports comport with the results from a survey of 1,625 California adults in 2019. Eighty-eight percent of respondents reported having broadband connectivity; 10% reported smartphone-only connectivity (as compared with 18% in 2017). Of the 12% of respondents reporting no Internet connectivity, 51% reported cost as a reason; 31% reported the ability to connect through another site than home; and 21% reported no Internet service available in their community (CETF, 2019).

## Provider and Patient Use of and Satisfaction With Telehealth

Access to and utilization of telehealth is increasing due to changes in reimbursement policies by purchasers and payers before the COVID-19 pandemic, but it accelerated substantially during the pandemic. This section presents information about the use of telehealth from different perspectives in the health care system pre-pandemic and during the pandemic.

### *California provider experience*

A California Health Care Foundation (CHCF) survey of 1,202 health care providers (across clinical specialties) in September 2020 found that the number who reported using telehealth grew from 30% (pre-pandemic) to 79% during the pandemic, along with the proportion of telehealth appointments, which grew from 24% pre-pandemic to 51% during the pandemic. Telehealth use was greatest among behavioral health providers, radiologists, pathologists, and emergency medicine physicians pre-pandemic. Although telehealth use among all provider types jumped during the COVID-19 pandemic, the adoption of telehealth had been growing pre-pandemic; this upward trend appears to be holding even as telehealth use waned during summer 2020 (CHBRP, 2021).

Almost all California providers who used telehealth reported using live video and telephone (audio only) for some portion of their telehealth visits. Eighty percent of providers reported using live video for some percentage of their appointments during the pandemic as compared with 55% pre-pandemic; and 46% reported using live video for more than half of their telehealth visits as compared with 26% pre-pandemic. Ninety percent reported using telephone appointments for some proportion of their telehealth visits during the pandemic (CHCF, 2020a).

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<sup>33</sup> 200 Kbps represents the minimum speed for email and browsing or supporting one basic video call (e.g., Skype/Zoom); 3 to 6 Mbps is minimum recommended speed to support one video call at a time; each simultaneous household broadband user is additive to the speed requirement. See Appendix D for more information.

<sup>34</sup> [Executive Order N-73-20](#). Governor Gavin Newsom. August 14, 2020.



AB 32 includes a mandate for Medi-Cal to cover telehealth. Safety-net providers, a subset of CHCF survey respondents, reported that 53% of their telehealth visits during the pandemic were conducted by telephone as compared with 41% of visits for non-safety-net providers, indicating that the telephone was an important tool for facilitating visits for all providers, but especially for those serving a low-income population, which is more likely to lack access to broadband connectivity (CHCF, 2020a).

Provider experience with telehealth during the pandemic appears to be favorable, with 84% of providers stating that telehealth was “very” or “somewhat” effective for providing care to their patients; and 89% reporting that they would continue to use telehealth if parity payments for telehealth and in-person visits remained (CHCF, 2020a). However, if payment parity with in-person visits was removed, interest in delivering care via telehealth declined from 89% to 42% (CHCF, 2020a).

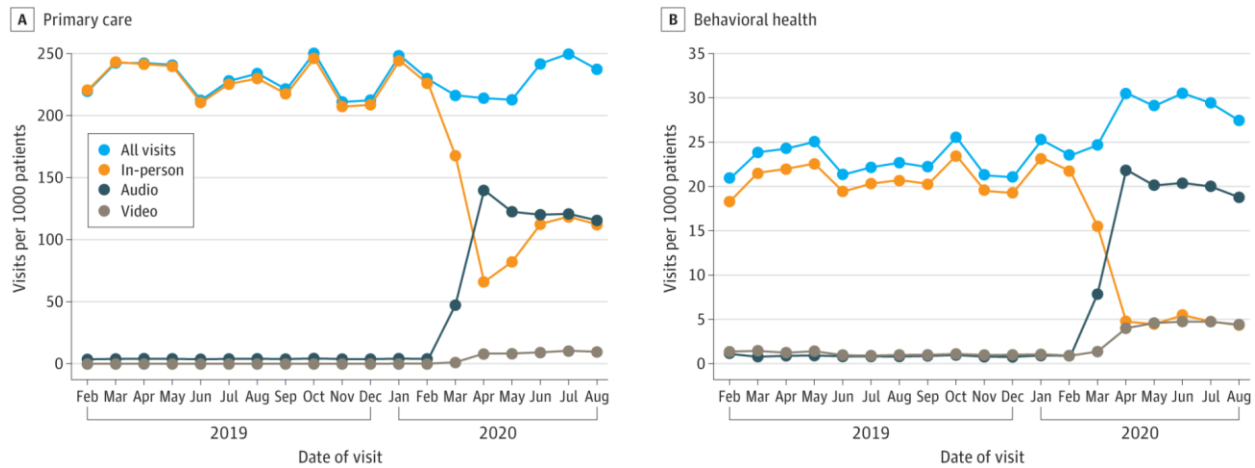
### California FQHCs/RHCs experience

In addition to providing primary care services to low-income people, FQHCs and RHCs provide dental, mental health, vision, and substance use disorder care as well as “enabling services” (e.g., case management, enrollment assistance, interpretation, transportation, etc.) (CHCF, 2019). These clinics treat about 23% of all Medi-Cal beneficiaries in California (National Association of Community Health Centers, 2018). As a proportion of patients seen by FQHCs, Medi-Cal beneficiaries comprise 66% of patients seen at the more than 260 FQHCs in California (CHCF, 2019; RHHub, 2020). The 262 RHCs operate similarly in rural areas (RHHub, 2020).

Historically, FQHCs and RHCs have been excluded from reimbursement for telephone and live video visits (with the exception of patients using live video visits onsite at a clinic to communicate with a remote provider). As discussed in the *Policy Context* section, federal and state policy permitted temporary reimbursement for telehealth (including telephone [audio-only visits]) under emergency order due to the COVID-19 pandemic. An analysis of services provided by 41 California FQHCs (534 physical locations) before and during pandemic showed a statistically significant decrease (-6.5% [95% CI, -104% to -2.3%;  $P = 0.03$ ) in the total visit volume for in-person primary care visits (average of 231.7 pre-pandemic primary care visits/1,000 patients/month compared with an average of 228.6 visits/1,000 patients/month during the COVID-19 pandemic) (Uscher-Pines et al., 2021).

However, as shown in Figure 2, the overall volume of primary care visits appeared to be mostly maintained during the pandemic due to FQHCs substituting (and being reimbursed for) live video and telephone (audio-only) visits. Uscher-Pines et al. found that there were 109.9 in-person, 111.0 telephone, and 7.8 video visits per 1,000 patients per month for primary care. Almost half of the visits occurred by telephone (48.5%), and very few occurred by video (3.4%). For behavioral health, there were 6.6 in-person, 18.2 telephone, and 4.0 video visits per 1,000 patients per month, with 22.8% occurring in-person, 63.3% via telephone, and 13.9% via video.

**Figure 2. California Sample of FQHCs: Pre- and Pandemic Visit Volume Supplemented by Telehealth**



Source: Uscher-Pines et al., 2021.

### California patient experience

Patient interest and ability to participate in telehealth visits is another key component to telehealth utilization, and studies indicate that patients are willing and interested in participating in telehealth visits when available.

More recent data show that broad patient adoption of telehealth is associated with the COVID-19 pandemic. As described in the CHBRP [Background Brief: Telehealth](#), 62% of 2,249 California residents who received care since March 2020 reported using telehealth (CHBRP, 2021; CHCF, 2020b). Approximately half the respondents used phone (audio only), and the other half used live video. Of those using a telephone visit, 24% reported they were “more satisfied” with their phone visit than with their last in-person visit; 48% were “just as satisfied”; and 28% were “less satisfied” with their phone visit. Similar results were found for patients with video visits: 33% reported they were “more satisfied” with their video visit than with their last in-person visit; 32% reported they were “just as satisfied”; and 30% were “less satisfied” with their video visit.

When rating the satisfaction with how well the technology worked for telephone and video, respondents reported higher satisfaction with video technology than telephone; 70% of respondents using video technology reported being “very satisfied” or “somewhat satisfied” as compared with almost 50% of telephone users being very/somewhat satisfied (CHCF, 2020b). Patients satisfaction is attributable to reduction in travel and waiting time, reduction in time away from work and its associated costs, as well as increased safety during the pandemic (Almathami et al., 2020; Westby et al., 2021). Patients also reported negative elements of telehealth such as poor connectivity/technical problems, language barriers (for hearing impaired or non-English speakers with no translators available), and lack of privacy (from family/coworkers) during visits (Almathami et al., 2020; CHCF, 2020b).

## Social Determinants of Health<sup>35</sup> and Disparities<sup>36</sup>

SDoH include factors outside of the traditional medical care system that influence health status and health outcomes. Where evidence is available, CHBRP presents the range of SDoH and related disparities (e.g., income, education, and social construct around age, race/ethnicity, gender, and gender identity/sexual orientation) that are relevant to AB 32.

### Disparities in Telehealth Access and Use

Disparities in use of some telehealth modalities persist due to existing connectivity barriers and differential insurance reimbursement policies for certain subpopulations (rural, Medi-Cal beneficiaries). Other reasons for disparities in use among patients include unaffordable devices (e.g., smartphones, computers), Internet and data plans, and a lack of digital literacy to operate devices and troubleshoot broadband difficulties.

#### *Geography*

The National Advisory Committee on Rural Health and Human Services 2018 report stated that rural-urban health disparities exist nationally (HRSA, 2018). Rural populations are generally older and sicker than urban populations, with less access to insurance and health care than their urban counterparts (HRSA, 2018). Travel barriers and inadequate provider–patient ratios are telehealth-relevant factors that contribute to rural health disparities (Marcin et al., 2016; Weinhold and Gurtner, 2014). About 13% (5.2 million) of California’s 39 million residents live in rural areas (Stanford, 2021); and in about two-thirds of counties, the number of physicians per capita is less than what is considered adequate to meet demand (Coffman et al., 2018).

Traveling to obtain in-person health care services can be a burden for rural (and some urban) residents, especially for those who have limited transportation options or who have complex conditions that make travel difficult (CHBRP, 2019). National studies conducted prior to and since the onset of the COVID-19 pandemic found that rural residents were less likely to use video telehealth than their urban counterparts (CHBRP, 2019; Day and Zweig, 2018; Jaffe et al., 2020; Nelson et al., 2019; Patel et al., 2021a; Pierce and Stevermer, 2020).

The disparity in use between urban and rural residents has implications for health outcomes. In a survey of rural Californians, Lee et al. (2019) reported that individuals who reported excellent, very good, or good health status were more likely to report telehealth use than individuals who reported poorer health status.

#### *Language*

CHBRP found that telehealth access and utilization were lower for non-English speakers. In a study of patients from a Massachusetts academic outpatient clinic, non-English speakers were less likely to have Internet access, an e-mail address, and a smartphone or computer capable of video (Blundell et al., 2020). This finding holds true in California as well; the CHCF survey of low-income California residents found a significantly lower rate of Internet connectivity among Spanish-dominant speakers (57%) as compared with English-dominant speakers (86%) (CHCF, 2020b). Several studies that examined data

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<sup>35</sup> CHBRP defines social determinants of health as conditions in which people are born, grow, live, work, learn, and age. These social determinants of health (economic factors, social factors, education, physical environment) are shaped by the distribution of money, power, and resources and impacted by policy (adapted from Healthy People 2020, 2015; CDC, 2014). See [SDoH white paper](#) for further information.

<sup>36</sup> Several competing definitions of “health disparities” exist. CHBRP relies on the following definition: “Health disparities are potentially avoidable differences in health (or health risks that policy can influence) between groups of people who are more or less advantaged socially; these differences systematically place socially disadvantaged groups” at risk for worse health outcomes (Braveman, 2006).

during the COVID-19 pandemic found that non-English speakers were less likely to utilize any form of telehealth services (Blundell et al., 2020; Eberly et al., 2020; Schifeling et al., 2020).

### *Income*

Differences in broadband access and telehealth use are evident by income. For example, as noted earlier, rural communities have less access to and use of video-based telehealth, but many low-income urban communities experience similar lack of access (Table D.1, Appendix D). In the CHCF survey of Californians, 65% of respondents with low incomes (compared with 62% of respondents overall) reported that they had a telehealth visit (telephone-audio-only or live video) during the pandemic. Although low income people and the overall population both reported more telephone use (43% and 38%, respectively) than live video use (34% and 36%, respectively), low-income respondents used telephone visits more often than the overall population. (CHCF, 2020b). In the same survey, low-income respondents were slightly more likely than all respondents to report an easier time attending the televisit (audio-only and live video) compared with past in-person visits (64% vs 56%, respectively). They were also more likely to say they wanted their clinician to give them a choice of an in-person or telehealth visit (63% vs 56%) (CHCF, 2020b).

The CHCF survey of providers' telehealth use found that safety-net providers (those serving Medi-Cal or uninsured patients) used video for 47% of their telehealth appointments, compared to 59% of non-safety-net providers. Almost half of these providers (45%) believe only some, a few, or none of their Medi-Cal or uninsured patients have adequate access to the technology needed for care via video telehealth (CHCF, 2020a).

### *Race/Ethnicity*

In California, people of color generally self-report worse health status, experience higher rates of many diseases, and have worse health outcomes than white Californians, (Gaines, 2019). For example, Black Californians consistently experience the highest rates of preventable hospitalizations for diabetes, COPD, asthma, and congestive heart failure as compared with White and Asian/Pacific Islander Californians. People of color also generally experience worse access to (in-person) care when compared to White individuals (DHCS, 2020).

Differences in Internet connectivity also exist by race/ethnicity in California, which may affect some people's ability to use telehealth care, especially if telephone (audio-only) is unavailable/uncovered. Earlier research showed that people of color were less likely to have access to broadband Internet and e-mail accounts and less likely to use online services or e-mail for health care advice and treatment (Baldassare et al., 2013; Dudas and Crocetti, 2013; Gibbons, 2008; Mitchell et al., 2014). According to the more recent 2019 CETF survey of 1,625 California adults, people of color reported being unconnected or underconnected (smartphone only) to the Internet more often than white individuals (11% of Whites reported being unconnected or underconnected, followed by Blacks, 19%; Asians, 28%; and (non-White) Latinos, 32%) (CETF, 2019).

Differences in access to Internet/WiFi connectivity can impact patient access to or choice of telehealth modality. There is conflicting evidence of telehealth use among people of color as compared with White counterparts. Several studies indicated lower use of telehealth by people of color (video in particular). Two national studies compared inter-modality use by race during the pandemic and found that people of color were less likely to use live video and were more likely to use telephone, as compared with white patients (Pierce and Stevermer, 2020; Schifeling et al., 2020). Analysis of ambulatory care visits in one Southern California academic health system found that Asian and Latino individuals were less likely to use telephone (audio-only) or live video visits during the COVID-19 pandemic compared with White individuals, whereas no difference was found between Black and White individuals (Kakani et al., 2021). Another study found that Black patients were two times more likely to complete a phone visit than a live video visit as compared with White patients (Wegermann, et al., 2021).

However, several other studies reported greater overall use of telehealth, including live video, by people of color as compared with white counterparts. For example, Campos-Castillo et al. (2021) surveyed Internet users' (n=10,624) use of telehealth services during the pandemic and found a significantly higher odds of Blacks (OR, 1.71; 95% CI, 1.32–2.21), Latinos (OR, 1.36; 95% CI 1.09–1.69), and those identifying as other race (OR, 1.58; 95% CI, 1.19–2.09) using telehealth than whites. A recent California-based survey (n=2,249) also found that people of color reported greater use of live video and telephone (76%) than white respondents (48%) during the COVID-19 pandemic (CHCF, 2020b).

### *Age*

Disparities in telehealth use by age remained during the COVID-19 pandemic as compared with data presented in a previous CHBRP report (CHBRP, 2019). Three earlier observational studies considered use of telephone and electronic health care in California and found disparities by age; technology users were generally younger than those who did not report using computer and smartphone technologies (Pearl, 2014; Uscher-Pines and Mehrotra, 2014). More recent studies examining telehealth utilization during the COVID-19 pandemic consistently found that older Americans were less likely to use telehealth services as compared to younger populations (Darrat et al., 2021; Eberly et al., 2020; Patel et al., 2021b). When older people reported using telehealth, they were more likely to use a telephone (audio-only) visit than a live video visit (Wegermann et al., 2021).

### *Gender*

CHBRP found conflicting evidence about disparities in telehealth utilization by gender. Whereas one recent study indicated that females were less likely to use telehealth, another study found that females were more likely to use telehealth (Eberly et al., 2020; Pierce et al., 2020). CHBRP was unable to identify any literature examining whether sexual orientation disparities occur in telehealth utilization.

## **Quality Performance and Appropriateness of Telehealth Care Services**

In light of increased use of telehealth services due to the COVID-19 pandemic, the literature identifies a need for standardized telehealth quality measure sets as well as publicly available, appropriateness-of-care guidelines (Chuo et al., 2020).

Numerous professional associations and health care entities have developed and published frameworks and guidance documents for establishing (billable) telehealth programs for their specialties; however, there are far fewer published guidelines that instruct provider decisions about when to schedule clinically-appropriate telehealth visits or how to measure quality of telehealth care (Daniel et al., 2015; RHHub, 2014; Shore et al., 2014). The American Telemedicine Association is one centralized source of (pay-wall protected) telehealth service guidelines, published pre-pandemic. These guidelines address a variety of medical specialties such as primary and urgent care, behavioral health, dermatology, ocular care, burn care, stroke, and rehabilitation services (ATA, 2021).

Examples of ongoing work to establish telehealth quality measures and appropriateness of care guidelines.

### **Quality of Care:**

The **National Quality Forum**, a nationally respected evaluator and endorser of quality performance measures, notes a “significant” gap in measuring the quality of care delivered via telehealth (NQF, 2017). After a rigorous [evidence review in 2017](#), the NQF committee recommended six priority domains for telehealth measurement: Travel Timeliness of Care; Actionable Information; Added Value of Telehealth to Provide Evidence-Based Best Practices; Patient Empowerment; Care Coordination. The NQF committee recommended adopting use of 73 NQF-approved measures across five areas: (1) mental and behavioral health; (2) dermatology; (3) chronic disease; (4) rehabilitation; (5) and care coordination. These measures

were not designed for telehealth specifically, but existing in-person measures thought to be generalizable to telehealth. Because no action has been taken since the release of the 2017 framework, the [2020 NQF 5-year strategic plan](#) now includes a telehealth quality measure set as part of its proposed “national measurement architecture” (NQF, 2020).

As part of its Merit-based Incentive Payment (MIPS) program for eligible clinicians, the **Centers for Medicare & Medicaid Services** issued a list of 39 telehealth-eligible electronic clinical quality measures (eQMs) for the 2021 performance period (CMS, 2020b). Providers participating in the quality performance incentive program are paid according to scoring system. Similar to the NQF experience, none of these approved metrics are specific to telehealth, but rather adopted from existing in-person measures. CMS specifically notes that these measures do not differentiate between in-person encounters or telehealth encounters when telehealth CPT and HCPCS codes are used. (CMS, 2020b). These measures are not publicly reported as telehealth measures.

### **Appropriateness of Care:**

Within California, CHBRP found two health systems that publicly shared their pandemic-related experience with determining appropriateness of telehealth care. These experiences focus on care provided by primary care clinicians; therefore, the recommendations are not applicable to all providers in California.

- The Native American Health Center, a collection of 15 sites in the San Francisco Bay Area, found that telehealth visits for the populations they serve were most appropriate for stable patients with limited comorbidities and good compliance; in-person care was most useful for patients with multiple comorbidities with a high risk of re-hospitalization (Garrett and Jenkins, 2020). Guidance was provided as to which types of services could be provided via telehealth (see Table D.2 Appendix D).
- The University of California, Los Angeles Health system (UCLA Health) conducted a survey of primary care physicians (PCPs) at UCLA Health that investigated the appropriateness of telehealth in common patient scenarios. PCPs identified the following complaints as the least appropriate for a telehealth visit: chest pain, shortness of breath, ear pain or hearing changes, abdominal pain, and leg swelling. Services that were more appropriate for telehealth included depression or anxiety, cough and/or nasal congestion, diabetes management, and skin disorders such as dermatitis or rash. Note that although these PCPs identified which conditions were most and least appropriate for telehealth in their setting, specialists may make a different determination based on patient relationship, medical history, and specific medical condition or complaint.

## MEDICAL EFFECTIVENESS

As discussed in the *Policy Context* section, AB 32 would require state-regulated health insurance to cover and reimburse telehealth services at parity with services delivered in-person; AB 32 explicitly requires coverage of telehealth services provided via live video and telephone by physicians or billable non-physician providers. This review encompasses studies of patients with a wide range of diseases and conditions because AB 32 would require coverage and reimbursement for telehealth modalities for all enrollees.

### Research Approach and Methods

The literature review encompassed the telehealth modalities for which AB 32 would affect coverage: live video and telephone.

Studies were identified through searches of PubMed, the Cochrane Library, Web of Science, EconLit, and Business Source Complete, the Cumulative Index of Nursing and Allied Health Literature, and PsycINFO. Websites maintained by the following organizations that produce and/or index meta-analyses and systematic reviews were also searched: the Agency for Healthcare Research and Quality (AHRQ), the International Network of Agencies for Health Technology Assessment (INAHTA), the National Health Service (NHS) Centre for Reviews and Dissemination, the National Institute for Health and Clinical Excellence (NICE), and the Scottish Intercollegiate Guideline Network.

The search was limited to abstracts of studies published in English. The search was limited to studies published from 2020 to present. For studies published prior to 2019, CHBRP relied on literature searches conducted in 2014, 2015, 2016, and 2019 for reports on previous bills regarding coverage for telehealth services.

Of the 1,100 articles found in the current literature review, 77 were reviewed for potential inclusion in this report. In total, 54 studies were included in the medical effectiveness review for AB 32, based on the quality of the studies and their relevance to this bill. Studies were eliminated because they did not report findings from clinical research studies, were of poor quality, or did not focus on the telehealth modalities relevant to AB 32. The 107 studies previously included in the medical effectiveness review for AB 744 (2019), AB 2507 (2016), and SB 289 (2015) were also reconsidered based on the quality of the studies and their relevance to AB 32. Additionally, CHBRP had previously conducted thorough literature searches on these topics in 2020 for the Telehealth Brief and included any relevant studies. For the multiple systematic reviews included in the report that had inclusion criteria broader than the mandate of this bill, CHBRP only summarized findings from the relevant studies.

The conclusions below are based on the best available evidence from peer-reviewed and grey literature.<sup>37</sup> Unpublished studies are not reviewed because the results of such studies, if they exist, cannot be obtained within the 60-day timeframe for CHBRP reports.

### Key Questions

1. Does the evidence indicate whether services delivered via telehealth (and specifically telephone) are equivalent to in-person services?
2. Does the evidence indicate whether the use of telehealth services (and specifically telephone services) increase, decrease, or supplement the use of other services?

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<sup>37</sup> Grey literature consists of material that is not published commercially or indexed systematically in bibliographic databases. For more information on CHBRP's use of grey literature, visit [http://chbrp.com/analysis\\_methodology/medical\\_effectiveness\\_analysis.php](http://chbrp.com/analysis_methodology/medical_effectiveness_analysis.php).

## Methodological Considerations

Most studies pertinent to this report examine the use of telehealth modalities as a substitute for in-person care. In these cases, the relevant studies evaluated whether care provided via these technologies resulted in equal or better outcomes and processes of care than care delivered in person and whether use of these technologies improved access to care. Some studies assessed the effects of telehealth as a supplement to in-person care; these studies evaluate whether adding these technologies improves processes of care and health outcomes relative to receiving in-person care alone.

A major methodological limitation of the literature is that the pace at which studies of telehealth are published does not keep pace with the rate of change in telehealth technology. Another important limitation of some studies is the inability to disaggregate the telehealth services from other interventions, such as an integrated web portal that includes e-mails as well as information about self-care, access to test results, and ability to refill prescriptions.

The literature search for this report used general terms for telehealth services, which may have missed peer-reviewed literature that was indexed using terms associated with particular diseases or conditions.

## Outcomes Assessed

To examine whether services delivered via telehealth are of the same quality as in-person services, CHBRP examined three sets of outcomes: (1) health outcomes, including both physiological measures and patient-reported outcomes; (2) process of care outcomes, including treatment adherence and accuracy of diagnoses and treatment plans; and (3) access to care and utilization outcomes, such as wait time for specialty care, or number of outpatient visits, emergency department visits and hospitalizations.

## Study Findings

This following section summarizes CHBRP's findings regarding the strength of evidence for the effectiveness of telehealth services addressed by AB 32. Each section is accompanied by a corresponding figure. The title of the figure indicates the test, treatment, or service for which evidence is summarized. The statement in the box above the figure presents CHBRP's conclusion regarding the strength of evidence about the effect of a particular test, treatment, or service based on a specific relevant outcome and the number of studies on which CHBRP's conclusion is based. Definitions of CHBRP's grading scale terms is included in the box below, and more information is included in Appendix B.

The following terms are used to characterize the body of evidence regarding an outcome:

*Clear and convincing* evidence indicates that there are multiple studies of a treatment and that the large majority of studies are of high quality and consistently find that the treatment is either effective or not effective.

*Preponderance of evidence* indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective.

*Limited evidence* indicates that the studies have limited generalizability to the population of interest and/or the studies have a fatal flaw in research design or implementation.

*Inconclusive evidence* indicates that although some studies included in the medical effectiveness review find that a treatment is effective, a similar number of studies of equal quality suggest the treatment is not effective.



*Insufficient evidence* indicates that there is not enough evidence available to know whether or not a treatment is effective, either because there are too few studies of the treatment or because the available studies are not of high quality. It does not indicate that a treatment is not effective.

More information is available in Appendix B.

## **Diseases and Conditions Studied**

CHBRP found that evidence regarding whether telehealth modalities and services result in equal or better outcomes than care delivered in person is mixed depending on the disease and condition, telehealth modality and type of outcome studied: health outcomes, process of care, or use of other services. Because telehealth studies have only focused on a limited number of diseases and conditions, the findings may not be generalizable outside of the specific diseases and conditions studied.

There are multiple studies with evidence for live video, which include multiple RCTs and meta-analyses and systematic reviews across specialties, on multiple conditions and diseases, including cardiology, dermatology, infectious disease consultations, neurocognitive assessments and psychiatry, orthopedics, primary care, respiratory infections, rheumatology, abortion, stroke, and urology.

There have also been multiple systematic reviews examining the impact of telephone as a form of telehealth. Most studies for telephone consultations are on cardiology, gastroenterology, telepsychiatry, and on multiple sclerosis. Systematic reviews on telephone consultations have been conducted across specialties. For the diseases and conditions studied, the preponderance of evidence suggests that telephone consultations were at least as effective as in-person consultations on health outcomes. There is insufficient evidence to determine whether processes of care outcomes are equivalent for services provided by telephone and in person. Findings from studies of the effect of telephone consultations on access to care and utilization are inconsistent.

Behavioral health services are the only services for which studies that compare telehealth modalities have been published and these comparisons are limited to live video visits and telephone visits. These studies found that health outcomes were similar across the two modalities.

## **Findings for Live Video**<sup>38</sup>

### *Health outcomes*

Literature reviews that CHBRP conducted for its previous reports on SB 289, AB 2507, and AB 744 identified a large number of studies that compared the effects of live video and in-person care on health outcomes (Ferrer-Roca et al., 2010; Fortney et al., 2015; Garcia-Lizana and Munoz-Mayorga, 2010; Harrison et al., 1999; Kairy et al., 2009; Morland et al., 2010, 2014; Myers et al., 2015; Shukla et al., 2017; Wallace et al., 2004). These studies report that quality of life, clinical outcomes, and functional status, such as severity of depression symptoms, are similar between people who participate in live video and people who receive in-person care.

Two systematic reviews and one meta-analysis found that telepsychiatry delivered via live video is similar to in-person care for the management of mental health care in terms of quality of care and quality of doctor-patient relationship (Coustasse et al., 2020; Sunjaya et al., 2020). A systematic review reported that patients with post-traumatic stress disorder in programs that included live video were associated with shorter total therapeutic hours than patients receiving face-to-face therapy (Sunjaya et al., 2020). One recent meta-analysis (McClellan et al., 2021) (18 RCT studies:2,648 subjects) found that telepsychiatry delivered through live video has a moderate-to-strong effect on mental health outcomes and has similar

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<sup>38</sup> Two-way, real-time interactive video to connect users. Occurs provider-to-provider or between a patient and a provider.

effects to in-person care for the management of symptoms of PTSD, specifically trauma and depression, in veterans. Arnedt et al. (2021) (65 subjects) reported significant and similar improvements in insomnia severity, measured with the Insomnia Severity Index, and Daytime functioning measures for subjects who received cognitive behavioral treatment via live video versus in-person treatment immediately post treatment and at 3-months follow-up. Daytime functioning measures included reductions in fatigue, depression and anxiety symptoms, sleep-related cognitions, and improvement in quality of life (all  $p < 0.05$ ).

Legha et al. (2020) studied telepsychiatric care provided via live video within a rural Alaska native psychiatric program and reported that, compared to patients who received usual care, patients in the telepsychiatry group remained engaged in treatment longer and were more likely to complete treatment. The odds of treatment completion was 99% greater in the telepsychiatry group than in the usual care group.

Lu et al. (2021) (9,010 subjects) reported similar health outcomes for veterans who received live video primary care visits in addition to usual care for diabetes. The researchers reported that while there was a significant improvement in blood pressure control and hemoglobin A1C (HbA1C) levels for both groups, there was no significant difference between groups for these outcomes. However, the video visit group showed significant increases in the proportion of patients meeting diabetes quality indicators: statin use and angiotensin-converting enzyme inhibitors or angiotensin II receptor blockers (ACEi/ARB) relative to patients in the group that received usual care.

Additionally, CHBRP found a recent large systematic review (Burnham et al., 2019) (18 studies) on the clinical effectiveness of live video for infectious diseases consultations, which reported that people who received consultations via live video had shorter hospital length of stay, similar rates of readmission as people who received in-person care and similar rates adherence to treatment as people who receive in-person care. This systematic review reported mixed findings for mortality, with higher mortality in the group receiving care through live video in two studies reporting on this outcome and lower in two studies reporting this outcome (range, 0%–22%).

Another systematic review (Shah and Badawy, 2021) (5/11 studies; 1,129 subjects) of multiple health conditions reported that in all included studies live video consultations resulted in outcomes that were similar to or better than the outcomes of a standard in person visit. Two studies reported the effects of live video on health outcomes. One study (Fleischman et al., 2016) (33 subjects) found that, compared to usual care (regular primary care visits), patients who attended primary care physician in-person visits plus specialist video visits had significantly greater decreases in BMI after 3 months than patients who only attended primary care physician visits ( $P = .049$ ).

A 2019 retrospective cohort study (5,952 patients: 738 telemedicine visits, 5,214 standard visits) comparing medication abortion with a live video to a standard in person visit for medication abortion (Kohn et al., 2019) reported that health outcomes for medication abortion provided via live video are similar to standard in person visits. The study reported that ongoing pregnancy was less common among telemedicine patients (0.5%) than standard patients (1.8%) (OR=.23) and that follow up aspiration procedures were less common among telemedicine patients (1.4%) than standard patients (4.5%) (OR 0.28). In both groups, fewer than 1% of patients reported clinically significant adverse events.

### *Process of care*

CHBRP's previous reports on telehealth found no difference in processes of care between patients who received care via live video and patients who received in-person care. These studies include three systematic reviews and one randomized controlled trial (RCT): Bready et al. (2017) 12 studies, 497 participants; Fortney et al. (2015) 265 subjects; Simpson and Reid (2014) 23 studies; Warshaw et al. (2011) 10 studies, 1,290 subjects.

Bradley et al. (2020) found no significant difference (62 patients;  $P = 0.98$ ) in the overall diagnostic reliability of a live video clinical examination compared to a traditional in-person shoulder clinical examination (with an MRI as reference) for patients with shoulder rotator cuff tears. The study found that the diagnostic effectiveness of both tests without an MRI was poor regardless of the group. A study of 47 patients (Rabin et al., 2021) with shoulder disorders at a shoulder surgery clinic were assessed sequentially by live video examination and through an in-person examination. Researchers found that there was substantial to almost perfect agreement between the video examination and in person examination for the diagnosis of patients with various shoulder disorders. Agreement between the live video examination and in person examination for the treatment plan and the need for additional diagnostic studies was moderate.

Another systematic review (Moentmann et al., 2021)(35 studies:2700 subjects) reported that the studies consistently found that synchronous live video between otolaryngologists and patients is similar to an in-person visit in terms of diagnostic concordance (5 studies). One study (Yulzari et al.,2018) (48 subjects) found diagnostic concordance in 79.2% of the consultations between patients who had a remote otolaryngology visit at a general physician's office and patients who had an in-person otolaryngology clinic visit.

A retrospective cohort study (Yao et al., 2020) (260 subjects) found no statistically significant difference in the rates at which patients seen via live video and patients seen in an emergency department were prescribed antibiotics for acute respiratory infections (29% of telemedicine visits and 28% of in-person visits (OR 1.038;  $P = 0.846$ )).

However, a large retrospective cohort study using claims data (528,213 total pediatric visits), Ray et al. (2019), that compared the quality of antibiotic prescribing for acute respiratory infections among children in three different health care settings -- live video telehealth consultations, urgent care, and primary care provider offices – reached the opposite conclusion. The study reported that clinicians who cared for children via live video were less likely to prescribe antibiotics in a manner that was consistent with clinical practice guidelines (59% of telemedicine visits versus 67% urgent care and 78% primary care provider visits). For visits with a diagnosis of streptococcal pharyngitis (strep throat), live video providers were less likely to order a streptococcal test to confirm the diagnosis (4% of telemedicine visits versus 75% urgent care and 68% primary care provider visits), which could have led live video providers to prescribe antibiotics unnecessarily because some children who they suspected had strep throat may not have had it and, thus, did not need antibiotics. It is important to note that in this study the live video consultations were provided by physicians who were not the children's usual primary care providers. They did not have access to the children's medical records or prior relationships with the children or their parents. Thus, one cannot determine whether the differences in antibiotic prescribing were due to the use of live video versus consultation with providers who were not children's usual source of primary care.

Del Campo et al. (2021) (61 subjects) compared in-person dysmorphology examinations for children with fetal alcohol syndrome to two different types of remotely guided live video technology: a smartphone using Zoom and a tablet Transportable Examination Station (TES) system using a precision camera and laptop. The study reported "almost perfect" percentages of agreement and Cohen's K coefficient between interviews when comparing both technologies with in-person interviews for most examinations, and a few "substantial" agreements for measurements of the head circumference (HC) and the evaluation of the 3 key facial features, including palpebral fissure length (PF), smooth philtrum, and thin and smooth vermilion of the upper lip, common traits of children born with fetal alcohol syndrome.

One retrospective chart review study of patients referred for evaluation in an outpatient neuropsychology clinic compared validity of in-home teleneuropsychology assessments using live video to in person assessments. Parks et al. (2021) (131 subjects) compared test scores for teleneuropsychology tests consisting of tests measuring attention/processing speed, verbal memory, naming, verbal fluency, and visuoconstruction to in person test scores. Teleneuropsychology test scores did not significantly differ from in-person testing across all tests except the Hopkins Verbal Learning Test-Revised Discrimination Index.

Lu et al. (2021) (9,010 subjects) reported similar health outcomes for veterans who received live video primary care visits in addition to usual care for diabetes. The researchers reported the live video visit group showed significant increases in the proportion of patients meeting diabetes quality indicators for annual microalbuminuria testing, statistically more than in the virtual care group.

### *Access to care and utilization*

Studies have found that live video increases access to care and decreases follow up visits (Andino et al., 2020; Wood and Caplan, 2019).

Wood and Caplan (2019) (85 subjects) reported that substituting live video for in-person visits with a specialist was associated with a substantial and statistically significant reduction in the distance that rural veterans with inflammatory arthritis traveled to obtain care ( $p < 0.01$ ).

In a retrospective study of 600 live video visits among established patients completed by 13 urology providers, Andino et al. (2020) found that for new or persistent medical concerns, the 30-day revisit rates — defined as an in-person evaluation within 30 days of the patient's initial visit by any urologist or urology advanced practice provider in the clinic, emergency room, or inpatient hospital — were similar across both groups (0.5% vs. 0.67%;  $p = 0.60$ ).

A 2019 retrospective cohort study (5,952 patients: 738 telemedicine visits; 5,214 standard visits) comparing medication abortion with a live video to a standard in-person visit for medication abortion (Kohn et al., 2019) reported that medication abortion provided via live video significantly improves access to earlier abortion and abortion care services. The study reported that ongoing pregnancy was less common among telemedicine patients (2/445, 0.5%) than standard patients (71/4,011, 1.8%) (adjusted OR 0.23) and that aspiration procedures were less common among telemedicine patients (6/445, 1.4%) than standard patients (182/4,011, 4.5%) (adjusted OR 0.28).

**Summary of findings regarding the effectiveness of health services delivered by live video:** There is a *preponderance of evidence* that care delivered by live video is at least as effective as in-person care for *health outcomes* for several conditions and health care settings, including infectious disease, obesity, diabetes, and abortion.

There is *clear and convincing evidence* that mental health services for ADHD depression, and PTSD delivered by live video are at least as effective as in-person care for *processes of care and health outcomes*.

There is *clear and convincing evidence* that dermatology diagnoses made via live video are as accurate as *diagnoses* made during in-person visits. There is a *preponderance of evidence* that scores on *neurocognitive tests* administered via live video are similar to scores obtained when tests are administered in person. Studies have also found diagnostic concordance between live video and in-person examination for shoulder disorders, otolaryngology, and fetal alcohol syndrome.

There is a *limited evidence* that care delivered by live video is at least as effective as in-person care for *access to care and utilization*.

## Findings for Telephone<sup>39</sup>

### *Health outcomes*

The 2016 report for AB 2507 found telephone consultations result in equal or better health outcomes as in-person consultations based on three studies (Akobeng et al., 2015; Fann et al., 2015; Kotb et al., 2015). The CHBRP report for AB 744 reported that a meta-analysis (11 RCTs; 1,104 subjects), found moderately better scores on a measure of depression for patients with multiple sclerosis who received telephone psychotherapy interventions and small to moderately better short-term scores on measures of fatigue, quality of life, multiple sclerosis symptoms, physical activity, and medication adherence compared with patients in control groups and patients who received other interventions (Proctor et al., 2018).

CHBRP found one recent study (Shah et al., 2021) (25 subject) that evaluated the impact of telephone follow up and virtual wound checks on readmissions after head and neck surgery. Patients who received telephone follow-up calls post-discharge to review symptoms and wound photos (30% of patients sent photos) showed lower emergency department visits ( $P < 0.05$ ) and readmission rates (no statistically significant difference) compared to patients the previous year, before the telephone follow up program was implemented. In this study there was no comparison group, the authors used a pre-post design that did not control for trends over time, which may have affected the results.

Another recent study (Smith et al., 2021) (77 subjects) assessed telephone consultations for follow up visits in children who had been treated for enuresis. A statistically equivalent number of subjects in the telephone consultation group (61.9%) responded to treatment compared with 48.1% patients responding to treatment ( $p = 0.22$ ).

In a systemic review of multiple telehealth modalities and multiple health conditions (Shah and Badawy, 2021) (11 studies), one study reported health outcomes for telephone consultations. This RCT (Powers et al., 2015) (78 subjects) compared patients with cystic fibrosis and pancreatitis who received regular in person visits to patients who received individual counseling by telephone in addition to regular care. The authors reported that patients in the regular care group had significantly lower energy intake levels ( $P < 0.001$ ) and greater decreases in height ( $P = 0.049$ ) at 18 months follow-up. There were no significant differences in weight ( $P = 0.25$ ) between the two groups after treatment and at 18 months' follow-up.

### *Process of care*

A systematic review comparing telehealth to in-person care in primary care settings (Han et al., 2020) included three retrospective cohort studies that compared antibiotic prescribing in telephone consultations and in-person consultations (Ewen et al., 2015; Murray et al., 2020; Penza et al., 2020). These studies reported mixed results. Ewen et al. (2015) and Penza et al. (2020) reported lower rates of antibiotic prescriptions during telephone consultations compared to in-person visits. In contrast, Murray et al. (2020) reported no significant differences in antibiotic prescribing rates between telephone and in-person visits for urinary tract infections (81% vs. 83%;  $P = 0.76$ ).

One study (Malik et al., 2020) (400 subjects) examined the sensitivity of telephone-based questionnaire to detect symptoms of cancer recurrence. The questionnaire was administered to patients by telephone two weeks before a follow up appointment. Researchers compared the diagnostic accuracy of the telephone questionnaire against findings from a blinded in-person exam by an otorhinolaryngologist. The telephone consultations showed acceptable sensitivity and negative predictive value for detecting cancer recurrences in patients after treatment.

A study (Crossland et al., 2021) (150 subjects) evaluated the repeatability of visual acuity measured using an at-home visual acuity test (Home Acuity Test) administered by telephone and the agreement between

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<sup>39</sup> Uses two-way, interactive audio to connect users via landline or cell-phone. Occurs provider-to-provider at a distant site or between a patient and a provider.

findings from the telephone-based test and the last in-clinic test of visual acuity. The at home test was developed for patients unable to attend hospital ophthalmology appointments because of the COVID-19 outbreak. The eye chart was printed and mailed to the patient before the telephone consultation. There was good repeatability and a high level of agreement between the Home Acuity Test and a conventional test used during in-person visits regarding the level of visual impairment.

### *Access to care and utilization*

The 2015 CHBRP report for SB 289 found inconclusive evidence from RCTs and time-series studies of the effect of telephone consultation services on access to care and utilization, with studies showing different effects for use of the same type of service (e.g., emergency department, hospitalization, or primary care) (Bunn et al., 2004; Flores-Mateo et al., 2012).

A more recent study (Smith et al., 2021) (77 subjects) of follow up care for patients seen for nocturnal enuresis, a common childhood condition, found that patients who received telephone consultation follow-up missed fewer appointments (0.14) than patients with in person follow-up visits (0.5) ( $P = 0.016$ ).

The data analyzed for all these studies were collected prior to the COVID-19 pandemic. As data about use of telephone during the pandemic becomes more widely available, researchers may find that telephone visits increased access to care and utilization, especially during the early months of the pandemic when people were discouraged from seeking in-person care unless necessary. Additionally, compensation for telephone visits also changed during COVID-19, which may have affected access to care because providers were more willing to use telephone as a modality.

#### **Summary of findings regarding the effectiveness of health services delivered by telephone:**

CHBRP concludes that, for the diseases and conditions studied, the *preponderance of evidence* from studies of the effect of telephone consultations suggests that telephone consultations were at least as effective as in-person consultations on *health outcomes*.

CHBRP concludes that, for the diseases and conditions studied, findings from studies of the effect of telephone consultations on *processes of care* and *access to care and utilization* are inconsistent; therefore, the evidence that medical care provided by telephone compared to medical care provided in person is *inconclusive*.

### **Findings That Compare Live Video to Telephone Visits**

One recent meta-analysis (McClellan et al., 2021) (18 RCT studies, 2,648 subjects) found that telepsychiatry delivered through both telephone and live videoconference have a moderate-to-strong beneficial effect on mental health outcomes and is similar to in-person care for the management of symptoms of PTSD, specifically trauma and depression, in veterans. Additionally, the review found telepsychiatry delivered through videoconference was slightly more beneficial than telepsychiatry delivered through telephone for treatment of trauma and depression.

Another systematic review (Shah and Badawy, 2021) (5/11 studies; 1,129 subjects) included one cluster RCT study with physicians delivering behavioral group interventions to families through telephone or video (Davis et al., 2016) (103 subjects). The study reported no significant differences in changes in patients' or parents BMIs (pretreatment to posttreatment) between the video and telephone groups ( $P > 0.05$ ).

**Summary of findings regarding the effectiveness of health services delivered by live video compared to telephone consultation:** There is *preponderance of evidence* based on one meta-analysis (18 RCTs) and one RCT study that behavioral health services delivered by live video are comparable to services delivered by telephone consultation on *health outcomes*.

CHBRP found no studies that compared live video to telephone consultation on outcomes for *processes of care and access to care and utilization* of health services. CHBRP notes that absence of evidence is not evidence of no effect.

## Findings for Telehealth Services that Encompass Multiple Modalities

CHBRP has found evidence for other telehealth systems that encompass a variety of modalities for certain health conditions, specifically telestroke and telerehabilitation.

Studies that examine telestroke compared telestroke, typically at a rural hospital, to acute stroke care at a comprehensive stroke center with access to thrombolysis and physicians with specialized expertise in caring for patients with strokes. Telestroke modalities can include remote patient monitoring, telephone calls and video visits. Studies on telerehabilitation examine the effectiveness of multiple modalities of telerehabilitation on patients compared to standard rehabilitation or home-based exercise programs. Telerehabilitation modalities can include video-based therapy programs, remote patient monitoring, telephone calls and video with providers including physiotherapists, physical therapists, occupational therapists, neurologists, or physicians.

There is a preponderance of evidence based on two meta analyses that health services delivered by telestroke systems are at least as effective as in-person care at a comprehensive stroke center for processes of care and health outcomes, including onset to door duration (OTD), hospital length of stay, functional independence, and mortality (Baratloo et al., 2018; Kepplinger et al., 2016). There is limited evidence that telestroke can improve access to care and utilization of health services (Al Kasab et al., 2017; Jewett et al., 2017).

There is a preponderance of evidence that telerehabilitation is effective in improving health outcomes such as activities of daily living, motor function, and physical activity based on two meta-analyses of 21 studies (Shukla et al., 2017; Tchero et al., 2018). There is insufficient evidence to determine whether services provided by telerehabilitation are as effective as medical care provided in person with regard to processes of care (Richardson et al., 2017). CHBRP notes that the absence of evidence does not mean there is no effect; it means the effect is unknown. CHBRP concludes that there is inconclusive evidence to determine whether services provided by telerehabilitation are as effective as medical care provided in person for access to care (Kairy et al., 2009).

**Summary of findings regarding the effectiveness of health services delivered by multiple modalities:** CHBRP concludes that there is a *preponderance of evidence* that telestroke and telerehabilitation are as effective as in person care on *health outcomes*.

There is a *preponderance of evidence* based on 2 large systematic reviews and meta analyses of 33 studies that *processes of care* for health services delivered by telestroke systems are at least as effective as they are for in-person care at a comprehensive stroke center. There is *limited evidence* that telestroke can improve *access to care and utilization* of health services

There is a *preponderance of evidence* that telerehabilitation is effective in improving *health outcomes* such as activities of daily living, motor function, and physical activity. There is *insufficient evidence* to determine whether services provided by telerehabilitation are as effective as medical care provided in person for processes of care. CHBRP notes that the absence of evidence does not mean there is no effect; it means the effect is unknown. There is *inconclusive evidence* to determine whether services provided by telerehabilitation are as effective as medical care provided in person with regard to *access to care and utilization* of health services.

## Summary of Findings

Evidence of effectiveness is mixed for services delivered via telehealth. Among the telehealth modalities and services reviewed, there is evidence that most modalities and services improve health outcomes. Evidence regarding effects on process of care and access and utilization is limited for most modalities and services.

Table 5 summarizes evidence of the effectiveness of telehealth for access and utilization; processes of care; and health outcomes. Findings are reported separately for each telehealth modality because findings differ across these types of uses. Evidence is also reported separately for the three types of outcomes because the strength of evidence of the effectiveness of telehealth modalities varies across the outcomes.

**Table 4. Summary of Evidence of Medical Effectiveness of Synchronous Telehealth Compared to In-Person Care**

	Health Outcomes	Processes of Care	Access and Utilization
Live video	Limited evidence – effective	Clear and convincing evidence – effective	Preponderance of evidence – effective
Telephone	Preponderance of evidence – effective	Inconclusive evidence	Inconclusive evidence
Telestroke	Preponderance of evidence – effective	Preponderance of evidence – effective	Limited evidence-effective
Telerehabilitation	Preponderance of evidence – effective	Insufficient evidence	Inconclusive evidence

Source: California Health Benefits Review Program, 2021.



## BENEFIT COVERAGE, UTILIZATION, AND COST IMPACTS

As discussed in the *Policy Context* section, AB 32 would require commercial, CalPERS, and Medi-Cal Managed Care Plans or policies regulated by the California Department of Managed Health Care (DMHC) or California Department of Insurance (CDI), and Medi-Cal coverage administered through County Organized Health Systems (COHS) or the Fee-for-Service (FFS) Medi-Cal program to provide benefit coverage for telehealth services at parity with in-person services. AB 32 would also allow for enrolled clinics to receive reimbursement for telehealth services at parity, prohibit the Department of Health Care Services from restricting the ability of a clinic to provide and be reimbursed for services through telehealth, and extend DHCS-established telehealth flexibilities put in place during the COVID-19 public health emergency.

In addition to commercial enrollees, more than 50% of enrollees associated with the California Public Enrollees' Retirement System (CalPERS) and more than 70% of Medi-Cal beneficiaries are enrolled in DMHC-regulated plans.<sup>40</sup>

This section reports the potential incremental impacts of AB 32 on estimated baseline benefit coverage, utilization, and overall cost.

### Assumptions on Utilization and Cost

- Telehealth capacity among providers has improved during 2020 due to COVID-19. This improvement in capacity to deliver and bill for telephonic and live video will enable providers to respond to new benefit coverage in 2022, regardless of the state of the pandemic or public health emergency.
- Telehealth capacity among FQHCs and RHCs specifically has been expanded due to the COVID-19 pandemic. Previous limitations on FQHC and RHC delivery of telehealth and ability to bill for services provided dampened telehealth use in FQHC and RHC settings relative to other practice settings. The COVID-19 pandemic's public health emergency suspended those rules, and FQHCs and RHCs have responded by developing capacity and engaging in new telehealth services via telephone and live video in 2020 and 2021.
- The high levels of telehealth use in 2020 due to the pandemic will decline such that telehealth represents a larger portion of overall visits in 2022 than it did in 2019 (the year for which claims data are available), but telehealth will not fully supplant in-person care. Telehealth will likely represent a larger proportion of health care services than in the past due to new capacity, patient convenience, patient reticence about obtaining in-person care due to the ongoing effects of the pandemic, and practice adoption.
- The implementation of AB 744 on January 1, 2021, which required benefit coverage for synchronous telehealth services by commercial plans, and the COVID-19 public health emergency will bolster the capacity of health care providers to deliver telehealth in 2022 whether AB 32 is enacted or not. **The baseline presented in this analysis is a middle-ground estimate of 2022 in a hypothetical scenario in which AB 744 has been fully implemented and the COVID-19 public health emergency regulations terminated, both of which laid the groundwork for telehealth adoption and use more broadly than in 2019 prior to the pandemic.** To develop this hypothetical 2022 scenario, CHBRP inflated 2019 claims for telehealth services and also relied on previous estimates of the impact of AB 744 to adjust the baseline for 2022 used in this analysis.

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<sup>40</sup> For more detail, see CHBRP's *Estimates of Sources of Health Insurance in California for 2021*, a resource available at [http://chbrp.org/other\\_publications/index.php](http://chbrp.org/other_publications/index.php).

## Additional Considerations Used to Develop Estimates of Utilization and Cost

- Telehealth utilization data from Milliman’s 2019 Consolidated Health Cost Guidelines Sources Database (CHSD) does not reflect significant use of telehealth by patients in FQHCs due to limitations on provision of service and billing (see *Policy Context* section for a description). However, the lifting of those restrictions due to the COVID-19 public health emergency had a substantial impact on telehealth use and FQHC capacity to deliver telehealth services (Uscher-Pines et al., 2021).
- Telephonic telehealth services represent approximately 50% of synchronous telehealth visits for primary care, and 65% of behavioral health services delivered via synchronous telehealth in the commercial and CalPERS health insurance market. The remainder of the synchronous telehealth services will be delivered via live video. This assumption is driven by experiences in FQHCs and was adjusted down to compensate for likely use by commercial enrollees (Uscher-Pines et al., 2021).
- The use of telehealth increased substantially during the pandemic, especially for behavioral health services. The nature of behavioral health and new billing practices make it likely that high rates of telehealth use will continue in behavioral health relative to other specialties that may require more in-person contact for well-visits, laboratory tests, procedures, and other activities.
  - Telehealth represents 54% of all behavioral health visits in 2020 (Mehrotra et al. 2021). Although CHBRP expects behavioral health to continue being delivered through telehealth, CHBRP estimates that 45% of behavioral health services in commercial insurance will be delivered via telehealth, and 12% in Medi-Cal will be delivered via telehealth due to supply constraints (i.e., technology, shortage of behavioral health providers).
- At baseline, use of telehealth will comprise 11% of all primary care visits and 8% of specialty visits among commercial and CalPERS enrollees. For behavioral health, telehealth represents 40% of use in the commercial market. For Medi-Cal Managed Care at baseline, use of telehealth will comprise 3% of all primary care visits, 3% of specialty visits, and 3% for behavioral health. Approximately 3% of primary care and behavioral health was provided via telehealth for FQHC/RHCs. Recent evidence suggests that during pandemic surges in 2020, telehealth replaced some in-person services. In April 2020, in-person visits to ambulatory care providers declined by 60%, but rebounded in May 2020 (Mehrotra et al., 2021). Similarly, during another COVID-19 surge in November and December of 2020, the same study found a shift back to telehealth and drop in some in-person services. The number of visits overall were lower than in previous comparable time periods. During 2022, CHBRP anticipates higher levels of in-person visits, but a substantial portion of telehealth use could remain due to uncertainty about the ongoing impacts of the pandemic and the increased capacity for delivering telehealth due to COVID-19 public health emergency regulations. Although previous analyses (AB 744) estimated that supplemental visits would represent 71% of all additional telehealth services (Shah et al., 2018), for this analysis CHBRP estimates that supplemental services will represent 50% of new telehealth services and 50% will replace in-person care due to the ongoing effects of the pandemic and reticence by patients to seek out in-person care.
- AB 32 requires that FQHCs and RHCs that are able to provide telehealth services be paid at parity with in-person services. FQHCs and RHCs rely on an all-inclusive prospectively calculated cost-related reimbursement rate for Medi-Cal patients. When an FQHC or RHC cares for a Medi-Cal Managed Care enrollee, they may be receiving capitation or a discounted fee from the managed care firm. However, they are allowed to be reimbursed for the total cost of the visit

according to their PPS (FQHC) or AIR (RHC) through a reconciliation process with Medi-Cal Fee-for Service.<sup>41</sup>

- The increase in Medi-Cal all-inclusive PPS rates paid to FQHCs and RHCs for both in-person and telehealth visits is linked to the Medicare Economic Index (MEI).<sup>42</sup>
- CHBRP assumes overall utilization of in-person and telehealth health care services in 2022 will be roughly equivalent to overall utilization in 2019,<sup>43</sup> with adjustments made to account for changes in enrollment and population. When estimating impacts in 2022, CHBRP does not make additional assumptions to adjust for changes in utilization due to COVID-19 because recent 2020 claims data indicates utilization in aggregate has mostly returned to pre-pandemic levels. However, CHBRP acknowledges utilization has not rebounded for some services and for some groups of enrollees (i.e. visits for younger children had not returned to pre-pandemic baseline as of October 2020) (Mehrotra et al., 2020). Additionally, there are additional unknown factors that may impact utilization as a result of COVID-19, such as the potential impacts of deferred care and long term impacts from COVID-19 infections.
- CHBRP assumes that telehealth capacity and use will differ from overall utilization of health care services by 2022:
  - Utilization of telehealth in Federally Qualified Health Centers (FQHC) and Rural Health Centers (RHC) will be higher in 2022 than Milliman's 2019 Consolidated Health Cost Guidelines Sources Database (CHSD) indicates. The COVID-19 public health emergency created flexibility that enabled FQHCs and RHCs to expand telehealth capacity and service delivery during the pandemic, such that telehealth represented 65% of primary care and 71.6% of behavioral health services delivered by FQHCs at the peak in April of 2020. For the entire year, 48.5% of primary care visits and 63.3% of behavioral health services were delivered via telehealth in FQHCs. This increased capacity will allow FQHCs and RHCs to respond differently to telehealth benefit coverage than they would have in the absence of the COVID-19 public health emergency.
  - AB 744, which was implemented January 1, 2021, expanded coverage of synchronous telehealth services for commercial health plans and policies in California. The additional benefit coverage and use of services that occurs in 2021 due to the implementation of AB 744 is not reflected in Milliman's 2019 Consolidated Health Cost Guidelines Sources Database (CHSD). Due to this gap in information, CHBRP assumed higher use of telehealth services at baseline for the 2022 plan year to reflect the likely changes brought about by the previously passed and implemented legislation.
- As discussed in the *Policy Context* section, not all services provided via telehealth are equivalent to in-person visits. CHBRP focuses this analysis on modalities for which benefit coverage substantially changes and that are most likely to be considered equivalent to an in-person visit (live video and telephone). While some changes as a result of AB 32 would occur for asynchronous store and forward, eConsult, and E-Visits, these changes are marginal. CHBRP has provided more information about existing law and potential impacts of AB 32 for these services in Appendix D.

For further details on the underlying data sources and methods used in this analysis, please see Appendix C.

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<sup>41</sup> For detail on the reconciliation process for FQHC and RHCs, please visit: [https://www.dhcs.ca.gov/formsandpubs/forms/Documents/ANI/ANI\\_FormDHCS3097i\\_ReconRequest\\_Instructions\\_06-2019.pdf](https://www.dhcs.ca.gov/formsandpubs/forms/Documents/ANI/ANI_FormDHCS3097i_ReconRequest_Instructions_06-2019.pdf).

<sup>42</sup> The Medicare Economic Index (MEI) is updated each year, and dictates increases in FQHC and RHC all-inclusive visit payments: <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/MarketBasketData>.

<sup>43</sup> CHBRP uses Milliman's 2019 Consolidated Health Cost Guidelines Sources Database (CHSD) and 2019 MarketScan Commercial Claims and Encounters Database (MarketScan) to estimate utilization in 2022.

Tables 6 and 7 below provide an overview of the predicted distribution of utilization of health care services by telehealth modality or in-person at baseline after implementation of AB 744 and postmandate (AB 32) for the commercial and Medi-Cal markets.

**Table 5. Predicted Distribution of Utilization by Modality for Services With Applicable Telehealth Modality, Commercial Insurance Beneficiaries, 2022**

Commercial						
Distribution of Utilization	Primary Care	Specialist	Mental Health and SUD	Primary Care	Specialist	Mental Health and SUD
	Baseline			Postmandate		
Live video	6%	4%	16%	6%	4%	16%
Telephone	5%	3%	24%	6%	4%	29%
<b>Total synchronous</b>	<b>11%</b>	<b>8%</b>	<b>40%</b>	<b>12%</b>	<b>8%</b>	<b>45%</b>
In-person	89%	92%	60%	88%	92%	55%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: California Health Benefits Review Program, 2021.  
 Note: Numbers may not add due to rounding.

**Table 6. Predicted Distribution of Utilization by Modality for Services With Applicable Telehealth Modality, Medi-Cal Beneficiaries, 2022**

Medi-Cal Managed Care					
Distribution of Utilization	Primary Care	Specialist	Mental Health and SUD	FQHC/RHC Facility - PC	FQHC/RHC Facility – MH/SUD
Baseline					
Live video	1%	1%	1%	3%	3%
Telephone	2%	2%	2%	0%	0%
<b>Total synchronous</b>	<b>3%</b>	<b>3%</b>	<b>3%</b>	<b>3%</b>	<b>3%</b>
In-person	97%	97%	97%	97%	97%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Postmandate					
Live video	1%	1%	2%	1%	2%
Telephone	11%	8%	10%	11%	10%
<b>Total synchronous</b>	<b>12%</b>	<b>8%</b>	<b>12%</b>	<b>12%</b>	<b>12%</b>
In-person	88%	92%	88%	88%	88%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: California Health Benefits Review Program, 2021.

Note: CHBRP assumes utilization of telehealth is similar for enrollees with Medi-Cal coverage through COHS and the FFS program.

Key: MH/SUD = mental health and substance use disorder; PC = primary care.

## Baseline and Postmandate Benefit Coverage

At baseline, 100% of enrollees with commercial or CalPERS health insurance that would be subject to AB 32 have coverage for live video telehealth services, while 80.4% of enrollees have coverage for telephone services. Approximately 7% of enrollees with CalPERS health insurance do not have benefit coverage for telehealth delivered via telephone.

AB 32 would require commercial and CalPERS health plans to provide new benefit coverage for synchronous telephone telehealth services for 19.6% of enrollees (see estimates in Table 1).

At baseline, 100% of the Medi-Cal Managed Care beneficiaries have existing benefit coverage for live video services. However, 73.5% of beneficiaries with Medi-Cal coverage through DMHC-regulated Medi-Cal Managed Care Plans and County Organized Health Systems (COHS) subject to AB 32 have coverage for synchronous telephone services. AB 32 would require Medi-Cal Managed Care Plans, COHS, and Fee-for-Service to provide new benefit coverage for synchronous telephone services for 26.5% of beneficiaries (see estimates in Table 1).

In general, CHBRP assumes compliance on the part of all subject health insurance with the proposed mandate.

## **Baseline and Postmandate Utilization**

Baseline utilization of synchronous telehealth in the commercial, CalPERS, and Medi-Cal program can be found in Table 1. The baseline estimates were based upon Milliman's 2019 Consolidated Health Cost Guidelines Sources Database (CHSD), with adjustments for the impact of COVID-19 on changing behavior and accelerating the development of provider capacity to deliver and bill for telehealth. Because 100% of commercial, CalPERS, and Medi-Cal Managed Care beneficiaries already had coverage for live video and 80.4% of commercial enrollees and 73.5% of Medi-Cal Managed Care beneficiaries had coverage for synchronous telephone services. The actual use of those services in 2019 were used to predict future use. However, CHBRP relied on several recent articles on the impact of COVID-19 on ambulatory care visits and telehealth use to update those baseline numbers (see *Additional Considerations Used to Develop Estimates of Utilization and Cost*). A summary of the changes that would occur due to new benefit coverage in specific visit types is below.

### **For Commercial and CalPERS Enrollees:**

At baseline there were 69.8 telephonic primary care and urgent care visits, 165.2 telephonic outpatient mental health and substance use disorder (MH/SUD) visits, and 50.6 telephonic outpatient specialist visits per 1,000 enrollees. Due to new benefit coverage for telephonic services for 19.6% of enrollees, utilization will increase by 24.36% in each category postmandate for a total of 86.9 telephonic primary care and urgent care visits, 205.5 outpatient MH/SUD visits, and 62.9 outpatient specialty visits per 1,000 enrollees. Due to the new coverage for telephonic visits, there will be a slight reduction in in-person visits because a portion of the new visits will replace in-person services. In-person primary and urgent care visits will decrease by 0.66%, MH/SUD visits by 4.91%, and specialty visits by 0.45%. There were no other utilization changes postmandate for live video due to AB 32 because 100% of commercial and CalPERS enrollees already had coverage for live video.

### **DMHC-Regulated Medi-Cal Managed Care Beneficiaries:**

At baseline, there were 23.79 telephonic and 13.88 live video visits for primary care and urgent care, 3.74 telephonic and 2.18 live video visits for outpatient MH/SUD, and 28.37 telephonic and 16.55 live video outpatient specialist visits per 1,000 enrollees seeking care from non-FQHCs or RHCs. Due to new benefit coverage for telephonic services for 26.5% of Medi-Cal Managed Care beneficiaries, telephonic telehealth services would increase postmandate to 175.25 telephonic primary care and urgent care visits, 24.17 telephonic outpatient MH/SUD, and 143.52 telephonic outpatient specialist visits per 1,000 enrollees seeking care from non-FQHCs and RHCs. Due to a portion of new telephonic visits replacing live video visits, the use of live video visits decreased to 12.29 live video primary care and urgent care visits, increased to 5.32 live video outpatient MH/SUD visits, and decreased to 10.06 live video outpatient specialist visits per 1,000 enrollees seeking care from non-FQHCs and RHCs.

At baseline, in FQHCs and RHCs, there were no telephonic visits and a small number of live video visits (4.10 primary care and urgent care visits and 1.39 MH/SUD visits per 1,000 enrollees). Due to the extension of COVID-19 public health emergency regulations that allow these clinics to more broadly provide telehealth services and receive reimbursement at parity, there will be increases in use of telephonic primary care and urgent care visits (15.52 per 1,000 enrollees), and MH/SUD visits (4.61 per 1,000 enrollees), and slight decreases in live video due to replacement with telephone.

Telephonic telehealth services were not covered for 26.5% of Medi-Cal Managed Care beneficiaries at baseline, and new benefit coverage will result in a large increase in telephonic service use that substitutes for in-person care in 2022 (see Table 1) resulting in a 5.17% decrease in in-person primary, urgent care and MH/SUD visits for enrollees seeking care from non-FQHCs or RHCs, a 4.89% decrease in FQHC or RHCs, and a 3.14% reduction in in-person outpatient specialty visits.

## Baseline and Postmandate Per-Unit Cost

There is no impact on per-unit cost for commercial or CalPERS enrollees because plans already reimburse at parity with in-person services. In the case of Medi-Cal Managed Care, the parity requirements of AB 32 would increase per-unit costs by between 5.42% and 780.67%. The primary driver of the change in average per-unit costs are the all-inclusive PPS rates that would be paid to FQHCs and RHCs for primary care, urgent care, and MH/SUD services due to the requirement to pay at parity with in-person visits for all Medi-Cal providers, including FQHCs and RHCs that are paid a cost-related PPS visit rate. See estimates in Table 1. Federal policy requires FQHCs and RHCs to receive a cost-related reimbursement for in-person services, and by removing barriers for FQHCs and RHCs to deliver telehealth services and requiring payment parity, AB 32 guarantees that FQHCs and RHCs will obtain the current PPS rate for the telehealth services delivered for primary care, urgent care, and MH/SUD, which is \$218 per visit based on the statewide average PPS rate for 2021 trended forward to 2022 based upon the MEI. Also, the Medi-Cal payment for telephonic and live video MH/SUD not delivered by FQHCs and RHCs will increase from \$125 to \$283 due to the parity requirements.

## Baseline and Postmandate Expenditures

Table 8 and Table 9 present baseline and postmandate expenditures by market segment for DMHC-regulated plans and CDI-regulated policies. The tables present per member per month (PMPM) premiums, enrollee expenses for both covered and noncovered benefits, and total expenditures (premiums as well as enrollee expenses).

AB 32 would increase total net annual expenditures by \$240,827,000 or 0.18% for enrollees with DMHC-regulated plans, CDI-regulated policies, and DMHC-regulated Medi-Cal Managed Care Plans. This is due to an increase in total health insurance premiums paid by DMHC-regulated large group plans (\$0.49 PMPM), small group plans (\$1.26 PMPM), individual market plans (\$0.34 PMPM), CalPERS HMOs (\$0.21 PMPM), Medi-Cal Managed Care plans for under 65 (\$1.42 PMPM), Medi-Cal Managed Care for 65 and over (\$1.41 PMPM), CDI-regulated large group (\$2.23 PMPM), and CDI-regulated individual market (\$1.56 PMPM). The largest increases in expenditures were in Medi-Cal Managed Care for non-elderly enrollees (0.63%), Medi-Cal Managed Care for 65+ (0.30%), and CDI-regulated large group (0.18%) (see Table 9).

In addition to the estimated \$136,534,000 increase in premiums for the 8.05 million Medi-Cal beneficiaries enrolled in DMHC-regulated Medi-Cal Managed Care plans, a proportional increase of \$42.62 million is estimated to occur for the beneficiaries enrolled in County Organized Health System (COHS) managed care for fee-for-service. CHBRP assumes the two populations to be relatively similar and to have relatively similar benefit coverage.

Overall, the increase in commercial and CalPERS expenditures were driven entirely by new benefit coverage because payment parity is already required for telehealth services. However, of the

\$136,534,000 (0.57%) increase in Medi-Cal Managed Care expenditures, \$134,005,000 (0.56%) would be due to parity requirements and \$2,529,000 (0.01%) would be due to new coverage of telehealth services. Additionally, of the \$136,534,000 increase in expenditures, \$24,450,000 (0.10%) would be due to the increase in coverage and parity requirements for telehealth services provided by FQHCs/RHCs.

## Premiums

Changes in premiums as a result of AB 32 would vary by market segment. Note that such changes are related to the number of enrollees (see Table 1, Table 8, and Table 9), with health insurance that would be subject to AB 32.

The premium increases in Medi-Cal Managed Care Plans are 0.63% for non-elderly and 0.30% for elderly enrollees. CalPERS HMO premiums increased by 0.02%. CDI-regulated large group premiums increased by 0.18%. Premiums are estimated to increase by \$136,534,000 overall for the 8.05 million Medi-Cal enrollees enrolled in DMHC-regulated plans.

## Enrollee Expenses

AB 32–related changes in cost sharing for covered benefits (deductibles, copays, etc.) and out-of-pocket expenses for noncovered benefits would vary by market segment. Note that such changes are related to the number of enrollees (see Table 1, Table 8, and Table 9) with health insurance that would be subject to AB 32 expected to use the relevant telehealth services during the year after enactment.

Due to new coverage, CHBRP estimates that total cost sharing for enrollees newly covered who use telehealth services would increase by \$41,704,000 under the new mandate. CHBRP estimates are based on claims data and may underestimate the cost savings for enrollees due to carriers' ability to negotiate discounted rates that are unavailable to patients and their families.

Cost-sharing impacts for covered benefits range between \$0.13 PMPM for enrollees in DMHC-regulated individual market plans, and \$0.90 PMPM increases for enrollees in CDI-regulated large group policies. CHBRP projects a small change (\$0.09 PMPM) to copayments or coinsurance rates for CalPERS HMO enrollees. Medi-Cal managed care and COHS enrollees will not be subject to increase in copayments or coinsurance rates.

It is possible that some enrollees incurred expenses related to telehealth for which coverage was denied, but CHBRP cannot estimate the frequency with which such situations occur and so cannot offer a calculation of impact.

## Potential Cost Offsets or Savings in the First 12 Months After Enactment

CHBRP does not project any cost offsets or savings in expenditures that would result because of the enactment of provisions in AB 32. A limited number of enrollees will obtain new benefit coverage in the commercial (19.6%) and Medi-Cal (26.5%) market, and that new coverage will be focused on specific types of services. However, because AB 32 require payment for telehealth to be at parity with in-person care and that 50% of the increased telehealth use supplements in-person visits, no cost offsets or savings are anticipated. In addition, it is unlikely the actual cost of staff, technology, and resources used to deliver services via telehealth are less expensive than in-person care.<sup>44</sup>

## Postmandate Administrative Expenses and Other Expenses

CHBRP estimates that the increase in administrative costs of DMHC-regulated plans and/or CDI-regulated policies will remain proportional to the increase in premiums. CHBRP assumes that if health care costs increase as a result of increased utilization or changes in unit costs, there is a corresponding

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<sup>44</sup> Communication from AB 32 Content Expert

proportional increase in administrative costs. CHBRP assumes that the administrative cost portion of premiums is unchanged. All health plans and insurers include a component for administration and profit in their premiums.

## **Other Considerations for Policymakers**

In addition to the impacts a bill may have on benefit coverage, utilization, and cost, related considerations for policymakers are discussed below.

### **Postmandate Changes in the Number of Uninsured Persons**

Because the change in average premiums does not exceed 1% for any market segment (see Table 1, Table 8, and Table 9), CHBRP would expect no measurable change in the number of uninsured persons due to the enactment of AB 32.

### **Changes in Public Program Enrollment**

CHBRP estimates that the mandate would produce no measurable impact on enrollment in publicly funded insurance programs due to the enactment of AB 32.



**Table 7. Baseline Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2022**

	DMHC-Regulated						CDI-Regulated			TOTAL
	Commercial Plans (by Market) (a)			Publicly Funded Plans			Commercial Plans (by Market) (a)			
	Large Group	Small Group	Individual	CalPERS HMOs (b)	MCMC (Under 65) (c)	MCMC (65+) (c)	Large Group	Small Group	Individual	
<b>Enrollee Counts</b>										
Total enrollees in plans/policies subject to state mandates (d)	8,405,000	2,086,000	1,989,000	889,000	7,218,000	787,000	384,000	43,000	144,000	21,945,000
Total enrollees in plans/policies subject to AB 32	8,405,000	2,086,000	1,989,000	889,000	7,218,000	787,000	384,000	43,000	144,000	21,945,000
<b>Premium Costs</b>										
Average portion of premium paid by employer	\$426.28	\$374.49	\$0.00	\$540.40	\$226.61	\$478.87	\$530.80	\$421.81	\$0.00	\$84,948,349,000
Average portion of premium paid by enrollee	\$141.02	\$180.89	\$624.47	\$96.86	\$0.00	\$0.00	\$186.55	\$212.07	\$545.57	\$36,600,954,000
<b>Total Premium</b>	<b>\$567.30</b>	<b>\$555.38</b>	<b>\$624.47</b>	<b>\$637.27</b>	<b>\$226.61</b>	<b>\$478.87</b>	<b>\$717.35</b>	<b>\$633.88</b>	<b>\$545.57</b>	<b>\$121,549,303,000</b>
<b>Enrollee Expenses</b>										
Cost sharing for covered benefits (deductibles, copays, etc.)	\$43.61	\$121.70	\$173.51	\$50.75	\$0.00	\$0.00	\$134.75	\$197.13	\$184.11	\$13,168,032,000
Expenses for noncovered benefits (e)	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0
<b>Total Expenditures</b>	<b>\$610.91</b>	<b>\$677.07</b>	<b>\$797.97</b>	<b>\$688.02</b>	<b>\$226.61</b>	<b>\$478.87</b>	<b>\$852.10</b>	<b>\$831.01</b>	<b>\$729.68</b>	<b>\$134,717,335,000</b>

Source: California Health Benefits Review Program, 2021.

Notes: (a) Includes enrollees with grandfathered and nongrandfathered health insurance acquired outside or through Covered California (the state's health insurance marketplace).

(b) Approximately 54.1% of CalPERS enrollees in DMHC-regulated plans are state retirees, state employees, or their dependents.

(c) Medi-Cal Managed Care Plan expenditures for members over 65 include those who are also Medicare beneficiaries. This population does not include enrollees in COHS.

(d) Enrollees in plans and policies regulated by DMHC or CDI aged 0 to 64 years as well as enrollees 65 years or older in employer-sponsored health insurance. This group includes commercial enrollees (including those associated with Covered California or CalPERS) and Medi-Cal beneficiaries enrolled in DMHC-regulated plans.

(e) Includes only those expenses that are paid directly by enrollees or other sources to providers for services related to the mandated benefit that are not covered by insurance at baseline. 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.

(f) Includes only Medi-Cal beneficiaries enrolled in DMHC-regulated plans.

Key: CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; COHS = County Organized Health Systems; DMHC = Department of Managed Health Care; MCMC = Medi-Cal Managed Care.

**Table 8. Postmandate Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2022**

	DMHC-Regulated						CDI-Regulated			TOTAL
	Commercial Plans (by Market) (a)			Publicly Funded Plans			Commercial Plans (by Market) (a)			
	Large Group	Small Group	Individual	CalPERS HMOs (b)	MCMC (Under 65) (c)	MCMC (65+) (c)	Large Group	Small Group	Individual	
<b>Enrollee Counts</b>										
Total enrollees in plans/policies subject to state mandates (d)	8,405,000	2,086,000	1,989,000	889,000	7,218,000	787,000	384,000	43,000	144,000	21,945,000
Total enrollees in plans/policies subject to AB 32	8,405,000	2,086,000	1,989,000	889,000	7,218,000	787,000	384,000	43,000	144,000	21,945,000
<b>Premium Costs</b>										
Average portion of premium paid by employer	\$0.2194	\$0.5164	\$0.0000	\$0.1082	\$1.4221	\$1.4142	\$0.9784	\$0.0000	\$0.0000	\$177,251,000
Average portion of premium paid by enrollee	\$0.0726	\$0.2494	\$0.2043	\$0.0194	\$0.0000	\$0.0000	\$0.3439	\$0.0000	\$0.9490	\$21,871,000
<b>Total Premium</b>	<b>\$0.2920</b>	<b>\$0.7658</b>	<b>\$0.2043</b>	<b>\$0.1276</b>	<b>\$1.4221</b>	<b>\$1.4142</b>	<b>\$1.3223</b>	<b>\$0.0000</b>	<b>\$0.9490</b>	<b>\$199,122,000</b>
<b>Enrollee Expenses</b>										
Cost sharing for covered benefits (deductibles, copays, etc.)	\$0.1994	\$0.4922	\$0.1313	\$0.0871	\$0.0000	\$0.0000	\$0.9029	\$0.0000	\$0.6099	\$41,704,000
Expenses for noncovered benefits (e)	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0.0000	\$0
<b>Total Expenditures</b>	<b>\$0.4913</b>	<b>\$1.2580</b>	<b>\$0.3355</b>	<b>\$0.2148</b>	<b>\$1.4221</b>	<b>\$1.4142</b>	<b>\$2.2251</b>	<b>\$0.0000</b>	<b>\$1.5589</b>	<b>\$240,826,000</b>
<b>Postmandate Percent Change</b>										
Percent change insured premiums	0.0515%	0.1379%	0.0327%	0.0200%	0.6276%	0.2953%	0.1843%	0.0000%	0.1739%	0.1638%
<b>Percent Change total expenditures</b>	<b>0.0804%</b>	<b>0.1858%</b>	<b>0.0420%</b>	<b>0.0312%</b>	<b>0.6276%</b>	<b>0.2953%</b>	<b>0.2611%</b>	<b>0.0000%</b>	<b>0.2136%</b>	<b>0.1788%</b>

Source: California Health Benefits Review Program, 2021.

Notes: (a) Includes enrollees with grandfathered and nongrandfathered health insurance acquired outside or through Covered California (the state's health insurance marketplace).

(b) Approximately 54.1% of CalPERS enrollees in DMHC-regulated plans are state retirees, state employees, or their dependents.

(c) Medi-Cal Managed Care Plan expenditures for members over 65 include those who are also Medicare beneficiaries. This population does not include enrollees in COHS.

(d) Enrollees in plans and policies regulated by DMHC or CDI aged 0 to 64 years as well as enrollees 65 years or older in employer-sponsored health insurance. This group includes commercial enrollees (including those associated with Covered California or CalPERS) and Medi-Cal beneficiaries enrolled in DMHC-regulated plans.

(e) Includes only those expenses that are paid directly by enrollees or other sources to providers for services related to the mandated benefit that are not covered by insurance at baseline. 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.

(f) Includes only Medi-Cal beneficiaries enrolled in DMHC-regulated plans.

Key: CalPERS HMOs = California Public Employees' Retirement System Health Maintenance Organizations; CDI = California Department of Insurance; COHS = County Organized Health Systems; DMHC = Department of Managed Health Care; MCMC = Medi-Cal Managed Care.

## PUBLIC HEALTH IMPACTS

As presented in the *Policy Context*, AB 32 would require the following insurers to provide benefit coverage and reimbursement for synchronous telehealth services at parity with in-person services: state-regulated commercial plans and policies, CalPERS, Medi-Cal Managed Care Plans, and Medi-Cal's County Organized Health Systems (COHS) and Fee-for-Service (FFS) Medi-Cal program. AB 32 would also allow Federally Qualified Health Clinics (FQHCs) and Rural Health Clinics (RHCs) to be reimbursed for telehealth services at parity with in-person visits through the extension of DHCS telehealth regulations adopted during the COVID-19 public health emergency.

This section estimates the short-term<sup>45</sup> public health impact of AB 32 on access to care, health outcomes, and social determinants of health. See the *Long-Term Impacts* section for a discussion of access to care beyond the first 12 months of the bill implementation.

### Estimated Public Health Outcomes

Based on the conditions and medical specialties studied, and the metrics used, there is mixed evidence of effectiveness across telehealth modalities (see *Medical Effectiveness* summary in Table 5). The telehealth literature generally focuses on a limited number of clinical specialties (e.g., dermatology, neurology, behavioral health) using different modalities and uses metrics (process, outcomes, access) inconsistently; thus, results may not be generalizable to other conditions, clinical specialties, or other modalities.

CHBRP's cost analysis projects that AB 32 would provide telephone (audio-only) coverage to an additional ~4,853,000 enrollees (2.73 million commercial and CalPERS enrollees and 2.12 Medi-Cal Managed Care beneficiaries) and ~2,746,000 Medi-Cal beneficiaries who have coverage through COHS and FFS.

AB 32 would also enable FQHCs and RHCs to continue providing telephone and live video options following the recession of enabling regulations from the COVID-19 public health emergency order. Note that until the public health emergency order was issued during the pandemic, patients of FQHCs and RHCs were not covered for live video visits *unless those visits occurred on-site at the clinic*. Thus, this subset of patients, who are low-income and are more likely to have travel barriers, had no option for audio-only (telephone) or live video visits with their providers pre-pandemic,

### Public Health Impact on Access to Care, Health Outcomes, and Satisfaction

As described in the *Background* section, patient and provider use of telehealth continues to grow, primarily due to the COVID-19 pandemic, which produced a significant increase in telehealth visits between during 2020. This is especially true for FQHC and RHC providers who became eligible for audio-only (telephone) and all live video visit reimbursement during the pandemic. These safety-net providers reported providing telephone visits more often than other providers. This evidence supports observations of disparity in access to broadband by income, and perhaps by geography, as reliable broadband connectivity is contingent on physical infrastructure and affordability of Internet/WiFi service and devices.

Also presented in the *Background* section, are survey results demonstrating that most patients and providers are satisfied with telehealth as a substitute for in-person care. Patients note reductions in travel and waiting time, and time away from work as beneficial. Provider survey results also show that most providers were satisfied with telehealth services (during the pandemic) and will continue to use it, if reimbursement remains in parity with in-person visits; almost half said they would not continue telehealth visits if parity were rescinded (CHCF, 2020b; COVID-19 Healthcare Coalition, 2020).

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<sup>45</sup> CHBRP defines short-term impacts as changes occurring within 12 months of bill implementation.

Telehealth can supplant or substitute in-person visits for some diseases and health conditions. The broad nature of telehealth modalities and the multiple metrics (e.g., access, process, outcomes, etc.) across modalities and countless conditions precludes quantitative estimates of changes in public health outcomes attributable to AB 32. However, based on evidence presented in this report:

CHBRP anticipates that AB 32 would increase access to and use of telehealth modalities for ~4.85 million commercial/CalPERS and Medi-Cal enrollees, thus putting their coverage at parity with other state-regulated commercial carriers already providing coverage at baseline. In turn, these enrollees would experience reduced delays in care (e.g., appointments, diagnoses, treatments) for conditions treated by primary care, behavioral health, orthopedic, rehabilitation, dermatology, and other specialty providers.

CHBRP anticipates AB 32 would bring live video and telephone-based care from FQHCs and RHCs into parity with Medi-Cal and commercial plans and policies, thus mitigating income disparities in care.

CHBRP also anticipates that, as compared with in-person visits, AB 32 would produce equivalent (or in some cases, better) health outcomes for newly covered enrollees across some, but not all, diseases and conditions.

## Social Determinants of Health and Disparities

CHBRP defines social determinants of health (SDoH) as conditions in which people are born, grow, live, work, learn, and age. These social determinants of health (e.g., economic factors, social factors, education, physical environment) are shaped by the distribution of money, power, and resources and impacted by policy (adapted from Healthy People 2020, 2015; CDC, 2014). These factors generally occur prior to or outside of the health care system and are highly correlated with downstream events such as avoidable illnesses and premature death. In the case of AB 32, key determinants that may be affected by the mandate include transportation, rural living, and demographic characteristics (age, race/ethnicity, income, language).

### Disparities in Use of Telehealth

Some of the pre-pandemic literature notes concern about expanded telehealth access leading to the unintended consequence of exacerbating health disparities. This is because telephone (audio only) has not always been covered in parity with live video, which requires access to broadband and potentially expensive devices. However, California's natural experiment with increased telehealth use during COVID-19 indicates that newly covered telephone visits (via state public health emergency order) were accessed as often or more often than live video depending on the population (CHCF, 2020a, 2020b; Wegermann et al., 2021).

#### *Impact on disparities by income, race, and ethnicity*

As presented in the *Background* section, people of color experience higher rates of many diseases and worse access to (in-person) care. An earlier analysis by CHBRP about the racial and ethnic composition of enrollees with state-mandated plans and policies found that commercial and CalPERS enrollees are about equally divided between people of color and Whites in contrast to Medi-Cal beneficiaries, who are predominantly people of color (CHBRP, 2018). The differences in composition has implications for potential changes in disparities.

Because CHBRP found conflicting evidence of differences in access to and use of telehealth services among racial and ethnic groups (*Background* section), the presence of disparities among these groups in the commercially insured population is unknown. AB 32 would increase telephone (audio only) coverage

for 2.7 million commercial enrollees, thus producing an “all boats rise” scenario in which access to telehealth would increase for these enrollees regardless of race and ethnicity.

AB 32 also requires coverage for Medi-Cal beneficiaries who are by definition low-income, but also are predominantly people of color. As discussed in the *Background* section, low income persons (as compared with non-low income persons) were more likely to use telephone than live video visits, and reported having an easier time attending any televisit compared with past in-person visits.

CHBRP projects that AB 32 would bring Medi-Cal beneficiary coverage for telephone and live video visits into parity with that of the commercially insured population. This change would close the pre-pandemic disparities gap in telehealth access and respective health outcomes by income as well as potential racial ethnic disparities. Without the current pandemic public health emergency order, Medi-Cal beneficiaries do not have insurance coverage for telephone (audio-only) visits; and FQHCs that provide care to Medi-Cal patients do not receive reimbursement for live video visits to a patient’s home (essentially removing the live video visit option for FQHC/RHC Medi-Cal patients). Despite conflicting evidence of disparities in access to or use of telehealth modalities by race and ethnicity writ large, the evidence is clear that Medi-Cal beneficiaries (predominantly people of color) have been using telephone and live video visits during the pandemic. Without these modalities, much of the care would have been forgone.

It is unknown if racial or ethnic disparities in access to or use of telehealth exist among the commercially-insured population; therefore CHBRP is unable to estimate an impact for this population,

People of color comprise the majority of Medi-Cal beneficiaries. As a group, their telehealth coverage is unequal with much of the commercial market at baseline. CHBRP projects that, postmandate, AB 32 would bring telephone and live video telehealth coverage and reimbursement for Medi-Cal beneficiaries into parity with that of commercial plans and policies. This would decrease income disparities in access to health care and health outcomes by providing equal access to all modalities of care as well as reducing delays in in-person care for some conditions (appointments, diagnoses, treatment),

CHBRP also projects that AB 32 would decrease overall racial and ethnic disparities that are present due to the different baseline coverage between commercial plans and policies and Medi-Cal, which is predominantly comprised of people of color. This would decrease disparities in access to health care and health outcomes by reducing delays in in-person care for some conditions (appointments, diagnoses, treatment), as well as providing equal access to all modalities of care. CHBRP is unable to quantify the reduction in disparities.

The reduction in disparities would be attributable to two mechanisms in AB 32: 1) new coverage for telephone (audio-only) that brings Medi-Cal beneficiaries’ coverage into parity with commercial plans and policies; and 2) permanent eligibility for FQHCs and RHCs to bill Medi-Cal for telephone and live video visits with Medi-Cal patients.

### *Impact on transportation barriers*

Patients must travel to obtain in-person health care services, which can be a burden especially for those who live in rural areas, have limited transportation options, or complex conditions that make travel difficult. Patients in rural and urban areas who cannot take time away from work, have difficulty traveling, or have questions or health problems occurring after usual office hours may find the convenience of telephone and live video to be beneficial. Such convenience can help patients avoid traffic delays, public transportation barriers, and related transportation costs (such as transportation fares, tolls, parking) (Cota et al., 2017; Ferguson et al., 2008; Jordan et al., 2021).

### *Impact on rural health disparities*

There are rural health care workforce shortages in California, especially for clinical specialty providers (e.g., neurologists, dermatologists, ophthalmologists, etc.). Telehealth may help to overcome some of the disparities in health care access by making clinical expertise available when and where it is needed, including rural areas of California. Evidence shows that telehealth services provide medically underserved rural communities with improved access to ambulatory and specialty care (Marcin et al., 2016; Nesbitt, 2012). Moreover, research indicates reductions in costs related to rural provider or patient travel, unnecessary office visits, emergency department visits or hospitalizations. The recent DHCS-initiated telehealth policy issued in response to the pandemic permits FQHCs and RHCs to offer health care to patients that would otherwise have been unavailable due to COVID-19.

CHBRP anticipates that, postmandate, AB 32 would increase access to health care by reducing transportation barriers to in-person care by covering telephone (audio only) visits. AB 32 would also increase health care options and reduce travel costs and travel time for those enrollees who use the newly covered telephonic visits or reimbursable live video visits with FQHC/RHC providers. These enrollees and Medi-Cal beneficiaries may have equivalent or better outcomes (compared with in-person care) because they would no longer delay or avoid in-person visits because of travel difficulties.

For those rural (and some urban) enrollees and Medi-Cal beneficiaries who have no broadband connectivity (due to lack of infrastructure in remote areas or cost of service or devices), a landline telephone would remain a viable telehealth modality, resulting in equivalent or better outcomes (compared with in-person care).

### *Impact on disparities in technology use across demographic groups*

As described in the *Background* section, there is some evidence of disparities in access to and use of some technologies covered by AB 32. Earlier observational studies considered use of telephone and electronic health care in California and found some disparities by age, race/ethnicity, income with greater use of telehealth by younger, white, and more affluent people. However, some progress seems to have been made in closing gaps in California since these earlier studies, especially with the advent of the COVID-19 pandemic, which allowed reimbursement to providers for telephone and live video visits.

Telephone (audio only) is a technology that is frequently overlooked, yet it remains an option for virtually everyone. Despite much of the literature's focus on live video as the primary synchronous modality for patient-provider interaction, CHBRP's review of the evidence found that, when available, telephone visits are used by many and appear to generate similar satisfaction and outcomes to live video or in-person care for many types of visits. AB 32 would sustain reductions in technology disparities by reimbursing for telephone visits.

CHBRP anticipates AB 32 would decrease disparities in care associated with technology barriers for many Californians who are low-income (Medi-Cal), live in broadband deserts, or lack digital literacy by permitting access to reimbursable telephone and live video visits.

## **Estimated Impact on Economic Loss**

CHBRP found little literature addressing lost productivity associated with travel and in-person wait time for health care. In addition to studies identified in the patient travel and rural disparities section, another study documented some savings from telehealth. An employer with more than 20,000 employees offered a contracted, independent telehealth service. Employees self-reported saving almost \$800,000 in direct health costs and averted lost productivity (Zappe, 2012); however, no health outcomes were reported.



CHBRP is unable to project a potential change in economic loss postmandate due to a lack of evidence and data. Lost productivity due to patient travel time to in-person visits (and wait time) could be reduced, but the extent is unknown.

## LONG-TERM IMPACTS

In this section, CHBRP estimates the long-term impact of AB 32, which CHBRP defines as impacts occurring beyond the first 12 months after implementation. These estimates are qualitative and based on the existing evidence available in the literature. CHBRP does not provide quantitative estimates of long-term impacts because of unknown improvements in clinical care, changes in prices, implementation of other complementary or conflicting policies, and other unexpected factors.

### Long-Term Utilization and Cost Impacts

#### Utilization Impacts

Although CHBRP estimates the telephonic telehealth services will increase in 2022 and 2023 due to new benefit coverage under AB 32 and the ongoing effects of the COVID-19 pandemic (as a barrier to in-person services), in the long term, CHBRP anticipates that technology capacity improvements could support additional use of live video. However, use of telephone for telehealth is likely to continue, especially for patients with technology limitations (e.g., Internet bandwidth, lack of smartphone or computer).

#### Cost Impacts

CHBRP estimates that technology advances, convenience, and increased capacity (partially due to the necessity to provide telehealth services during the COVID-19 pandemic) will facilitate the growth in telehealth service use. Due to payment parity requirements in AB 744 and AB 32, there are no cost savings associated with the increase. However, additional supplemental telehealth service use (e.g., follow-up visits that would not have happened after an in-person visit) could result in additional spending.

### Long-Term Public Health Impacts

CHBRP projects under AB 32, Medi-Cal beneficiaries, especially those who access care through FQHCs/RHCs, would experience comparable coverage for telehealth care with their commercially insured counterparts, which would allow them access to the same telehealth choices. In the long term, CHBRP projects that this new parity could narrow some racial/ethnic, income, and geographic disparities in access to care and health outcomes.

#### Telehealth Appropriateness and Quality of Care

The COVID-19 pandemic expedited the adoption of telehealth by health systems, providers, and patients. Due to the public health emergency order that permitted reimbursement for telephone, disparities in access to telehealth care have been mitigated. A recent survey of providers across specialties showed that a majority are not only interested in continuing to offer telehealth services to patients after the pandemic, but are also interested in expanding telehealth services (COVID-19 Healthcare Coalition, 2020).

In the near future, the natural experiment brought on by the pandemic will likely yield more evidence of the effectiveness of various telehealth modalities across greater numbers of conditions. Comparisons of processes of care and health outcomes pre- and post-pandemic will likely be forthcoming and inform outstanding questions about telehealth quality and appropriateness of telehealth versus in-person visits.

CHBRP projects AB 32 would increase enrollee access to health care in the long term, especially for those who would use audio-only services; it would also provide more data to inform future research about the appropriateness of telehealth care as compared with in-person visits and other telehealth modalities.

## APPENDIX A TEXT OF BILL ANALYZED

On February 16, 2021, the California Assembly Committee on Health requested that CHBRP analyze AB 32 as amended on February 12, 2021.

**ASSEMBLY BILL**

**NO. 32**

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**Introduced by Assembly Member Aguiar-Curry  
(Coauthors: Assembly Members Arambula, Bauer-Kahan, Burke, Cunningham,  
Cristina Garcia, Petrie-Norris, Quirk-Silva, Blanca Rubio, and Santiago)**

**December 07, 2020  
Amended February 12, 2021**

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An act to amend Section 2290.5 of the *Business and Professions Code*, to amend Section 1374.14 of the *Health and Safety Code*, to amend Section 10123.855 of the *Insurance Code*, and to amend Section 14087.95 of, and to add Sections ~~14092.4~~ 14092.4, 14132.721, and 14132.722 to, the *Welfare and Institutions Code*, relating to telehealth.

### LEGISLATIVE COUNSEL'S DIGEST

AB 32, as amended, Aguiar-Curry. Telehealth.

Existing law provides for the Medi-Cal program, which is administered by the State Department of Health Care Services, under which qualified low-income individuals receive health care services. The Medi-Cal program is, in part, governed and funded by federal Medicaid program provisions. Under existing law, Medi-Cal services may be provided pursuant to contracts with various types of managed care health plans, including through a county organized health system. Under existing law, in-person contact between a health care provider and a patient is not required under the Medi-Cal program for services appropriately provided through telehealth. Existing law provides that neither face-to-face contact nor a patient's physical presence on the premises of an enrolled community clinic is required for services provided by the clinic to a Medi-Cal beneficiary during or immediately following a proclamation declaring a state of emergency. Existing law defines "immediately following" for this purpose to mean up to 90 days following the termination of the proclaimed state of emergency, unless there are extraordinary circumstances.

Existing law, the Knox-Keene Health Care Service Plan Act of 1975 (Knox-Keene), provides for the licensure and regulation of health care service plans by the Department of Managed Health Care. Existing law provides for the regulation of health insurers by the Department of Insurance. Existing law requires a contract issued, amended, or renewed on or after January 1, 2021, between a health care service plan or health insurer and a health care provider to require the plan or insurer to reimburse the provider for the diagnosis, consultation, or treatment of an enrollee,

subscriber, insured, or policyholder appropriately delivered through telehealth services on the same basis and to the same extent as the same service through in-person diagnosis, consultation, or treatment. Existing law requires a health care service plan contract or health insurance policy issued, amended, or renewed on or after January 1, 2021, to specify that coverage is provided for health care services appropriately delivered through telehealth on the same basis and to the same extent as in-person diagnosis, consultation, or treatment. Existing law exempts Medi-Cal managed care plans that contract with the State Department of Health Care Services under the Medi-Cal program from these provisions, and generally exempts county organized health systems that provide services under the Medi-Cal program from Knox-Keene.

This bill would delete the above-described references to contracts issued, amended, or renewed on or after January 1, 2021, would require these provisions to apply to the plan or insurer's contracted entity, as specified, and would delete the exemption for Medi-Cal managed care plans. The bill would subject county organized health systems, and their subcontractors, that provide services under the Medi-Cal program to the above-described Knox-Keene requirements relative to telehealth. The bill would authorize a provider to enroll or recertify an individual in *specified* Medi-Cal programs through telehealth and other forms of virtual communication, *and would authorize a county eligibility worker to determine eligibility for, or recertify eligibility for, the Medi-Cal Minor Consent program remotely through virtual communication*, as specified.

*This bill would require health care services furnished by an enrolled clinic through telehealth to be reimbursed by Medi-Cal on the same basis, to the same extent, and at the same payment rate as those services are reimbursed if furnished in person. The bill would prohibit the State Department of Health Care Services from restricting the ability of an enrolled clinic to provide and be reimbursed for services furnished through telehealth. The bill would require the ~~State Department of Health Care Services~~ department to indefinitely continue the telehealth flexibilities in place during the COVID-19 pandemic state of emergency. The bill would require the department, by January 2022, to convene an advisory group with specified membership to provide input to the department on the development of a revised Medi-Cal telehealth policy that promotes specified principles. The bill would require the department, by December 2024, to complete an evaluation to assess the benefits of telehealth in Medi-Cal, including an analysis of improved access for patients, changes in health quality outcomes and utilization, and best practices for the right mix of in-person visits and telehealth. The bill would require the department to report its findings and recommendations from the evaluation to the appropriate policy and fiscal committees of the Legislature no later than July 1, 2025.*

Vote: majority Appropriation: no Fiscal Committee: yes Local Program: no

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THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

**SECTION 1.** (a) The Legislature finds and declares all of the following:

(1) The Legislature has recognized the practice of telehealth as a legitimate means by which an individual may receive health care services from a health care provider without in-person contact

with the provider, and enacted protections in Section 14132.72 of the Welfare and Institutions Code to prevent the State Department of Health Care Services from restricting or limiting telehealth services.

(2) The use of telehealth was expanded during the COVID-19 pandemic public health emergency and has proven to be an important modality for patients to stay connected to their health care providers. Telehealth has been especially critical for California's Medi-Cal patients.

(3) Patients have reported high satisfaction with telehealth, noting how easy it is to connect with their care teams without having to take time off work, find childcare, or find transportation to an in-person appointment.

(4) In addition to video access, audio-only care is essential because many patients have reported challenges accessing video technology due to limitations with data plans and internet access.

(5) Primary care and specialty care providers have found telehealth to be a critical access point to address a variety of health care needs, including helping patients manage chronic disease, adjust pain medications, and for followup visits after a procedure, among others.

(6) Behavioral health providers have found that offering telehealth has engaged patients in necessary care they would never have received if required to walk into a clinic.

(7) Health care providers have reported significant decreases in the number of missed appointments since telehealth became available, helping to ensure that patients receive high-quality care in a timely manner.

(8) Telehealth is widely available to individuals with health insurance in the commercial market, and existing law in Section 1374.14 of the Health and Safety Code and Section 10123.855 of the Insurance Code requires commercial health care service plans and health insurers to pay for services delivered through telehealth services on the same basis as equivalent services furnished in person. Medi-Cal must evolve with the rest of the health care industry to achieve health equity for low-income Californians.

(9) The expanded telehealth options that patients and providers have relied on during the COVID-19 pandemic should continue to be available to Medi-Cal recipients after the public health emergency is over.

(b) It is the intent of the Legislature to continue the provision of telehealth in Medi-Cal, including video and audio-only technology, for the purposes of expanding access and enhancing delivery of health care services for beneficiaries.

*SEC. 2. Section 2290.5 of the Business and Professions Code is amended to read:*

**2290.5.** (a) For purposes of this division, the following definitions shall apply:

(1) “Asynchronous store and forward” means the transmission of a patient’s medical information from an originating site to the health care provider at a distant site.

(2) “Distant site” means a site where a health care provider who provides health care services is located while providing these services via a telecommunications system.

(3) “Health care provider” means any of the following:

(A) A person who is licensed under this division.

(B) An associate marriage and family therapist or marriage and family therapist trainee functioning pursuant to Section 4980.43.3.

(C) A qualified autism service provider or qualified autism service professional certified by a national entity pursuant to Section 1374.73 of the Health and Safety Code and Section 10144.51 of the Insurance Code.

(4) “Originating site” means a site where a patient is located at the time health care services are provided via a telecommunications system or where the asynchronous store and forward service originates.

(5) “Synchronous interaction” means a real-time ~~interaction~~ *interaction, including, but not limited to, audiovideo, audio only, such as telephone, and other virtual communication*, between a patient and a health care provider located at a distant site.

(6) “Telehealth” means the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient’s health care. Telehealth facilitates patient self-management and caregiver support for patients and includes synchronous interactions and asynchronous store and forward transfers.

(b) Before the delivery of health care via telehealth, the health care provider initiating the use of telehealth shall inform the patient about the use of telehealth and obtain verbal or written consent from the patient for the use of telehealth as an acceptable mode of delivering health care services and public health. The consent shall be documented.

(c) This section does not preclude a patient from receiving in-person health care delivery services during a specified course of health care and treatment after agreeing to receive services via telehealth.

(d) The failure of a health care provider to comply with this section shall constitute unprofessional conduct. Section 2314 shall not apply to this section.

(e) This section shall not be construed to alter the scope of practice of a health care provider or authorize the delivery of health care services in a setting, or in a manner, not otherwise authorized by law.

(f) All laws regarding the confidentiality of health care information and a patient's rights to the patient's medical information shall apply to telehealth interactions.

(g) All laws and regulations governing professional responsibility, unprofessional conduct, and standards of practice that apply to a health care provider under the health care provider's license shall apply to that health care provider while providing telehealth services.

(h) This section shall not apply to a patient under the jurisdiction of the Department of Corrections and Rehabilitation or any other correctional facility.

(i) (1) Notwithstanding any other law and for purposes of this section, the governing body of the hospital whose patients are receiving the telehealth services may grant privileges to, and verify and approve credentials for, providers of telehealth services based on its medical staff recommendations that rely on information provided by the distant-site hospital or telehealth entity, as described in Sections 482.12, 482.22, and 485.616 of Title 42 of the Code of Federal Regulations.

(2) By enacting this subdivision, it is the intent of the Legislature to authorize a hospital to grant privileges to, and verify and approve credentials for, providers of telehealth services as described in paragraph (1).

(3) For the purposes of this subdivision, "telehealth" shall include "telemedicine" as the term is referenced in Sections 482.12, 482.22, and 485.616 of Title 42 of the Code of Federal Regulations.

~~SEC. 2.~~ **SEC. 3.** Section 1374.14 of the Health and Safety Code is amended to read:

**1374.14.** (a) (1) A contract between a health care service plan and a health care provider for the provision of health care services to an enrollee or subscriber shall specify that the health care service plan shall reimburse the treating or consulting health care provider for the diagnosis, consultation, or treatment of an enrollee or subscriber appropriately delivered through telehealth services on the same basis and to the same extent that the health care service plan is responsible for reimbursement for the same service through in-person diagnosis, consultation, or treatment.

(2) This section does not limit the ability of a health care service plan and a health care provider to negotiate the rate of reimbursement for a health care service provided pursuant to a contract subject to this section. Services that are the same, as determined by the provider's description of the service on the claim, shall be reimbursed at the same rate whether provided in person or through telehealth. When negotiating a rate of reimbursement for telehealth services for which no in-person equivalent exists, a health care service plan and the provider shall ensure the rate is consistent with subdivision (h) of Section 1367.

(3) This section does not require telehealth reimbursement to be unbundled from other capitated or bundled, risk-based payments.

(4) If a health care service plan delegates responsibility for the performance of the duties described in this section to a contracted entity, including a medical group or independent practice association, then the delegated entity shall comply with this section.

(5) The obligation of a health care service plan to comply with this section shall not be waived if the plan delegates services or activities that the plan is required to perform to its provider or another contracting entity. A plan's implementation of this section shall be consistent with the requirements of the Health Care Providers' Bill of Rights, and a material change in the obligations of a plan's contracting network providers shall be considered a material change to the provider contract, within the meaning of subdivision (b) Section 1375.7.

(b) (1) A health care service plan contract shall specify that the health care service plan shall provide coverage for health care services appropriately delivered through telehealth services on the same basis and to the same extent that the health care service plan is responsible for coverage for the same service through in-person diagnosis, consultation, or treatment. Coverage shall not be limited only to services delivered by select third-party corporate telehealth providers.

(2) This section does not alter the obligation of a health care service plan to ensure that enrollees have access to all covered services through an adequate network of contracted providers, as required under Sections 1367, 1367.03, and 1367.035, and the regulations promulgated thereunder.

(3) This section does not require a health care service plan to cover telehealth services provided by an out-of-network provider, unless coverage is required under other law.

(c) A health care service plan may offer a contract containing a copayment or coinsurance requirement for a health care service delivered through telehealth services, provided that the copayment or coinsurance does not exceed the copayment or coinsurance applicable if the same services were delivered through in-person diagnosis, consultation, or treatment. This subdivision does not require cost sharing for services provided through telehealth.

(d) Services provided through telehealth and covered pursuant to this chapter shall be subject to the same deductible and annual or lifetime dollar maximum as equivalent services that are not provided through telehealth.

(e) The definitions in subdivision (a) of Section 2290.5 of the Business and Professions Code apply to this section.

~~SEC. 3.~~ **SEC. 4.** Section 10123.855 of the Insurance Code is amended to read:

**10123.855.** (a) (1) A contract between a health insurer and a health care provider for an alternative rate of payment pursuant to Section 10133 shall specify that the health insurer shall reimburse the treating or consulting health care provider for the diagnosis, consultation, or treatment of an insured or policyholder appropriately delivered through telehealth services on the same basis and to the same extent that the health insurer is responsible for reimbursement for the same service through in-person diagnosis, consultation, or treatment.



(2) This section does not limit the ability of a health insurer and a health care provider to negotiate the rate of reimbursement for a health care service provided pursuant to a contract subject to this section. Services that are the same, as determined by the provider's description of the service on the claim, shall be reimbursed at the same rate whether provided in person or through telehealth. When negotiating a rate of reimbursement for telehealth services for which no in-person equivalent exists, a health insurer and the provider shall ensure the rate is consistent with subdivision (a) of Section 10123.137.

(3) If a health insurer delegates responsibility for the performance of the duties described in this section to a contracted entity, including a medical group or independent practice association, then the delegated entity shall comply with this section.

(4) The obligation of a health insurer to comply with this section shall not be waived if the insurer delegates services or activities that the insurer is required to perform to its provider or another contracting entity. An insurer's implementation of this section shall be consistent with the requirements of the Health Care Providers' Bill of Rights, and a material change in the obligations of an insurer's contracting network providers shall be considered a material change to the provider contract, within the meaning of subdivision (b) Section 10133.65.

(b) (1) A policy of health insurance that provides benefits through contracts with providers at alternative rates of payment shall specify that the health insurer shall provide coverage for health care services appropriately delivered through telehealth services on the same basis and to the same extent that the health insurer is responsible for coverage for the same service through in-person diagnosis, consultation, or treatment. Coverage shall not be limited only to services delivered by select third-party corporate telehealth providers.

(2) This section does not alter the existing statutory or regulatory obligations of a health insurer to ensure that insureds have access to all covered services through an adequate network of contracted providers, as required by Sections 10133 and 10133.5 and the regulations promulgated thereunder.

(3) This section does not require a health insurer to deliver health care services through telehealth services.

(4) This section does not require a health insurer to cover telehealth services provided by an out-of-network provider, unless coverage is required under other law.

(c) A health insurer may offer a policy containing a copayment or coinsurance requirement for a health care service delivered through telehealth services, provided that the copayment or coinsurance does not exceed the copayment or coinsurance applicable if the same services were delivered through in-person diagnosis, consultation, or treatment. This subdivision does not require cost sharing for services provided through telehealth.

(d) Services provided through telehealth and covered pursuant to this chapter shall be subject to the same deductible and annual or lifetime dollar maximum as equivalent services that are not provided through telehealth.

(e) The definitions in subdivision (a) of Section 2290.5 of the Business and Professions Code apply to this section.

~~SEC. 4.~~**SEC. 5.** Section 14087.95 of the Welfare and Institutions Code is amended to read:

**14087.95.** (a) A county contracting with the department pursuant to this article shall be exempt from Chapter 2.2 (commencing with Section 1340) of Division 2 of the Health and Safety Code for purposes of carrying out the contracts.

(b) (1) Notwithstanding subdivision (a), a county contracting with the department pursuant to this article shall comply with Section 1374.14 of the Health and Safety Code.

(2) If a county subcontracts for the provision of services pursuant to this article, as authorized under Section 14087.6, the subcontractor shall comply with Section 1374.14 of the Health and Safety Code.

~~SEC. 5.~~Section 14092.4 is added to the Welfare and Institutions Code, immediately following Section 14092.35, to read:

~~14092.4. For the purposes of enrolling patients in programs administered through Medi-Cal, including the Family Planning, Access, Care, and Treatment (Family PACT), presumptive eligibility Programs, accelerated enrollment programs, and the Medi-Cal Minor Consent program, a provider may determine program eligibility, enroll, and recertify patients remotely through telehealth and other virtual communication modalities, including telephone, based on the current Medi-Cal program criteria. The department may develop program policies and systems to support implementation of offsite eligibility determination, enrollment, and recertification.~~

**SEC. 6.** Section 14092.4 is added to the Welfare and Institutions Code, immediately following Section 14092.35, to read:

**14092.4.** (a) *To enroll individuals in Medi-Cal programs that permit onsite enrollment and recertification of individuals by a provider or county eligibility worker as applicable, the following shall apply:*

*(1) For the Family Planning, Access, Care, and Treatment (Family PACT), Presumptive Eligibility for Pregnant Women, and Every Woman Counts programs, a provider may enroll or recertify an individual remotely through telehealth and other virtual communication modalities, including telephone, based on the current Medi-Cal program eligibility form or forms applicable to the specific program.*

*(2) For the Medi-Cal Minor Consent program, a county eligibility worker may determine eligibility for, or recertify eligibility for, an individual remotely through virtual communication modalities, including telephone.*

*(b) The department may develop program policies and systems to support implementation of remote eligibility determination, enrollment, and recertification, consistent with this section.*

*(c) Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, the department may implement, interpret, or make specific this section by means of all-county letters, plan letters, plan or provider bulletins, or similar instructions, without taking regulatory action.*

**SEC. 7.** Section 14132.721 is added to the Welfare and Institutions Code, immediately following Section 14132.72, to read:

**14132.721.** *(a) Notwithstanding any other law, health care services furnished by an enrolled clinic through telehealth shall be reimbursed by Medi-Cal on the same basis, to the same extent, and at the same payment rate as those services are reimbursed if furnished in person, consistent with this section.*

*(b) Consistent with the protections for health care providers set forth in the Telehealth Advancement Act of 2011, including Section 14132.72, the department shall not restrict the ability of an enrolled clinic to provide and be reimbursed for services furnished through telehealth. Prohibited restrictions include all of the following:*

*(1) Requirements for face-to-face contact between an enrolled clinic provider and a patient.*

*(2) Requirements for a patient's or provider's physical presence at the enrolled clinic or any other location.*

*(3) Requirements for prior in-person contacts between the enrolled clinic and a patient.*

*(4) Requirements for documentation of a barrier to an in-person visit or a special need for a telehealth visit.*

*(5) Policies, including reimbursement policies, that impose more stringent requirements on telehealth services than equivalent services furnished in person. This paragraph does not prohibit policies that require all of the clinical elements of a service to be met as a condition of reimbursement.*

*(6) Limitations on the means or technologies through which telehealth services are furnished.*

*(c) Notwithstanding the in-person requirements of Section 14132.100, if an enrolled clinic is also a federally qualified health center or a rural health center, the definition of "visit" set forth in subdivision (g) of Section 14132.100 includes a telehealth encounter to the same extent it includes an in-person encounter.*

*(d) This section does not eliminate the obligation of a health care provider to obtain verbal or written consent from the patient before delivery of health care via telehealth or the rights of the patient, pursuant to subdivisions (b) and (c) of Section 2290.5 of the Business and Professions Code.*

*(e) This section does not conflict with or supersede the requirements for health care service plan contracts set forth in Section 1374.14 of the Health and Safety Code and the requirements for health insurance policies set forth in Section 10123.855 of the Insurance Code.*

*(f) This section does not limit reimbursement for or coverage of, or reduce access to, services provided through telehealth before the enactment of this section.*

*(g) The department shall require Medi-Cal managed care plans, through contract or otherwise, to adhere to the requirements of this section.*

*(h) Notwithstanding Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code, the department may implement, interpret, and make specific this section by means of all-county letters, plan letters, plan or provider bulletins, or similar instructions, without taking regulatory action.*

*(i) The department shall seek any necessary federal approvals and obtain federal financial participation in implementing this section. This section shall be implemented only to the extent that any necessary federal approvals are obtained and federal financial participation is available and not otherwise jeopardized.*

*(j) For purposes of this section:*

*(1) "Enrolled clinic" means any of the following:*

*(A) A clinic licensed pursuant to subdivision (a) of Section 1204 of the Health and Safety Code.*

*(B) An intermittent clinic exempt from licensure under subdivision (h) of Section 1206 of the Health and Safety Code.*

*(C) A hospital or nonhospital-based clinic operated by the state or any of its political subdivisions, including the University of California, or a city, county, city and county, or hospital authority.*

*(D) A tribal clinic exempt from licensure under subdivision (c) of Section 1206 of the Health and Safety Code, or an outpatient setting conducted, maintained, or operated by a federally recognized Indian tribe, tribal organization, or urban Indian organization, as defined in Section 1603 of Title 25 of the United States Code.*

*(2) "Telehealth" has the same meaning as in subdivision (a) of Section 2290.5 of the Business and Professions Code, which includes audio-only telephone communication technologies.*

SEC. 6. Section 14132.722 is added to the Welfare and Institutions Code, immediately following Section 14132.72, to read:

**SEC. 8. Section 14132.722 is added to the Welfare and Institutions Code, immediately following Section 14132.721, to read:**

**14132.722.** (a) The department shall indefinitely continue the telehealth flexibilities in place during the COVID-19 pandemic, including those implemented pursuant to Section 14132.723.

(b) (1) By January 2022, the department shall convene an advisory group that includes representatives from community health centers, designated public hospitals, Medi-Cal managed care plans, consumer groups, labor organizations, behavioral health providers, counties, and other Medi-Cal providers.

(2) The advisory group shall provide input to the department on the development of a revised Medi-Cal telehealth policy that promotes all of the following principles:

(A) Telehealth shall be used as a means to promote timely and patient-centered access to health care.

(B) Patients, in conjunction with their providers, shall be offered their choice of service delivery mode. Patients shall retain the right to receive health care in person.

(C) Confidentiality and security of patient information shall be protected.

(D) Usual standard of care requirements shall apply to services provided via telehealth, including quality, safety, and clinical effectiveness.

(E) The department shall consider disparities in the utilization of, and access to, telehealth, and shall support patients and providers in increasing access to the technologies needed to use telehealth.

(F) When the care provided during a telehealth visit is commensurate with what would have been provided in person, payment shall also be commensurate.

(c) (1) By December 2024, the department shall complete an evaluation to assess the benefits of telehealth in Medi-Cal. The evaluation shall analyze improved access for patients, changes in health quality outcomes and utilization, and best practices for the right mix of in-person visits and telehealth.

(2) The department shall report its findings and recommendations on the evaluation to the appropriate policy and fiscal committees of the Legislature no later than July 1, 2025.

## APPENDIX B LITERATURE REVIEW METHODS

This appendix describes methods used in the literature review conducted for this report. A discussion of CHBRP's system for medical effectiveness grading evidence, as well as lists of MeSH Terms, publication types, and keywords, follows.

The literature review encompassed the telehealth modalities for which AB 32 would potentially affect coverage: live video, telephone, store and forward, eConsults, and E-Visits.

Studies were identified through searches of PubMed, the Cochrane Library, Web of Science, EconLit, and Business Source Complete, the Cumulative Index of Nursing and Allied Health Literature, and PsycINFO. Websites maintained by the following organizations that produce and/or index meta-analyses and systematic reviews were also searched: the Agency for Healthcare Research and Quality (AHRQ), the International Network of Agencies for Health Technology Assessment (INAHTA), the National Health Service (NHS) Centre for Reviews and Dissemination, the National Institute for Health and Clinical Excellence (NICE), and the Scottish Intercollegiate Guideline Network.

The search was limited to abstracts of studies published in English. The search was limited to studies published from 2020 to present. For studies published prior to 2019, CHBRP relied on literature searches conducted in 2014, 2015, 2016, and 2019 for reports on previous bills regarding coverage for telehealth services.

### Medical Effectiveness Review

Of the 1,100 articles found in the current literature review, 77 were reviewed for potential inclusion in this report. In total, 48 studies were included in the medical effectiveness review for AB 32, based on the quality of the studies and their relevance to this bill. Studies were eliminated because they did not report findings from clinical research studies, were of poor quality, or did not focus on the telehealth modalities relevant to AB 32. The 107 studies previously included in the medical effectiveness review for AB 744 (2019), AB 2507 (2016), and SB 289 (2015) were also reconsidered based on the quality of the studies and their relevance to AB 32. Additionally, CHBRP had previously conducted thorough literature searches on these topics in 2020 for the Telehealth Brief and included any relevant studies. For the multiple systematic reviews included in the report that had inclusion criteria broader than the mandate of this bill, CHBRP only summarized findings from the relevant studies.

### Medical Effectiveness Evidence Grading System

In making a "call" for each outcome measure, the medical effectiveness lead and the content expert consider the number of studies as well the strength of the evidence. Further information about the criteria CHBRP uses to evaluate evidence of medical effectiveness can be found in CHBRP's *Medical Effectiveness Analysis Research Approach*.<sup>46</sup> To grade the evidence for each outcome measured, the team uses a grading system that has the following categories:

- Research design;
- Statistical significance;
- Direction of effect;
- Size of effect; and
- Generalizability of findings.

The grading system also contains an overall conclusion that encompasses findings in these five domains. The conclusion is a statement that captures the strength and consistency of the evidence of an

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<sup>46</sup> Available at: [http://chbrp.com/analysis\\_methodology/medical\\_effectiveness\\_analysis.php](http://chbrp.com/analysis_methodology/medical_effectiveness_analysis.php).

intervention's effect on an outcome. The following terms are used to characterize the body of evidence regarding an outcome:

- *Clear and convincing evidence;*
- *Preponderance of evidence;*
- *Limited evidence;*
- *Inconclusive evidence;* and
- *Insufficient evidence.*

A grade of *clear and convincing evidence* indicates that there are multiple studies of a treatment and that the large majority of studies are of high quality and consistently find that the treatment is either effective or not effective.

A grade of *preponderance of evidence* indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective.

A grade of *limited evidence* indicates that the studies had limited generalizability to the population of interest and/or the studies had a fatal flaw in research design or implementation.

A grade of *inconclusive evidence* indicates that although some studies included in the medical effectiveness review find that a treatment is effective, a similar number of studies of equal quality suggest the treatment is not effective.

A grade of *insufficient evidence* indicates that there is not enough evidence available to know whether or not a treatment is effective, either because there are too few studies of the treatment or because the available studies are not of high quality. It does not indicate that a treatment is not effective.

### **Search Terms (\* indicates truncation of word stem)**

- Coronavirus
- COVID-19
- DEVICE TELEMEDICINE ROBOTIC
- Facilities and Services Utilization
- Facilities Utilization
- Health care utilization
- Health insurance
- Information Systems Telemedicine
- Information Systems Telemedicine Ophthalmology
- Information Systems Telemedicine Pathology
- Information Systems Telemedicine Radiology
- Information Systems Telemedicine Videoconferencing
- Insurance, Health, Reimbursement
- Pandemic
- Procedure Utilization
- Reimbursement
- Reimbursement Mechanisms
- Reimbursement, Incentive
- Review, Utilization
- SARS cov-2
- Software Information System Telemedicine
- Software Information System Telemedicine Diagnostic Image
- Technique Utilization
- Techniques Utilization
- Telehealth
- Telemammography Systems
- Telemedicine

## APPENDIX C COST IMPACT ANALYSIS: DATA SOURCES, CAVEATS, AND ASSUMPTIONS

The cost analysis in this report was prepared by the members of the cost team, which consists of CHBRP task force members and contributors from the University of California, Los Angeles, and the University of California, Davis, as well as the contracted actuarial firm, Milliman, Inc. (Milliman).<sup>47</sup>

Information on the generally used data sources and estimation methods, as well as caveats and assumptions generally applicable to CHBRP's cost impact analyses are available at CHBRP's website.<sup>48</sup>

This appendix describes any analysis-specific data sources, estimation methods, caveats, and assumptions used in preparing this cost impact analysis.

### Analysis-Specific Caveats and Assumptions

Commercial (large group, small group, and individual market) and CalPERS enrollees, as well as Medi-Cal beneficiaries enrolled in DMHC-regulated plans would be subject to AB 32. Commercial enrollees in CDI-regulated policies would also be subject to AB 32. In addition, Medi-Cal beneficiaries enrolled in County Organized Health Systems (COHS) and the Medi-Cal Fee For Service (FFS) program obtaining telehealth services through a Medi-Cal clinic would be subject to AB 32. Since AB 32 has different implications for commercial and Medi-Cal plans, the cost and utilization assumptions used to estimate the baseline and postmandate health care costs associated with AB 32 are discussed separately.

CHBRP determined the current coverage percentage of telehealth services based on carrier survey responses. Responses to the surveys represent 70% of enrollees covered by commercial health plans, 100% of enrollees covered by CalPERS plans, 38% of enrollees covered by Medi-Cal Managed Care Plans, and 0% of enrollees covered by Medi-Cal COHS/FFS programs. In the case that a market segment is not represented, CHBRP has used a representative market segment/carrier response to estimate benefit coverage.

### Identification of Telehealth Service Utilization

CHBRP examined Milliman's proprietary 2019 Consolidated Health Cost Guidelines™ Sources Database (CHSD) and identified service categories for which there is an applicable telehealth modality. This database includes both commercial claims and Medi-Cal Managed Care encounters. Major service categories considered in the analysis of AB 32 include: Primary Care and Urgent Care, Specialty Care and Mental Health and Substance Use Disorder (SUD) services.

CHBRP then used CPT/HCPCS procedure codes that were available in Milliman's proprietary 2019 CHSD database to identify relevant telehealth and in-person claims. Telehealth claims were identified using the following logic:

#### *Identifying telehealth claims*

- Certain codes that identify communication technology-based services (CTBS) are considered telehealth services. Claims with any of these codes present were classified as telehealth. These codes are included in Table 7.

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<sup>47</sup> CHBRP's authorizing statute, available at [https://chbrp.org/about\\_chbrp/index.php](https://chbrp.org/about_chbrp/index.php), requires that CHBRP use a certified actuary or "other person with relevant knowledge and expertise" to determine financial impact.

<sup>48</sup> See method documents posted at [http://chbrp.com/analysis\\_methodology/cost\\_impact\\_analysis.php](http://chbrp.com/analysis_methodology/cost_impact_analysis.php); in particular, see *2021 Cost Analyses: Data Sources, Caveats, and Assumptions*.



- Claims with any of the following modifiers were classified as telehealth:
  - GT modifier (interactive telecommunication)
  - 95 modifier (synchronous telemedicine service rendered via a real-time interactive audio and video telecommunications system)
  - GQ modifier (telehealth store and forward)
- Claims with a Place of Service (POS) code of 02 (telehealth) were classified as telehealth.

*Identifying asynchronous versus synchronous telehealth services*

Telehealth claims with a GQ modifier or a CPT/HCPCS code that has been defined as ‘asynchronous’ in the table below have been classified as asynchronous telehealth claims. All other telehealth claims have been classified as synchronous telehealth claims.

**Table 9. Communication Technology-Based Service (CTBS) CPT/HCPCS Codes Used for the AB 32 Analysis**

CTBS CPT/HCPCS	Description	Synchronous or Asynchronous
98966-8	Telephone assessment and management service provided by a qualified nonphysician health care professional to an established patient	Synchronous
0188T-0189T	Remote real-time interactive video-conferenced critical care, evaluation and management of the critically ill or critically injured patient	Synchronous
G0406-8	Follow-up inpatient consultation	Synchronous
G0425-7	Telehealth consultation, emergency department or initial inpatient	Synchronous
G0459	Inpatient telehealth pharmacologic management, including prescription, use, and review of medication with no more than minimal medical psychotherapy	Synchronous
G0508-9	Telehealth consultation, critical care	Synchronous
G2012, G2251-2	Brief communication technology-based service, e.g. virtual check-in	Synchronous
Q3014	Telehealth originating site facility fee	Synchronous
T1014	Telehealth transmission, per minute, professional services bill separately	Synchronous
99446-9	Interprofessional telephone/Internet/electronic health record assessment and management service provided by a consultative physician	Both

CTBS CPT/HCPCS	Description	Synchronous or Asynchronous
99452	Interprofessional telephone/Internet/electronic health record referral service(s) provided by a treating/requesting physician	Both
99457-8	Remote physiologic monitoring treatment management services	Both
98970-2	Qualified nonphysician health care professional online digital assessment and management	Asynchronous
99090-1	Collection and interpretation of physiologic data	Asynchronous
99421-3	Online digital evaluation and management service, for an established patient	Asynchronous
99453-4	Remote monitoring of physiologic parameter(s) (e.g., weight, blood pressure, pulse oximetry, respiratory flow rate), initial	Asynchronous
G2010	Remote evaluation of recorded video and/or images submitted by an established patient (e.g., store and forward)	Asynchronous
G2061-3	Qualified nonphysician health care professional online assessment and management service	Asynchronous
G2250	Remote assessment of recorded video and/or images submitted by an established patient (e.g., store and forward)	Asynchronous
S9110	Telemonitoring of patient in their home, including all necessary equipment	Asynchronous

The 2019 claims data used for this analysis likely underestimates the current utilization of telehealth services due to the following reasons:

- (1) Many enrollees subject to AB 32 did not have coverage for telehealth services in 2019. AB 744 (2019), which expanded telehealth coverage and mandated parity for telehealth services for commercial plans, was made effective January 1, 2021. As such, the impacts of AB 744 (2019) are not reflected in 2019 claims data.
- (2) Enrollees without coverage could still use telehealth services by paying telehealth vendors directly for services at the point of care. Non-covered services would not be reflected in claims data.
- (3) Billing practices among providers may vary depending on the market segment and carriers' coverage policy. In addition, coding and reimbursement rules for telehealth services are evolving. For example, in 2017 the POS code set was revised to allow for a telehealth POS code (02). In the last few years physician payment rules under Medicare Part B allowed for coverage of additional telehealth services. While not directly related to commercial and Medi-Cal coverage policies, carriers often review and consider adjustments to coverage policies based on Medicare's policy changes.
- (4) In general, there has been underuse of the modifiers to identify telehealth services. According to a GAO (2017)<sup>49</sup> report, "CMS officials told us that there are no payment incentives for a provider to put a telehealth modifier on a non-approved telehealth service, because the provider could receive payment for that service if it did not include the modifier and the service is payable under Medicare's Physician Fee Schedule. That is, the payment to a distant site provider for a service on the approved telehealth list would be the same amount as the payment for the service if it were furnished in person. Adding a telehealth modifier incorrectly also increases the possibility that claim would be examined, CMS officials said, reducing the incentive to incorrectly add the telehealth modifier."

Because existing claims data do not reflect the impacts of the effects of COVID-19 and AB 744 (2019) on the utilization of telehealth services, CHBRP has relied on literature and expert judgement to supplement the available claims data.

### *Services not explicitly considered*

CHBRP understands that there are certain telehealth services, such as tele-ICU and telestroke, that may be included in inpatient or outpatient services. Inpatient facility services (e.g., remote monitoring in an intensive care unit) are generally bundled in per diem or per-case rates payments, and CHBRP assumes that these services would be continued to be bundled and reimbursed per current billing practices. Therefore, CHBRP assumes no change in cost for these services. For related inpatient and outpatient professional services, the claims data do not show a material amount of telehealth-related claims for these service categories. Although providers may be providing some of these services using interprofessional consultation (e.g., peer-to-peer consults or e-consults), providers are not coding these services as telehealth. Thus, if there is no way to identify payment differences between service types, CHBRP assumes no change in per-unit cost postmandate. CHBRP assumes that these inpatient-focused telehealth services, which are part of services delivered for significant injuries or conditions, will not be supplemental, but will instead substitute for the equivalent in-person service.

A significant portion of radiology and lab/pathology are provided via "store and forward" technology or via new home kits related to a telehealth visit. However, the claims data do not show a material amount of

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<sup>49</sup> <https://www.gao.gov/assets/gao-17-365.pdf>.

telehealth-related claims for these service categories. It is likely that radiologists and pathologists are not coding these services as telehealth and the payments and coverage for these services are treated the same regardless if they are provided in-person or via telehealth modalities. It is not likely that such coding practices will change. Thus, CHBRP estimates no change in utilization for these categories of services. In addition, there is no way to identify payment differences for these services, so CHBRP assumes no change in per-unit cost postmandate.

CHBRP excluded service categories with limited telehealth modality application. For example, CHBRP considered telehealth services that may be applicable for preventive services. However, claims data revealed limited to no telehealth use for preventive services. This can likely be explained by the nature of most preventive services, which typically require an in-person service or procedure (for example, immunizations, physical exams, pap tests, colonoscopies, etc.).

### **Baseline Utilization – Medi-Cal**

- The impacts of COVID-19 on the utilization of telehealth services have not been included in the baseline utilization for Medi-Cal since as discussed in the *Background and Policy Context* section, much of the current utilization resulting from the regulatory flexibilities permitted by DHCS under the COVID-19 public health emergency (PHE) are temporary. AB 32 is intended to make those flexibilities permanent; therefore, the utilization impact is considered in the postmandate utilization assumptions (see the next section).
- Utilization of in-person services – The 2019 CHSD data was used to determine the utilization of in-person services for primary care and urgent care, specialist care and mental health and SUD services. The utilization of primary care/urgent care and mental health and SUD services was considered separately for FQHCs/RHCs and other settings. The 2019 utilization rates were trended forward for 3 years at a rate of 1.5% per year to arrive at 2022 baseline utilization rates.
- Telehealth as a percentage of total utilization – CHBRP assumes that for those with telehealth coverage at baseline, telehealth accounts for 3.1% of total utilization for services that have a corresponding telehealth modality. This is supported by Uscher-Pines et al. (2020),<sup>50</sup> who investigated the impacts of expanding telehealth services in safety-net settings.
- Utilization of telephone (audio-only) telehealth services – Again, although flexibilities were permitted on a temporary basis during the COVID-19 PHE, AB 32 would make those flexibilities permanent, including reimbursing for telehealth delivered via telephone. Due to the current limited coverage and restrictive policies that apply to FQHCs/RHCs, CHBRP has assumed that the baseline utilization of telephone services in these settings is zero and that all synchronous telehealth services are provided via a live video modality. For telehealth services delivered in other settings, CHBRP has assumed that 30% of telehealth visits occur using live video, whereas 70% occur using telephone. Note that because the assumed average cost per service is equivalent for telephone and live video, this assumption does not have any impact on the change in total expenditures.

### **Postmandate Utilization – Medi-Cal**

- Telehealth as a percentage of total utilization – Mehrotra et al. (2021)<sup>51</sup> report that in December 2020, virtual visits accounted for 8.4% of total visits, specifically for primary care and behavioral

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<sup>50</sup> [https://www.rand.org/content/dam/rand/pubs/research\\_reports/RRA100/RRA100-1/RAND\\_RRA100-1.pdf](https://www.rand.org/content/dam/rand/pubs/research_reports/RRA100/RRA100-1/RAND_RRA100-1.pdf)

<sup>51</sup> <https://www.commonwealthfund.org/publications/2021/feb/impact-covid-19-outpatient-visits-2020-visits-stable-despite-late-surge>

health, telehealth visits accounted for 12% and 56%, respectively. Postmandate, CHBRP has assumed that 12% of primary care/urgent care visits are telehealth and 8.4% of specialist visits are telehealth. Current utilization of mental health and SUD services are at historical highs, resulting from the COVID-19 PHE. CHBRP projects some proportion of mental health and SUD visits that are telehealth are likely to taper off following the COVID-19 pandemic period. CHBRP assumes that postmandate, 12% of mental health/SUD visits will be telehealth to reflect the tapering off effects of COVID-19 as well as the supply constraints within Medi-Cal (i.e., shortages of mental health and SUD providers).

- Percentage of telehealth visits that are replacement versus additive – CHBRP estimates that substitute (or replacement) services constitute 50% of all new synchronous telehealth services (i.e., replacing in-person services), and that supplementary (or additive) telehealth services constitute 50% of all new synchronous telehealth services (i.e., additional services that were previously provided but not reimbursed, or not previously provided). In CHBRP’s analysis of AB 744 (2019), CHBRP estimated that substitute services constituted 29% of telehealth services while supplemental services constituted 71% of telehealth services, based on a publication that examined the share of new telehealth services in comparison to in-person services delivered in an accountable care organization-based medical practice (Shah et al., 2018).<sup>52</sup> For AB 32, CHBRP has assumed that a greater proportion of telehealth visits will be substitute services to reflect that patients may still be leery of in-person visits because of the lingering effects of the COVID-19 pandemic.
- Distribution of telehealth visits between telephone and live video – Based on findings reported by Uscher-Pines et al. (2021)<sup>53</sup> for safety-net organizations in the later part of 2020, CHBRP has assumed that postmandate, 93% of primary care and specialist telehealth visits will be delivered via telephone, with 7% of these visits being delivered via live video. For mental health and SUD visits, CHBRP has assumed that 82% of telehealth visits will be delivered via telephone and 18% of visits will be delivered via live video.

### **Baseline Cost – Medi-Cal**

- Cost data from the 2019 CHSD dataset was trended forward at a rate of 4.5% per year for 3 years to reflect the 2022 baseline costs for synchronous telehealth and in-person visits.
- For FQHCs, CHBRP used the 2021 rates provided confidentially by DHCS to CHBRP to calculate an average prospective payment system (PPS) rate of \$215 for DMHC-regulated Medi-Cal Managed Care Plans. The average 2021 rate was trended forward to 2022 using a trend rate of 1.7% per year, which is the annual FQHC PPS trend rate for 2021 published by CMS in the Actual Regulation Market Basket Updates<sup>54</sup>.

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<sup>52</sup> <https://www.healthaffairs.org/doi/abs/10.1377/hlthaff.2018.05105>.

<sup>53</sup> [Telehealth Use Among Safety-Net Organizations in California During the COVID-19 Pandemic | Health Care Delivery Models | JAMA | JAMA Network](#).

<sup>54</sup> <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/MarketBasketData>.

## Postmandate Cost – Medi-Cal

- The average cost for synchronous telehealth services is the same as the average cost for in-person services since postmandate, these services will be reimbursed at parity with in-person services. The average cost for synchronous telehealth services delivered through FQHCs/RHCs is equivalent to the in-person PPS rate calculated for the baseline.

## County Operated Health Systems (COHS) and Medi-Cal FFS programs

- The impact of AB 32 on the Medi-Cal COHS and FFS populations has been estimated by applying the calculated PMPM impact for Medi-Cal Managed Care enrollees to Medi-Cal COHS and FFS enrollees.

## Baseline Utilization – Commercial and CalPERS

- As discussed in the *Benefit Coverage, Utilization, and Cost Impacts* section, the expected impacts of COVID-19 and the implementation of AB 744 (2019) on the utilization of telehealth services have been included in the baseline utilization.
- Utilization of in-person services – The 2019 CHSD data was used to determine the utilization of in-person services for primary care and urgent care, specialist care, and mental health and SUD services. In-person utilization was scaled up for the proportion of beneficiaries who do not have telephone coverage to reflect the in-person utilization that has not yet been replaced by telephone utilization. This adjustment was made using the same assumption as used for Medi-Cal, where 50%/50% of new telephone visits are assumed to supplement/substitute in-person services. The 2019 utilization rate was trended forward for 3 years at a rate of 1.5% per year to arrive at the 2022 baseline utilization rate.
- Telehealth as a percentage of total utilization – Mehrotra et al. (2021)<sup>55</sup> report that in December 2020, virtual visits accounted for 8.4% of total visits, whereas for primary care and behavioral health, telehealth visits accounted for 12% and 56%, respectively. This is supported by the Monthly Telehealth Regional Tracker published by FAIR Health<sup>56</sup>, which reports that telehealth visits accounted for 8.58% of total visits in December 2020 in Western states, including California. At baseline, CHBRP has assumed that 12% of primary care and urgent care visits are telehealth and 8.4% of specialist visits are telehealth. Current utilization of mental health and SUD services are at historical highs resulting from the COVID-19 pandemic. CHBRP projects some proportion of mental health and SUD visits that are telehealth will likely taper off following the COVID-19 PHE and has applied a dampening factor of 20% to assume that at baseline, 45% of visits are telehealth.
- Percentage of telehealth visits that are telephone versus live video – CHBRP assumes that for the commercial population, the percentage of visits that use live video will be higher than what is reported by Uscher-Pines et al. (2021)<sup>57</sup> for safety-net organizations. CHBRP has assumed that for primary care and specialist services, 50% of synchronous telehealth visits are telephone visits, whereas 50% are live video visits. For mental health and SUD visits, it is assumed that the

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<sup>55</sup> <https://www.commonwealthfund.org/publications/2021/feb/impact-covid-19-outpatient-visits-2020-visits-stable-despite-late-surge>

<sup>56</sup> <https://s3.amazonaws.com/media2.fairhealth.org/infographic/telehealth/dec-2020-west-telehealth.pdf>

<sup>57</sup> <https://jamanetwork.com/journals/jama/fullarticle/2776166>

percentage of synchronous telehealth visits that are telephone is higher (65%) than for primary care and specialists (50%), with live video accounting for 35% of synchronous telehealth.

### **Postmandate Utilization – Commercial and CalPERS**

- Based on the carrier survey responses, 100% of enrollees subject to AB 32 already have coverage for live video telehealth services, while 80.4% of enrollees have coverage for telephone telehealth services. Postmandate, 100% of enrollees would have coverage for telephone services. Given that there are no coverage impacts from other modalities of telehealth services, all utilization impacts are resulting from an increase in access to telehealth delivered via telephone.

### **Baseline Cost – Commercial and CalPERS**

- Cost data from the 2019 CHSD dataset was trended forward at a rate of 4.5% per year for 3 years to reflect the 2022 baseline costs and cost sharing for asynchronous telehealth and in-person visits.
- The average cost per visit for synchronous telehealth visits was set equal to the average cost for in-person costs to reflect the reimbursement parity mandated by AB 744 (2019), which went into effect in January 2021.

### **Postmandate Cost – Commercial and CalPERS**

- Postmandate costs for telehealth and in-person services are assumed to be the same as in the baseline scenario.

## APPENDIX D ADDITIONAL INFORMATION

### California Household Broadband Connectivity

**Table 10. Top 30 California Cities by Percent of Households With No Broadband Connectivity, 2019**

California City	Total Households	% Households With No Broadband of Any Type Including Cellular Data Plans	Rank Among 635 U.S. Cities (No Broadband)
Lynwood	15,142	33.54	3
East Los Angeles	30,676	25.31	28
San Bernardino	60,308	19.13	78
Yuba City	24,393	18.33	92
Hemet	28,412	17.17	115
Whittier	26,884	16.98	118
Bellflower	23,369	16.83	121
Compton	21,757	16.67	123
El Monte	31,535	16.64	124
Turlock	25,718	16.58	126
Oakland	168,413	16.08	131
Stockton	96,149	16.02	132
Redding	37,757	15.97	135
South Gate	23,559	15.86	141
Lancaster	49,220	15.82	143
Oxnard	50,739	15.80	144
Fresno	172,815	15.63	149
Santa Ana	79,704	15.62	150
Glendale	74,197	14.63	176
Florence-Graham	14,973	14.47	182
Pomona	40,579	14.27	190
Burbank	43,167	13.24	226
Corona	47,793	13.21	228
Rialto	24,751	13.18	229
Redlands	26,115	13.08	232
Visalia	45,878	12.73	243
San Buenaventura	40,513	12.53	250



California City	Total Households	% Households With No Broadband of Any Type Including Cellular Data Plans	Rank Among 635 U.S. Cities (No Broadband)
(Ventura)			
Los Angeles	1,398,900	12.28	259
West Covina	30,682	12.11	268

Source: California Health Benefits Review Program based on data from the National Digital Inclusion Alliance (NDIA, 2021).

Notes: Communities are 65,000 residents or more. Based on 2019 US Census data.

## Defining Broadband

Table 12 describes broadband speeds necessary to support categories of use by consumers. The FCC defines “basic service” as 3 to 8 Mbps, “medium service” as 12 to 25 Mbps, and “advance service” as >25 Mbps. Service requirements are generally additive, with requirements increasing based on the type of use and the number of simultaneous users. For example, two simultaneous users (or devices) may require basic (Internet browsing/e-mail only) or medium service (browsing and telecommuting) depending on activity.

The original 1996 broadband service speed benchmark (sufficient for e-mail and browsing) was 600 Kbps in 1996. Since then, minimal speed for broadband has increased due to increased bandwidth needs associated with maturing technology. California CPUC defines broadband (download/upload) as having a minimum speed of 6/1 Mbps, which is slower than the Federal Communications Commission (FCC) definition (25/3 Mbps). The FCC, which updated the minimum speed requirement in 2015, considers this speed to be sufficient for those with light to moderate use (requiring basic or medium service) (CBC, 2020).

**Table 11. FCC Broadband Speed Guide for Consumers**

General Usage	Minimum Download Speed (Mbps*)
General browsing/e-mail	1
Student	5–25
Telecommuting	5–25
File downloading	10
Social media	1
Streaming standard definition video	3–4
Streaming high definition video	5–8
Streaming ultra HD 4K video	25
Standard personal video call (e.g., Skype, Zoom)	1
HD personal video call (e.g., Skype, Zoom)	1.5
HD video teleconferencing	6
Gaming: online multiplayer	4

Source: California Health Benefits Review Program, 2021, based on Consumer Guide Broadband Speed Guide, [https://www.fcc.gov/sites/default/files/broadband\\_speed\\_guide.pdf](https://www.fcc.gov/sites/default/files/broadband_speed_guide.pdf).

Notes: \* This is the speed at which “information packets” are downloaded/uploaded from the Internet.

Key: Mbps = megabits per second.

## Clinical Guidance for Telehealth and In-Person Visits

Determining criteria for the appropriateness of telehealth care is being explored by stakeholders and policymakers. Multiple professional societies and some health systems have issued internal frameworks and guidelines across practice settings and specialties; however, CHBRP found no national standardized set of guidelines to evaluate telehealth appropriateness of care. Table 10 provides one example of a health system generated guidance by the Native American Health Center, a consortium of 15 clinics in the San Francisco Bay Area.

**Table 12. Clinic-Specific Guidance for Use of Telehealth and In-Person Visits**

Telehealth	In Person
When the physician–patient relationship is well established	For new patients/re-establish care with new PCPs
For stable patients with minimal complaints (e.g., URI or UTI symptoms, rash)	For complex symptoms, especially those needing physical exam (e.g., chest pain, neurological symptoms)
For patients with symptoms suggestive of COVID-19	For visits needing exams (e.g., diabetes eye exam and foot exam)
For routine medication refills and management of stable chronic disease	Uncontrolled chronic diseases (e.g., diabetes type 2, hypertension)
Behavioral health conditions (e.g., depression, anxiety)	Preventive care services (e.g., cancer screenings, vaccinations)
	Well child and well adolescent visits
	Perinatal services
	Flu clinic

Source: California Health Benefits Review Program, 2021. Adapted from Garrett and Jenkins, 2020.

Key: PCP = primary care physician; URI = urinary incontinence; UTI = urinary tract infection.

## Asynchronous Telehealth

### Existing California Law and AB 32

#### *Commercial and CalPERS plans and policies*

As mentioned in the *Policy Context* section, existing law<sup>58</sup> requires commercial and CalPERS DMHC-regulated plans and CDI-regulated policies to cover and reimburse services appropriately delivered through telehealth on the same basis and to the same extent that the plan or policy is responsible for covering the same service delivered in-person. The Business and Professions Code defines telehealth to include asynchronous store and forward.

<sup>58</sup> AB 744, passed in 2019 and implemented in 2021, created H&SC 1374.14 and IC 10123.855.

As a result, plans and policies are currently required to cover and reimburse at parity (if equivalent to an in-person service) services provided via store and forward. Although existing law does not require commercial and CalPERS plans and policies to cover or reimburse at parity eConsults, if eConsults are provided, they must be covered and reimbursed at parity. AB 32 would not change existing law related to asynchronous telehealth.

### *Medi-Cal telehealth policy*

The DHCS telehealth policy provides definitions of telehealth terminology that are similar to, but not identical to, those included in the Business and Professions Code. Differences include:

- *Asynchronous store and forward* – Patient-initiated consultations are not covered under the Medi-Cal telehealth policy. The Business and Professions Code does not specify whether the interaction is between patients and providers or providers and providers.
- *eConsult* – This service falls under the DHCS auspice of store and forward. eConsults are not mentioned in the Business and Professions Code.
- *E-Visits* – Communication between a patient and their provider through an online patient portal. E-Visits are not mentioned in the Business and Professions Code.

### **Asynchronous Store and Forward**

Medi-Cal reimburses providers for store and forward services including, but not limited to, teleradiology, teledermatology, teledentistry, and teleophthalmology. Services provided through eConsult are also covered according to these categories. An eConsult is not reimbursed if the consulting provider saw the patient within the last 14 days, the eConsult results in a transfer of care or other face-to-face services with the consulting provider within the next 14 days, or the consulting provider did not spend at least 5 minutes of medical consultant time and it did not result in a written report.

AB 32 would require coverage and reimbursement at parity for store and forward for all services. However, because Medi-Cal currently covers and reimburses for store and forward, the expansion in benefit coverage is marginal. AB 32 does require reimbursement at parity with in-person services, but it is unclear to what extent store and forward services are usually considered to be at parity with in-person services.

For FQHCs and RHCs, store and forward is reimbursed at the PPS rate for dentistry, dermatology, and ophthalmology only. FQHCs are explicitly prohibited from reimbursement for eConsults. FQHCs and RHCs are still restricted from receiving reimbursement for store and forward services not for the above mentioned reasons or for eConsult. AB 32 would not change these policies.

### **E-Visits**

E-Visits are billable nonphysician health care professional online assessment and management services for an established patient. These services are billed based on the cumulative time spent on the interaction during 7 days. DHCS created two E-Visit codes during the public health emergency (G2010/G2012).

AB 32 requires coverage and reimbursement of the two E-Visit codes at parity with equivalent in-person visits, however, it is unclear to what extent these E-Visits would be considered to be at parity with in-person services.

### *Related legislation*

*SB 364 (Caballero) E-consult service*, introduced during the 2021-2022 Legislative Cycle, would enable FQHCs and RHCs to receive reimbursement for eConsults.

## Medical Effectiveness Review of Asynchronous Telehealth

For information about methods and inclusion criteria, please refer to the *Medical Effectiveness* section of the main report and Appendix B.

### *Diseases and conditions studied*

The studies of store and forward have been limited to telecardiology, teledermatology, and teleophthalmology. Overall, there is limited evidence that health services delivered by store and forward are at least as effective as in-person care.

There have been several studies examining the effectiveness of eConsult, across multiple specialties, rheumatology, and otolaryngology. CHBRP found insufficient evidence to determine whether eConsults improve processes of care and health outcomes, there is preponderance of evidence that services delivered by eConsults reduce the time that patients and primary care providers wait to obtain specialists' input and can substitute for a substantial proportion of in-person visits to specialists.

### *Findings for store and forward*<sup>59</sup>

CHBRP found no new studies on store and forward that reported outcomes on access to care and utilization or health outcomes but did find new studies that compared process of care for store-and-forward and in-person visits. Most studies of store-and-forward consultation concern teledermatology or teleophthalmology

### Health outcomes

The evidence for the effect of store and forward technology on health outcomes is limited to dermatology and ophthalmology. CHBRP found no studies published since 2016 that examined the effect of store-and-forward technology on health outcomes.

For the 2015 report for SB 289, CHBRP found one systematic review that reported insufficient evidence to evaluate clinical outcomes of store and forward teledermatology (Warshaw et al., 2011). One RCT found that teledermatology was equivalent to in-person care (Whited et al., 2013a, 2013b) and a small cohort study comparing store-and-forward to in-person dermatological diagnosis reported no adverse or harmful events for patients using store-and-forward modality for dermatological diagnoses (Seghers et al., 2015).

### Process of care

Previous CHBRP reports on studies of the diagnostic accuracy of store and forward technology reported inconsistent findings across medical specialties. One large RCT cited in the AB 2507 report found very high reliability between store and forward and in-person dermatology for both diagnosis and treatment plans (Nami et al., 2015). However, a systematic review of the use of store and forward in dermatology found poorer accuracy compared to in-person diagnosis, especially for malignant and premalignant lesions (Warshaw et al., 2011) (42 studies; 6,634 subjects). A meta-analysis (Finnane et al., 2017) (8 studies) also found that for skin cancer diagnostic accuracy is higher for in-person diagnosis than for teledermatology.

In a systematic review, (Shah and Badawy, 2021) (11 studies, range 22 to 400 subjects), one study examined store-and-forward modalities and found diagnoses are at least as accurate as in-person consultations for skin conditions. In the study, O'Connor et al. (2017) (40 subjects) found concordance

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<sup>59</sup> Patient or provider captures medical information (e.g., photo, recording) and transmits information to a remote provider for later review.

between diagnoses made during in person visits and diagnoses based on photographs sent to physicians through parents' smartphones for skin conditions in children (Shah and Badawy, 2021) ( $p = 0.68$ ).

Studies of use of store and forward for other conditions have found that diagnoses are at least as accurate as in-person consultations (Dahl et al., 2002; Saari et al., 2004). Kawaguchi et al. (2018) found no statistically significant difference between the ability of teleophthalmology and in-person examination on an ophthalmologist's ability to detect choroidal neovascularization. Similarly, Gonzalez-Marquez et al. (2021) (179 subjects) found a high level of diagnostic agreement between diagnoses based on images obtained by an ophthalmologist during an in-person visits and images obtained by a smartphone coupled to a medical device known as open retinoscope, handled by a nurse and then assessed by an ophthalmologist.

In another systemic review (Moentmann et al., 2021) (35 studies, 2,700 subjects), 6 studies reported on the diagnostic accuracy of smartphone video and images sent between patients and providers on multiple conditions. Two found little agreement patient photos and in-person clinical assessment: (Moumoulidis et al. (2007) 25 subjects; and Shah et al. (2018) 80 ears. Four studies found smartphone video and images were similar to in-person clinical visits: Barghouthi et al. (2012) 50 subjects; Rappaport et al. (2016) 31 images; Shah et al. (2019) 30 subjects; and Don et al. (2020) 21 subjects.

### Access to care and utilization

The 2015 report for SB 289 found a systematic review about the impact of store-and-forward dermatology care on access to care. The studies consistently found that teledermatology was associated with shorter time to treatment as measured by time until appointment, biopsy, surgery, or other intervention (Warshaw et al., 2011) (42 studies; 6,634 subjects).

One systematic review and meta-analysis (Finnane et al., 2017) (21 studies) found seven studies that reported that store-and-forward teledermatology reduced wait times compared to in-person appointments, diagnosis, and surgery.

One systematic review and meta-analysis of teleophthalmology found patients receiving care from any trained provider through teleophthalmology compared to in-person care (Kawaguchi et al., 2018) (2 studies; 626 patients) had significantly increased odds of having a screening eye examination for diabetic retinopathy (Kawaguchi et al., 2018).

**Summary of findings regarding the effectiveness of health services delivered by store and forward:** There is *insufficient evidence*, limited to dermatology and ophthalmology, that health services delivered by store and forward are at least as effective as in-person care on *health outcomes*. The findings for *processes of care* are *inconclusive* and there is a *preponderance of evidence* that store and forward improves *access to care* for dermatology.

The findings for store and forward have found that diagnoses of dermatological conditions made via store and forward are less accurate than diagnoses that are made during in-person visits, especially for malignant and premalignant lesions.

### *Findings for electronic consultation (eConsult)<sup>60</sup>*

#### Health outcomes

CHBRP did not identify any studies of the impact of eConsult on health outcomes.

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<sup>60</sup> May encompass store and forward. Referring provider uses web portal or electronic health record for clinical input from specialists, who answer the question, request more information or tests, and/or schedule an office visit.

## Process of care

CHBRP did not identify any studies of the impact of eConsults on processes of care.

## Access to care and utilization

In the previous report for AB 744, CHBRP found three systematic reviews and seven observational studies that addressed the effects of eConsult on access to care and utilization across multiple specialties, including otolaryngology–head and neck surgery, rheumatology, dermatology, orthopedics, and psychiatry (Archibald et al., 2018; Baig et al., 2016; Bauer et al., 2019; Gleason et al., 2017; Kohlert et al., 2018; Lai et al., 2018; Liddy et al., 2018, 2019; Lowenstein et al., 2017; Naka et al., 2018; Rea et al., 2018; Rostom et al., 2018; Schettini et al., 2019; Ulloa et al., 2017; Vimalananda et al., 2015). The studies consistently found that an eConsult was associated with shorter time to treatment, shorter wait time for specialist input, and fewer avoidable specialist visits.

CHBRP also identified one recent study (Anderson et al., 2020) that found that implementation of eConsult among Medicaid beneficiaries increased the percentage of referrals to an endocrinologist that were completed, either by an in-person visit or an eConsult. Completion of a higher percentage of referrals indicates that more patients whose primary care provider believed they would benefit from a consultation with an endocrinologist received one. In a systematic review (Moentmann et al., 2021) (35 studies, 2,700 subjects), eight studies reported a high diagnostic accuracy and agreement between telemedicine consults between physicians at clinics who sent pictures or videos to a tertiary care specialist for consultation and in-person consultations with a specialist across multiple specialties: (Patricoski et al. (2003) 40 subjects; Kokesh et al. (2010) 90 subjects; Wu et al. (2014) 6 subjects; Mandavia et al. (2018) 56 subjects; Seim et al. (2018) 21 subjects; Mallen et al. (2020) 31 subjects; and Cha et al. (2020) 177 subjects.

### **Summary of findings regarding the effectiveness of health services delivered by e-consultation:**

There is *insufficient evidence* to determine whether eConsults improve *health outcomes* and *processes of care*. CHBRP notes that absence of evidence is not evidence of no effect. There is *preponderance of evidence* based on three systematic review and eight studies that services delivered by eConsults reduce the time that patients and primary care providers wait to obtain specialists' input and can substitute for a substantial proportion of in-person visits to specialists.

## Findings for E-Visits

### Health outcomes

CHBRP found one study that examined the effect of E-Visits on health outcomes for the general population. A retrospective cohort study (Johnson et al., 2019) (350 patients) that evaluated adults diagnosed with sinusitis treated through a virtual text-based visits compared to in-person office visits reported that, patients in the virtual visits group were more likely to have an unplanned revisit related to sinusitis within 24 hours (1.7% vs. 8%;  $P = 0.006$ ) and within 30 days (7.4% vs. 14.9%;  $P = 0.027$ ) compared with patients who had in-person office visits.

### Process of care

CHBRP found one study that examined the effect of E-Visits on processes of care for the general population. Johnson et al. (2019) (350 patients) evaluated adults diagnosed with sinusitis treated through a virtual text-based visits compared to in-person office visits. This study reported significantly more antibiotics prescribed in the in-person office visits group compared with the virtual visit group (94.3% vs 68.6%;  $P < 0.001$ ). When antibiotics were prescribed, the rate of guideline-concordant prescribing was not different between in-person office visits and virtual visits (64.8% vs. 67.5%;  $P = 0.641$ ).

Access to care and utilization

CHBRP found one recent study (Hertzog et al., 2019) that compared an E-visit system where patients submit history, symptoms, and other relevant clinical information for a limited range of low-acuity symptoms and diagnoses through a secure Web portal to usual in-person care. Follow-up visit rates were higher in the E-Visit group when an E-visit was the first time a patient saw that provider (12% vs. 9%; P < 0.04) and that the difference was statistically significant. Rates were higher, but not statistically significant, for unrelated follow-up visits (11% vs. 9%; P < 0.16)

**Summary of findings regarding the effectiveness of health services delivered by E-Visits:** CHBRP concludes that there is *insufficient evidence* that health services delivered by E-Visits improve *health outcomes, process of care, and access to care and utilization*.

**Table 13. Summary of Evidence of Medical Effectiveness of Asynchronous Telehealth Compared to In-Person Care**

	Health Outcomes	Processes of Care	Access and Utilization
Store and forward	Insufficient evidence	Inconclusive evidence	Preponderance of evidence – effective
eConsult	Insufficient evidence	Insufficient evidence	Preponderance of evidence – effective
E-Visits	Insufficient evidence	Insufficient evidence	Insufficient evidence

Source: California Health Benefits Review Program, 2021.

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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 researchers and analysts who are **Task Force 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**, 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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CHBRP assumes full responsibility for the report and the accuracy of its contents. All CHBRP bill analyses and other publications are available at [www.chbrp.org](http://www.chbrp.org).

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