



Abbreviated Analysis

California Assembly Bill 2709: Emergency Ground Medical Transportation

Summary to the 2021–2022
California State Legislature
April 14, 2022

Prepared by
California Health Benefits Review Program
www.chbrp.org

Suggested Citation: *California Health Benefits Review Program (CHBRP). Abbreviated Analysis: California Assembly Bill 2709: Emergency Ground Medical Transportation. Berkeley, CA: CHBRP; 2022.*

SUMMARY

The California Assembly Committee on Health requested that the California Health Benefits Review Program (CHBRP)¹ conduct an evidence-based assessment of California Assembly Bill (AB) 2709.

AB 2709 requires health care service plans or health insurance policies issued, amended, or renewed on or after January 1, 2023, to undertake steps that reduce balance billing or high out-of-network charges for out-of-network emergency ground medical transport (EGMT) providers (in California). An enrollee or member who receives covered emergency ground medical transport services from a non-contracting ground ambulance provider would pay no more than the same cost-sharing amount that the enrollee or insured would pay for the same covered services received from a contracting ground ambulance provider. In addition, the bill would prohibit the non-contracting ground ambulance provider from billing or sending to collections a higher amount. And, the bill would require the plan or insurer to reimburse a non-contracting ground ambulance provider either the greater of the average contracted rate, or 125% of the Medicare rate.

EGMT in California. In California, there were approximately 2.8 million EGMT transports in 2019, operated by over 700 public and private ambulance service providers. Ambulance transportation charges are regulated at a local level and can vary considerably by county. A recent national analysis found that in 2018, 73% of EGMT transports in California included an out-of-network charge.

Policy Context. The recently enacted federal No Surprises Act does not directly apply to EGMT. A “surprise medical bill” is a bill from an out-of-network provider or facility that was not expected by the patient or that came from an out-of-network provider not chosen by the patient. California already has protections in place against surprise billing by individual doctors that are not chosen by consumers but are out-of-network. Current state law in California explicitly allows balance billing for medical transportation for DMHC- and CDI-regulated plans and policies.

EGMT is often not addressed in legislation intended to address surprise billing, but it is increasingly a source of concern.

AB 2709 would not require coverage for a new state benefit mandate and therefore does not exceed the definition of EHBs in California.

Impacts. AB 2709 could disincentivize negotiation between health plans, insurers, and EGMT providers because of the ceiling it sets, or AB 2709 could encourage payers to negotiate

lower rates with contracted providers. Overall, health plans and insurers would pay more for out-of-network EGMT services postmandate because of the difference between out-of-network rates and contracted rates and lower enrollee cost sharing. The per unit cost would decrease from \$1,710 at baseline to \$1,650 postmandate.

Utilization and Expenditures. CHBRP estimates that utilization of EGMT services will not change due to AB 2709. The baseline and postmandate utilization of out-of-network EGMT services of 2.5 per 1,000 enrollees is not estimated to increase as a result of AB 2709.

AB 2709 would increase total net annual expenditures by \$4,711,000 or 0.003% for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to a 0.037% change in total health insurance premiums paid by employers and enrollees for newly covered benefits, adjusted by a decrease in enrollee expenses for covered and/or noncovered benefits.

Although some Medi-Cal Managed Care Plans are subject to the bill, enrollees will not experience a cost impact.

Seven other states have recent legislative activity around EGMT.

¹ Refer to CHBRP’s full report for full citations and references.

POLICY CONTEXT

On February 22, 2022, the California Assembly Committee on Health requested that the California Health Benefits Review Program (CHBRP) conduct an evidence-based analysis of the impacts of Assembly Bill (AB) 2709: Emergency Ground Medical Transportation (EGMT). CHBRP focused on fiscal and policy analysis and did not conduct a medical effectiveness or public health analysis.

AB 2709 requires a health care service plan contract or a health insurance policy issued, amended, or renewed on or after January 1, 2023, to undertake steps that reduce balance billing or high out-of-network charges for out-of-network emergency ground medical transport providers (in California). An enrollee or member who receives covered services from a non-contracting ground ambulance provider (i.e., non-contracting with a health care service plan or insurance plan) would pay no more than the same cost-sharing amount that the enrollee or insured would pay for the same covered services received from a contracting ground ambulance provider. In addition, the bill would prohibit the non-contracting ground ambulance provider from billing, or sending to collections, a higher amount. And, the bill would require the plan or insurer to reimburse a non-contracting ground ambulance provider either the greater of the average contracted rate, OR 125% of the Medicare rate.

The bill applies to DMHC-regulated plans (including DMHC-regulated Medi-Cal Managed Care plans) and California Department of Insurance (CDI) policies that provide coverage for emergency services. Potentially, large-group CDI plans may not cover emergency services since they are exempt from basic health care services (definitions provided further in this section). However, for the purposes of this analysis, we have assumed that 100% of these plans do provide coverage for the EGMT referenced in AB 2709.

More than 20 million ambulance rides occur annually in the United States,² and media and research reports have suggested that they are associated with sizable and frequent out-of-network charges (Chhabra et al., 2020). The federal Affordable Care Act (ACA) requires nongrandfathered, group health plans to cover emergency services at out-of-network hospitals at the same copayment or coinsurance level as in-network hospitals.³ This requirement, however, does not extend to ambulance services, including EGMT. EGMT is not included in this definition of emergency services because it is not provided in an emergency department of a hospital. Similarly, the recently enacted federal No Surprises Act does not directly apply to EGMT (described later in this section).

Emergency Ground Medical Transport in California

Though the ACA does require health plans to cover out-of-network EGMT at usual and customary rates (UCR), there are no specific standards regarding UCR. Health plans often set their UCR much lower than what an ambulance provider charges, leaving patients open to financial liability for the remainder of the charges (Chhabra et al., 2020).

For enrollees in DMHC-regulated plans and CDI-regulated policies, health professionals and facilities are categorized as in-network or out-of-network, based on whether they have an existing contract with specific health plans or insurers to provide service to their enrollees for a specific payment amount. In-network health facilities and professionals have a contract with the enrollee's plan or insurer that defines a contracted rate for payment for services (and no balance billing of the enrollee is allowed). However, when an out-of-network provider's billed charge is more than the plan/insurer will pay, the provider may then seek to recoup the difference, or balance bill, directly from the enrollee when they receive reimbursement from the plan or policy at a lower amount (Chhabra et al., 2020).

² Rui P, Kang K, Ashman JJ. National Hospital Ambulatory Medical Care Survey: 2016 emergency department summary tables [Internet]. Hyattsville (MD): National Center for Health Statistics; [cited 2020 Mar 17]. Available at: https://www.cdc.gov/nchs/data/nhamcs/web_tables/2016_ed_web_tables.pdf.

³ 29 CFR § 2590.715-2719A(b).

Another key interaction of AB 2709 is with existing state law and regulations contained within Basic Health Care Services: § 1371.5 of the Knox-Keene Act (Use of emergency response system). Health Care Service Plans that provide basic health care services shall not require prior authorization or refuse to pay for any ambulance or ambulance transport services provided to an enrollee as a result of a 911 emergency response system request for assistance, if either of the following conditions apply:

- The request was made for an emergency medical condition, and ambulance transport services were required.
- An enrollee reasonably believed that the medical condition was an emergency medical condition and reasonably believed that the condition required ambulance transport services. The determination as to whether an enrollee reasonably believed that the medical condition was an emergency medical condition that required an emergency response shall not be based solely upon a retrospective analysis of the level of care eventually provided to, or a final discharge of, the person who received emergency assistance.

A health care service plan shall not be required to pay for any ambulance or ambulance transport services if the health care service plan determines that the ambulance or ambulance transport services were never performed, the service was not requested in response to a reasonably perceived emergency, or upon findings of fraud, incorrect billings, the provision of services that were not covered under the member's current benefit plan, or membership that was invalid at the time services were delivered for the pending emergency claim.

Emergency health care services are defined in Knox-Keene in Section 1345 as those that include ambulance and ambulance transport services and out-of-area coverage. "Basic health care services" includes ambulance and ambulance transport services provided through the 911 emergency response system. Emergency health care services shall be available and accessible to enrollees on a 24-hours-a-day, 7-days-a-week basis within the health care service plan area. Emergency health care services shall include ambulance services for the area served by the plan, to transport the enrollee to the nearest 24-hour emergency facility with physician coverage, designated by the health care service plan.⁴

Current state law (HSC 1367.11 and INC 10352) explicitly allows balance billing for medical transportation for DMHC- and CDI-regulated plans and policies. This bill would close this significant exemption.

Within Medi-Cal, current law (Welfare and Institutions Code 14019.4) prohibits ambulance service providers from "balance billing" Medi-Cal beneficiaries⁵ in addition to the beneficiaries generally not having any cost sharing requirements.

A "surprise medical bill" is a bill from an out-of-network provider or facility that was not expected by the patient or that came from an out-of-network provider not chosen by the patient (Garmon and Chartock, 2017). Surprise medical bills cause financial anxiety and have been linked to unavoidable medical debt (Hamel et al., 2016). California already has protections in place against surprise billing by individual doctors that are not chosen by consumers but are out-of-network, such as anesthesiologists. However, the law does not currently apply to out-of-network EGMT services.⁶

AB 2709 would not require coverage for a new state benefit mandate and therefore does not exceed the definition of EHBs in California.

⁴ § 1300.67. Scope of Basic Health Care Services.

⁵ Personal Communication, W. White, DHCS, March 2020.

⁶ For more background on surprise medical billing and prevalence, as well as impacts on public health (related to Emergency Services and Air Ambulances prior to enacted legislation), please see CHBRP's completed analysis of AB 1611 in 2019, and CHBRP's analysis of Air Ambulance Legislation AB 651, also completed in 2019.

Federal Policy

Federal agencies funded and oversaw emergency medical services (EMS) systems until 1981, when the federal government turned this authority over to states and their counties. (For more on this history, please see the *Background* section.) The federal Office of EMS, under the National Highway Traffic Safety Administration (NHTSA), currently provides guidance and leadership through data collection, publication of service guidelines, and convening stakeholders to define best practices in the EMS industry. Federal funding is provided through the Department of Health and Human Services (HHS) block grants, which states may choose to spend on EMS provision (Institute of Medicine, 2007).

Emergency medical services are not administered or overseen by any single U.S. federal department or agency. In addition to NHTSA's Office of EMS, other federal departments that support and regulate EMS include Defense, HHS, Homeland Security, and the Federal Communications Commission.

No Surprises Act

In December of 2020, Congress enacted the “No Surprises Act,” which, starting in 2022, prohibits most surprise out-of-network bills when a patient receives out-of-network services during an emergency visit or at an in-network hospital without advance notice. In addition, the “No Surprises Act” includes air ambulances (Hoadley et al., 2020). However, the protections do not apply to ground ambulance services. This is likely because few states, to date, have implemented regulations in this area, which is complicated by the fact that many ground ambulance services are provided by local government entities, (Hoadley et al., 2020), as described later in this section. The law instead requires a federal advisory committee to study the issue and recommend options to protect patients from surprise bills.⁷

CARES Act

Healthcare providers, including ambulance services, that accepted money from the federal Provider Relief Fund created by the March 2020 CARES Act are not allowed to balance bill patients for care if they have a suspected or confirmed case of COVID-19 (Rosato, 2021). While this only applies to presumptive or confirmed COVID-19 patients, the duration of this balance billing prohibition is unclear. In California, there are 58,846 health care providers that received CARES Act funding.

Ambulances / Medicare

Medicare has a considerable fiscal, regulatory, and policy role in financing and influencing EGMT throughout the country. Medicare covers medically necessary ground ambulance services for its beneficiaries meeting certain conditions.⁸ While most Medicare transports are covered by the Medicare Part B medical benefit, transports involving inpatients at a hospital or other facility fall under the Part A hospital benefit. Medicare pays ambulance providers for Part B-covered transports using the Ambulance Fee Schedule (AFS). The AFS establishes a base rate that varies by the level of transport provided (e.g., basic life support vs. advanced life support level 1 or level 2) and whether the transport is emergency or non-emergency. The AFS also includes a per-mile rate applied to the distance traveled with the patient. The AFS incorporates a permanent add-on payment of a 50 percent increase in the standard mileage rate for ground ambulance transports that originate in rural areas where the travel distance is between 1 and 17 miles. Both base and mileage payments are only made when a patient is transported to an emergency department or other eligible destination—in other words, Medicare does not pay for ambulance responses to calls for service that do not result in a patient transport.

⁷ Information on the Committee may be accessed at: <https://www.federalregister.gov/documents/2021/11/23/2021-25560/ground-ambulance-and-patient-billing-advisory-committee>.

⁸ In addition to medical necessity, Medicare requires that (a) transports are to the nearest appropriate facility given the patient's condition, and (b) all other forms of transportation are contraindicated.

State Policy

State Oversight: The California Emergency Medical Services Authority (EMSA) serves as the pass-through for federal funds, and oversees county and multicounty local EMS agencies (LEMSAs). EMSA manages licensing and practice standards for the California EMS workforce, publishes standards for and approves LEMSA implementation plans, coordinates EMS services among LEMSA jurisdictions, regulates the statewide trauma system, and directs the statewide poison control system (Narad et al., 1994).

County Oversight: California’s 33 local EMS agencies (LEMSAs) exercise the most direct authority over the day-to-day operation of the state’s emergency medical services. Organized on a county or multicounty basis, LEMSAs plan, implement, monitor, and evaluate local EMS systems and establish the roles and responsibilities of the various system participants in implementing the plan (Narad et al., 1994). LEMSAs also share responsibility with the state EMSA for regulating the local EMS workforce, EGMT providers, and 911-receiving hospitals. LEMSAs set the maximum charges for ambulance transportation. LEMSAs also write and enforce contract terms with public and private EMS providers, issue ambulance licenses, and grant exclusive operating area (EOA) rights to EGMT providers.

Other States

EGMT is often not addressed in legislation intended to address surprise billing, but it is increasingly a source of concern (U.S. GAO, 2012). Historically, most EGMT was provided by local government or by hospitals at prices close to Medicare reimbursement levels (Adler et al., 2019). As Medicare and Medicaid reimbursement levels for EGMT have remained below cost growth (while these payers simultaneously account for a rapidly growing share of the population using EGMT services), billed charges have increased considerably. Privatization of ambulance services and industry consolidation also may have contributed to price increases (U.S. GAO, 2012; Webb, 2019).

In January of 2020, Ohio enacted a law banning surprise medical bills starting in 2022 that mirrors the No Surprises Act but includes ground ambulances. In New York, out-of-network providers cannot bill insured patients more than in-network rates in emergency situations, including for ground ambulances though not for transports between facilities. In Colorado, a 2019 law that recently went into effect bans private ambulances from balance billing patients, though public ambulances funded with taxpayer dollars are exempt. Maryland has a similar balance billing law that applies to ground ambulance services, but it applies only to those operated by local governments or volunteer fire departments and rescue squads (Rosato, 2021). Table 1 provides an overview of the ten states with enacted laws related to surprise billing rules for out-of-network ground ambulance providers. In particular, they vary significantly in their regulation of reimbursement rates for out-of-network providers.

Table 1. State Surprise Billing Rules for Out-of-Network Ground Ambulance Providers

State (year of enactment)	Protects consumers from balance bills	Regulates reimbursement rates for out-of-network providers	Protections apply to public/private providers?
Colorado (2019)	Yes	Yes	Private only
Delaware (2001)	Yes	No	Both
Florida (2016)	Yes	Yes*	Both
Illinois (2011)	Yes	No	Both
Maine (2020)	Yes	Yes*	Both
Maryland (2020)	Yes	No	Public only

State (year of enactment)	Protects consumers from balance bills	Regulates reimbursement rates for out-of-network providers	Protections apply to public/private providers?
New York (2015)	Yes	Yes*	Both
Ohio (2020)	Yes, for emergency services	Yes*	Both
Vermont (1994)	Yes, for emergency services	No	Both
West Virginia (1997)	Yes	Yes*	Both

Source: O'Brien et al., 2021

Table 2 summarizes the topic and status of seven other states that have recent (2021 and 2022) legislative activity around EGMT. Most activity relates to reimbursement rates or fee schedules related to emergency transport.

Table 2. EGMT-Related Legislation in Other States in Current Legislative Session

State	Year	Bill Number	Summary
Washington	2022	HB 1688	Requests that a report be submitted to the legislature with recommendations for preventing ground ambulance balance billing
Rhode Island	2022	S 2476	Requires individual and group plans that provide coverage for emergency medical services to also provide coverage for transport to an alternative location facility Requires plans to reimburse EMS transport to alternative facilities at the same rate as for non-emergency basic life support transports to EDs
Idaho	2022	S 1283	Provides supplemental Medicaid reimbursement for ground emergency medical transportation for Medicaid beneficiaries
Massachusetts	2021	SB 731	Requires insurers to directly pay out-of-network ambulance service providers at a rate equal to that established by the municipality where the patient was transported from
Illinois	2022	HB 4944	Requires that the base rate of reimbursement for Medicaid ground ambulance services be increased to at least 100% of Medicare Ambulance Fee Schedule rates for urban areas
Maryland	2022	SB 295	Requires the Dept. of Health to reimburse emergency service transporters who request reimbursement from the state's MA program Requires the Dept. to increase the reimbursement amount by \$25 each FY until reimbursement is at least \$300
Nebraska	2021	LB 238	Establishes a supplemental reimbursement program for ground emergency transport services

Source: California Health Benefits Review Program, 2022.

BACKGROUND ON EMERGENCY GROUND MEDICAL TRANSPORTATION

While emergency medical services (EMS) in the United States are influenced by federal recommendations and guidelines, EMS operations are largely regulated at the state and local level. California's EMS Act of 1980 created provisions for state regulation of EMS, including extensive local delegation, in Division 2.5 of the Health and Safety code (sections 1797-1799) to local EMS agencies (LEMSAs) (California EMS Authority, 2019). For additional information on the history of EMS in the United States, please see the *Background* section of CHBRP's abbreviated analysis of AB 2625 of 2020⁹.

EGMT Delivery Systems

Emergency ground medical transportation (EGMT) is provided by emergency medical technicians (EMTs) and/or paramedics who staff land ambulances. EMTs, who receive approximately 150 hours of training, can provide noninvasive basic life support (BLS) maneuvers such as oxygen therapy, cardiopulmonary resuscitation (CPR), and bleeding control. Paramedics, who receive approximately 1,100 hours of training beyond that of EMTs, can provide invasive advanced life support (ALS), such as intravenous (IV) therapy, medication administration, and breathing tube insertion. In response to 911 calls, trained emergency medical dispatchers use software to triage whether an emergency is life threatening (necessitating a paramedic-level ALS response) or non-life threatening (necessitating an EMT-level BLS response). BLS ambulances consist of two EMTs, whereas ALS ambulances are staffed by either two paramedics or one paramedic and one EMT.

Payer reimbursement rates typically vary by patient acuity. Rates are higher for life-threatening emergencies with ALS ambulances than for non-life-threatening emergencies with BLS ambulances. In addition to the response and transportation charge, there are sometimes additional charges such as mileage, oxygen, and miscellaneous supplies (Los Angeles County, 2021). Plans and policies may adopt Medicare ambulance coverage polices, classifying EGMT reimbursement into BLS and two ALS levels: ALS Level 1 when a paramedic assessment or intervention is provided, or ALS Level 2 when a defined complex paramedic intervention is provided, such as endotracheal intubation or three intravenous injections (UnitedHealthcare Services Inc., 2022)

A variety of systems deliver EMS, including public entities (fire departments, public ambulance districts, hospital systems) and private nonprofit or for-profit entities (hospitals and ambulance companies). Although 78% of the EGMT providers in California are in the public sector, these public entities only operate 19% of ambulances and account for 24% of 911 transports (Jacobs et al., 2017). While fire departments respond to most 911 medicals calls in California and employ EMTs and paramedics on their fire apparatus, most fire departments do not provide ambulance transport services. Two companies in the private sector (Global Medical Response and Falck and their subsidiaries) operate nearly half of private ambulances and provide over 75% of all California EGMT transports (Jacobs et al., 2017).

Ambulance transportation charges, including the response, mileage, and supplies components, are regulated at a local level by LEMSAs. LEMSAs set a maximum billed charge, which can vary considerably by county (Jacobs et al., 2017). The most recent comprehensive review of California's 33 LEMSAs, in 2014, reported that the maximum billed ambulance response charge, if inflated to 2022 dollars, can average up to \$3,200 depending on the region (Los Angeles County EMS Agency, 2014). These maximum billed charges represent the ceiling; contracted or allowed rates may be substantially lower. However, the LEMSAs' role in regulating maximum charges also serves to create a de facto maximum balance or surprise bill from out-of-network EGMT providers in each county.

Ambulance transports can also include nonemergency, scheduled transportation, which are primarily hospital-to-hospital transfers, transfers to/from skilled nursing facilities, and transfers to/from kidney

⁹ Available at http://www.chbrp.org/completed_analyses/index.php.

dialysis facilities. These nonemergency, scheduled ambulance transports are regulated by California's EMS Act and are also provided by EMTs and paramedics; however, these non-EGMT transports are typically reimbursed in a different manner, and they are not within the scope of AB 2709.

Given the emergency nature of 911 calls, emergency medical dispatchers typically dispatch the closest ambulance to the scene. The patient does not have any choice in determining the EGMT ambulance provider. As such, the patient cannot choose an in-network contracted provider over an out-of-network ambulance provider. Furthermore, most ambulance providers do not routinely contract with insurance networks for EGMT. A recent national analysis of 2018 large-employer claims found that 73% of EGMT transports in California included an out-of-network charge (Amin et al., 2021). Another national study estimated that 51% of EGMT transports were considered out-of-network (Garmon and Chartock, 2017). As a result, patients often have increased cost-sharing responsibilities, and they may be subject to balance billing, where the patient is billed the difference between the ambulance provider's charges and the insurer's payment. These balance bills are routinely above \$1,000, and sometimes over \$2,000, depending on the provider and the insurer.

Ambulance Delays, Diversion, and EGMT

EGMT utilization, charges, and ultimately balance billing may be influenced by ambulance delays and diversion. Patients utilizing EGMT often encounter delays in transfer of care from the ambulance to emergency department (ED) providers (Backer et al., 2019). This wait time interval from when an ambulance arrives at the ED to the time ED staff formally accept patient care responsibilities is commonly referred to as ambulance patient offload time (APOT), and prolonged APOT is associated with delays in treatment and longer hospital length of stay (Backer et al., 2019). While a primary cause of APOT is ED overcrowding, there are numerous contributing factors, such as lack of inpatient hospital beds and hospital staffing shortages.

APOT delays can contribute to ambulance diversion and more distant EGMT transports, which may ultimately result in higher EGMT charges and potentially greater balance billing. The most recent California statewide data (which includes all counties except for Los Angeles County) reported monthly 90th percentile APOT averages ranging from 32 to 39 minutes in 2019 and 2020, meaning that an average of 10% of EGMT patients waited over 32 to 39 minutes to be transferred in the ED (California EMS Authority, 2021). Between July 2019 and June 2020, the average APOT was 27 minutes while the median APOT was 23 minutes; about 3.7% of EGMT resulted in APOT greater than 60 minutes (California EMS Authority, 2021).

APOT is closely tied to ambulance diversion, whereby a hospital temporarily closes their ED to incoming ambulances, thus forcing the ambulance to divert to a different ED than intended. (Hsuan et al., 2019) Like APOT, diversion is also associated with increased morbidity and mortality, especially for patients with time-sensitive conditions like stroke or acute myocardial infarction. (Hsuan et al., 2019) While ambulance diversion is intended to reduce ED crowding and APOT, studies suggest that diversion is ineffective in reducing ED crowding, instead leading to "catastrophic delays in treatment for seriously ill or injured patients" (Burke et al., 2013 and Institute of Medicine, 2007).

In addition to delaying treatment and worsening health outcomes, ambulance diversion is also associated with financial repercussions. Diversion may necessitate that an ambulance transport a patient to a more distant hospital, thus increasing the ambulance transportation mileage. As mileage is a component of total EGMT charges, diversion is likely associated with increased EGMT charges. If the EGMT provider is out-of-network, diversion and more distant ambulance transport can result in a potentially larger balance bill. Furthermore, ambulance diversion disproportionately affects racial and ethnic minorities, potentially leading to higher EGMT charges for racial and ethnic minorities. One study found that hospitals serving large minority populations were more likely to engage in ambulance diversion as compared to hospitals with smaller proportions of minorities, even after adjusting for various hospital characteristics (Hsia et al., 2012).

Ambulance Subscription Plans

Many EGMT providers do not contract with insurance networks, but some EGMT providers in California offer a subscription service to local residents within their jurisdiction. Though not insurance programs, these “ambulance plans” are regulated under the California Code of Regulations, Title 28 § 1300.43.3. In exchange for an annual household fee, which is typically between \$50 and \$100, the EGMT provider agrees to accept the insurer’s payment as payment in full, eliminating any potential out-of-pocket expenses (including surprise bills) billed from that provider. Ambulance subscriptions are likely marketed by EGMT providers and purchased by consumers to avoid potential balance billing, so subscriptions may be unnecessary and less common under the proposed AB 2709 and its consumer balance billing protections.

Mobile Integrated Health – Community Paramedicine and EGMT

An emerging area within the EMS field is mobile integrated health/community paramedicine (MIH-CP). MIH-CP utilizes EMTs and paramedics to function in a proactive public health role that supplements the traditional reactive function of 911 emergency response and transportation to hospital emergency departments. Many MIH-CP programs are intended to reduce the need for EGMT by treating a 911 patient at the emergency scene. For example, Baltimore City Fire Department’s MIH-CP program was able to treat nearly two-thirds of patients at home, with less than 10% requiring transport to the emergency department (Somers et al., 2021). Accordingly, MIH-CP may significantly decrease EGMT expenditures and ambulance balance billing if MIH-CP can prevent or substitute for ambulance transport.

Financing for Mobile Integrated Health – Community Paramedicine

Many of these innovative MIH-CP and telemedicine programs are grant-funded and do not have stable reimbursement mechanisms. However, the Centers for Medicare & Medicaid Services recently introduced a new payment model for these services, dubbed Emergency Triage, Treat, and Transport (ET3), whereby eligible EGMT providers can now receive Medicare payments for alternative EGMT destinations (e.g., urgent care, mental health facility, primary care office) or telehealth-facilitated treatment at the emergency scene (Centers for Medicare & Medicaid Services, 2021). Though most insurers currently do not reimburse for transport to alternative EGMT destinations, policies and plans may begin to consider reimbursement for MIH-CP in line with Medicare’s ET3 coverage determination. Successful MIH-CP programs may reduce the need for EGMT, thus reducing the financial burden of EGMT, ambulance balance billing, and emergency department utilization.

EGMT Utilization in California

In California, there were approximately 2.8 million EGMT transports in 2019, operated by over 700 public and private ambulance service providers (California EMS Authority, 2021; Los Angeles County EMS Agency, 2021). Demographic data about ambulance transport is available for 75% of California’s 2019 population (California EMS Authority, 2021).¹⁰

Approximately 4% of EGMT transports were for Californians under age 15, 53% were for Californians aged 15 through 63 years, and 43% were for Californians aged 64 years and older. About 85% of EGMT transports were for medical problems and 15% were for traumatic injuries. The most common medical problems were general weakness, abdominal pain/problems, behavioral/psychiatric crisis, altered level of

¹⁰ The California EMS Authority maintains a centralized data system to collect data about 911 EMS responses and transports, known as the California Emergency Medical Services Information System (CEMSIS). As of 2019, 32 of 33 LEMSAs, representing 57 of California’s 58 counties (all but Los Angeles County) and approximately 75% of California’s 39.5 million 2019 population, submitted data for inclusion in CEMSIS’s most recent 2019 data report. Demographic information was only available from CEMSIS, but total California 2019 EGMT transports were compiled by adding data provided in Los Angeles County EMS Agency’s annual data report (Los Angeles County EMS Agency, 2021).

consciousness, and body pain, whereas the most common traumatic injuries was fall and motor vehicle related (California EMS Authority, 2021). Approximately 49.5% of EGMT transports were for females, while 50% were for males and 0.5% were other or unknown genders. However, males were over-represented in the under 64 population while females were over-represented in the 64 years and older population (California EMS Authority, 2021). A separate study using statewide data in 2019 (similarly included all counties except for Los Angeles County) examined EMS responses for Californians aged 50 and older, finding that 9.1% of EMS responses were for Black patients, 11.0% were for Latino patients, 4.5% were for Asian patients, 47.3% were for White patients, and 29.2% were for Other or not recorded (Melgoza et al., 2021). No reports were identified describing race or ethnicity in EMS responses or transports for Californians younger than 50 years.

Table 3. EGMT in California by Age in 2019*

Age	Counts	Percentages
0 to 14	68,373	3.8%
15 to 26	165,835	9.2%
27 to 44	320,347	17.9%
45 to 63	469,323	26.2%
64 and older	770,366	42.9%
Total	1,794,244	100.0%

Source: California Health Benefits Review Program, 2022.

*Note: This table includes all 911 EMS transports (both medical and trauma) with recorded age in California in calendar year 2019, except those in Los Angeles County.

EGMT Utilization Changes During the COVID-19 Pandemic

The most recent statewide data are only available from calendar year 2019, but EGMT utilization patterns likely changed as a result of the COVID-19 pandemic. National trends from NEMSIS, a database that includes most states and the majority of the United States population, demonstrate the impact of the COVID-19 pandemic on EMS responses and EGMT (Lerner et al., 2020). From mid-March to mid-May, there were over 26% fewer EMS responses in 2020 compared to 2018-2019 averages (Lerner et al., 2020). During this same period, the proportion of EMS responses related to cardiac arrest and opioid use/overdose nearly doubled while traumatic injuries were significantly less common (Handberry et al., 2021). Though Black and Latinx patients began 2020 with lower per-capita overdose mortality rates than White patients, Black and Latinx patients had significantly higher increases in per-capita EMS responses with overdose-related mortality in 2020 compared to White patients (Friedman et al., 2021). In Los Angeles County, another study found that EMS responses to cardiac arrests and dead-on-arrival patients significantly increased in late March and April 2020, before declining in May 2020, as compared to the same months in 2018 and 2019 (Rollman et al., 2021). Though there were declines in EMS responses and EGMT early in the COVID-19 pandemic, national data indicates that EMS responses and EGMT largely returned to baseline levels later in 2020 and EGMT volume may have even increased, compared to pre-pandemic levels, in 2021 and 2022 (Handberry et al., 2021 and Mann et al., 2022).

Disparities in Accessing Emergency Ground Medical Transportation

Per statute, CHBRP includes discussion of disparities and social determinants of health (SDoH) when conducting public health analysis of introduced legislation. CHBRP completed a brief review of disparities literature as it relates to EGMT. Disparities are differences between groups that are modifiable. CHBRP found relevant literature identifying disparities by race/ethnicity and age.

Age differences

Multiple studies found that older persons utilize EGMT more than younger persons. In a national sample of 70 million emergency department (ED) visits in years 2004 to 2006 examining the mode of arrival to EDs, older adults aged 55 to 64 years were more than twice as likely to utilize ambulances as compared to young adults aged 18 to 24 years (Meisel et al., 2011). An earlier study among a national sample of 16.2 million ED visits in 2003 found that ambulance utilization increased gradually as age increased (Burt et al., 2006). Finally, another study using 2008-2010 data reported that frequent EGMT users were more likely than non-frequent EGMT users to be 45 years or older (Knowlton et al., 2013). CHBRP was unable to locate more recent studies, but it is unlikely that the identified age disparities changed significantly.

Racial or ethnic differences

EGMT utilization did not vary significantly by race/ethnicity when adjusted by factors including age, insurance, health status, and geography. Significant racial disparities in ambulance utilization were not identified in a national sample of ED visits examining mode of arrival to EDs (Meisel et al., 2011). Another national study found that Black patients were significantly more likely than White patients to arrive at the ED via ambulance, whereas Asian patients were significantly less likely than White patients to arrive at the ED via ambulance (Burt et al., 2006). However, these disparities did not persist after accounting for confounding variables such as insurance status and age. A detailed study of Massachusetts patients also found that racial and ethnic disparities in ambulance utilization did not persist in a fully adjusted, multivariate analysis (Rucker et al., 1997).

However, while overall utilization disparities were not identified, several studies demonstrated that racial and ethnic minorities may experience longer wait times for ambulances after calling 911. A national study of 2014 EMS data reported that patients with cardiac arrest located in lower-income neighborhoods with larger proportions of non-White populations had significantly longer 911 ambulance response times than similar patients in higher-income neighborhoods with smaller proportions of non-White populations (Hsia et al., 2018). An older study of stroke patients in Kentucky also found that ambulance response times were longer for Black patients than White patients (Kleindorfer et al., 2006). Finally, a recent study found that Black and Hispanic patients were more likely to be transported via ambulance to safety-net hospitals than were White patients (Hanchate et al., 2019). CHBRP did not identify any literature or reports that explicitly discussed demographics or disparities in ambulance balance billing. Nevertheless, the disparities described above may suggest that balance billing disproportionately impacts older adults and (when unadjusted) Black patients as these populations are more likely to utilize EGMT.

IMPACTS

Table 4. Impacts of AB 2709 on Benefit Coverage, Utilization, and Cost, 2023

	Baseline (2023)	Postmandate Year 1 (2023)	Increase/ Decrease	Change Postmandate
Benefit Coverage				
Total enrollees with health insurance subject to state-level benefit mandates (a)	22,810,000	22,810,000	0	0.00%
Total enrollees with health insurance subject to AB 2709	22,810,000	22,810,000	0	0.00%
Total percentage of enrollees with coverage for Emergency Transport and Response	100%	100%	0%	0.00%
EGMT & Response Utilization and Costs for Commercial and CalPERS populations				
<i>Out-of-Network Emergency Transport & Response</i>				
Utilization per 1,000	2.5	2.5	0.00	0%
Average Insurer Paid	\$540	\$1,450	\$910	169%
Average Enrollee Financial Responsibility	\$1,170	\$200	-\$970	-83%
Enrollee Cost Sharing (deductibles, copayments, etc.)	\$430	\$200	-\$230	-53%
Balance Billing	\$740	\$0	-\$740	-100%
Expenditures				
<i>Premium (expenditures) by Payer</i>				
Private Employers for group insurance	\$52,967,575,000	\$52,988,636,000	\$21,061,000	0.040%
CalPERS HMO employer expenditures (b) (c)	\$5,895,476,000	\$5,897,533,000	\$2,057,000	0.035%
Medi-Cal Managed Care Plan expenditures	\$25,989,411,000	\$25,989,411,000	\$0	0.000%
<i>Enrollee Premiums (expenditures)</i>				
Enrollees for individually purchased insurance	\$24,029,788,000	\$24,037,046,000	\$7,258,000	0.030%
Individually Purchased – Outside Exchange	\$6,324,312,000	\$6,326,418,000	\$2,106,000	0.033%
Individually Purchased – Covered California	\$17,705,476,000	\$17,710,628,000	\$5,152,000	0.029%
Enrollees with group insurance, CalPERS HMOs, Covered California, and Medi-Cal Managed Care (c)	\$24,504,936,000	\$24,514,567,000	\$9,631,000	0.039%
<i>Enrollee Out-of-Pocket Expenses</i>				
Cost sharing for covered benefits (deductibles, copayments, etc.)	\$15,807,011,000	\$15,798,795,000	-\$8,216,000	-0.052%
Expenses for noncovered benefits (d)	\$27,080,000	\$0	-\$27,080,000	-100.000%
Total Expenditures	\$149,221,277,000	\$149,225,988,000	\$4,711,000	0.003%

Source: California Health Benefits Review Program, 2022.

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.¹¹

(b) Approximately 51.7% of CalPERS enrollees in DMHC-regulated plans are state retirees, state employees, or their dependents. About one in five of these enrollees has a pharmacy benefit not subject to DMHC.¹² CHBRP has projected no impact for those enrollees. However, CalPERS could, postmandate, require equivalent coverage for all its members (which could increase the total impact on CalPERS).

(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.

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

¹¹ For more detail, see CHBRP's *Estimates of Sources of Health Insurance in California for 2023*, a resource available at http://chbrp.org/other_publications/index.php.

¹² For more detail, see CHBRP's *Estimates of Pharmacy Benefit Coverage in California for 2023*, a resource available at http://chbrp.org/other_publications/index.php.

BENEFIT COVERAGE, UTILIZATION, AND COST IMPACTS

As discussed in the *Policy Context* section, AB 2709 would require health plans and health policies regulated by the Department of Managed Health Care (DMHC) or the California Department of Insurance (CDI) to undertake steps that reduce balance billing or high out-of-network charges for out-of-network emergency ground medical transport providers (in California).

In addition to commercial enrollees, more than 70% of enrollees associated with the California Public Enrollees' Retirement System (CalPERS) and more than 80% of Medi-Cal beneficiaries are enrolled in DMHC-regulated plans.¹³ As noted in the *Policy Context* section, AB 2709 would apply to the benefit coverage of these CalPERS enrollees and Medi-Cal beneficiaries. However, the bill would not impact Medi-Cal beneficiaries.

This section reports the potential incremental impacts of AB 2709 on estimated baseline benefit coverage, utilization, and overall cost. For the purposes of describing AB 2709's impact, CHBRP has used the following terms and definitions:

- **In-Network Allowed Charge** — Health plans/insurers have contracts with in-network providers to pay an agreed upon "allowed charge." The amount is then shared between the plan's payment and the enrollee cost sharing. The enrollee is responsible for the in-network cost sharing.
- **Out-of-Network (OON) Allowed Charge** — The total amount the plan/insurer defines to be appropriate for the OON service. The amount is then shared between the plan's payment and the enrollee cost sharing. There is no contract with these providers. The plan pays a specified amount. The enrollee is responsible for the OON cost sharing, which is typically higher than in-network cost sharing.
- **Billed Charge** — The amount billed for services by providers. Health plans generally only pay out-of-network providers a portion of their billed charges. Billed charges are typically higher than in-network allowed charges, out-of-network allowed charges, or local Medicare rates.
- **Balance Bill** — This term refers to the practice of providers billing enrollees for the difference between the billed charge and the out-of-network allowed charge. This is the amount a provider may send as a bill directly to a patient. Balance billing is not allowed for in-network providers and Medi-Cal beneficiaries.

Analytic Approach and Key Assumptions

The following key assumptions and considerations were made when providing this abbreviated analysis of AB 2709:

- 1) Potentially, large-group CDI plans may not cover emergency services since they are exempt from basic health care services (definitions provided further in this section). However, because there was no carrier survey for this bill analysis, we have assumed that 100% of these plans do provide coverage for the EGMT referenced in AB 2709.
- 2) Medi-Cal enrollees do not pay out-of-pocket for emergency ground medical transportation and balance billing is prohibited for Medi-Cal enrollees. Although some Medi-Cal Managed Care Plans are subject to the bill, enrollees will not experience a cost impact.
- 3) Both "emergency transportation" and "emergency response" cases for the California commercial population were identified using procedure codes were identified in Milliman's 2019 Consolidated Health Cost Guidelines Sources Database (CHSD) and included in this analysis. Mileage and supplies were included in the associated cost per case. The procedure codes used to identify EGMT claims are in Table B-1 of Appendix B.

¹³ For more detail, see CHBRP's *Estimates of Sources of Health Insurance in California for 2023*, a resource available at http://chbrp.org/other_publications/index.php.

- 4) At baseline, this analysis uses the average out-of-network allowed charge to assess the cost of out-of-network services to the health insurer or plan and the related enrollee cost sharing. The average out-of-network billed charge is used to assess balance billing paid by the enrollee.
- 5) All balance billed charges are not ultimately collected by health care providers. Consumers may not pay at all (in which case, their bill may be sent to debt collection) or they may reach a discounted agreement to pay part of the bill or establish a payment plan (which is not documented in commercial claims data). EGMT balance billing collection data is not available, but it is estimated that emergency physicians collect 65% of charged amounts for likely surprise bills, (Biener et al, 2021). CHBRP calculated a discounted rate of collections that assumed 65% of out-of-network EGMT billed charges are collected. After removing the insurer and enrollee cost sharing portions of the billed charge, we estimate 45% of EGMT balance billed charges are paid by the enrollee.
- 6) The postmandate per unit cost for out-of-network service is set equal to the in-network allowed charge because the in-network allowed charge typically exceeds 125% of the Medicare rate. The in-network cost sharing is applied to the in-network allowed charge to determine the enrollee cost sharing for out-of-network EGMT services as required by AB 2709.
- 7) The in-network allowed charge is greater than the average out-of-network allowed charge because the average out-of-network allowed charge is based upon external benchmarks (e.g., FAIR Health, Medicare) rather than the in-network allowed charge.
- 8) Because consumers are typically unaware of the potential for balance billing for EGMT services and payment is typically requested after receipt of services, we assumed that there would be no detectable change in demand for and utilization of EGMT services as a direct result of AB 2709. Instead, the impact of AB 2709 would be apparent for insurers and enrollees while claims were being processed, rather than at the point of service because of the unplanned nature of emergency services.
- 9) We do not address longer-term trends related to provider contracting and out-of-network rate calculations. A recent case study suggests that surprise billing laws (like AB 72 or the proposed AB 2709) may incentivize health plans and insurers to cancel contracts or negotiate lower rates with contracted providers to suppress the in-network allowed charge, given that the in-network allowed charge acts as a ceiling on charges for out-of-network claims (Duffy, 2019). That is described further in the *Long-Term Impacts* section.

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

Baseline and Postmandate Benefit Coverage

At baseline, 100% of enrollees with health insurance that would be subject to AB 2709 have coverage for emergency ground medical transport and response services. Although benefit coverage would not increase due to AB 2709, prices paid by all health plans, insurers, and consumers for out-of-network EGMT services would change for two reasons:

- The EGMT services' per-unit cost for out-of-network claims would be based on the in-network allowed charge, rather than a lower external benchmark; and
- Enrollees pay in-network cost sharing for out-of-network EGMT services. For many plans, this results in lower deductibles, copayments, and coinsurance amounts. The lower deductibles and coinsurances are applied to the in-network allowed charge.

Baseline and Postmandate Utilization

The baseline utilization of Out-of-Network EGMT services of 2.5 per 1,000 enrollees is not estimated to increase postmandate because of AB 2709.

Baseline and Postmandate Per-Unit Cost

At baseline, the out-of-network allowed charge is \$970 per unit of out-of-network EGMT services. Health plans and insurers pay on average \$540 of the allowed amount with the remaining \$430 paid by enrollee cost sharing in the form of deductibles, copayments, and coinsurances. The average billed charges for transport are \$2,740 and \$440 for response, according to the 2019 Milliman CHSD trended to 2023, which aligns with the range of maximum charges dictated by the LEMSA (LA County EMS Report, 2014).

At baseline, the difference between the billed charge and the out-of-network allowed charge can be billed to the enrollee. CHBRP estimates enrollees pay \$740 per unit of EGMT services in the form of balance billing. Enrollees pay a total of \$1,170 per unit for out-of-network EGMT services, with \$430 counted as cost sharing and \$740 due to balance billing by out-of-network providers. Overall, the per unit cost when combining the insurer payment, enrollee cost share, and enrollee balance billing payments at baseline are \$1,710 (Table 1).

Postmandate, the cost per unit of out-of-network EGMT services is equal to the in-network allowed charge. The average in-network allowed charges, which are based on actual claims paid by the specific insurer to in-network providers, exceeds the out-of-network allowed charge which is based on external benchmarks. CHBRP estimates the paid allowed amount will increase from \$970 to \$1,650. The average insurer payment per-unit would increase \$910 to \$1,450 and the cost sharing paid by enrollees would decrease \$230 to \$200 (Table 4). Balance billing would be prohibited, further reducing enrollee expenses \$740 per unit of EGMT services. Overall, the per unit cost when combining the insurer payment and enrollee cost sharing amounts is \$1,650 which represents a 3.5% decrease in per unit cost paid to EGMT providers postmandate.

Overall, health plans and insurers will pay an additional \$910 per unit, while enrollees would see a \$970 decrease in their per-unit cost due to a \$230 reduction in cost sharing (the coinsurance rate would decrease if a claim is treated as in-network) and a \$740 reduction in balance billed charges.

See Appendix B for additional detail on per unit cost calculations and trends.

Baseline and Postmandate Expenditures

Table 5 and Table 6 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 2709 would increase total net annual expenditures by \$4,711,000 or total net annual 0.003% for enrollees with DMHC-regulated plans and CDI-regulated policies. This is due to a 0.037% change for total health insurance premiums paid by employers and enrollees for newly covered benefits, adjusted by a decrease in enrollee expenses for covered and/or noncovered benefits.

Premiums

Changes in premiums as a result of AB 2709 would vary by market segment. Note that such changes are related to the number of enrollees (see Table 4, Table 5 and Table 6), with health insurance that would be subject to AB 2709.

In the DMHC-regulated commercial plans, the largest premium increase (0.0409%) would occur for the large group market, while the individual market would face the smallest premium increase (0.0300%). Within the individual DMHC-regulated market, health plans offered by Covered California would experience a 0.0290% premium increase.

Among CDI-regulated commercial plans, the largest premium increase would be for the individual market (0.0335%) and the smallest would occur for the large group market (0.0298%). Covered California individual market plans regulated by CDI would experience a 0.0356% increase in premiums.

CalPERS HMO plans would experience a 0.0349% premium increase due to AB 2709.

Enrollee Expenses

AB 2709-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 4, Table 5, and Table 6) with health insurance that would be subject to AB 2709 and expected to use the relevant services during the year after enactment.

In all DMHC- and CDI-regulated plans, and in CalPERS, enrollee expenses would decrease due to the prohibition on balance billing by EGMT providers and the reduced cost sharing. The reduction in cost sharing is due to treating claims as in-network where coinsurance and copayment rates are lower than they are for out-of-network claims. Expenses for noncovered benefits would decrease by \$0.15 PMPM across CalPERS, DMHC- and CDI-regulated markets, while cost sharing reductions varied from a low of \$0.0116 PMPM for the individual CDI-regulated market to a high of \$0.0579 PMPM in the large group DMHC-regulated market.

It is possible that some enrollees incurred expenses related to services for which coverage was denied, but CHBRP cannot estimate the frequency with which such situations occur and so cannot offer a calculation of impact. However, due to the emergency nature of EGMT services, it is unlikely that services were denied, rather they were considered out-of-network at baseline and incurred higher cost sharing and balance billed amounts.

Average enrollee expenses per user

CHBRP estimates that the 14,776,000 enrollees with uncovered or cost sharing-related expenses at baseline would receive a \$35,296,000 reduction in their out-of-pocket spending for covered (\$8,216,000 in reduced cost sharing) and noncovered expenses (\$27,080,000) associated with EGMT services (Table 4).

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

CHBRP does not project any cost offsets or savings in health care that would result because of the enactment of provisions in AB 2709. There could be downward pressure on contracted allowed amounts in the long-term due to health plan and insurer negotiations with providers that are not estimated from the first two years after enactment. These issues will be discussed more fully in the *Long-Term Impacts* section.

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 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 4, Table 5, and Table 6), CHBRP would expect no measurable change in the number of uninsured persons due to the enactment of AB 2709.

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 2709.

How Lack of Benefit Coverage Results in Cost Shifts to Other Payers

CHBRP assumes that enrollees who do not have benefit coverage pay for services directly (e.g., self-pay). In the case of AB 2709, the EGMT services are already covered benefits, but due to the nature of out-of-network EGMT services, the covered benefit may still have resulted in enrollee out-of-pocket spending in the form of cost sharing or balance billing. However, at baseline it is unlikely that all balance billed charges were actually paid, which may have resulted in charity care, provider bad debt, or payments by public programs. The prohibition on balance billing for EGMT services will result in balance billed charges being reduced to zero. The change in out-of-network allowed charge from an external benchmark to the in-network allowed charge will result in health plans and insurers paying higher per unit costs.

Table 5. Baseline Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2023

	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	
Enrollee Counts										
Total enrollees in plans/policies subject to state mandates (d)	8,317,000	2,125,000	2,758,000	881,000	7,158,000	876,000	485,000	44,000	166,000	22,810,000
Total enrollees in plans/policies subject to AB2709	8,317,000	2,125,000	2,758,000	881,000	0	0	485,000	44,000	166,000	14,776,000
Premium Costs										
Average portion of premium paid by employer	\$407.24	\$369.14	\$0.00	\$557.65	\$238.69	\$521.94	\$465.60	\$379.33	\$0.00	\$84,852,462,000
Average portion of premium paid by enrollee	\$166.59	\$204.69	\$691.58	\$113.48	\$0.00	\$0.00	\$228.48	\$246.41	\$572.88	\$48,534,724,000
Total Premium	\$573.83	\$573.83	\$691.58	\$671.13	\$238.69	\$521.94	\$694.08	\$625.74	\$572.88	\$133,387,186,000
Enrollee Expenses										
Cost sharing for covered benefits (deductibles, copays, etc.)	\$48.46	\$124.44	\$175.87	\$58.77	\$0.00	\$0.00	\$146.18	\$200.65	\$200.15	\$15,807,011,000
Expenses for noncovered benefits (e)	\$0.15	\$0.15	\$0.15	\$0.15	\$0.00	\$0.00	\$0.15	\$0.15	\$0.15	\$27,080,000
Total Expenditures	\$622.44	\$698.42	\$867.61	\$730.04	\$238.69	\$521.94	\$840.41	\$826.54	\$773.17	\$149,221,277,000

Source: California Health Benefits Review Program, 2022.

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

(b) 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.

(c) 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.

(d) 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.

(e) 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 6. Postmandate Per Member Per Month Premiums and Total Expenditures by Market Segment, California, 2023

	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	
Enrollee Counts										
Total enrollees in plans/policies subject to state mandates (d)	8,317,000	2,125,000	2,758,000	881,000	7,158,000	876,000	485,000	44,000	166,000	22,810,000
Total enrollees in plans/policies subject to AB 2709	8,317,000	2,125,000	2,758,000	881,000	0	0	485,000	44,000	166,000	14,776,000
Premium Costs										
Average portion of premium paid by employer	\$0.1667	\$0.1392	\$0.0000	\$0.1946	\$0.0000	\$0.0000	\$0.1388	\$0.1180	\$0.0000	\$23,118,000
Average portion of premium paid by enrollee	\$0.0682	\$0.0772	\$0.2078	\$0.0396	\$0.0000	\$0.0000	\$0.0681	\$0.0767	\$0.1918	\$16,890,000
Total Premium	\$0.2349	\$0.2164	\$0.2078	\$0.2342	\$0.0000	\$0.0000	\$0.2069	\$0.1947	\$0.1918	\$40,008,000
Enrollee Expenses										
Cost sharing for covered benefits (deductibles, copays, etc.)	-\$0.0579	-\$0.0313	-\$0.0244	-\$0.0572	\$0.0000	\$0.0000	-\$0.0341	-\$0.0140	-\$0.0116	-\$8,216,000
Expenses for noncovered benefits (e)	-\$0.1527	-\$0.1527	-\$0.1527	-\$0.1527	\$0.0000	\$0.0000	-\$0.1527	-\$0.1527	-\$0.1527	-\$27,080,000
Total Expenditures	\$0.0243	\$0.0324	\$0.0307	\$0.0242	\$0.0000	\$0.0000	\$0.0201	\$0.0280	\$0.0275	\$4,712,000
Postmandate Percent Change										
Percent change insured premiums	0.0409%	0.0377%	0.0300%	0.0349%	0.0000%	0.0000%	0.0298%	0.0311%	0.0335%	0.0300%
Percent Change Total Expenditures	0.0039%	0.0046%	0.0035%	0.0033%	0.0000%	0.0000%	0.0024%	0.0034%	0.0036%	0.0032%

Source: California Health Benefits Review Program, 2022.

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

(b) 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.

(c) 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.

(d) 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.

(e) 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.

LONG-TERM IMPACTS

In this section, CHBRP estimates the long-term impact of AB 2709, 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 typically 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

In the long term, no changes in utilization are likely to result due to the enactment of AB 2709.

Cost Impacts

Enactment of AB 2709 would prohibit balance billing for EGMT services and result in a benchmark price set at the in-network allowed charge to be used by health plans and insurers in paying for out-of-network EGMT services. The overall per unit cost paid to EGMT providers will decrease from a total of \$1,710 at baseline to \$1,650 postmandate. The \$1,650 paid to EGMT providers will come from different sources postmandate, with a larger share coming from health plans and insurers and a smaller share coming from enrollee cost sharing due to the requirement to apply in-network cost sharing to out-of-network EGMT services. The \$1,710 collected by EGMT service providers at baseline from out-of-network allowed amount payments, enrollee cost sharing, and balance billing collections is 3.5% or \$60 greater than the payment amount per unit that EGMT companies will receive postmandate. Due to a minor difference in the overall payment for out-of-network EGMT services, CHBRP finds no immediate threat to revenues or the sustainability of EGMT providers due to AB 2709.

AB 2709 could disincentivize negotiation between health plans and insurers and EGMT providers because of the ceiling set by AB 2709 at 125% of Medicare or the in-network allowed charge, whichever is greater. EGMT providers may be unable to negotiate a higher amount than the average in-network allowed charge to become an in-network provider, because the plan or insurer could decide not to contract and still pay the same price for the same service. By not contracting at all, or offering 125% of Medicare to network providers, they could effectively lower the in-network allowed charge which would also suppress prices paid to out-of-network providers. A recent case study suggests that the AB 72 surprise billing laws in California may incentivize health plans and insurers to cancel contracts or negotiate lower rates with contracted providers to suppress the in-network allowed charge, given that the in-network allowed charge acts as a ceiling on charges for out-of-network claims (Duffy, 2019). In the long-term, this type of health plan or insurer behavior would limit the paid amount for claims to the in-network allowed without a need to negotiate and contract with EGMT providers for services. It could also result in fewer EGMT firms entering the market or staying in the market, especially if their main profit source was in balance billing consumers to obtain higher prices for the services provided.

APPENDIX A TEXT OF BILL ANALYZED

On February 22, 2022, the California Assembly Committee on Health requested that CHBRP analyze AB 2709.

ASSEMBLY BILL

NO. 2709

Introduced by Assembly Member Boerner Horvath

February 18, 2022

An act to add Section 1371.56 to the Health and Safety Code, and to add Section 10126.66 to the Insurance Code, relating to health care coverage.

LEGISLATIVE COUNSEL'S DIGEST

AB 2709, as introduced, Boerner Horvath. Emergency ground medical transportation.

Existing law, the Knox-Keene Health Care Service Plan Act of 1975, provides for the licensure and regulation of health care service plans by the Department of Managed Health Care and makes a willful violation of the act a crime. Existing law also provides for the regulation of health insurers by the Department of Insurance. Existing law requires that health care service plan contracts and health insurance policies provide coverage for certain services and treatments, including emergency medical transportation services.

This bill would require a health care service plan contract or a health insurance policy issued, amended, or renewed on or after January 1, 2023, to require an enrollee or insured who receives covered services from a noncontracting ground ambulance provider to pay no more than the same cost-sharing amount that the enrollee or insured would pay for the same covered services received from a contracting ground ambulance provider, and would prohibit the noncontracting ground ambulance provider from billing or sending to collections a higher amount. The bill would require the plan or insurer to reimburse a noncontracting ground ambulance provider the greater of the average contracted rate or 125% of the Medicare reimbursement rate for those services, as specified. Because a willful violation of the bill's requirements relative to a health care service plan would be a crime, the bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

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

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

SECTION 1. Section 1371.56 is added to the Health and Safety Code, to read:

1371.56. (a) (1) Notwithstanding Section 1367.11, a health care service plan contract issued, amended, or renewed on or after January 1, 2023, shall require an enrollee who receives covered services from a noncontracting ground ambulance provider to pay no more than the same cost-sharing amount that the enrollee would pay for the same covered services received from a contracting ground ambulance provider. This amount shall be referred to as the “in-network cost-sharing amount.”

(2) An enrollee shall not owe the noncontracting ground ambulance provider more than the in-network cost-sharing amount for services subject to this section. At the time of payment by the plan to the noncontracting provider, the plan shall inform the enrollee and the noncontracting provider of the in-network cost-sharing amount owed by the enrollee.

(b) (1) The in-network cost-sharing amount paid by the enrollee pursuant to this section shall count toward the limit on annual out-of-pocket expenses established under Section 1367.006.

(2) Cost sharing arising pursuant to this section shall count toward any deductible in the same manner as cost sharing would be attributed to a contracting provider.

(3) The in-network cost-sharing amount paid by the enrollee pursuant to this section shall satisfy the enrollee’s obligation to pay cost sharing for the health service.

(c) A noncontracting ground ambulance provider shall only advance to collections the in-network cost-sharing amount, as determined by the plan pursuant to subdivision (a), that the enrollee failed to pay.

(d) (1) Unless otherwise agreed to by the noncontracting ground ambulance provider and the health care service plan, the plan shall reimburse for ground ambulance services the greater of the average contracted rate or 125 percent of the amount Medicare reimburses on a fee-for-service basis for the same or similar services in the general geographic region in which the services were rendered. For purposes of this section, “average contracted rate” means the average of the contracted commercial rates paid by the health care service plan or its delegated entity for the same or similar services in the geographic region.

(2) If either the ground ambulance provider or the plan disputes the payment amount, the provider or the plan may appeal through the independent dispute resolution process established by the department pursuant to Section 1371.30.

(e) This section does not affect the balance billing protections for Medi-Cal beneficiaries under Section 14019.4 of the Welfare and Institutions Code.

SEC. 2. Section 10126.66 is added to the Insurance Code, to read:

10126.66. (a) (1) Notwithstanding Section 10352, a health insurance policy issued, amended, or renewed on or after January 1, 2023, shall require an insured who receives covered services from a noncontracting ground ambulance provider to pay no more than the same cost-sharing amount that the insured would pay for the same covered services received from a contracting ground ambulance provider. This amount shall be referred to as the “in-network cost-sharing amount.”

(2) An insured shall not owe the noncontracting ground ambulance provider more than the in-network cost-sharing amount for services subject to this section. At the time of payment by the insurer to the noncontracting provider, the insurer shall inform the insured and the noncontracting provider of the in-network cost-sharing amount owed by the insured.

(b) (1) The in-network cost-sharing amount paid by the insured pursuant to this section shall count toward the limit on annual out-of-pocket expenses established under Section 10112.28.

(2) Cost sharing arising pursuant to this section shall count toward any deductible in the same manner as cost sharing would be attributed to a contracting provider.

(3) The in-network cost-sharing amount paid by the insured pursuant to this section shall satisfy the insured’s obligation to pay cost sharing for the health service.

(c) A noncontracting ground ambulance provider shall only advance to collections the in-network cost-sharing amount, as determined by the insurer pursuant to subdivision (a), that the insured failed to pay.

(d) (1) Unless otherwise agreed to by the noncontracting ground ambulance provider and the health insurer, the insurer shall reimburse for ground ambulance services the greater of the average contracted rate or 125 percent of the amount Medicare reimburses on a fee-for-service basis for the same or similar services in the general geographic region in which the services were rendered. For purposes of this section, “average contracted rate” means the average of the contracted commercial rates paid by the health insurer or its delegated entity for the same or similar services in the geographic region.

(2) If either the ground ambulance provider or the insurer disputes the payment amount, the provider or the insurer may appeal through the independent dispute resolution process established by the commissioner pursuant to Section 10112.81.

(e) This section does not affect the balance billing protections for Medi-Cal beneficiaries under Section 14019.4 of the Welfare and Institutions Code.

SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIII B of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.

APPENDIX B COST IMPACT ANALYSIS: DATA SOURCES, CAVEATS, AND ASSUMPTIONS

With the assistance of CHBRP's contracted actuarial firm, Milliman, Inc, the cost analysis presented in this report was prepared by the faculty and researchers connected to CHBRP's Task Force with expertise in health economics.¹⁴ Information on the generally used data sources and estimation methods, as well as caveats and assumptions generally applicable to CHBRP's cost impacts analyses are available at CHBRP's website.¹⁵

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

Analysis-Specific Caveats and Assumptions

The analytic approach and key assumptions are determined by the subject matter and language of the bill being analyzed by CHBRP. As a result, analytic approaches may differ between topically similar analyses, and therefore the approach and findings may not be directly comparable.

Methodology and Assumptions for Baseline Benefit Coverage

- The population subject to the mandate includes individuals covered by DMHC-regulated commercial insurance plans, CDI-regulated policies, CalPERS plans subject to the requirements of the Knox-Keene Health Care Service Plan Act, and Medi-Cal HMOs.
- CHBRP assumed 100% of the population subject to mandate currently have some form of ambulance coverage and are subject to AB 2709.
- CHBRP assumed Med-iCal enrollees do not pay for emergency ground medical transportation. Although Medi-Cal HMOs are subject to the bill, enrollees will not have a cost impact.

Methodology and Assumptions for Baseline Utilization and Cost

- The average cost and utilization rates for emergency ground transportation are based on the 2019 Consolidated Health Cost Guidelines Sources Database (CHSD). The data was limited to California commercial enrollees.
- 'Emergency transportation' and 'emergency response' cases were identified using procedure codes. 'Mileage' and 'supplies' associated with the emergency response and transportation cases were included in the cost per case. The procedure codes used to identify emergency ground transportation claims are in Table B-1. No other procedure codes were included in the cost per case.
- All cases were identified as in-network or out-of-network emergency ground medical transportation (EGMT). Only out-of-network utilization was included in our analysis.
- Utilization was trended from 2019 to 2023 using 0% trend. Billed and allowed costs per case were trended using 4.0% annual medical trend from the 2021 Milliman Health Cost Guidelines.

Methodology and Assumptions for Baseline Cost Sharing

- The paid-to-allowed ratios for emergency transportation and emergency response services were calculated for in and out of network services using the CHSD database.

¹⁴ CHBRP's authorizing statute, available at 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.

¹⁵ See method documents posted at http://chbrp.com/analysis_methodology/cost_impact_analysis.php; in particular, see *2022 Cost Analyses: Data Sources, Caveats, and Assumptions*.

- To adjust for average plan benefit differentials by line of business, factors were calculated by comparing paid-to-allowed ratios of each line of business to the overall paid to allowed ratios of the California commercial population in the CHSD database.
- The emergency transportation and response paid-to-allowed ratios were multiplied by the line of business factors to calculate line of business specific emergency transportation and response paid-to-allowed ratios.
- One minus the line of business adjusted **out-of-network** paid-to-allowed ratio was applied multiplicatively to the out-of-network allowed cost to determine the enrollee share of cost.
- The plan cost was calculated as the out-of-network allowed amount minus the enrollee share of cost.
- The balance billing component, labeled as ‘non-covered benefits’ in the cost model, was calculated as the out-of-network billed charge minus the out-of-network allowed amount.
- Providers are not always able to collect the full balance billed charge. EGMT balance billing collection data is not available, but it is estimated that physicians collect 65% of charged amounts for likely surprise bills, (Biener et al., 2021). Assuming 65% of out-of-network EGMT billed charges are collected, CHBRP estimates 45% of EGMT balance billed charges are paid by the enrollee.

Methodology and Assumptions for Postmandate Utilization

- We assume emergency ground transportation utilization would not increase as a result of AB2709.

Methodology and Assumptions for Postmandate Cost

- The average costs for emergency ground transportation are based on the 2019 Consolidated Health Cost Guidelines Sources Database (CHSD). The data was limited to California commercial enrollees.
- The average in-network allowed cost for each procedure code in **Table B-1** was calculated by Metropolitan Statistical Area (MSA). The maximum of the in-network average allowed and 125% of Medicare was assumed to be the postmandate cost per service.
- Out-of-network ‘emergency transportation’ and ‘emergency response’ cases identified at baseline were repriced to the new postmandate cost per service.
- Billed and allowed costs per case were estimated to increase from 2019 to 2023 using 4.0% annual medical trend.

Methodology and Assumptions for Postmandate Cost Sharing

- One minus the line of business adjusted **in-network** paid-to-allowed ratio was applied multiplicatively to the repriced out-of-network allowed cost to determine the enrollee share of cost.
- The plan cost was calculated as the repriced out-of-network allowed cost amount minus the enrollee share of cost.
- The balance billing component, labeled as ‘non-covered benefits’ in the cost model, is \$0 because balance billing is not allowed under AB 2709.

Table B-1: Emergency Ground Transportation Procedure Codes

HCPCS	Long Description	Category
A0998	Ambulance response and treatment, no transport	Emergency Response
S0207	Paramedic intercept, non-hospital-based ALS service (non-voluntary), non-transport	Emergency Response

HCPCS	Long Description	Category
S0208	Paramedic intercept, hospital-based ALS service (non-voluntary), non-transport	Emergency Response
A0225	Ambulance service, neonatal transport, base rate, emergency transport, one way	Emergency Transportation
A0427	Ambulance service, advanced life support, emergency transport, level 1 (ALS 1 - emergency)	Emergency Transportation
A0429	Ambulance service, basic life support, emergency transport (BLS - emergency)	Emergency Transportation
A0433	Advanced life support, level 2 (ALS 2)	Emergency Transportation
A0021	Ambulance service, outside state per mile, transport (Medicaid only)	Mileage
A0380	BLS mileage (per mile)	Mileage
A0390	ALS mileage (per mile)	Mileage
A0425	Ground mileage, per statute mile	Mileage
A0888	Noncovered ambulance mileage, per mile (e.g., for miles traveled beyond closest appropriate facility)	Mileage
A0382	BLS routine disposable supplies	Supplies
A0384	BLS specialized service disposable supplies; defibrillation (used by ALS ambulances and bls ambulances in jurisdictions where defibrillation is permitted in bls ambulances)	Supplies
A0392	ALS specialized service disposable supplies; defibrillation (to be used only in jurisdictions where defibrillation cannot be performed in bls ambulances)	Supplies
A0394	ALS specialized service disposable supplies; IV drug therapy	Supplies
A0396	ALS specialized service disposable supplies; esophageal intubation	Supplies
A0398	ALS routine disposable supplies	Supplies
A0422	Ambulance (ALS or BLS) oxygen and oxygen supplies, life sustaining situation	Supplies

Source: California Health Benefits Review Program, 2022.

Second-Year Impacts on Benefit Coverage, Utilization, and Cost

CHBRP has considered whether continued implementation during the second year of the benefit coverage requirements of AB 2709 would have a substantially different impact on utilization of either the tests, treatments, or services for which coverage was directly addressed, the utilization of any indirectly affected utilization, or both. CHBRP reviewed the literature and consulted content experts about the possibility of varied second-year impacts and determined the second year’s impacts of AB 2709 would be substantially the same as the impacts in the first year (see Table 4). Minor changes to expenditures are

due to an estimated 4% per year increase in prices paid, but no changes in utilization per 1,000 are expected.

REFERENCES

- Adler L, Fiedler M, Ginsburg PB, et al. *State Approaches to Mitigating Surprise Out-of-Network Billing*. Washington, D.C.: USC-Brookings Schaeffer Initiative for Health Policy; 2019.
- Amin K, Pollitz K, Claxton G, Rae M, Cox C. Ground ambulance rides and potential for surprise billing. Peterson-Kaiser Family Foundation Health System Tracker. June 24, 2021. Available at: <https://www.healthsystemtracker.org/brief/ground-ambulance-rides-and-potential-for-surprise-billing/>. Accessed March 27, 2022.
- Backer HD, D'Arcy NT, Davis AJ, Barton B, Sporer KA. Statewide Method of Measuring Ambulance Patient Offload Times. *Prehospital Emergency Care*. 2019;23(3):319-326. doi:10.1080/10903127.2018.1525456
- Biener AI, Chartock BL, Garmon C, Trish E. (2021). Emergency Physicians Recover a Higher Share of Charges From Out-of-Network Care than from In-Network Care. *Health Affairs*, 40(4): 622-628. Available at: <https://doi.org/10.1377/hlthaff.2020.01471>. Accessed March 25, 2022.
- Burke LG, Joyce N, Baker WE, et al. The effect of an ambulance diversion ban on emergency department length of stay and ambulance turnaround time. *Annals of Emergency Medicine*. 2013;61(3):303-311.e1. doi:10.1016/j.annemergmed.2012.09.009
- Burt CW, McCaig LF, Valverde RH. Analysis of ambulance transports and diversions among US emergency departments. *Annals of Emergency Medicine*. 2006;47(4):317-326.
- California EMS Authority. Emergency Medical Services Data Report Calendar Year 2019. April 2021. Available at: https://emsa.ca.gov/wp-content/uploads/sites/71/2021/04/SYS_100-03_Annual_EMS_Report_CY2019.pdf. Accessed March 27, 2022.
- California EMS Authority. State of California Emergency Medical Services Law. February 2019. Available at: <https://emsa.ca.gov/wp-content/uploads/sites/71/2019/07/2019-EMS-Statute-Book.pdf>. Accessed April 1, 2020.
- Centers for Medicare & Medicaid Services. Emergency Triage, Treat, and Transport (ET3) Model. September 23, 2021. Available at: <https://innovation.cms.gov/innovation-models/et3>. Accessed March 27, 2022.
- Chhabra KR, McGuire K, Sheetz KH, Scott JW, Nuliyalu U, Ryan AM. Most Patients Undergoing Ground And Air Ambulance Transportation Receive Sizable Out-Of-Network Bills. *Health Affairs (Millwood)*. 2020;39(5):777-782. doi:10.1377/hlthaff.2019.01484
- Duffy EL. Influence of Out-of-Network Payment Standards on Insurer Provider Bargaining: California's Experience. *American Journal of Managed Care*. 2019;25(8): e243-e246. Available at: <https://www.ajmc.com/view/influence-of-outofnetwork-payment-standards-on-insurer-provider-bargaining-californias-experience>. Accessed March 27, 2022.
- Friedman J, Mann NC, Hansen H, et al. Racial/Ethnic, Social, and Geographic Trends in Overdose-Associated Cardiac Arrests Observed by US Emergency Medical Services During the COVID-19 Pandemic. *JAMA Psychiatry*. 2021;78(8):886-895. doi:10.1001/jamapsychiatry.2021.0967
- Garmon C, Chartock B. One in five inpatient emergency department cases may lead to surprise bills. *Health Affairs (Millwood)*. 2017;36(1):177-181.
- Hamel L, Norton M, Pollitz K, et al. The Burden of Medical Debt: Results from The Kaiser Family Foundation/New York Times Medical Bill Survey. January 2016. Henry J. Kaiser Family

Foundation. Available at: <https://www.kff.org/wp-content/uploads/2016/01/8806-the-burden-of-medical-debt-results-from-the-kaiser-family-foundation-new-york-times-medical-bills-survey.pdf>. Accessed March 25, 2022.

- Hanchate AD, Paasche-Orlow MK, Baker WE, Lin MY, Banerjee S, Feldman J. Association of Race/Ethnicity with Emergency Department Destination of Emergency Medical Services Transport. *JAMA Network Open*. 2019;2(9):e1910816. Published 2019 Sep 4. doi:10.1001/jamanetworkopen.2019.10816
- Handberry M, Bull-Otterson L, Dai M, et al. Changes in Emergency Medical Services Before and During the COVID-19 Pandemic in the United States, January 2018-December 2020. *Clinical Infectious Diseases*. 2021;73(Suppl 1):S84-S91. doi:10.1093/cid/ciab373
- Hoadley, J., Keith, K., & Lucia, K. (2020). Unpacking the No Surprises Act: an opportunity to protect millions. *Health Affairs*. December, 18.
- Hsia RY, Asch SM, Weiss RE, et al. California hospitals serving large minority populations were more likely than others to employ ambulance diversion. *Health Affairs (Millwood)*. 2012;31(8):1767-1776. doi:10.1377/hlthaff.2011.1020
- Hsia RY, Huang D, Mann NC, et al. A US National Study of the Association Between Income and Ambulance Response Time in Cardiac Arrest. *JAMA Network Open*. 2018;1(7):e185202. Published 2018 Nov 2. doi:10.1001/jamanetworkopen.2018.5202
- Hsuan C, Hsia RY, Horwitz JR, Ponce NA, Rice T, Needleman J. Ambulance diversions following public hospital emergency department closures. *Health Services Research*. 2019;54(4):870-879. doi:10.1111/1475-6773.13147
- Institute of Medicine. *Emergency Medical Services: At the Crossroads*. Washington, DC: The National Academies Press; 2007.
- Jacobs E, Heller N, Waheed S, Appel S. Emergency Medical Services in California: Wages, Working Conditions, and Industry Profile. UC Berkeley Labor Center and UCLA Labor Center. 2017. Available at: <http://laborcenter.berkeley.edu/pdf/2017/emergency-medical-services-in-california.pdf>. Accessed March 29, 2022.
- Kleindorfer DO, Lindsell CJ, Broderick JP, et al. Community socioeconomic status and prehospital times in acute stroke and transient ischemic attack: do poorer patients have longer delays from 911 call to the emergency department?. *Stroke*. 2006;37(6):1508-1513. doi:10.1161/01.STR.0000222933.94460.dd
- Knowlton A, Weir BW, Hughes BS, et al. Patient demographic and health factors associated with frequent use of emergency medical services in a midsized city. *Academic Emergency Medicine*. 2013;20(11):1101-1111. doi:10.1111/acem.12253
- Lerner EB, Newgard CD, Mann NC. Effect of the Coronavirus Disease 2019 (COVID-19) Pandemic on the U.S. Emergency Medical Services System: A Preliminary Report. *Academic Emergency Medicine*. 2020;27(8):693-699. doi:10.1111/acem.14051
- Los Angeles County EMS Agency. BLS & ALS Base Rate Ambulance Transport Charges Averages by County. September 2014. Available at: http://file.lacounty.gov/SDSInter/dhs/223395_Amb_Rate2014.pdf. Accessed April 1, 2020.

- Los Angeles County EMS Agency. General Public Ambulance Rates. April 9, 2021. Available at: http://file.lacounty.gov/SDSInter/dhs/1106181_GeneralPublicAmbulanceRatesEffective7.1.21.pdf. Accessed on March 27, 2022.
- Los Angeles County EMS Agency. Los Angeles County EMS System Report. May 1, 2021. Available at: https://file.lacounty.gov/SDSInter/dhs/1106985_2020EMSAnnualDataReport.pdf. Accessed on March 27, 2022.
- Mann NC. EMS By the Numbers Impact of COVID-19. March 21, 2022. Available at: https://nemsis.org/wp-content/uploads/2022/03/NEMSIS-TAC-Update-to-COVID_19-Trends-03_21_2022-Pre-Findings-V3.pdf Accessed March 27, 2022.
- Meisel ZF, Pines JM, Polsky D, Metlay JP, Neuman MD, Branas CC. Variations in ambulance use in the United States: the role of health insurance. *Academic Emergency Medicine*. 2011;18(10):1036-1044.
- Melgoza E, Beltran-Sanchez H, Vargas Bustamante A. Emergency Medical Service Use Among Latinos Aged 50 and Older in California Counties, Except Los Angeles, During the Early COVID-19 Pandemic Period. *Front. Public Health*. 2021; 9:660289. DOI: 10.3389/fpubh.2021.660289. Accessed March 27, 2022.
- Narad RA, Hatch EL, Haley TL. *Organization and Financing of Local EMS Agencies in California, 1993-1994*. Rancho Cordova, CA: California Emergency Medical Services Authority; 1994.
- O'Brien M, et al., "Surprise Bills for Ground Ambulance Services," To the Point (blog), Commonwealth Fund, Nov. 15, 2021. <https://doi.org/10.26099/KJ08-MZ71>Office of EMS. The History of EMS at NHTSA. National Highway Transportation Safety Administration. 2020. Available at: <https://www.ems.gov/OEMShistory.html>. Accessed March 24, 2022.
- Rollman JE, Kloner RA, Bosson N, et al. Emergency Medical Services Responses to Out-of-Hospital Cardiac Arrest and Suspected ST-Segment-Elevation Myocardial Infarction During the COVID-19 Pandemic in Los Angeles County. *Journal of the American Heart Association*. 2021;10(12):e019635. doi:10.1161/JAHA.120.019635
- Rosato, D. (2021, February 27). Your ambulance ride could still leave you with a surprise medical bill. Consumer Reports. Retrieved March 28, 2022, from <https://www.consumerreports.org/medical-billing/your-ambulance-ride-could-still-leave-you-with-a-surprise-medical-bill-no-surprises-act-a2373503204/>
- Rucker DW, Edwards RA, Burstin HR, O'Neil AC, Brennan TA. Patient-specific predictors of ambulance use. *Annals of Emergency Medicine*. 1997;29(4):484-491. doi:10.1016/s0196-0644(97)70221-x
- Somers S, Brown J, Fitzpatrick S, Landi C, Gingold DB, Marcozzi D. Innovative Use of Emergency Medicine Providers in an Urban Setting to Reduce Overutilization of 9-1-1. *Journal of Emergency Medicine*. 2020;59(6):836-842. doi:10.1016/j.jemermed.2020.07.003
- UnitedHealthcare Services Inc. Ambulance Policy, Professional Reimbursement Policy. January 1, 2022. Available at: [https://www.uhcprovider.com/content/dam/provider/docs/public/policies/medicaid-comm-plan-reimbursement/UHCCP-Ambulance-Policy-\(R0123\).pdf](https://www.uhcprovider.com/content/dam/provider/docs/public/policies/medicaid-comm-plan-reimbursement/UHCCP-Ambulance-Policy-(R0123).pdf). Accessed March 27, 2022.
- U.S. Government Accountability Office (U.S. GAO). Ambulance Providers: Costs and Medicare Margins Varied Widely; Transports of Beneficiaries Have Increased. GAO13-6. October 1, 2012. Available at: <https://www.gao.gov/assets/650/649018.pdf>. Accessed March 25, 2022.

Webb, O. Private Equity Chases Ambulances. The American Prospect. October 15, 2019. Available at: <https://prospect.org/health/private-equity-chases-ambulances-emergency-medical-transport/>.

ABOUT CHBRP

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.

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** works with Task Force members in preparing parts of the analysis, and manages 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. Information on CHBRP's analysis methodology, authorizing statute, as well as all CHBRP reports and other publications, are available at www.chbrp.org.

CHBRP Staff

Garen Corbett, MS, Director
John Lewis, MPA, Associate Director
Adara Citron, MPH, Principal Policy Analyst
Sabrina Woll, Policy Associate
Karen Shore, PhD, Contractor*
An-Chi Tsou, PhD, Contractor*

*Independent Contractor working with CHBRP to support analyses and other projects.

Faculty Task Force

Paul Brown, PhD, University of California, Merced
Timothy T. Brown, PhD, University of California, Berkeley
Janet Coffman, MA, MPP, PhD, *Vice Chair for Medical Effectiveness*, University of California, San Francisco
Todd Gilmer, PhD, University of California, San Diego
Sylvia Guendelman, PhD, LCSW, University of California, Berkeley
Elizabeth Magnan, MD, PhD, *Co-Vice Chair for Public Health*, University of California, Davis
Sara McMenamin, PhD, *Vice Chair for Medical Effectiveness and Public Health*, University of California, San Diego
Joy Melnikow, MD, MPH, *Co-Vice Chair for Public Health*, University of California, Davis
Aimee Moulin, MD, University of California, Davis
Jack Needleman, PhD, University of California, Los Angeles
Mark A. Peterson, PhD, University of California, Los Angeles
Nadereh Pourat, PhD, *Vice Chair for Cost*, University of California, Los Angeles
Dylan Roby, PhD, University of California, Irvine
Marilyn Stebbins, PharmD, University of California, San Francisco

Task Force Contributors

Bethney Bonilla, MA, University of California, Davis
Danielle Casteel, MA, University of California, San Diego
Shana Charles, PhD, MPP, University of California, Los Angeles, and California State University, Fullerton
Margaret Fix, MPH, University of California, San Francisco
Naomi Hillery, MPH, University of California, San Diego

Jeffrey Hoch, PhD, University of California, Davis
Julia Huerta, MPH, University of California, Davis
Michelle Keller, PhD, MPH, University of California, Los Angeles
Jacqueline Miller, University of California, San Francisco
Marykate Miller, MS, University of California, Davis
Amy Quan, University of California, San Francisco
Dominique Ritley, MPH, University of California, Davis
Emily Shen, University of California, Los Angeles
Riti Shimkhada, PhD, University of California, Los Angeles
Meghan Soulsby Weyrich, MPH, University of California, Davis
Steven Tally, PhD, University of California, San Diego
Sara Yoeun, MPH, University of California, San Diego

National Advisory Council

Lauren LeRoy, PhD, Strategic Advisor, L. LeRoy Strategies, Chair
Stuart H. Altman, PhD, Professor of National Health Policy, Brandeis University, Waltham, MA
Deborah Chollet, PhD, Senior Fellow, Mathematica Policy Research, Washington, DC
Allen D. Feezor, Former Deputy Secretary for Health Services, North Carolina Department of Health and Human Services, Raleigh, NC
Charles “Chip” Kahn, MPH, President and CEO, Federation of American Hospitals, Washington, DC
Jeffrey Lerner, PhD, President Emeritus, ECRI Institute Headquarters, Plymouth Meeting, PA; Adjunct Senior Fellow, Leonard Davis Institute of Health Economics, University of Pennsylvania
Donald E. Metz, Executive Editor, *Health Affairs*, Bethesda, MD
Dolores Mitchell, (Retired) Executive Director, Group Insurance Commission, Boston, MA
Marilyn Moon, PhD, Senior Fellow, Retired, American Institutes for Research, Washington, DC
Carolyn Pare, (Retired) President and CEO, Minnesota Health Action Group, Bloomington, MN
Richard Roberts, MD, JD, Professor Emeritus of Family Medicine, University of Wisconsin-Madison
Alan Weil, JD, MPP, Editor-in-Chief, *Health Affairs*, Bethesda, MD

ACKNOWLEDGMENTS

CHBRP gratefully acknowledges the efforts of the team contributing to this analysis:

Megan van Noord, MS, of the University of California, Davis, conducted the literature search. Jeffrey Rollman, MPH, CHBRP contractor, prepared the background. Dylan Roby, PhD, of the University of California, Irvine, prepared the cost impact analysis. Casey Hammer, FSA, MAAA, of Milliman, provided actuarial analysis. Garen Corbett, MS, of CHBRP staff prepared the Policy Context and synthesized the individual sections into a single report. A subcommittee of CHBRP's National Advisory Council (see previous page of this report) and a member(s) of the CHBRP Faculty Task Force, Mark A. Peterson, PhD, of the University of California, Los Angeles, and CHBRP Contractor Karen Shore, PhD, reviewed the analysis for its accuracy, completeness, clarity, and responsiveness to the Legislature's request.

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.

Garen Corbett, MS
Director

Please direct any questions concerning this document to: California Health Benefits Review Program; MC 3116; Berkeley, CA 94720-3116, info@chbrp.org, or www.chbrp.org