TECHNICAL BRIEF

AB 1843

Communicable Diseases: Hepatitis B and C

CHBRP

About the Technical Brief

This document provides details on the analytical foundation for CHBRP's analysis of AB 1843. While the main report synthesizes key findings for immediate policy consideration, this document is designed to support a deeper understanding of the background of the topic of the legislation and CHBRP's methodology and research in conducting its analysis. It contains the data sources, methods, assumptions, and other bill-specific considerations necessary for legislative staff, fiscal analysts, and other stakeholders to fully understand the scope and impact of the proposed measure.

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Acronyms and Terminology

Acronyms

AASLD/IDSA – American Association for the Study of Liver Diseases/Infectious Diseases Society of America

AB – Assembly Bill

ACA – Affordable Care Act

CA – California

CalPERS – California Public Employees' Retirement System

CDC – Centers for Disease Control and Prevention

CDI – California Department of Insurance

CHBRP – California Health Benefits Review Program

COHS – County Organized Health System

DAA – direct-acting antiviral

DHCS – Department of Health Care Services

DMHC – Department of Managed Health Care

EHB – essential health benefits

EHM – extrahepatic manifestations

FDA – U.S. Food and Drug Administration

HCC – hepatocellular carcinoma

HBV – hepatitis B virus

HCV – hepatitis C virus

HIV – human immunodeficiency virus

SVR – sustained virologic response

USPSTF – U.S. Preventive Services Task Force

Terminology

CHBRP uses the following terminology for this analysis:

Hepatitis C: A liver disease caused by infection from the hepatitis C virus (HCV), which is transmitted through exposure to infected blood or bodily fluids containing infected blood.

Direct-acting antiviral (DAA) medications: An 8- to 12-week course of oral medications that treat and cure HCV infection.

Hepatic manifestations: Diseases affecting the liver.

Extrahepatic manifestations (EHM): Diseases affecting organs outside the liver, occurring in up to 74% of HCV patients.

Cost sharing: Payment for use of covered health insurance benefits is shared between the payer (e.g., health plan/insurer or employer) and the enrollee. Common cost-sharing mechanisms include copayments, coinsurance, and/or deductibles (but do not include premium expenses[1]).

Utilization management: Utilization management techniques are used by health plans and insurers to control costs, ensure medication compatibility, and manage safety. Examples include benefit coverage requirements related to prior authorization, step therapy, quantity limits, and limits related to the age or sex of the enrollee (such as prescription-only infant formula or prostate cancer screening for men).

Prior authorization:[2] Also known as precertification, prior approval, or prospective review, prior authorization is a utilization management technique commonly used by health insurance carriers to ensure that a given medical intervention meets the insurance plan or policy's criteria for coverage (Newcomer et al., 2017). Prior authorization was developed as a

[1] Premiums are paid by most enrollees, regardless of their use of any tests, treatments, or services. Some enrollees may not pay premiums for different reasons. For example, their employers cover the full premium, or they receive benefits through Medi-Cal.
[2] More information about prior authorization is available in CHBRP's 2023 analysis *Prior Authorization in California*.

tool for insurers to assess the appropriateness of treatment that would result in a hospital admission or a high-cost procedure (Resneck, 2020). The primary uses of prior authorization include:

- **Coverage evaluation:** Allows evaluation of whether a test, treatment, or service is medically necessary and otherwise covered.
- **Safety:** Acts as a safeguard to confirm that a patient's medications are compatible and provides an opportunity to check that proper diagnostic testing has been completed to ensure patient safety prior to use of a requested treatment. Prior authorization also reduces inappropriate patient care by stopping unsafe or low-value care that is inconsistent with the most recent clinical evidence.
- **Cost control:** Imposition of prior authorization for nonpreferred medications can encourage the use of preferred medications that can be procured at lower price.

Legislative Text Analyzed

CHBRP analyzed AB 1843 Communicable Diseases: Hepatitis B and C, as amended on March 2, 2026, per the request of the California Assembly Committee on Health. The text analyzed is copied below.

SECTION 1. Section 1342.76 is added to the Health and Safety Code, to read:

1342.76. (a) (1) A health care service plan shall not subject direct-acting antiviral drugs that are medically necessary for the treatment of hepatitis C, including, but not limited to, sofosbuvir/velpatasvir, sofosbuvir/ledipasvir, glecaprevir/pibrentasvir, or elbasvir/grazoprevir, to prior authorization, except as provided in paragraph (2).

(2) If the United States Food and Drug Administration has approved one or more therapeutic equivalents of a drug, device, or product for the treatment of hepatitis C, this section does not require a health care service plan to cover all of the therapeutically equivalent versions without prior authorization, if at least one therapeutically equivalent version is covered without prior authorization.

(b) A health care service plan's clinical criteria for hepatitis C treatment and prior authorization shall align with the current guidelines and the standard of care consistent with the standards of the American ~~Liver Foundation and~~ *Association for the Study of Liver Diseases and the* Infectious Diseases Society of America, and shall not impose prior authorization requirements, including, but not limited to, all of the following:

(1) A liver biopsy.

(2) Genotype testing.

(3) Sobriety requirements.

(4) Fibrosis staging thresholds.

(5) Elastography or FibroScan documentation.

(6) Ultrasound documentation.

(7) A specialist referral or evaluation.

~~**SEC. 2.** Section 121027 is added to the Health and Safety Code, to read:~~

~~**121027.** (a) Public health records relating to hepatitis B and hepatitis C containing personally identifying information that were developed or acquired by local health agencies or their agents shall be confidential and shall not be disclosed except as otherwise provided by law or with the written consent of the individual who is the subject of the record or by the legal representative of the individual.~~

~~(b) A local health officer may, for the purposes of case investigation and linkage to, or reengagement in care for, the person with hepatitis B or hepatitis C, may request and disclose without written consent of the individual any information, including personally identifying information, in hepatitis B and hepatitis C public health records from the person's health care provider or health care facilities as may be necessary to facilitate clinical management, treatment coordination, and the prevention of the spread of disease or occurrence of additional cases.~~

~~(c) A local health officer, for the purposes of facilitating appropriate hepatitis B and hepatitis C medical care and treatment, may further disclose the information to the person positive for hepatitis B or hepatitis C who is the subject of the record, or~~

~~the health care provider who provides the person's hepatitis care, for the purpose of proactively offering and coordinating care and treatment services. Any personally identifying information received pursuant to this subdivision by a health care provider or health care facility shall be confidential and shall not be further disclosed except as required by law or with the written consent of the individual.~~

~~(d) Any disclosures authorized by subdivision (a), (b), or (c) shall include only the information necessary for the purpose of that disclosure and shall be made only upon the agreement that the information will be kept confidential as described in subdivision (a). Any unauthorized further disclosure shall be subject to the penalties described in subdivision (e).~~

~~(e) (1) A person who negligently discloses the content of a confidential public health record to a third party, except pursuant to a written authorization, as described in subdivision (a), or as otherwise authorized by law, shall be subject to a civil penalty in an amount not to exceed five thousand dollars ($5,000), plus court costs, as determined by the court. The penalty and costs shall be paid to the person whose record was disclosed.~~

~~(2) A person who willfully or maliciously discloses the content of any confidential public health record to a third party, except pursuant to a written authorization, or as otherwise authorized by law, shall be subject to a civil penalty in an amount not less than five thousand dollars ($5,000) and not more than twenty-five thousand dollars ($25,000), plus court costs, as determined by the court. The penalty and costs shall be paid to the person whose confidential public health record was disclosed.~~

~~(3) A person who willfully, maliciously, or negligently discloses the content of a confidential public health record to a third party, except pursuant to a written authorization, or as otherwise authorized by law, that results in economic, bodily, or psychological harm to the person whose confidential public health record was disclosed, is guilty of a misdemeanor, punishable by imprisonment in a county jail for a period not to exceed one year, or a fine not to exceed twenty-five thousand dollars ($25,000), or both, plus court costs, as determined by the court. The penalty and costs shall be paid to the person whose confidential public health record was disclosed.~~

~~(4) A person who commits an act described in paragraph (1), (2), or (3) is liable to the person whose confidential public health record was disclosed for all actual damages for economic, bodily, or psychological harm that is a proximate result of the act.~~

~~(5) Each violation of this section is a separate and actionable offense.~~

~~(6) This section does not limit or expand the right of an injured person whose confidential public health record was disclosed to recover damages under any other applicable law.~~

~~(7) For the purposes of this section, a confidential public health record means the same as defined in subdivision (c) of Section 121035.~~

SEC. ~~3.~~ *2.* Section 10123.1936 is added to the Insurance Code, to read:

10123.1936. (a) (1) A health insurer shall not subject direct-acting antiviral drugs that are medically necessary for the treatment of hepatitis C, including, but not limited to, sofosbuvir/velpatasvir, sofosbuvir/ledipasvir, glecaprevir/pibrentasvir, or elbasvir/grazoprevir, to prior authorization, except as provided in paragraph (2).

(2) If the United States Food and Drug Administration has approved one or more therapeutic equivalents of a drug, device, or product for the treatment of hepatitis C, this section does not require a health insurer to cover all of the therapeutically equivalent versions without prior authorization, if at least one therapeutically equivalent version is covered without prior authorization.

(b) A health insurer's clinical criteria for hepatitis C treatment and prior authorization shall align with the current guidelines and the standard of care consistent with the standards of the American ~~Liver Foundation and~~ *Association for the Study of Liver Diseases and the* Infectious Diseases Society of America, and shall not impose prior authorization requirements, including, but not limited to, all of the following:

(1) A liver biopsy.

(2) Genotype testing.

(3) Sobriety requirements.

(4) Fibrosis staging thresholds.

(5) Elastography or FibroScan documentation.

(6) Ultrasound documentation.

(7) A specialist referral or evaluation.

~~**SEC. 4.** The Legislature finds and declares that Section 2 of this act, which adds Section 121027 to the Health and Safety Code, imposes a limitation on the public's right of access to the meetings of public bodies or the writings of public officials and agencies within the meaning of Section 3 of Article I of the California Constitution. Pursuant to that constitutional provision, the Legislature makes the following findings to demonstrate the interest protected by this limitation and the need for protecting that interest:~~

~~In order to protect confidential and personal medical information, it is necessary that the public health records relating to hepatitis B and hepatitis C, as described in this act, remain confidential.~~

SEC. ~~5.~~ *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.

Additional Policy Context

This brief provides additional material to support the findings presented in CHBRP's Analysis of Assembly Bill 1843 Communicable Disease: Hepatitis B and C.[3] The following sections contain additional details on the California and federal policy landscape. While this information is essential to the completeness of the analysis, it has been placed in this separate brief to maintain the flow of the main report. Readers are encouraged to consult this material for deeper insights into existing laws, comprehensive data sets, and technical details that informed the analysis and conclusions of the main report.

California Policy Landscape

Preventive Services

Both the California Preventive Services Mandate and the Federal Preventive Services Mandate require coverage of certain preventive services without cost sharing for enrollees in nongrandfathered plans and policies following these four sets of Federal recommendations:[4,5]

- The U.S. Preventive Services Task Force (USPSTF) A and B recommendations;
- The Health Resources and Services Administration (HRSA)-supported health plan coverage guidelines for women's preventive services;
- The HRSA-supported comprehensive guidelines for infants, children, and adolescents, which include:
  - The Bright Futures Recommendations for Pediatric Preventive Health Care; and
  - The recommendations of the Secretary's Advisory Committee on Heritable Disorders in Newborns and Children; and
- The Advisory Committee on Immunization Practices (ACIP) recommendations that have been adopted by the Director of the Centers for Disease Control and Prevention (CDC).

Additionally, in September 2025, Governor Newsom signed Assembly Bill 144, which requires nongrandfathered state-regulated health plans in California to cover preventive care services recommended by the federal government as of January 1, 2025, or recommended by the California Department of Public Health (CDPH), without cost sharing.[6]

The USPSTF provides a B recommendation, as of March 2020, for screening for hepatitis C virus infection in asymptomatic adults aged 18 to 79 years.

[3] California Health Benefits Review Program (CHBRP). (2026). *Analysis of California Assembly Bill 1843 Communicable Diseases: Hepatitis B and C.* Berkeley, CA.
[4] HSC §1367.002; INS §10112.2.
[5] More information about the state and federal requirements to cover specified preventive services is included in CHBRP's resource *Federal Recommendations and the California and Federal Preventive Services Benefit Mandates*.
[6] HSC §120164.

Federal Policy Landscape

Affordable Care Act

A number of Affordable Care Act (ACA) provisions have the potential to or do interact with state benefit mandates. Below is an analysis of how AB 1843 may interact with requirements of the ACA as presently exist in federal law, including the requirement for certain health insurance to cover essential health benefits (EHBs).[7,8]

Essential health benefits

In California, nongrandfathered[9] individual and small-group health insurance is generally required to cover EHBs.[10] In 2027, approximately 11.5% of all Californians will be enrolled in a plan or policy that must cover EHBs.[11]

States may require state-regulated health insurance to offer benefits that exceed EHBs.[12,13,14,15] Should California do so, the state could be required to defray the cost of additionally mandated benefits for enrollees in health plans or policies purchased through Covered California, the state's health insurance marketplace. However, state benefit mandates specifying provider types, cost sharing, or other details of existing benefit coverage would not meet the definition of state benefit mandates that could exceed EHBs.[16,17] It should be noted that federal guidance establishes the "State" as the entity that would identify when a state benefit mandate exceed EHBs;[18] thus, DMHC and CDI would determine whether the benefit would require defrayal of costs.

AB 1843 would not exceed EHBs because it would change terms and conditions of already covered benefits.

[7] The ACA requires nongrandfathered small-group and individual market health insurance — including but not limited to qualified health plans sold in Covered California — to cover 10 specified categories of EHBs. Policy and issue briefs on EHBs and other ACA impacts are available on the CHBRP website.
[8] Although many provisions of the ACA have been codified in California law, the ACA was established by the federal government, and therefore, CHBRP generally discusses the ACA as a federal law.
[9] A grandfathered health plan is "a group health plan that was created — or an individual health insurance policy that was purchased — on or before March 23, 2010. Plans or policies may lose their 'grandfathered' status if they make certain significant changes that reduce benefits or increase costs to consumers."
[10] For more detail, see CHBRP's issue brief *Essential Health Benefits: An Overview of Benefits, Benchmark Plan Options, and EHBs in California*.
[11] See CHBRP's resource *Sources of Health Insurance in California*.
[12] ACA Section 1311(d)(3).
[13] State benefit mandates enacted on or before December 31, 2011, may be included in a state's EHBs, according to the U.S. Department of Health and Human Services (HHS). Patient Protection and Affordable Care Act; Standards Related to Essential Health Benefits, Actuarial Value, and Accreditation. Final Rule. Federal Register, Vol. 78, No. 37. February 25, 2013.
[14] However, as laid out in the Final Rule on EHBs U.S. Department of Health and Human Services (HHS) released in February 2013, state benefit mandates enacted on or before December 31, 2011, would be included in the state's EHBs, and there would be no requirement that the state defray the costs of those state-mandated benefits. For state benefit mandates enacted after December 31, 2011, that are identified as exceeding EHBs, the state would be required to defray the cost.
[15] In February 2026, HHS released a proposed rule that would alter what benefits would be determined to exceed EHBs. The conclusions in this analysis of AB 1843 are subject to change based on the final language of the regulations. U.S. Department of Health and Human Services (HHS). Patient Protection and Affordable Care Act, HHS Notice of Benefit and Payment Parameters for 2027; and Basic Health Program. Proposed Rule. Federal Register, Vol. 91, No. 28. February 11, 2026.
[16] Essential Health Benefits. Final Rule. A state's health insurance marketplace would be responsible for determining when a state benefit mandate exceeds EHBs, and qualified health plan issuers would be responsible for calculating the cost that must be defrayed. Patient Protection and Affordable Care Act; Standards Related to Essential Health Benefits, Actuarial Value, and Accreditation. Final Rule. Federal Register, Vol. 78, No. 37. February 25, 2013.
[17] As of 2024, Maine, Massachusetts, Minnesota, Montana, Utah, and Virginia mandate benefits that exceed EHBs (GAO, 2024). For more information about defrayal, refer to CHBRP's issue brief *Essential Health Benefits: Exceeding EHBs and the Defrayal Requirement*.
[18] Essential Health Benefits Final Rule. Federal Register, Vol. 87. No. 27. February 25, 2013.

Background on Hepatitis C

This background section provides information about hepatitis C, describes the demographics and prevalence of hepatitis C, outlines clinical practice guidelines outlining treatment for hepatitis C, and summarizes disparities in hepatitis C and barriers to care.

What Is Hepatitis C?

Hepatitis C is a liver disease caused by infection from the hepatitis C virus (HCV), which is transmitted through exposure to infected blood or bodily fluids containing infected blood (CDC, 2025b). There are two types of hepatitis C:

1. Acute: occurs within the first 6 months of exposure to HCV and leads to chronic infection in most patients (80-85%) (Basit and Koirala, 2025).
2. Chronic: occurs when HCV treatment is delayed and the virus is not cleared by the body within 6 months.

It is estimated that 2.4 to 4.0 million people in the United States have hepatitis C (Hall et al., 2025). In 2023, the CDC found that there were 4,966 new cases of acute hepatitis C reported (but estimates new acute HCV infections at 69,000 after adjusting for underascertainment and underreporting[19]) and 101,525 cases of newly reported chronic hepatitis C (CDC, 2025). Although there are effective treatments for hepatitis C (see *Medical Effectiveness* section), the prevalence of hepatitis C in the United States remained unchanged between 2013 and 2020 (Hall et al., 2025).

The majority of individuals with acute and chronic hepatitis C are asymptomatic (Feld, 2026). An analysis of 2017–2020 National Health and Nutrition Examination Survey (NHANES) data found that 68% of people with hepatitis C are aware of their infection status, meaning that nearly one-third are unaware and could unknowingly transmit the virus to others (Lewis et al., 2023). Studies suggest that more than one-half of people who become infected with HCV will develop long-term, chronic hepatitis C infection (Micallef et al., 2006). Studies estimate that on average one person with HCV infection transmits the virus to 1 to 4 other people (Scott et al., 2015; Ward and Hinman, 2019).

Risk Factors and Transmission

Several populations are at increased risk for HCV and developing hepatitis C due to increased contact with potentially infected body fluids (Table 1). HCV is primarily transmitted by sharing contaminated needles, syringes, or other equipment used to prepare or inject drugs.

[19] Underascertainment of HCV occurs because the infection is often asymptomatic as well as challenges with hepatitis C surveillance reporting, such as incomplete clinician reporting, delayed data capture, and restrictive case surveillance definitions (Onofrey et al., 2015). To account for underascertainment and underreporting, the CDC uses a previously published probabilistic model for estimating the true incidence of hepatitis C from reported cases (Klevens et al., 2014).

Table 1. Risk Factors for HCV Infection

Behavior, Exposure, Condition and/or Circumstance	HCV Infection Risk Factor
Risk behavior	• Injection drug use (current or ever) • Intranasal illicit drug use • Men who have sex with men

Risk exposure	• Persons (ever) on long-term hemodialysis
	• Persons with percutaneous/parenteral exposure in an unregulated setting
	• Health care, emergency medical, and public safety workers after needle sticks, sharps, or mucosal exposure to HCV-infected blood
	• Children born to HCV-infected women
	• Persons who were ever incarcerated
	• Prior recipients of blood transfusion(s) or organ transplant, including persons who:
	  ○ Were notified that they received blood from a donor who later tested positive for HCV
	  ○ Received a transfusion of blood or blood components, or underwent an organ transplant, prior to July 1992
	  ○ Received clotting factor concentrates produced prior to 1987

Risk conditions and circumstances	• HIV infection • Sexually active persons about to start pre-exposure prophylaxis (PrEP) for HIV • Unexplained chronic liver disease and/or chronic hepatitis, including elevated alanine aminotransferase (ALT) levels • Solid organ donors (deceased and living) and solid organ transplant recipients

Source: Ghany and Morgan, 2020.
Key: HCV = hepatitis C virus; HIV = human immunodeficiency virus.

Health Outcomes

As noted above, acute HCV infection leads to chronic hepatitis C in the majority of patients. An estimated 10 to 20% of individuals with chronic hepatitis C and persistent liver inflammation will develop cirrhosis and people with cirrhosis are at increased risk for liver cancer and other liver-related complications. Non-liver–related complications include severe fatigue and certain renal and autoimmune diseases (CDC, 2024).

According to 2023 CDC data, there were 11,194 deaths with hepatitis C listed as a cause of death in the United States (2.52 deaths per 100,000 population). Death rates were highest among males versus females (3.69 vs. 1.45 per 100,000 population, respectively). The CDC notes that non-Hispanic White individuals accounted for nearly two-thirds of all deaths but the death rate among American Indian/Alaska Native and non-Hispanic Black individuals were significantly higher than the death rate among non-Hispanic White individuals (7.75 and 4.03 per 100,000 population vs. 2.4 per 100,000 population, respectively). Additionally, deaths among older adults (aged 55–74 years) were higher than other age groups, accounting for 75% of all hepatitis C deaths (CDC, 2025).

Screening and Treatment for Hepatitis C

Screening

The American Association for the Study of Liver Diseases (AASLD)/Infectious Diseases Society of America (IDSA), the CDC, and the USPSTF recommend universal one-time HCV screening for adults aged 18 years and older.

In 2019, the AASLD/IDSA recommended a one-time routine, opt-out HCV screening for adults aged 18 years and older. The AASLD/IDSA guidelines also recommend one-time testing for HCV for individuals younger than 18 years at increased risk of HCV infection (based on risk behavior, exposures, conditions or circumstances), periodic HCV testing for all

persons at increased risk of HCV exposure, and annual HCV testing for all persons who inject drugs and for men with HIV infection who have unprotected sex with men (Ghany and Morgan, 2020). In 2020, the CDC issued updated guidance recommending that (1) all adults aged 18 years and older receive HCV screening at least once in their lifetime, and (2) pregnant women receive hepatitis C screening during each pregnancy. Additionally, all persons with risk factors should be tested for hepatitis C (regardless of age or setting prevalence) with periodic testing while risk factors persist, and any person who requests hepatitis C testing should receive it, regardless of disclosure of risk (Schillie et al., 2020). In 2020, the USPSTF recommended one-time HCV screening for all adults aged 18 to 79 years without known liver disease. The USPSTF recommends periodic screening for people with continued risk for HCV infection (e.g., those with past or current injection drug use) (Owens et al., 2020).

Studies examining HCV screening rates over the past 20 years have found that 15% to 20% of eligible patients (and 25% of high-risk patients) have received HCV screening; screening is increasing, but slowly (1-2% per year) (Ferval-Shioya et al., 2025; Kasting et al., 2018; Linas et al., 2014).

Pretreatment Assessment and Treatment

For individuals with HCV infection, the AASLD/IDSA guidelines include simplified HCV treatment algorithms for treatment-naïve adults (i.e., adults who have never been treated) without cirrhosis. These simplified algorithms streamline initiation of antiviral treatment by decreasing requirements for pretreatment assessments for uncomplicated patients (Bhattacharya et al., 2023) and are intended to be used by any health care provider knowledgeable about HCV disease and treatment as long as they can consult a specialist if needed (Ghany and Morgan, 2020). The 2023 simplified treatment algorithms are summarized in Table 2. Although the guidelines continue to recommend interventions and lifestyle changes to prevent further liver damage, they no longer condition initiation of antiviral therapy on abstinence from alcohol or sobriety testing, genotype testing, or other tests for cirrhosis (e.g., transient elastography, prior liver biopsy). Firstline treatment regimens with glecaprevir/pibrentasvir or sofosbuvir/velpatasvir are considered pangenotypic and genotype testing is not required to initiate treatment with these drugs for treatment-naïve individuals

Table 2. AASLD/IDSA Simplified Treatment Algorithms for Treatment-Naïve Adults

Treatment Algorithm Component	Treatment-Naïve Adults Without Cirrhosis	Treatment-Naïve Adults with Compensated Cirrhosis

Pretreatment assessment (before initiating antiviral therapy)	• Calculate FIB-4 score (a noninvasive measure of hepatic fibrosis)
	• Cirrhosis assessment (liver biopsy not required; patient presumed to have cirrhosis with FIB-4 >3.25 *or* any of the following findings from a previously performed test:
	  ○ Transient elastography indicating cirrhosis (e.g., FibroScan stiffness >12.5 kPa)
	  ○ Noninvasive serologic tests above proprietary cutoffs indicating cirrhosis
	  ○ Clinical evidence of cirrhosis (e.g., liver nodularity and/or splenomegaly on imaging, platelet count <150,000/mm^3, etc.)
	  ○ Prior liver biopsy showing cirrhosis
	• Laboratory testing, including:
	  ○ Obtain complete blood count, hepatic function panel, determine eGFR, serum pregnancy test
	  ○ Check quantitative HCV RNA (“viral load”)
	  ○ Check hepatitis B surface antigen
	• Medication reconciliation
	• Potential drug-drug interaction assessment
		• Calculate CTP score
		• Ultrasound of the liver
		• Laboratory testing, including:
		  ○ Obtain complete blood count, hepatic function panel, determine eGFR, serum pregnancy test
		  ○ Check INR
		  ○ Check quantitative HCV RNA (“viral load”)
		  ○ Obtain HIV antibody test
		  ○ Check hepatitis B surface antigen
		  ○ Check HCV genotype (if treating with sofosbuvir/velpatasvir)
		• Medication reconciliation
		• Potential drug-drug interaction assessment
		• Education (medication, adherence, prevention of reinfection)

Treatment Algorithm Component	Treatment-Naïve Adults Without Cirrhosis	Treatment-Naïve Adults with Compensated Cirrhosis
	• Education (medication, adherence, prevention of reinfection)	
Recommended regimens	Glecaprevir/pibrentasvir (8 weeks) Sofosbuvir/velpatasvir (12 weeks)	*Based on genotype testing* Glecaprevir/pibrentasvir (8 weeks) (genotype 1-6) Sofosbuvir/velpatasvir (12 weeks) (genotype 1-2, 4-6)
On-treatment monitoring	• Monitoring for hypoglycemia in patients taking diabetes medication • Monitoring INR for subtherapeutic anticoagulation in patients taking warfarin • No laboratory monitoring required for other patients • In-person/telehealth visits for patient support, assessment of symptoms, and/or new medications, as needed	• Blood tests to monitor for liver injury during treatment because hepatic decompensation occurs rarely among patients with cirrhosis receiving antiviral treatment • Referral to specialist if worsening liver tests, jaundice, ascites, encephalopathy, or new liver-related symptoms • Monitoring INR for subtherapeutic anticoagulation in patients taking warfarin • In-person/telehealth visits for patient support, assessment of symptoms, and/or new medications, as needed
Post-treatment assessment of cure (SVR)	• Assessment of quantitative HCV RNA and a hepatic function panel are recommended 12 weeks or later following completion of therapy to confirm HCV RNA is undetectable (virologic cure) and transaminase normalization • Monitoring for hypoglycemia in patients taking diabetes medication • Monitoring INR in patients taking warfarin • Assessment for other causes of liver disease is recommended for patients with elevated transaminase levels after achieving SVR	

Source: Bhattacharya et al., 2023.
Key: CTP = Child-Turcotte-Pugh; eGFR = estimated glomerular filtration rate; FIB-4 = fibrosis-4; HCV = hepatitis C virus; INR = international normalized ratio; RNA = ribonucleic acid; SVR = sustained virologic response.

After FDA approval of a new point-of-care HCV RNA[20] test in 2024 (FDA, 2024), in 2025, the AASLD/IDSA released a new “test and treat” algorithm that limits the provider assessment to a review of signs, symptoms or history of liver disease, blood tests, and review of potential medication interactions. Patients immediately begin treatment with one of the first-line medications, without the need for additional tests before treatment initiation (AASLD/IDSA, 2025).There is no on-treatment monitoring and SVR is assessed 4 weeks after treatment. For people with specific high-risk characteristics (e.g., children, pregnancy, previous treatment for hepatitis C, coinfection with hepatitis B, potential drug-drug interactions, cirrhosis, or liver cancer), the 2025 algorithm recommends that providers refer the patient to a specialist for individualized hepatitis C treatment and monitoring decisions (AASLD/IDSA, 2025).

The AASLD/IDSA guidelines recommend direct-acting antiviral (DAA) treatment for all adults with acute or chronic HCV infection (except for individuals with short life expectancy) (Ghany and Morgan, 2020). Table 3 summarizes information regarding DAA treatments.

[20] HCV ribonucleic acid (RNA) is the genetic material of the hepatitis C virus.

Table 3. Direct-Acting Antiviral (DAA) Treatments for Hepatitis C

Generic Name (Brand Name)	Genotype	Typical Duration	First-Line Status
Glecaprevir/pibrentasvir (Mavyret)	Pangenotypic	8 weeks	First-line
Sofosbuvir/velpatasvir (Epclusa)	Pangenotypic	12 weeks 24 weeks (for some patients with decompensated cirrhosis)	First-line
Sofosbuvir/velpatasvir/ Voxilaprevir (Vosevi)	Pangenotypic	12 weeks	Selective
Ledipasvir/sofosbuvir (Harvoni)	1, 4, 5, 6	12 weeks 24 weeks (for some patients with decompensated cirrhosis)	Selective
Elbasvir/grazoprevir (Zepatier)	1, 4	12 weeks	Selective

Source: Bhattacharya et al., 2023.
Note: Pangenotypic means that the direct-acting antiviral (DAA) treatment is appropriate for any of the major hepatitis C virus genotypes (1-6).

Treatment rates

Studies have found that DAA treatments can cure HCV infection in more than 95% of treated individuals (Falade-Nwulia et al., 2017). However, treatment rates remain low. In 2022, the CDC reported that 35% of privately insured adults with a positive HCV test initiated treatment within 360 days (Thompson et al., 2022). A retrospective study using data from two large commercial laboratories also found that that 35% of adults with a positive HCV test were treated (Ghany et al., 2025). Studies have found similarly low treatment rates among children with HCV infection. One retrospective study including 8,516 HCV-exposed children found that less than half completed any HCV testing (46%) or appropriate HCV testing (42%); of children eligible for treatment, only 14% were treated (Epstein et al., 2024). A nationwide analysis including 928 children aged 0 to 18 years with HCV infection found that less than 1 in 3 children were linked to HCV care (receipt of services such as genotype testing, fibrosis staging, or DAAs prescribed) and only 1 in 8 children were treated with DAAs when eligible (Curtis et al., 2025). Socioeconomic factors such as unemployment, housing instability, and lack or inadequate health insurance can contribute to underutilization of HCV screening and treatment services (Alenzi and Almeqdadi, 2024).

Despite recommendations for universal HCV screening, studies have found delays in diagnosis and linkage to treatment for patients with HCV. A large national cohort study identified delayed diagnosis in an estimated 90% of patients with chronic hepatitis C and 75% of patients experienced liver complications, despite availability of DAA treatment during the study period. Approximately 48% of patients were diagnosed with hepatitis C in the 6 months prior to their first occurrence of a liver-related complication; the authors posit that these patients were “only tested to work up the etiology of their liver complications.” This study also found that the majority of hepatitis C patients started DAA treatment after a liver complication had occurred and only 6% of non-delayed diagnosis patients started DAA treatment more than 2 years before liver complications occurred (Levesley et al., 2025). One study of patients in a large hepatitis C cohort found that a majority of patients already had advanced liver disease at the time of their initial HCV infection diagnosis, despite several years of prior health care engagement (Moorman et al., 2015). Taken together, these findings suggest that the new simplified treatment algorithms and test-to-treat services may help identify enrollees with HCV infection earlier and initiate treatment in a more timely manner, increasing the percentage of people who clear infection and preventing disease complications.

Hepatitis C Prevalence in California

According to the CDPH, there were 35,448 newly reported cases of chronic hepatitis C in California in 2018 (the most recent statewide surveillance data available) (CDPH, 2020c).[21] This equates to 89 cases per 100,000 persons, which represents a 10% decrease from 2017 (98.7 cases per 100,000 persons) (CDPH, 2020c). According to 2022 CDC data, HCV infection related to injection drug use accounted for 52% of cases among reported cases of hepatitis C in 2022; other common transmission methods are multiple sexual partners (10%) and hemodialysis (6%) (CDC, 2024).

A qualitative study with 114 Californians aged 15 to 29 years found differences in risk perception between persons with injection drug use and persons with other HCV risk factors. The authors found that 76% of injection drug users knew that they were at high risk prior to HCV diagnosis but had low self-reported access to, and utilization of, harm reduction services. In contrast, non-injection drug users had very low prediagnosis risk perception (8%), despite having other risk factors for HCV infection, such as prior incarceration or nonprofessional tattoo or piercing (Ohringer et al., 2021).

Disparities[22] in Hepatitis C

Disparities are noticeable and preventable or modifiable differences between groups of people. Health insurance benefit mandates or related legislation may impact disparities. Where intersections between health insurance benefit mandates and social determinants or systemic factors exist, CHBRP describes relevant literature. Despite recommendations for universal screening, CHBRP found literature identifying disparities and differences by age, race/ethnicity, gender, socioeconomic status, and geography.

Age and Gender

Rates of newly reported cases of chronic hepatitis C by age and gender in California in 2018 are presented in Table 4. Rates are higher among men compared to women, but rates among men have slightly decreased (by 2%) since 2014 whereas rates among women have increased by 11% (CDPH, 2020a). Individuals aged 15 to 39 years account for 35% of newly reported cases, and CDPH notes that this is mainly attributable sharing of injection drug use equipment (CDPH, 2020b).

Table 4. Prevalence of Newly Reported Cases of Chronic Hepatitis C by Age and Gender in California, 2018

Demographic Characteristic	Men	Women
Total Cases	**110.0**	**66.0**
Aged 0-14 years	1.7	1.9
Aged 15-19 years	14.8	13.1
Aged 20-29 years	147.3	69.1
Aged 30-39 years	145..5	69.7
Aged 40-49 years	107.7	63.2
Aged 50-59 years	171.2	120.3

[21] In 2020, the CDC announced changes to the surveillance case definitions for acute and chronic hepatitis C, which became effective January 1, 2021; CDPH expected to modify their surveillance forms and guidance soon after (CDPH, 2020a). The updated definition was "developed to emphasize more objective laboratory tests and reduce dependence on subjective and non-specific signs and symptoms." The CDC notes that this change was expected to increase the number of cases classified as acute hepatitis C relative to the 2016 definition (CDC, 2024a).
[22] Several competing definitions of "health disparities" exist. CHBRP relies on the following definition: Health disparity is defined as the differences, whether unjust or not, in health status or outcomes within a population (Wyatt et al., 2016).

Demographic Characteristic	Men	Women
Aged 60+	160.6	101.1

Source: CDPH, 2020b.

Race or Ethnicity

Race/ethnicity was not specified for the majority of newly reported cases in 2018 (71%); of cases with race/ethnicity documented, proportion of cases were highest among White persons (56%) followed by Hispanic/Latino (25%), African American/Black (11%), Asian/Pacific Islander (8%), and American Indian/Alaska Native persons (1%) (CDPH, 2020a). White, African American/Black, and American Indian/Alaska Native persons were disproportionally affected by chronic hepatitis C in 2018 (meaning that their percent of cases was greater than their percent of the California population) (CDPH, 2020a). A similar trend is seen at the national level for newly reported cases of acute hepatitis C (CDC, 2024).

HCV risk perception varies by race/ethnicity. In a qualitative study of 114 Californians aged 15 to 29 years with newly reported hepatitis C, risk perception prior to diagnosis varied significantly by race/ethnicity. The authors found that 44% of non-Hispanic White respondents perceived they were at risk for HCV prior to diagnosis compared to 22% of persons of color, despite high rates of risky behavior (e.g., injection drug use, nonprofessional tattoo or piercing, or risky sexual behavior) among both groups (Ohringer et al., 2021).

Studies have also identified disparities in HCV testing and linkage to care. Black/African American and Asian/Pacific Islander children are significantly less likely to complete appropriate HCV testing compared to White children (Epstein et al., 2024). Black children are also less likely to be linked to HCV care (e.g., genomic testing, fibrosis staging) compared to Hispanic/Latinx and White children (Curtis et al., 2025). Similarly, studies have found that Black adults with hepatitis C are less likely be prescribed DAA treatment compared to White persons (Elnaiem et al., 2025). American Indian/Alaska Natives experience higher mortality rates due to hepatitis C compared to other groups (Ahlers et al., 2025; Ahmed et al., 2025).

Socioeconomic Status

One study using 2017–2020 data from the National Health and Nutrition Examination Study (NHANES) found that current hepatitis C infection was 5.3 times higher among persons experiencing poverty compared to those not experiencing poverty (Lewis et al., 2023). The study also found that the current hepatitis C infection was 4.7 and 5.8 times higher among persons with public insurance or who were uninsured (respectively) compared to persons with private insurance. A retrospective cohort study set at one academic medical center over a 5-year period found that individuals experiencing homelessness or who were on public insurance or were uninsured were less likely to be prescribed hepatitis C treatment (Elnaiem et al., 2025).

Barriers to Accessing Hepatitis C Testing and Treatment

Barriers at the patient and system level contribute to the relatively low treatment rates for hepatitis C. Stigma surrounding HCV infection can adversely affect use of HCV screening and treatment services (Alenzi and Almeqdadi, 2024). Individuals living in nonurban areas with less access to primary care services often have lower HCV screening rates (Alenzi and Almeqdadi, 2024). Limited health literacy about HCV can also influence screening and treatment rates (Baumert et al., 2019).

Despite guidelines recommending universal screening, studies have found that providers are not recommending screening for all adults, or risk-based screening for those with higher HCV risk (Laily et al., 2024). Although the AASLD/IDSA treatment algorithms intended to make assessment and treatment earlier for primary care physicians, studies have found that most HCV treatment is being prescribed primarily by specialists (Kapadia et al., 2021; Scialli et al., 2024). A qualitative study asked outpatient primary care physicians in Los Angeles County about their hepatitis C

treatment experience; respondents noted several barriers including inadequate training in hepatitis C management (41%), lack of familiarity with the hepatitis C guidelines (23%), and lack of institutional leadership support to implement hepatitis C treatment (18%) (Loomis et al., 2025).

Studies have also found that health plan or institutional restrictions on hepatitis C treatment (such as requiring HCV genotyping prior to DAA treatment, even when first-line treatments are pangenotypic) create barriers to care (Javanbakht et al., 2020; Loomis et al., 2025; Wang et al., 2022).

Societal Impact of Hepatitis C in California

The presence of hepatitis C in the United States has direct and indirect economic and societal costs. Please note, the societal impact discussed here is relevant to a broader population than AB 1843 impacts, which would affect the health insurance of a subset of Californians (see the *Overview* section of CHBRP's Analysis of AB 1843). See the *Benefit Coverage and Cost Impacts* section for estimates of direct cost impacts for the specific population targeted by AB 1843.

One older study estimated that the total burden of hepatitis C in the United States exceeds $10 billion (in 2017 dollars; this estimate includes direct costs such as medical expenses but does not include indirect costs such as lost work productivity) (Stepanova and Younossi, 2017). An analysis of claims data for commercially insured adults estimated the incremental costs associated with HCV infection at $23,406 (compared to enrollees without HCV infection) due to higher costs for outpatient and inpatient care as well as prescription drugs (McCombs et al., 2011). Similar results were seen in an analysis of Medicaid enrollees, which found an incremental cost of $17,879 due HCV infection; nearly two-thirds of the incremental cost was due to inpatient hospitalizations and nearly one-third was due to prescription drug costs (Roebuck, 2019).

Medical Effectiveness

The medical effectiveness review summarizes findings from evidence[23] on the effectiveness of DAAs for treating HCV infection, and on health outcomes, processes of care, and utilization of other health services. Additionally, this review examined the impact of utilization management, including prior authorization or other types of utilization management.

Research Approach and Methods

The search was limited to studies published from 2016 to the present.[24]

A total of 24 studies were included in the medical effectiveness review for this report. The other articles were eliminated because they did not focus on the effectiveness of DAAs or the effects of prior authorization on the use of DAAs and the subsequent outcomes, were of poor quality[25], or did not report findings from clinical research studies. A more thorough description of the methods used to conduct the medical effectiveness review and the process used to grade the evidence for each outcome measure is presented in CHBRP's Medical Effectiveness Analysis and Research Approach document.

Except for where there are large systematic reviews that include both newer and older regimens, studies involving obsolete first-generation DAAs were excluded to ensure the analysis reflects current clinical practice, as these older regimens have been succeeded by pangenotypic, highly curative, newer-generation agents and are no longer recommended in international treatment guidelines. Additionally, CHBRP excluded studies that compared DAAs to interferon because interferon is no longer recommended for use and DAAs have shown to be superior to interferon-based regimens.

The conclusions below are based on the best available evidence from peer-reviewed and grey literature.[26] Unpublished studies are not reviewed because the results of such studies, if they exist, cannot be obtained within the 60-day timeframe for CHBRP reports.

Key Questions

- For persons infected with hepatitis C, what is the effectiveness of FDA-approved DAAs on health outcomes, processes of care and utilization of other health services, as well as the associated harms, as compared to placebo?
- What is the comparative effectiveness of hepatitis C FDA-approved DAAs (i.e., do effects on health outcomes, processes of care, and utilization of other health services differ)?
- What is the impact of prior authorization or other utilization management policies on access to hepatitis C medications, health outcomes, and utilization of other health services?

Methodological Considerations

An HCV cure is defined as achieving a sustained virologic response (SVR12), which means the hepatitis C virus remains undetectable in the blood (using a sensitive test, typically <25 IU/mL) for 12 weeks or more after completing antiviral treatment. SVR12 indicates that the virus has been eradicated, as relapsing after this point is extremely rare, effectively acting as a cure.

[23] Much of the discussion in this section is focused on reviews of available literature. However, as noted in the section on Implementing the Hierarchy of Evidence in the Medical Effectiveness Analysis and Research Approach document, in the absence of peer-reviewed literature on well-designed randomized controlled trials (RCTs) that is fully applicable to the analysis, CHBRP's hierarchy of evidence allows for the inclusion of other evidence.
[24] Studies of the effects of DAAs were identified through searches of PubMed and Embase. The search was limited to abstracts of studies published in English.
[25] For a detailed explanation of how CHBRP defines high-quality research, see the "Selecting Studies for Inclusion in the Literature Review" section of CHBRP's Medical Effectiveness Analysis and Research Approach document.
[26] Grey literature consists of material that is not published commercially or indexed systematically in bibliographic databases. See CHBRP's website for more information.

Because the newest DAAs to treat HCV are safe, effective, and cure over 95% of patients, there has been a shift in testing protocols for clinical trials of DAAs (Zeng et al., 2020). Researchers are no longer required to run studies that compare new drugs against old ones (which were less effective). Instead, they use trials that observe patients taking the newer drugs, typically without a control group. In the United States, the FDA updated their 2017 guidance to industry on design and analysis of clinical trials of DAAs to recommend the use of single-arm/historical controls, as well as a placebo-deferred trial design (FDA, 2017). Thus, many studies included in this analysis are a single-arm study or without a reference group.

Additionally, most studies had some differences in participants (age, severity), interventions, or outcomes, which can lead to differences in results; for instance, some studies focused on patients without cirrhosis while other study populations included HIV/HCV-coinfected patients. Additionally, DAA regimens and duration of treatment varied. Furthermore, due to changes in the 2017 FDA guidance, most recent meta-analyses and systematic reviews include retrospective cohort studies, real-world studies, and clinical trials. Real-world studies refer to health and medical information derived from multiple sources, such as electronic health records, disease registries, or data through clinical observation, which were different from the clinical trials which are designed to control variability and to ensure the quality of the data generated.

Outcomes Assessed

The most significant indicator of the effectiveness of DAAs is the percentage of patients formally cured of hepatitis C, defined as having SVR 12 weeks after treatment ends (SVR12). CHBRP also assessed the effects of DAAs on other health outcomes, such as mortality and liver-related morbidity including liver cancer (hepatocellular carcinoma [HCC]). Additional health outcomes include extrahepatic manifestations (EHM), which are diseases, symptoms, or conditions caused by the HCV infection that occur outside the liver. These systemic issues impact organs like the skin, kidneys, joints, and nervous system, often the first sign of underlying liver infection. Harms considered included mild adverse events, such as fatigue and headache, as well as severe adverse events.

Study Findings

This following section summarizes CHBRP's findings regarding the strength of evidence for the effectiveness of DAAs addressed by AB 1843. Each section is accompanied by a corresponding figure. The title of the figure indicates the test, treatment, or service for which evidence is summarized. The statement in the box above the figure presents CHBRP's conclusion regarding the strength of evidence about the effect of a particular test, treatment, or service based on a specific relevant outcome and the number of studies on which CHBRP's conclusion is based. Definitions of CHBRP's grading scale terms are included in the box below.

CHBRP's analysis relies largely on multiple meta-analyses published from 2016 to present. These meta-analyses specifically focused on studies of DAAs with SVR12 as a primary outcome.

Overall, there is *very strong* evidence that DAAs are safe and effective and lead to a significant reduction in SVR with a high cure rate and improvement of subsequent health outcomes and EHM including HCC occurrence and recurrence, chronic kidney disease and end-stage kidney disease, stroke, major adverse cardiac events (MACE), neurocognitive disorders (NCD), and health-related quality of life. There is some evidence that DAAs are effective at reducing the utilization of other health services; HCV infection was linked to higher hospitalization risk while DAA therapy reduced hospitalizations in three studies, including a reduction in liver-related admissions among U.S. patients with HCV cirrhosis. Across multiple recent reviews, modern DAAs deliver very high cure rates for chronic hepatitis C, even among high-risk populations including patients coinfected with HIV and those with cirrhosis.

CHBRP found two studies that examined the impact of prior authorization or other utilization management policies on utilization of DAA medications and subsequent health outcomes. There is *some evidence* to suggest that prior authorization or other utilization management policies for DAAs affect utilization of DAAs based on two observational

studies. There is *not enough research* to determine whether prior authorization or other utilization management policies for DAAs affect health outcomes.

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

Very strong evidence (formerly called *clear and convincing evidence*) indicates that there are multiple studies of a treatment and the large majority of studies are of high quality and consistently find that the treatment is either effective or not effective. Conclusions are unlikely to be altered by additional evidence.

Strong evidence (formerly called *preponderance of evidence*) indicates that the majority of the studies reviewed are consistent in their findings that treatment is either effective or not effective. Conclusions could be altered with additional strong evidence.

Some evidence (formerly called *limited evidence*) indicates that a small number of studies have limited generalizability to the population of interest and/or the studies have a serious methodological concern in research design or implementation. Conclusions could be altered with additional evidence.

Conflicting evidence (formerly called *inconclusive evidence*) indicates that of the studies of equal quality, the number suggesting the treatment is effective is similar to the number of those suggesting the treatment is not effective.

Not enough research (formerly called *insufficient evidence*) indicates that (1) there are no studies of the treatment **or** (2) the available studies are not of high quality, meaning there is not enough evidence available to know whether or not a treatment is effective. *Not enough research* does not indicate that a treatment is not effective.

Effectiveness of DAAs on Sustained Virological Response (SVR12)

Multiple studies have demonstrated the effectiveness of DAAs on SVR at week 12 (SVR12) (Ferreira et al., 2018; Wei et al., 2018). Recent meta-analyses have demonstrated high effectiveness of DAAs, including those described in AB 1843, on cure rates, defined as a sustained virologic response at 12 weeks after treatment completion (SVR12) exceeding 95%, the established standard for virologic cure (Ahmed et al., 2017; Lampertico et al., 2020; Mettikanont et al., 2019; Wang et al., 2019; Xiao et al., 2025).

Findings for all patients (regardless of HIV coinfection and/or cirrhosis status)

In a meta-analysis data from cohort studies performed in real-world clinics (excluded clinical trials), Lampertico et al. (2020: 18 studies; 12,583 patients) reported that the effectiveness of DAA (glecaprevir/pibrentasvir) in routine clinical practice is comparable is similar to findings from randomized controlled trials (RCTs), with 96.7% (95% confidence interval [CI] 95.4–98.1; n = 8,583, 15 cohorts) of all patients achieving SVR12 with post-treatment week 12 data and 98.1% (95% CI 97.1–99.2) in the modified population[27] (n = 7,001, 14 cohorts). Additionally, DAA was well-tolerated across all HCV genotypes and patient populations.

Wang et al. (2019; 13 studies – mix of RCTs and observational studies; 3,082 patients) reported that the total SVR12 rate for DAA (glecaprevir/pibrentasvir) was 97.8% across studies. When disaggregating HCV genotypes, the SVR12 rates were also very high with 99.8% for genotype (GT)1, 99.2% for GT2, 96.1% for GT3, and 100% for GT4–6.

Ahmed et al., 2017 (6 RCTs; 1,427 patients). reported that velpatasvir plus sofosbuvir achieved SVR12 rates of 98.2% in GT1, 99.4% in GT2, 94.7% in GT3, 99.6% in GT4, 97.1% in GT5, and 98.8% in GT6 patients.

[27] The modified population is the study population excluding patients who did not achieve SVR12 for reasons other than virologic failure including severe fibrosis (F3; data included only where F3 was specified), alcohol abuse/dependency, chronic kidney disease stage 4–5, receiving opioid substitution therapy, psychiatric disorder, and proton-pump inhibitor (PPI) use.

Findings for patients with HIV/HCV

Previous evidence from clinical trials may have limited applicability to the broader population, as many individuals with coinfections were excluded from participating in these studies. More recent cohort studies have shown that the SVR12 rates achieved in patients coinfected with human immunodeficiency virus (HIV) and HCV are similar to those in patients infected only with HCV

In a meta-analysis (Li et al., 2018; 7 studies; 1,167 coinfected patients) that evaluated the efficacy and safety of sofosbuvir for treatment of HCV in patients coinfected with HCV/HIV, researchers reported that the pooled SVR12 was 94.0% (95% CI, 92.0%–95.0%).

Two meta-analyses reported excellent efficacy for newer formulations of DAAs for treatment of patients with HCV/HIV coinfection. Wang et al. (2019; 13 studies; 3,082 patients) reported that, when examining patients without and with HIV coinfection, the pooled SVR12 was 97.8% for patients with HIV coinfection (2 studies; 186 patients) compared to 99.4% for patients without HIV/HCV (12 studies; 2,719 patients). In a network meta-analysis, Zheng et al. (2020; 33 studies; 7,877 HIV/HCV coinfected patients from 16 countries) reported that the overall SVR rate of all-oral DAAs was 94.7% (95% CI, 93.8–95.6%). The same meta-analysis examined the efficacy of DAAs in settings that include diverse patient populations with HIV/HCV coinfection and clinical practices outside the controlled environment of clinical trials (16 studies). For these studies, the overall SVR rate of all-oral DAAs in these studies was 94.1% (95% CI, 92.9–95.3).

Findings for patients with compensated and decompensated cirrhosis

As discussed in the *Background* section, decompensated cirrhosis is an advanced stage of liver disease where, due to extensive scarring, the liver can no longer function properly, leading to life-threatening complications. Decompensation marks a transition from "compensated" (no symptoms) to a higher risk stage, generally categorized by the presence of ascites (Stage III) or variceal bleeding (Stage IV), with 1-year mortality rates ranging from 20% to 57% (VA, n.d.). Three meta-analyses reported that DAAs are effective at achieving SVR12 in patients with compensated and decompensated cirrhosis

In a meta-analysis (Xiao et al., 2025: 13 RCTs and cohort studies; 872 patients) examining the effectiveness of velpatasvir plus sofosbuvir with or without ribavirin, for 12 to 24 weeks (ribavirin was added in 9 studies) in patients with decompensated cirrhosis, researchers reported that the pooled SVR12 rate for patients that received velpatasvir plus sofosbuvir with or without ribavirin was 95.0% (808/872 patients; 95% CI, 92.0–97.0). Wang et al. (2019; 13 studies) reported that, when examining patients with and without compensated cirrhosis, the pooled SVR12 was 99.4% (95% CI, 98.6–99.9%) for patients without compensated cirrhosis (8 studies; 1,463 patients) compared to 98.8% (95% CI, 97.7-99.9%) for patients with compensated cirrhosis (5 studies; 1,202 patients). Lampertico et al., 2020 (18 studies; 12,583 patients), reported that in real-world clinical trials, the estimate for SVR12 rate in the intention to treat population without cirrhosis (n = 4,123; 5 cohorts) was 97.0% (95% CI, 94.3–99.7) and in those with compensated cirrhosis (n = 676; 6 cohorts) was 97.8% (95% CI, 96.4–99.2).

Summary of findings regarding DAAs on curing hepatitis C: There is *very strong evidence* that DAA are effective at achieving SVR12 based on nine meta-analyses that encompassed both clinical trials and observational studies. Across studies, all DAAs consistently achieve high cure rates, with SVR12 exceeding 95%, the established standard for virologic cure.

While older DAA regimens produced SVR12 rates of 88% to 96% overall, more recent meta-analyses show SVR12 rates ranging from 96.7% to 99.6% across most genotypes. Findings from meta-analyses of studies of persons who were coinfected with HIV and HCV (3 meta-analyses) and persons with cirrhosis (3 meta-analyses) were similar.

Figure 1. Level of Evidence of Effectiveness of DAAs on Curing Hepatitis C

Effectiveness of DAAs on Hepatic Health Outcomes

Liver cancer occurrence rate

In a meta-analysis of studies that assessed the liver cancer occurrence rate in HCV patients following treatment for HCV, Lv et al. (2024; 23 studies including 29,395 patients [interferon treatment = 6, DAA = 17; prospective = 10, retrospective = 13) reported that liver cancer occurrence rates following SVR12 versus nonresponse, demonstrated that successful treatment with DAAs significantly reduce, but do not eliminate, the risk of liver cancer occurrence in patients with HCV (1.54 per 100 person-years; 95% CI, 1.52–1.57 in SVR versus 7.80 per 100 person-years, 95% CI, 7.61–7.99 in non-responders).

Liver cancer recurrence rate

One RCT (Kamal et al., 2024; 84 patients[28]) compared the 1-year recurrence rates in patients who received DAAs after tumor ablation to those who postponed DAAs for 1 year after tumor ablation. At 1-year follow-up, researchers reported that DAA treatment after complete liver cancer ablation significantly decreases the 1-year cancer recurrence rates with the 1-year recurrence-free survival significantly higher in the DAAs group (72.2% vs. 38%, $P = 0.001$).

Effectiveness of DAAs on Extrahepatic Manifestations

Extrahepatic manifestations (EHMs) are diseases affecting organs outside the liver, which occur in up to 74% of HCV patients and can significantly impact patients' quality of life and overall health outcomes (Kuna et al., 2019). Studies show a close link between treatment-induced, sustained viral clearance and a low risk of EHMs of HCV infection.

Chronic kidney disease and end-stage kidney disease

In a population-based retrospective cohort study by Jeong et al., 2025, 22,576 subjects were analyzed: 11,953 received DAA treatment and achieved SVR, 386 received treatment but did not achieve SVR, and 10,237 never received treatment. Outcomes were compared primarily between untreated individuals and those treated with DAAs who achieved SVR, with multivariable weighted regression models estimating adjusted cause-specific hazard ratios (acsHRs) for treated individuals versus no treatment. Compared with untreated patients, those treated with DAAs who achieved SVR had lower incidence rates of chronic kidney disease and end-stage kidney disease (21.0 [95% CI, 19.0–23.1] versus 14.7 [95% CI, 13.4–16.1]). In multivariable weighted regression models, successful DAA treatment was associated with a 46% lower risk of chronic kidney disease compared with no treatment (acsHR, 0.54; 95% CI, 0.47–0.63).

Stroke

Jeong et al., 2025 reported that, compared with untreated patients, those treated with DAAs who achieved SVR had lower incidence rates of stroke (8.9 [95% CI, 7.7–10.2] versus 6.3 [95% CI, 5.5–7.2]). In multivariable weighted regression models, successful DAA treatment was associated with 34% lower risk of stroke compared with no treatment (acsHR, 0.66; 95% CI, 0.54–0.81).

[28] The number of lesions per patient ranged from 1 to 3 lesions, and the size of the largest lesion ranged from 1.5 to 5 cm. There were no statistically significant differences between both groups regarding baseline characteristics.

Major adverse cardiac events

Jeong et al., 2025, reported that, compared with untreated patients, those treated with DAAs who achieved SVR had lower incidence rates of major adverse cardiac events (26.7 [95% CI, 24.5–29.1] versus 19.3 [95% CI, 17.8–20.9]). In multivariable weighted regression models, successful DAA treatment was associated with 42% lower risk of adverse cardiac events compared with no treatment (acsHR, 0.58; 95% CI, 0.52–0.66).

Neurocognitive disorders

Jeong et al., 2025, reported that, compared with untreated patients, those treated with DAAs who achieved SVR had lower incidence rates of neurocognitive disorders (19.2 [95% CI, 17.3–21.2] versus 10.3 [95% CI, 9.2–11.5]). In multivariable weighted regression models, successful DAA treatment was associated with a 48% lower risk of neurocognitive disorders compared with no treatment (acsHR, 0.52; 95% CI, 0.45–0.61).

Type 2 diabetes

Jeong et al., 2025, reported that, compared with untreated patients, those treated with DAAs who achieved SVR had lower incidence rates of type 2 diabetes (6.4 [95% CI, 5.4–7.7] versus 9.2 [95% CI, 8.1–10.4]). In multivariable weighted regression models, no significant association was found for type 2 diabetes when comparing successful DAA treatment with no treatment (acsHR, 1.04; 95% CI, 0.84–1.29).

Summary of findings regarding DAAs on health outcomes: There is *strong evidence* that DAAs improve health outcomes based on two studies (one RCT and one retrospective cohort study) and one meta-analysis (23 studies) and that the risk of decompensated cirrhosis, liver cancer, and chronic kidney disease/end-stage kidney disease, stroke, major adverse cardiac events, and neurocognitive disorders is lower in people who achieve SVR than in those who do not.

There is no significant reduction in risk for type 2 diabetes due to treatment with DAAs.

Figure 2. Level of Evidence of Effectiveness of DAAs on Health Outcomes

Effectiveness of DAAs on the utilization of other health services

In a systematic review, Ng et al. (2024; 26 of 57 studies) examined the impact of HCV on hospitalization. Of the studies included, 12 showed evidence that people living with HCV infection are at an increased risk of hospitalization compared to those without HCV, with odds ratios ranging from 1.09 to 2.74 across studies. In this review, three cohort studies (Hill et al., 2018; McDonald et al., 2019; Schnazer et al., 2018) examined hospitalization and reported evidence that DAAs decrease hospitalization rates. One of these studies (Hill et al., 2018) reported that, for patients with HCV infection and cirrhosis (n = 378) in the United States, DAA treatment was associated with a 64.3% reduction in liver-related hospitalizations.

Summary of findings regarding DAAs on the utilization of other health services: There is *some evidence* that DAAs are associated with lower hospitalization rates based on 3 studies, including a reduction in liver-related admissions among U.S. patients with HCV cirrhosis.

Figure 3. Level of Evidence of Effectiveness of DAAs on Utilization of Other Health Services

Comparative Effectiveness of FDA-approved DAAs

In a meta-analysis comparing the efficacy and safety of two pangenotypic DAAs — glecaprevir/pibrentasvir and sofosbuvir/velpatasvir — for treating HCV genotype 6, Le et al. (2025: 27 studies[29]; 1,522 patients [451 glecaprevir/pibrentasvir and 1,071 sofosbuvir/velpatasvir]) reported that both are highly effective for treating HCV genotype 6, demonstrating clinical equivalence in virologic cure rates.[30] The authors reported 99.0% SVR12 for sofosbuvir/velpatasvir (95% CI, 98.2%–99.4%) and 95.6% for glecaprevir/pibrentasvir (95% CI, 93.2%–97.1%), highly consistent across studies. Additionally, in two head-to-head comparison studies, there was no significant difference in efficacy (pooled risk difference: 0.01; 95% CI, -0.01–0.02).

Another meta-analysis, Lei et al. (2025; 31 studies [2,968 participants; 1,387 treatment-naïve patients; 354 patients with cirrhosis]) evaluating the efficacy of DAAs in treating HCV genotype 2, reported that overall, the pooled SVR12 rate was 94.62% (95% CI, 92.43–96.52%) among the participants who received all doses of treatment demonstrating the high effectiveness of DAAs. Among the regimens analyzed, sofosbuvir/velpatasvir and glecaprevir/pibrentasvir were most effective, each achieving an SVR12 of 100% (95% CI, 99–100%) when administered over a 12-week period.

A systematic review (Mettikanont et al., 2019; 20 studies; 938 genotype 6 patients in Southeast Asia) found that all DAA regimens achieved high SVR rates, regardless of cirrhosis status and prior treatment history. Reported SVR12 rates were glecaprevir/pibrentasvir (4 studies; 108 patients; 98%–100%), ledipasvir/sofosbuvir (8 studies; 427 patients; 64%–100%), sofosbuvir/velpatasvir with or without voxilaprevir (5 studies; 171 patients; 100%), sofosbuvir/daclatasvir (3 studies; 172 patients; 88%–94%), and sofosbuvir with ribavirin (3 studies; 60 patients; 100%).

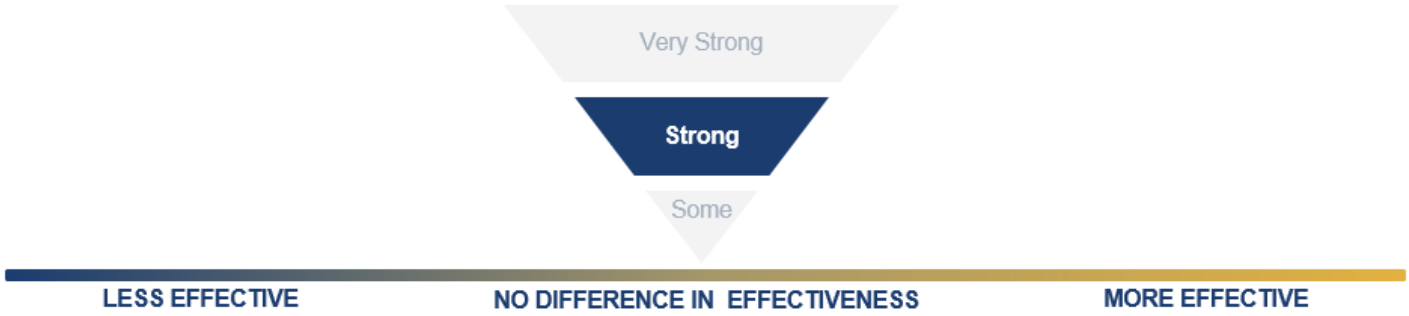
Patients with compensated cirrhosis

In an RCT examining adults with a documented history of HCV infection for at least 6 months and compensated cirrhosis, Huang et al., 2025 (N=61), reported that, compared with sofosbuvir/velpatasvir plus ribavirin treatment, sofosbuvir/velpatasvir/voxilaprevir, a newer treatment regimen, had a significantly higher SVR proportion in DAA-naïve patients with HCV genotype 3b and compensated cirrhosis (90% and 70%, p=0.046).

Summary of findings regarding the effectiveness of DAAs for achieving curative SVR rates: There is *strong evidence* there is no difference in effectiveness between DAAs when comparing DAAs designed to treat the same genotype based on three systematic reviews and meta-analyses (118 studies) in achieving curative SVR12 rates.

[29] Asselah et al., 2019 (JVH); Asselah, 2018 (EXPEDITION-8); Brown Jr., 2020; Feld, 2015; Wei, 2018; and Wei, 2020, studies are in Lei et al., 2025, and Le et al., 2025.
[30] The authors compared treatment with a regimen of glecaprevir/pibrentasvir, administered for a duration of 8 or 12 weeks with treatment with a 12-week regimen of sofosbuvir/velpatasvir. Included studies demonstrated a direct, head-to-head comparison between glecaprevir/pibrentasvir and sofosbuvir/velpatasvir or were single-arm cohorts reporting outcomes for either regimen.

Figure 4. Evidence of Comparative Effectiveness of DAAs on Achieving Curative SVR Rates



Impact of Prior Authorization or Other Utilization Management Policies on Utilization of DAAs

A couple studies have examined the impact of prior authorization or other utilization management policies on access to hepatitis C medications and the subsequent health outcomes.

In a retrospective observational study design to estimate the effect of DAA coverage policies in 39 state Medicaid programs (2015–2019), Davey et al., 2024, reported that easing or eliminating hepatitis C DAA coverage restrictions was associated with significantly higher DAA use. Of 39 states, 7 (18%) eliminated coverage restrictions, 25 (64%) eased restrictions, and 7 (18%) maintained the same restrictions from 2015 to 2019. The 32 states that eased or eliminated policies saw an average increase of 966 treatment courses per 100,000 Medicaid beneficiaries[31] per quarter compared with states that did not (95% CI, 409–1,523). Increases were significant in states with medium- and high–hepatitis C prevalence (+1,820; 95% CI, 1,353–2,287 and +917; 95% CI, 506–1,329, respectively) but not in low-prevalence states (+238; 95% CI, −681 to 1,157). Easing liver disease severity (+986; 95% CI, 512–1,460) and removing requirements that medication be prescribed by a liver specialist (+869; 95% CI, 283–1,456) showed significant increase in DAA use but easing sobriety restrictions did not (+53; 95% CI, −321 to 427). Sensitivity analyses showed significant increases when focusing on states with major changes (+735; 95% CI, 182–1,288) and when restricting to four quarters before and after policy change (+611; 95% CI, 241–982). Effects were significant in predominantly fee-for-service Medicaid states (+806; 95% CI, 515–1,097) but not in predominantly managed care states (+43; 95% CI, −1,287 to 1,372).

In a retrospective pre-post cohort analysis, Park et al. (2020; n=14,063 newly diagnosed HCV patients) evaluated the effects of Florida Medicaid prior authorization policy changes on DAA treatment uptake using administrative claims and electronic medical records from January 2013 to December 2018. Patients were aged 18 to 64 years, continuously enrolled for 12 months before and 3 months after HCV diagnosis, and grouped by HIV coinfection and/or substance use disorder (SUD) status. Florida Medicaid eliminated fibrosis-stage restrictions on June 1, 2016, but maintained requirements for 1-month abstinence from illicit drugs/alcohol and specialist prescribing. The primary outcome was DAA treatment initiation rate, and secondary outcome was treatment discontinuation rate. Overall, 8% of patients received DAA treatment during the study period. DAA initiation rates increased significantly from before to after June 1, 2016 (17.9 to 54.5 per 1,000 person-years; P<0.01), representing approximately a 3-fold increase. The findings demonstrate that despite prior authorization policy liberalization eliminating fibrosis-stage restrictions, treatment uptake remained low at 8%, with significant disparities persisting among patients with HIV coinfection, SUD (particularly those with HCV/HIV/SUD who showed no treatment increase post-policy change), and Black patients.

[31] To compare DAA use between states, authors calculated the number of treatment courses per 100,000 adult Medicaid enrollees using public Medicaid enrollment files.

Summary of findings regarding the impact of prior authorization or other utilization management policies on utilization: There is *some evidence* to suggest that prior authorization or other utilization management policies for DAAs affect utilization of DAAs based on two observational studies.

Figure 5. Level of Evidence of Impact of Utilization Management Policies on Utilization of DAAs

Impact of Prior Authorization or Other Utilization Management Policies on Health Outcomes

CHBRP found no studies that have examined the impact of prior authorization or other utilization management policies on health outcomes.

Summary of findings regarding the impact of prior authorization or other utilization management policies on health outcomes: There is *not enough research* to determine whether prior authorization or other utilization management policies for DAAs affect health outcomes.

Figure 6. Level of Evidence of Impact of Utilization Management Policies on Health Outcomes

Harms of DAAs

Multiple studies reported that adverse events, severe adverse events, and discontinuation due to adverse or severe adverse events is rare.

In 2016, the FDA issued a black box warning about the risk of hepatitis B virus (HBV) reactivation in some patients receiving DAA therapy for HCV. HBV reactivation can occur soon after the start of DAA therapy; thus, monitoring liver enzymes during DAA therapy is important in patients at risk (Pockros, 2017). In a meta-analysis to assess the incidence of HBV reactivation in patients receiving DAAs, Jiang et al., 2018, reported that the pooled HBV reactivation rate in HBV individuals receiving DAA-based therapy was 21.1% (11 studies; 95% CI, 15.8–26.9). Across studies in the meta-analysis, 39 patients who received preemptive HBV treatment, the risk of HBV reactivation with prophylaxis versus no prophylaxis was significantly reduced (RR 0.31; 95% CI, 0.10–0.96; P=0.042). In a meta-analysis, Le et al. (2025: 27 studies; 1,522 patients [451 glecaprevir/pibrentasvir and 1,071 sofosbuvir/velpatasvir]) reported that the safety profile of DAAs was favorable, with fatigue (14.0%; 95% CI, 6.4–21.6%) and headache (13.1%; 95% CI, 9.2–17.1%) being the most common adverse events, while serious adverse events and deaths were rare.

Lei et al (2025; 31 studies [2,968 participants; treatment-naïve patients; 354 patients with cirrhosis]) evaluating the efficacy of DAAs in treating chronic hepatitis C virus genotype 2, reported that fatigue was the most common adverse event (14.0%; 95% CI, 6.4-21.6%), followed by headache (13.1%; 95% CI, 9.2–17.1%), whereas death and serious adverse events were uncommon.

Lampertico et al. (2020; 7,199 patients[32]; safety population; 8 cohorts) reported that no single adverse event was reported with a frequency above 5% with the most frequently reported adverse events being pruritus (itchy skin) (4.7%), fatigue (4.2%), and headache (2.7%). Six cohorts included data on adverse events and were reported in 55 of 5,522 patients (1.0%; including 1 serious adverse event). In total, 33 of 5,595 patients (0.6%) discontinued study treatment because of an adverse event across the six cohorts in which these data were reported.

Hung et al., (2022; 9 single arm and RCTs; 7,650 participants) reported that the rate of grade 3 drug-induced laboratory abnormalities was low (total bilirubin 0.4%, alanine aminotransferase 0.1%, aspartate aminotransferase 0.2%, and hemoglobin 0.2%).

Summary of findings regarding harms of DAAs: There is *very strong evidence* that the harms such as serious adverse events and deaths from DAAs are rare, based on 4 meta-analyses that include 75 studies. The most common reported adverse events were headaches, fatigue, and pruritus (itchy skin).

Summary of Findings

There is *very strong evidence* that DAA are effective at achieving SVR12 based on nine meta-analyses (173 studies). Across the studies, all DAAs consistently achieved high cure rates, with SVR12 exceeding 95%, the established standard for virologic cure.

Meta-analyses of new regimens show SVR12 rates ranging from 96.7% to 99.6% across most genotypes. In special populations, SVR12 remain high, ranging from 94.0% with sofosbuvir in HIV/HCV coinfection (7 studies), to 97.8% in HIV/HCV patients treated with glecaprevir/pibrentasvir (2 studies; 186 patients) versus 99.4% in non-coinfected (12 studies; 2,719 patients), and 94.7% overall across all DAAs for HIV/HCV patients (33 studies; 94.1% in real-world settings). In cirrhosis patients, pooled SVR12 was 95.0% in patients with decompensated cirrhosis treated with sofosbuvir/velpatasvir with or without ribavirin and 98.8–99.4% in patients with and without compensated cirrhosis(13 studies).

There is *strong evidence* that DAAs improve health outcomes based on three studies and one meta-analysis (23 studies). Across the studies, DAAs significantly reduce liver cancer risk after SVR and, when given after complete tumor ablation[33], significantly lower 1-year liver cancer recurrence with higher recurrence-free survival. Achieving SVR with DAAs is associated with lower risks of chronic kidney disease/end-stage kidney disease, stroke, major adverse cardiac events, and neurocognitive disorders, but there was no significant reduction for type 2 diabetes.

There is *some evidence* that DAAs reduce the utilization of health services, specifically hospitalization, based on three studies included in a systematic review. Untreated HCV infection was linked to higher hospitalization risk while DAA therapy reduced hospitalizations in three studies, including a reduction in liver-related admissions among U.S. patients with HCV cirrhosis.

There is *strong evidence* there is no difference in effectiveness between DAAs based on five systematic reviews and meta-analyses (118 studies) in achieving curative SVR12 rates. In a direct comparison of two head-to-head comparison studies, there was no significant difference in efficacy (pooled risk difference: 0.01; 95% CI, -0.01 to 0.02). In Southeast Asian genotype 6 cohorts, all DAAs had high SVR12 rates regardless of cirrhosis or prior treatment. In patients with HIV/HCV coinfection, all currently FDA-approved DAAs achieved ~95% SVR, significantly outperforming older regimens. In DAA-naïve patients with compensated cirrhosis, sofosbuvir/velpatasvir/voxilaprevir produced higher SVR than sofosbuvir/velpatasvir plus ribavirin (90% vs. 70%; p=0.046).

[32] Safety data and adverse events (AEs) were reported in 1,271 patients (17.7%).
[33] A minimally invasive procedure that destroys cancer cells — primarily in the liver, kidney, and lung — by burning, freezing, or rupturing them using image-guided probes.

There are a couple studies that have examined the impact of prior authorization or other utilization management policies on access to hepatitis C medications and the subsequent health outcomes. There is *some evidence* that prior authorization or other utilization management policies for DAAs affect utilization, based on two observational studies. There is *not enough research* to determine whether prior authorization or other utilization management policies for DAAs affect health outcomes.

There is *very strong evidence* that the harms such as serious adverse events and deaths from DAAs are rare, based on five meta-analyses that include 75 studies. Hepatitis B reactivation is a rare but serious harm and is reduced by treating HVB before the use of DAAs. The most common reported adverse events were headaches, fatigue, and pruritus (itchy skin).

Cost Impact Analysis: Data Sources, Caveats, and Assumptions

Analytical Assumptions

In addition to the assumptions described in the *Analytical Approach and Assumptions* section of CHBRP's Analysis of California Assembly Bill 1843, CHBRP made the following assumption:

Pharmacy Benefit Coverage

CHBRP assumes that plans and policies that do not have coverage for outpatient prescription drugs or brand-name outpatient prescription drugs would not be required to do so for AB 1843. Almost all (96.2%) commercial/CalPERS enrollees in plans and policies regulated by DMHC or CDI have an outpatient pharmacy benefit regulated by DMHC or CDI that covers both generic and brand-name outpatient prescription medications.[34] Of the remaining commercial/CalPERS enrollees, 1.2% do not have a pharmacy benefit and 2.6% have a pharmacy benefit that is not regulated by DMHC or CDI. In other words, CHBRP assumes AB 1843 would have no impact for plans without a regulated pharmacy benefit.

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 Administrative 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.

State Health Care Spending Target

In 2024, in an effort to slow health care spending growth and improve health care affordability for California families, California's Office of Health Care Affordability (OHCA) under the Department of Health Care Access and Information (HCAI) approved a statewide target for maximum annual growth in health care spending for certain health care entities. The targets apply to per capita spending to specific entities, including health plans and insurers, provider organizations with at least 25 physicians, and hospitals (HCAI, 2022). The state is implementing this target with a phased-in approach, with a spending target of 3.5% for 2026, lowered to 3.2% in 2027 and 2028, and will be at 3% for 2029 and beyond (HCAI, 2025). Since health insurance benefit mandates may increase health care spending such as increases to insurance premiums, administrative costs, and out-of-pocket costs, OHCA spending targets may be relevant considerations in benefit mandate policy decisions.

Postmandate Changes in the Number of Uninsured Persons

CHBRP assumes that if premiums increase by more than 1.7% in the small- or large-group market segments or 0.6% in the individual market, some enrollees will lapse their coverage. Because the change in average premiums do not exceed

[34] For more detail, please see CHBRP's resource *Pharmacy Benefit Coverage in State-Regulated Health Insurance*.

either of these thresholds (see Table 8 in the Appendix of CHBRP's Analysis of California Assembly Bill 1843), CHBRP expects no measurable change in the number of uninsured persons due to the enactment of AB 1843.

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 1843.

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

As 100% of enrollees have coverage for at least one DAA at baseline, CHBRP assumes there would be no impact on public programs or other payers.

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.[35] 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 on CHBRP's website.[36]

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

Analysis-Specific Data Sources

Baseline coverage and prior authorization requirements of DAAs to treat hepatitis C for commercial enrollees were determined by a survey of the largest (by enrollment) providers of health insurance in California. Responses to this survey represent 91% of commercial enrollees with health insurance that can be subject to state benefit mandates. In addition, CalPERS plans were queried regarding related benefit coverage. As necessary, CHBRP extrapolated from responses of similarly situated plans/policies.

For this analysis, CHBRP relied on Current Procedural Terminology (CPT®) codes to identify relevant services related to AB 1843: CPT copyright 2026 American Medical Association (AMA). All rights reserved. Fee schedules, relative value units, conversion factors, and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein. CPT is a registered trademark of the AMA.

Health Cost Guidelines

Milliman's Health Cost Guidelines (HCGs) are a health care pricing tool used by actuaries in many of the major health plans in the United States. The guidelines provide a flexible but consistent basis for estimating health care costs for a wide variety of commercial health insurance plans. It is likely that these organizations use the HCGs, among other tools, to determine the initial premium impact of any new mandate. Thus, in addition to producing accurate estimates of the costs of a mandate, we believe the HCG-based values are also good estimates of the premium impact as estimated by the HMOs and insurance companies.

The highlights of the commercial HCGs include:

- Specific major medical, managed care, and prescription drug rating sections and guidance with step-by-step rating instructions.

[35] CHBRP's authorizing statute requires that CHBRP use a certified actuary or "other person with relevant knowledge and expertise" to determine financial impact.
[36] See CHBRP's Cost Impact Analysis landing page; in particular, see *Cost Impact Analyses: Data Sources, Caveats, and Assumptions*.

- Other helpful analysis resources such as inpatient length of stay distribution tables, Medicare Severity-Adjusted Diagnosis Related Group (MS-DRG) models, and supplementary sections addressing EHBs and mandated benefits, experience rating, and individual and small-group rating considerations.
- Presentation of loosely and well-managed nationwide utilization and cost information by Milliman benefit-aligned service categories used throughout the Rating Structures — inpatient hospital services for both loosely and well-managed care also supported by DRG level utilization and cost benchmarks.
- Annual updates address emerging regulatory considerations such as health care reform and mental health parity requirements.
- Annually updated benefit descriptions used in the HCG service categories.
- Annually updated medical trend assumptions and considerations.
- Presentation of two sets of nationwide area factors to facilitate development of area-specific claim costs, including separate utilization and charge level factors by type of benefit, state and Metropolitan Statistical Area for first-dollar coverage, and composite factors by deductible amount.
- Claim Probability Distributions (CPDs) by type of coverage that contain distributions of claim severity patterns for unique combinations of benefits and member types (adult, child, composite member).
- The Prescription Drug Rating Model (RXRM), an automated rating tool that provides a detailed analysis of prescription drug costs and benefits.

Consolidated Health Cost Guidelines Sources Database

Milliman maintains benchmarking and analytic databases that include health care claims data for nearly 60 million commercial lives and over 3 million lives of Medicaid managed care data. This dataset is routinely used to evaluate program impacts on cost and other outcomes.

Detailed Cost Notes Regarding Analysis-Specific Caveats and Assumptions

The analytic approach and key assumptions are determined by the subject matter and language of the bill being analyzed. 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 mandated offering includes individuals covered by DMHC-regulated commercial insurance plans, CDI-regulated policies, and CalPERS plans subject to the requirements of the Knox-Keene Health Care Service Plan Act.
- CHBRP surveyed the carriers to determine the percentage of the population with prior authorization requirements for hepatitis C DAA medications.

Methodology and assumptions for baseline utilization

Enrollees diagnosed with hepatitis C were identified in Milliman's proprietary 2024 Consolidated Health Cost Guidelines™ Sources Database (CHSD). This database only captures services that are filed for reimbursement by insurance and may not fully capture conditions related to noncovered benefits. CHBRP assigned enrollees into this condition using ICD 10 diagnosis codes B17.10, B17.11, B18.2, B19.20, and B19.21.

CHBRP used Milliman's CHSD to estimate that 0.06% of the 13,156,663 enrollees subject to AB 1843 were diagnosed with hepatitis C, totaling 7,852 enrollees (see Table 1 in CHBRP's Analysis of California Assembly Bill 1843).

CHBRP assumes that 10% of patients diagnosed with hepatitis C are treated with DAA medications at baseline based on estimates from Milliman's proprietary 2024 Consolidated Health Cost Guidelines™ Sources Database (CHSD) and two national studies (Ghany et al., 2025; Thompson et al., 2022). Milliman used the CHSD to obtain utilization for commercially insured enrollees in California, so it serves as CHBRP's primary source because that population of enrollees aligns with the population most impacted by AB 1843. The CHSD estimated a 5.7% treatment rate. However, two national studies found significantly higher treatment rates, one based on Symphony Health Solutions claims data that estimated a treatment rate of 35% (Ghany et al., 2025) and another based on HealthVerity claims data that also estimated a treatment rate of 35% for commercially insured enrollees (Thompson et al., 2022). The difference between the CHSD estimate and the national studies' estimate is partially because CHBRP used a broader list of diagnosis codes, which may have included enrollees who would not have a positive antibody or RNA test. Therefore, based on discussions with experts, including the content expert and two California-based physicians who treat patients with hepatitis C, CHBRP assumed a treatment rate of 10%, which is still grounded in Milliman's California-based estimate and might indicate these patients are experiencing higher barriers to care as compared with enrollees in other states.

Methodology and assumptions for baseline cost

- CHBRP calculated the average cost for a course of hepatitis C DAA treatment of $33,000 using Milliman's proprietary 2024 CHSD, trended to 2027 using Milliman's Health Cost Guidelines™ trends.
- CHBRP used the national drug codes (NDCs) in Table 5 to calculate an average cost for the course of treatment. If a generic drug with lower average costs was available for a therapeutic class, only the generic cost was used in the average, not the equivalent brand's cost, because only one drug per therapeutic class must be covered without prior authorization. There was no cost data available on elbasvir/grazoprevir in CHSD, so it is not included in the average.

Table 5. NDC, Drug Name, and Generic Drug Name of DAAs to Treat Hepatitis C

NDC	Drug Name	Generic Drug Name
72626260101	sofosbuvir/ledipasvir	sofosbuvir/ledipasvir
72626270101	sofosbuvir/velpatasvir	sofosbuvir/velpatasvir
61958220101	Epclusa	sofosbuvir/velpatasvir
61958220301	Epclusa	sofosbuvir/velpatasvir
61958220401	Epclusa	sofosbuvir/velpatasvir
61958220402	Epclusa	sofosbuvir/velpatasvir
61958220501	Epclusa	sofosbuvir/velpatasvir
61958220502	Epclusa	sofosbuvir/velpatasvir
61958180101	Harvoni	sofosbuvir/ledipasvir
61958180301	Harvoni	sofosbuvir/ledipasvir
61958180401	Harvoni	sofosbuvir/ledipasvir
61958180501	Harvoni	sofosbuvir/ledipasvir
00074260028	Mavyret	glecaprevir/pibrentasvir

00074262528	Mavyret	glecaprevir/pibrentasvir
00074262584	Mavyret	glecaprevir/pibrentasvir
00074262504	Mavyret	glecaprevir/pibrentasvir
00074262580	Mavyret	glecaprevir/pibrentasvir
00074262556	Mavyret	glecaprevir/pibrentasvir
00006307401	Zepatier	elbasvir/grazoprevir
00006307402	Zepatier	elbasvir/grazoprevir

Source: CHSD, 2026.
Key: NDC = national drug code.

Methodology and assumptions for baseline cost sharing

CHBRP assumed the cost sharing for DAAs for enrollees with coverage to be the minimum between the line of business 2027 maximum out of pocket (MOOP), the maximum copay for specialty drugs defined by Covered California benefit requirements, and major medical cost sharing. Enrollee cost share using major medical cost sharing is equal to one minus the line of business paid-to-allowed ratio multiplied by the script cost.

Methodology and assumptions for postmandate utilization

CHBRP assumes the utilization of DAAs to treat hepatitis C for enrollees with coverage postmandate would increase by 10% (or from 10% to 11%) as compared with enrollees with coverage at baseline because of the removal of prior authorization requirements.

AB 1843's removal of prior authorization requirements for DAAs to treat hepatitis C would increase utilization of DAAs via a direct effect and an indirect effect. The direct effect would occur because, postmandate, fewer prior authorization requests would be required, resulting in fewer denials and fewer patients being lost to follow-up during the prior authorization process. The indirect effect occurs when physicians who, at baseline, preemptively avoid prescribing a treatment that requires prior authorization because they expect the prior authorization request will be denied or delay treatment. Hence, the burden of submitting the request outweighs the likelihood the request would result in the patient being treated. Because this burden would be reduced under AB 1843's removal of prior authorization requirements, utilization of DAAs would increase via this indirect effect, also known as a sentinel effect.

The direct effect is estimated to be a 2% increase in utilization, which was calculated from Milliman's Prescription Drug Rating Model. This increase is based on the difference in utilization of specialty drugs for an average plan in California without prior authorization versus one with prior authorization. The sentinel effect[37] is estimated to be a 3% increase in utilization based on a Milliman prior authorization report (Busch and McCarthy, 2025). Busch and McCarthy estimated the direct and indirect effects for specialty drugs to be 3.5% and 5.0%, respectively; however, their estimate of the direct effect assumed patients shifted to more and higher-cost services, which overstates this effect for this bill. Notwithstanding, the ratio of their sentinel-to-direct effect (1.4) is relevant to AB 1843, resulting in sentinel effect of 3% (or 1.4 * 2%), which when combined with the direct effect, totals a 5% increase in utilization.

Based on the opinion of experts, including the content expert and two California-based physicians who treat patients with hepatitis C, the overall 5% effect was doubled to 10%. The experts believe prior authorization requirements for DAAs

[37] An indirect (or sentinel) effect occurs when physicians who, at baseline, preemptively avoid prescribing a treatment that requires prior authorization because they expect the prior authorization request will be denied or delay treatment. Hence, the burden of submitting the request outweighs the likelihood the request would result in the patient being treated. Because this burden would be reduced under AB 1843's prior-authorization restrictions, utilization of DAAs would increase via this indirect effect, also known as a sentinel effect.

restrain prescribing more than prior authorization requirements for other specialty drugs, as the prior authorization requirements for DAAs are not aligned with current national hepatitis C treatment guidelines. Consequently, they believe that removing the prior authorization requirements for DAAs to treat hepatitis C will lead to a greater increase in prescribing as compared with removing prior authorization for other specialty drugs. Although the overall effect of 10% is less than that found in a study that analyzed state Medicaid programs easing restrictions on DAAs to treat hepatitis C (Davey et al., 2024), that study is based on even more restrictive prior authorization requirements than what DAAs in California had at baseline.

Methodology and assumptions for postmandate cost

CHBRP assumes the average cost of DAAs to treat hepatitis C would not change as a result of AB 1843.

Methodology and assumptions for postmandate cost sharing

CHBRP assumed the cost sharing for DAAs for enrollees with coverage to be the minimum between the line of business 2027 maximum out of pocket (MOOP), the maximum copay for specialty drugs defined by Covered California benefit requirements, and major medical cost sharing. Enrollee cost share using major medical cost sharing is equal to one minus the line of business paid-to-allowed ratio multiplied by the script cost.

Other methodology and assumptions

- CHBRP assumes there would be offsets to the costs of hepatitis C treatment in terms of avoided medical complications, tests, and specialist visits for enrollees treated for hepatitis C.
- CHBRP assumes an evenly distributed cost of hepatitis C complications over 20 years for an average cost of $7,650 per year for 95% of those newly treated for hepatitis C postmandate, since DAA treatments are 95% effective at curing hepatitis C (Kaplan et al., 2022; Nyberg et al., 2023).
- Among those infected with hepatitis C, approximately 80% to 85% of cases will develop into chronic hepatitis C infection (Basit and Koirala, 2025). The increase in curative treatment postmandate would decrease health care utilization for hepatitis C–related complications, which could occur within 20 years after infection (WHO, 2025). As a result, health care utilization would decrease. Based on two cost-effectiveness studies that estimated the difference in health care utilization costs between untreated patients and those treated with DAAs, CHBRP assumes that the Year 1 costs to treat hepatitis C–related complications would decrease by $7,650 per incrementally treated patient (Nyberg et al., 2023; Kaplan et al., 2022). Excluding DAA drug costs, the studies found differences (in 2021$) of $158,021 and $84,481, respectively, which when inflated to 2027$, averaged to be $153,000. Because these complications occur within 20 years after infection (WHO, 2025), CHBRP assumes the infected patients who would be incrementally treated postmandate are evenly distributed over the 20-year post-infection period, which results in a steady state in each year postmandate, including Year 1 (2027). Therefore, CHBRP divided $153,000 by 20 (years) to obtain an annual cost of $7,650.
- CHBRP assumes some costs from genotype testing, liver ultrasounds, and specialist visits would be avoided with the introduction of AB 1843. CHBRP assumes only those with cirrhosis, suspected cirrhosis, or prior failed treatment would continue to receive these tests and thus assumes 25% of those treated with DAAs for hepatitis C would continue to receive these services. Those with cirrhosis were identified using the following ICD 10 diagnosis codes: K70.30, K70.31, K71.7, K74.3, K74.4, K74.5, K74.60, K74.69.
- Costs were not uniformly applied to all users and were applied by an estimated percentage of DAA users that receive these tests and/or screenings. These costs and utilization estimates were calculated using Milliman's proprietary 2024 CHSD and trended to 2027 using Milliman's Health Cost Guidelines™ Trends.
    - CHBRP assumes a reduction in genotype tests with an estimated average cost of $210 using CPT[38] code 87902.

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- CHBRP assumes a reduction in liver ultrasounds with an average cost of $310 using CPT codes 76705 and 76706.
- CHBRP assumes a reduction in specialist visits with an average cost of $350 using Milliman's HCGs.
- CHBRP assumes that there would be no reduction in the number of liver biopsies or elastographies due to AB 1843.

- CHBRP assumes that all plans that haven't responded to the carrier survey yet would require prior authorization for hepatitis C DAAs.

Determining Public Demand for the Proposed Mandate

CHBRP reviews public demand for benefits by comparing the benefits provided by self-insured health plans or policies (which are not regulated by the DMHC or CDI and therefore not subject to state-level mandates) with the benefits that are provided by plans or policies that would be subject to the mandate.

Among publicly funded self-insured health insurance policies, the preferred provider organization (PPO) plans offered by CalPERS have the largest number of enrollees. The CalPERS PPOs currently provide benefit coverage similar to what is available through group health insurance plans and policies that would be subject to the mandate.

To further investigate public demand, CHBRP used the bill-specific coverage survey to ask plans and insurers who act as third-party administrators for (non-CalPERS) self-insured group health insurance programs whether the relevant benefit coverage differed from what is offered in group market plans or policies that would be subject to the mandate. The responses indicated that there were no substantive differences.

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CHBRP Committees and Staff

CHBRP is an independent program administered and housed by the University of California, Berkeley, under the Office of the Vice Chancellor for Research. A group of faculty, researchers, and staff complete the analysis that informs 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 an independent actuarial firm, **Milliman, Inc.**, to assist in assessing the financial impact of each legislative proposal mandating or repealing a health insurance benefit. The **National Advisory Council** provides expert reviews of draft analyses and offers general guidance on the program to CHBRP staff and the Faculty Task Force. Information on CHBRP's analysis methodology, authorizing statute, as well as all CHBRP reports and other publications, are available at chbrp.org.

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Acknowledgments

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

Janet Coffman, MA, MPP, PhD, and Margaret Fix, MPH, of the University of California, San Francisco, prepared the medical effectiveness analysis. Penny Coppernoll-Blach, MS, of the University of California, San Diego, conducted the literature search. Meghan Soulsby Weyrich, MPH, and Aimee Moulin, MD, of the University of California, Davis, prepared the public health impact analysis. Brent Fulton, PhD, MBA, of the University of California, Berkeley, and Mark Peterson, PhD, of the University of California, Los Angeles, prepared the cost impact analysis. Aleece Blake, FSA, MAAA, and Andrew Brown, of Milliman provided actuarial analysis. Nimish Patel, PharmD, PhD, AAHIVP, of the University of California, San Diego, provided technical assistance with the literature search and expert input on the analytic approach. Adara Citron, MPH, of CHBRP staff prepared the Overview and Policy Context and synthesized the individual sections into a single report. Abby Choy, Project Assistant with CHBRP, prepared the infographic. A subcommittee of CHBRP's National Advisory Council (see previous page of this report) and members of the CHBRP Faculty Task Force — Kimberly Buss, MD, MS, MPH, of the University of California, San Francisco, and Elizabeth Magnan, MD, PhD, of the University of California, Davis — 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 chbrp.org.

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