A National Initiative to Eliminate Hepatitis C in the United States

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April 10, 2023



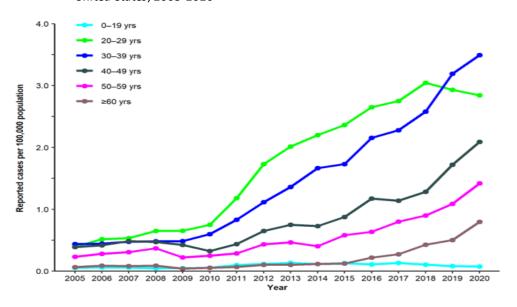


Hepatitis C is a Public Health Crisis in the United States

Slide credit: Division of Viral Hepatitis, CDC

Acute Infections

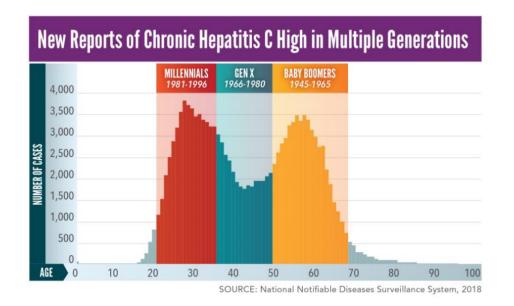
- Rate of reported acute hepatitis C cases
 increased 400% during 2010–2020
- Rates are highest among 20–39 year-olds
 Rates of reported cases of acute hepatitis Cvirus infection, by age group –
 United States, 2005-2020



2020 data are provisional. Rates are per 100,000 population. Source: CDC, National Notifiable Diseases Surveillance System

Chronic Infections

- Estimated 2.4 3 million (or possibly more) people living with hepatitis C
- About 40% of people with hepatitis C are unaware of their infection



Sources: Hofmeister et al, Hepatology, 2018; Patel et al, CID, 2019; Ryerson et al, MMWR, 2020.

Current Barriers to Getting Hepatitis C Treatment

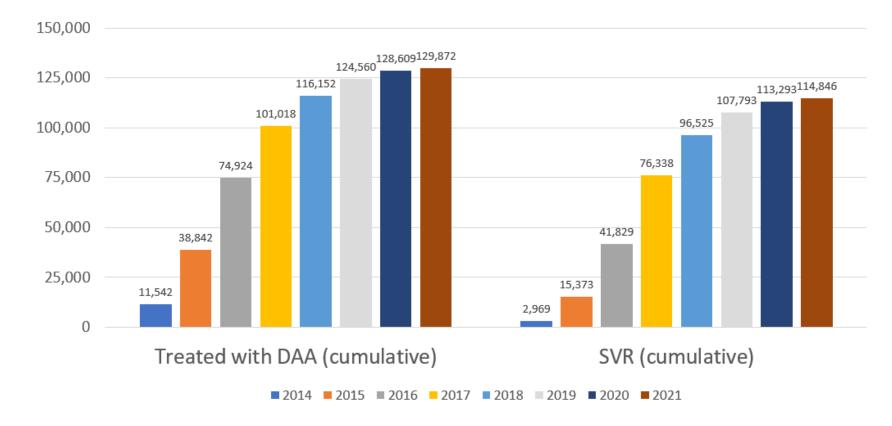
- Lack of awareness of condition (40% do not know they are infected)
- Two step diagnosis, lack of point-of-care diagnostics, loss of contact
- High cost of treatment (initially \$90K, still \$20K)
- Insurance treatment restrictions (liver damage, sobriety, pre-authorization requirements, specialist needed)
- Treatment not routine part of primary care
- Underserved and hard-to-reach populations including uninsured, people who inject drugs, justice-involved populations

Slide credit: Division of Viral Hepatitis, CDC **Hepatitis C Treatment Barriers** Starting honoring Creatment idenosed min hegariis C

Veterans' Affairs Hepatitis C Elimination Program

Veterans'
Administration,
Hepatitis C
elimination
program (20142021)

Hepatitis C Treated (DAA) and SVR VA 2014 – 2021 (March)

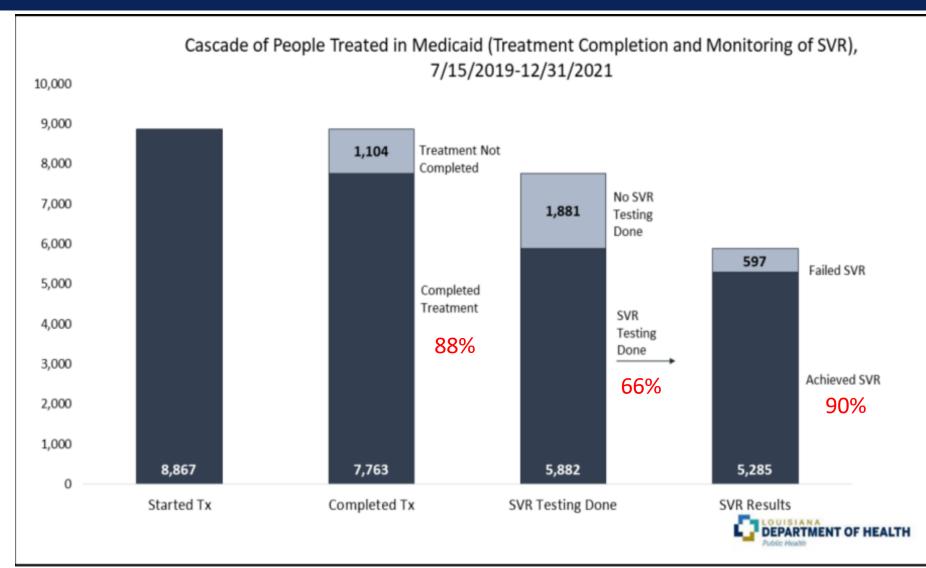


Acknowledgements: Veterans' Health Administration, Dr Tim Morgan, VA and Dr Pam Belperio, VA

Pilots show that this can work in the states

Louisiana, Medicaid cohort, 2019-2021

SVR = sustained virologic response



Acknowledgements: Louisiana Department of Health and Dr Risha Irvin, Johns Hopkins University

Other countries have embarked on national Hepatitis C elimination programs!



Protecting and improving the nation's health

Hepatitis C in the UK 2020

Working to eliminate hepatitis C as a major public health threat

The NEW ENGLAND JOURNAL of MEDICINE

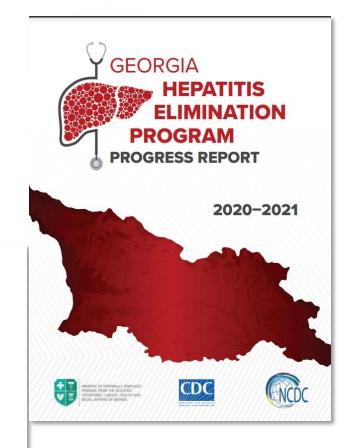
SPECIAL REPORT

Screening and Treatment Program to Eliminate Hepatitis C in Egypt

Imam Waked, M.D., Gamal Esmat, M.D., Aisha Elsharkawy, M.D., Magdy El-Serafy, M.D., Wael Abdel-Razek, M.D., Reham Ghalab, M.Sc., Galal Elshishiney, M.Sc., Aysam Salah, B.Sc., Soad Abdel Megid, M.Sc., Khaled Kabil, M.Sc., Manal H. El-Sayed, M.D., Hany Dabbous, M.D., Yehia El Shazly, M.D., Mohamed Abo Sliman, M.Sc., Khalid Abou Hashem, M.Sc., Sayed Abdel Gawad, M.Sc., Nevine El Nahas, B.Sc., Ahmed El Sobky, M.Sc., Sahar El Sonbaty, M.Sc., Hamdy El Tabakh, M.Sc., Ehab Emad, M.Sc., Hany Gemeah, M.Sc., Amal Hashem, M.Sc., Mohamed Hassany, M.D., Naseif Hefnawy, M.Sc., Abdel N. Hemida, M.B., B.Ch., Ayman Khadary, M.B., B.Ch., Kamal Labib, M.B., B.Ch., Faisal Mahmoud, M.B., B.Ch., Said Mamoun, M.Sc., Tamer Marei, M.Sc., Saad Mekky, M.Sc., Alsayeda Meshref, M.Sc., Alaa Othman, M.Sc., Omnia Ragab, M.Sc., Elhag Ramadan, M.Sc., Ahmed Rehan, M.Sc., Tarek Saad, Ph.D., Ramy Saeed, M.Sc., Mohamed Sharshar, M.Sc., Hesham Shawky, M.Sc., Mohamed Shawky, M.Sc., Wael Shehata, B.Sc., Hanaa Soror, M.Sc., Mohsen Taha, M.Sc., Mahmoud Talha, M.Sc., Adel Tealaab, M.Sc., Mohamed Zein, M.D., Alaa Hashish, M.P.H., Ahmed Cordie, M.D., Yasser Omar, M.D., Ehab Kamal, M.D., Islam Ammar, M.D., Mohamed AbdAlla, M.D., Wafaa El Akel, M.D., Wahid Doss, M.D., and Hala Zaid, M.Sc.

Chronic hepatitis C virus (HCV) infection is a ment available for all and to scale up treatment major global health problem affecting 1% of the to millions, as described previously.10 More than world population.12 The Sustainable Development 2 million patients were treated by 2018 (repre-

Goals that were adopted by the United Nations senting 40% of the total HCV-infected popula-





Economic benefits of a Hepatitis C elimination program – prior publications

Clinical Gastroenterology and Hepatology 2017;15:827-837

SYSTEMATIC REVIEWS AND META-ANALYSES

Fasiha Kanwal, Section Editor

Direct-Acting Antiviral Agents for Patients With Hepatitis C Virus Genotype 1 Infection Are Cost-Saving

Jagpreet Chhatwal,*** Tianhua He, Chin Hur,*** and Maria A. Lopez-Olivo*

Cost-effectiveness of direct-acting antivirals for chronic hepatitis C virus in the United States from a payer perspective

David E Kaplan, MD, MSc, FACP, AGAF, FAASLD; Marina Serper, MD; Ankita Kaushik, PhD: Claire Durkin, MD: Angie Raad, MSc; Fadoua El-Moustaid, PhD: Nathaniel Smith, PhD; Alon Yehoshua, PharmD, MS

MILLIMAN WHITE PAPER

Costs and Considerations for Elimination of Hepatitis C Virus in the United States

A scenario analysis of the costs and timeline associated with hepatitis C elimination

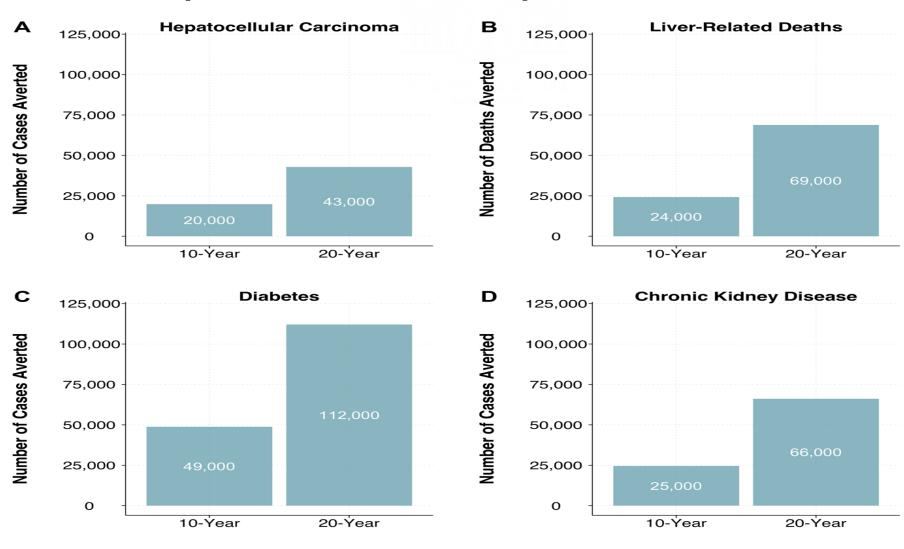
Ryan Cloninger, Senior Pharmacy Benefits Analytics Manager Kristin Niakan, MPH, Senior Pharmacy Benefits Analytics Manager Kali Schweitzer, PharmD, Senior Managed Care Pharmacist Susan Silseth, FSA, MAAA, Senior Consulting Actuary

Commissioned by: Gilead Sciences, Inc.

- **2017 Systematic Review** concludes DAAs both save lives and reduce costs.
- 2022 Veterans' Affairs Study concludes significant reduction in advanced liver disease and \$7-\$9 Billion cost savings (\$69,000 per cured vet) over 50 years in the VA. Cost savings as early as 5 years after treatment begins
- 2023 Milliman Report identified savings from \$28 Billion to \$46 Billion (depending on the increased rates of testing and treatment) over 10 years. Over 30 years, the savings were even greater between \$226 and \$257 billion.

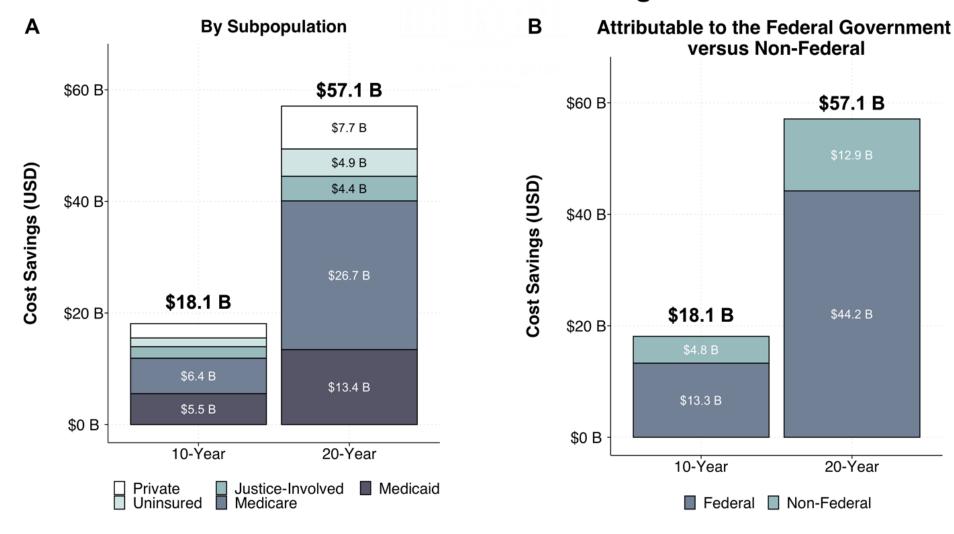
Economic benefits of a Hepatitis C elimination program: new analysis Chhatwal, Aaron, Zhong, Sood, Irvin, Alter, Zhuo, Sharfstein, Ward (2023)

Hepatitis C-Related Complications Averted



Economic benefits of a Hepatitis C elimination program: new analysis Chhatwal et al. (2023)

Cumulative Cost Savings



Components of the President's National Initiative on Hepatitis C

1) Point-Of-Care (POC) diagnostic tests

- RNA POC tests are currently available outside of the United-States, but not yet in the United-States.
- Plan: leverage the RADx ITAP program, with NIH, FDA and CMS, to accelerate clearance and achieve reimbursement in the US.
- Enable hepatitis C single-visit "test and treat" programs to enhance cascade of care

2) Providing broad access to curative hepatitis C medications

a) National subscription model

- Federal government negotiates a fixed sum for drug access with participating manufacturers, following the model of Louisiana's so-called "Netflix Model" but for the entire United States
- Already paid-for drugs are made readily available to Medicaid beneficiaries, justice-involved populations, individuals in opioid treatment programs, the uninsured, and American Indians and Alaskan Natives.

b) Medicare Co-Pay Assistance

Additional co-pay assistance is provided to Medicare beneficiaries for whom current costs are a barrier.

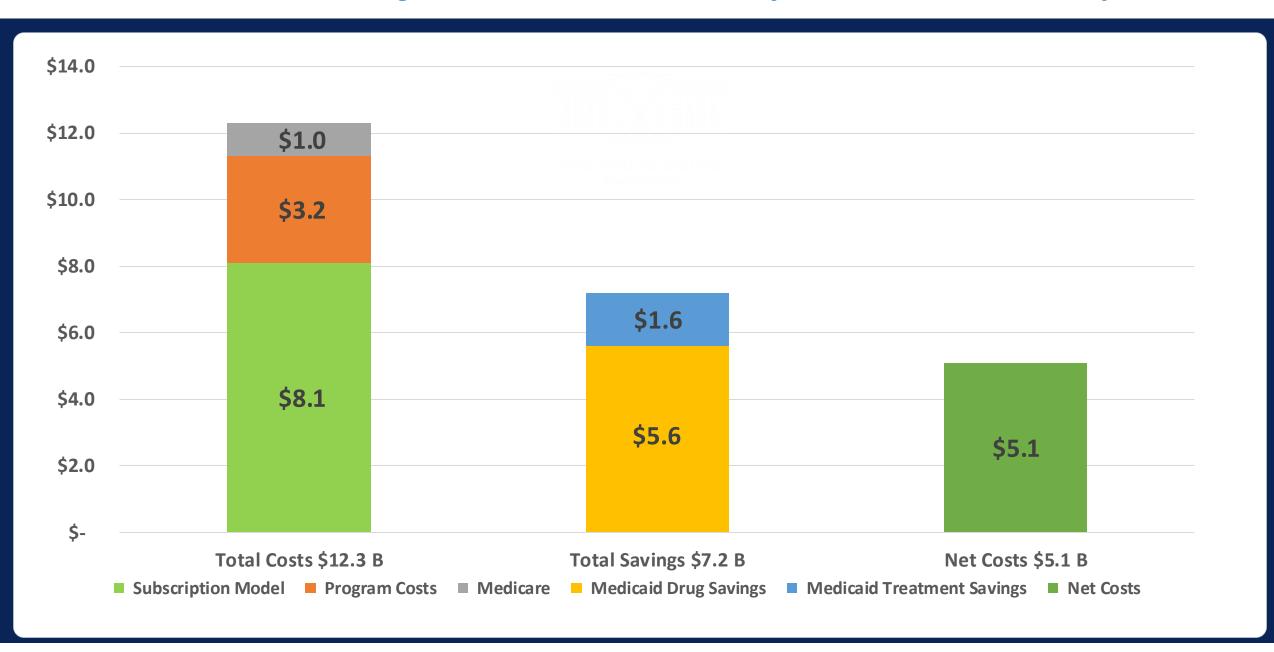
c) Commercial insurance

• Private insurers will be strongly encouraged to increase coverage for hepatitis C testing and treatment, and to limit out-of-pocket costs.

Components of the President's National Initiative on Hepatitis C (cont.)

- **3) Empower implementation efforts:** To reach, test and treat all affected individuals, the initiative proposes to support the:
- Expansion of screening strategies and settings, especially for high-risk populations;
- Expansion of the **number of providers** who can screen and treat hepatitis C using innovative telehealth methods such as the ECHO program;
- Expansion of the **number of community health workers and case managers** who can link people to care;
- Re-energizing of vaccine research and support for preventive services.

The President's FY24 Budget: \$5.1 Billion in Net Costs for the Initiative over 10 years



Components of the President's National Initiative on Hepatitis C (cont.)

VIEWPOINT

A National Hepatitis C Elimination Program in the United States

A Historic Opportunity

Rachael L. Fleurence, MSc, PhD

Executive Office of the President, The White House, Washington, DC.

Francis S. Collins, MD, PhD

Executive Office of the President, The White House, Washington, DC.

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Multimedia

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Related article

One of the most dramatic scientific achievements of

the last few decades has been the development of directacting antivirals (DAAs) that can cure hepatitis C in more than 95% of people infected. But 9 years after the first such treatment was approved in the United States, the simple 8- to 12-week oral cure is not reaching a significant fraction of the more than 2.4 million US residents chronically infected with hepatitis C.¹ More than 15 000 US residents die of hepatitis C every year unnecessarily. In its fiscal year 2024 budget proposal, the Biden-Harris administration has put forward a bold 5-year program to put the nation on course to eliminate hepatitis C in the United States.

The consequences of untreated hepatitis C can be severe: cirrhosis, liver failure, hepatocellular cancer, and death. Curative treatment stops transmission, prevents liver cancer and liver failure, and saves lives. It is even likely to be cost-saving, by avoiding expensive medical treatments for liver failure and liver cancer. So why is this not a public health success story? One major reason is that many people with hepatitis C have poor access to health care and experience other chronic health and social

It is rare to have the opportunity, using a simple and safe oral medication, to eliminate a lethal disease. But that is the situation facing the United States with hepatitis C.

JAMA Published online March 9, 2023

tion goals. Only about one-third of people diagnosed with hepatitis C who have private insurance, Medicare, or Medicaid get treated, and the proportion is probably even lower for those without insurance. This is in part due to current restrictions, such as requirements for patient sobriety, requirements to document evidence of liver fibrosis, and the restriction of access to treatment only to those seen by specialists, that have been put in place by public and private insurers in reaction to the high cost of DAAs (\$90 000 per patient initially, still around \$20 000). Low rates of treatment may also reflect the complexity of traversing the full cascade of care in our health care delivery system.

Addressing this missed opportunity can save both lives and money. A national effort can build on lessons from programs launched by jurisdictions such as the states of Louisiana and Washington, the Cherokee Nation, the Veterans Health Administration, and the Federal Bureau of Prisons. For example, the Veterans Health Administration has treated more than 92 000 veterans with hepatitis C virus since 2014, with cure rates exceeding 90%. 5 A key lesson from these initiatives is

that success requires both managing the cost of the medications and developing a comprehensive public health effort to identify persons with hepatitis C and link them to care.

To bring these efforts to a national scale, the Biden-Harris administration is calling on Congress to embrace its proposed 5-year program to eliminate hepatitis C in the United States. This program was developed through extensive con-

Stakeholder Outreach

Patient Advocac	y Organizations:
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American Liver Foundation

Caring Ambassadors

Coalition for Global Hepatitis Elimination

DePauw University

Hepatitis Appropriations Committee

Hepatitis B Foundation

Hepatitis C Mentor & Support Group, Inc.

HIV and Hepatitis Policy Institute

National Alliance of State and Territorial AIDS

Directors (NASTAD)

National Association of Community Health Centers

National Harm Reduction Coalition

National Viral Hepatitis Roundtable (NVHR)

Philadelphia FIGHT Community Health Centers

The AIDS Institute

Treatment Action Group

Other Patient Advocacy Organizations

Access Support Network

Digestive Disease National Coalition

ekiM For Change

End Hepatitis C

Global Liver Institute

Liver Coalition of San Diego

National A Treatment Advocacy Program

National Black Leadership Commission on Health

NC Survivors Union

Yakima Valley Farm Workers

Professional Societies:

American Academy of Family Physicians (AAFP)

American Association for the Study of Liver Diseases (AASLD)

American Association of Medical Colleges (AAMC)

American Medical Association (AMA)

Infectious Diseases Society of America (IDSA)

Association of Schools and Programs in Public Health (ASPPH)

State and Local Organizations:

Association of State and Territorial Officials (ASTHO)

National Academy for State Health Policy (NASHP)

National Association of Medicaid Directors (NAMD)

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- Dr Risha Irvin, Johns Hopkins University
- Dr Josh Sharfstein, Johns Hopkins University
- Dr Neeraj Sood, University of Southern California



- Dr John Ward, Coalition for Global Hepatitis Elimination

Success is nothing more than going from failure to failure with undiminished enthusiasm.

-- Sir Winston Churchill