A National Initiative to Eliminate Hepatitis C in the United States

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Hepatitis C is a Public Health Crisis in the United States

- 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 C virus infection, by age group – United States, 2005–2020

- 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

Acute Infections

Chronic Infections

**New Reports of Chronic Hepatitis C High in Multiple Generations**

2020 data are provisional. Rates are per 100,000 population.

Source: CDC, National Notifiable Diseases Surveillance System

Hepatitis C is now curable! But the cure isn’t reaching everyone

- **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
Hepatitis C Virus Clearance Cascade Using National Commercial Laboratory Data -- United States, 2013-2022

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Proportion</th>
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<tbody>
<tr>
<td>Ever infected†</td>
<td>1,719,493</td>
<td>100%</td>
</tr>
<tr>
<td>Viral Testing§</td>
<td>1,520,592</td>
<td>88%</td>
</tr>
<tr>
<td>Initial Infection§</td>
<td>1,042,082</td>
<td>69%</td>
</tr>
<tr>
<td>Cured/Cleared§</td>
<td>356,807</td>
<td>34%</td>
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<tr>
<td>Persistent/Reinfection§</td>
<td>23,518</td>
<td>7%</td>
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Notes: † Data from Quest Diagnostics during period: January 1, 2013 - December 31, 2022. ‡ Ever Infected was assessed during the baseline period: January 1, 2013 – December 31, 2021. § Viral Testing, Initial Infection, Cured/Cleared, and Persistent/Reinfection were assessed during the follow-up period: January 1, 2013 – December 31, 2022. ¶ Denotes conditional proportion using denominator from previous column.

Source: CDC, MMWR June 30, 2023
Veterans’ Administration, Hepatitis C elimination program (2014-2021)

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
A National Hepatitis C Elimination Program in the United States: A Historic Opportunity

One of the most dramatic scientific achievements of the last few decades has been the development of direct-acting 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. 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 healthcare and experience other chronic health and social services.

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.

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Multimedia
Related article
Components of the President’s National Initiative on Hepatitis C

1) Point-Of-Care (POC) diagnostic tests
   • RNA POC tests not currently available in the United-States.
   • Tests available outside of the US, including fingerstick sample collection
   • Plan: leverage the RADx ITAP program to accelerate clearance and achieve reimbursement in the US.
   • Enable hepatitis C single-visit “test and treat” programs to enhance cascade of care

Xpert HCV Viral Load test (manufactured by Cepheid) is a point-of-care hepatitis C virus test that can detect active infection from a finger-stick sample of blood.
Components of the President’s National Initiative on Hepatitis C

2) Providing broad access to curative hepatitis C medications

a) National subscription model
   - Fixed sum for drug access negotiated by the US Government.
   - Follows Louisiana’s “Netflix Model” – but for the entire United States.
   - Drugs to be made 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

c) Commercial insurance
3) Empower implementation efforts:

- Expansion of **screening strategies and settings**, especially for high-risk populations;

- Expansion of the **number of providers** using innovative telehealth methods such as the ECHO program;

- Expansion of the **number of community health workers** who can link people to care;

- Re-energizing of **vaccine research** and support for **preventive services**.
Economic benefits of a Hepatitis C elimination program: new analysis
Chhatwal et al. (2023) NBER Working Paper
Economic benefits of a Hepatitis C elimination program: new analysis
Chhatwal et al. (2023) – NBER Working Paper

Cumulative Cost Savings

A By Subpopulation

Cost Savings (USD)

$0 B $20 B $40 B $60 B

10-Year 20-Year

$18.1 B

$13.4 B

$6.4 B

$5.5 B

$26.7 B

$4.4 B

$4.9 B

$7.7 B

$57.1 B

B Attributable to the Federal Government versus Non-Federal

Cost Savings (USD)

$0 B $20 B $40 B $60 B

10-Year 20-Year

$18.1 B

$13.3 B

$4.8 B

$44.2 B

$12.9 B

Federal Non-Federal

Private Uninsured Justice-Involved Medicaid Medicare
Unless we take action, our system will be spending tens of billions of dollars for Hep C care over the coming decades – for people who are already infected.

How about instead we invest now in a Hep C cure?

It’s the compassionate thing to do – we can prevent untold suffering and save tens of thousands of lives.

It’s the economically wise thing to do – it’s actually long term deficit reduction.
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• Dr Nathan Furukawa
• Karina Rapposelli
To know what has to be done, then do it, comprises the whole philosophy of practical life.

-- Sir William Osler