Is Hepatitis C Elimination Cost Saving?

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Relevant Questions of Interest...

• How the use of new therapies is expected to reduce HCV disease burden?
• Are new therapies cost-effective and/or cost-saving?
• What’s the cost of eliminating HCV?
Liver-Related Deaths in the Era of New Antivirals: United States
Liver-Related Deaths in the Era of New Antivirals: United States

![Liver-related Deaths Chart](Image)

- **No Treatment**
- **Pre-DAA Era**
Liver-Related Deaths in the Era of New Antivirals: United States
Liver Cancer in the Era of New Antivirals: United States
Liver Cancer in the Era of New Antivirals: United States
Liver Cancer in the Era of New Antivirals: United States
HCV-Associated Disease Burden (2015–2050)

- Liver-related Death: 767,000 (No Treatment)
- HCC: 407,000 (No Treatment)
- Decomp. Cirrhosis: 651,000 (DAA Era)
- Liver Transplants: 63,000 (DAA Era)

Chhatwal et al. 2016 Hepatology 64:1442-1450
HCV-Associated Disease Burden (2015–2050)

20–30% reduction in HCV-associated disease burden

Chhatwal et al. 2016 Hepatology 64:1442-1450
HCV-Associated Disease Burden (2015–2050)

50–70% reduction in HCV-associated disease burden

Chhatwal et al. 2016 Hepatology 64:1442-1450
Cost of HCV Treatment
The Elephant in the Room...

$1000
Is $1000-a-pill Price Justified?

$1,000 Pill For Hepatitis C Spurs Debate Over Drug Prices
by RICHARD KNOX
December 30, 2013 3:22 AM

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Morning Edition
4 min 34 sec

CMAJ
Medical knowledge that matters

NEWS
February 18, 2014
Screening urged for Hepatitis C but drug costs are prohibitive

Gilead is not the original developer of Sovaldi, its new Hepatitis C medication that will cost $84,000 for a 12-week course of treatment; instead, it bought the drug developer, rival company Pharmasett, for $11 billion cash in 2011. Gilead now seeks a bon
Is HCV Treatment Cost-Effective/Saving?

• Cost-effective ≠ cost savings
• Cost-effective ≠ affordable
• “Cost-effective” implies that we are willing to spend additional money to gain additional health benefits
• “Cost-saving” implies that we will gain health benefits by implementing the intervention, and we will save money as well
HCV Treatment Costs Have Decreased

What is the Value of HCV Treatment?

What is the lifetime treatment cost?

- HIV treatment\(^1\) = $315,000
- Primary biliary cholangitis (obeticholic acid)\(^2\) = $900,000
- Hepatitis C treatment (oral DAAs) < $30,000

How much would it cost to gain 1 additional quality-adjusted life year?

- HIV treatment\(^3\) < $30,000 (cost-effective)
- Primary biliary cholangitis (obeticholic acid)\(^2\) = $190,000 (not cost-effective)
- Hepatitis C treatment (oral DAAs)\(^4\):

\(^1\)Schackman 2006 Med Care. \(^2\)Samur 2017 Hepatology; \(^3\)Walensky 2007 Clinical Inf Dis. \(^4\)Chhatwal 2017 Clinical Gastro & Hep
HCV Treatment is Cost-Saving

The more we treat, the more we save!
Cost of HCV Management: UK
Cost of HCV Elimination vs. Status Quo: United Kingdom

Cost savings --> $1.71 billion

- Status quo
- Elimination scenario

Billions ($)

Natural history
Treatment
Diagnose
Summary

• HCV elimination is feasible and will save lives
• Initial investment is needed to eliminate HCV
  • Resources spent on HCV elimination provide a good value for money and will result in cost-savings