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Hepatitis C hospitalization costs trump original estimates

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This Brief reports on actual, direct costs of HCV-related hospitalizations based on as-yet unpublished data from the California Department of Public Health (CDPH) Immunization Branch. Additionally, we identify several low- or no-cost policy options that policymakers may wish to consider to better address this public health issue.

The CDPH data report $1.6 billion in HCV-related hospitalization direct costs in California during 2007 (Winter), nearly double the highest cost estimates CRB reported in 2008 for direct and indirect healthcare expenses related to HCV.

These new figures exclude many indirect costs, such as time off from work for physician visits. Further, they exclude certain high-cost treatment protocols and most costs from Kaiser Permanente (which serves more than six million Californians), California military hospitals and Veterans Affairs Hospitals (which care for over 30,000 HCV-positive veterans and service-members in California); none of whom report inpatient cost data to the state (Winter).

UPDATE

In July 2008, the California Research Bureau reported estimated direct and indirect health-care costs of Hepatitis C (HCV) in California, at $49.8 million to $888.1 million per year.

For more information please see:
Rasada, Pamela. Hepatitis C: Public Policy Implications of a Silent Virus, California State Library, California Research Bureau, CRB 08-009, July 2008. Available online at: http://www.library.ca.gov/crb/08/08-009.pdf

Why Is This Important?

HCV is the most common blood-borne viral infection, the tenth leading cause of death among adults, and the fourth leading cause of premature death from infectious disease (CDC, 2001; NIH; Wise). HCV-related deaths in California more than doubled in one decade, rising to 1,155 in 2004 from 503 in 1995 (Wise).

Infected individuals often exhibit no signs or symptoms until cirrhosis has developed (CDC, 2001). As noted in our 2008 report, "The presence of cirrhosis significantly increases an individual's risk for advancing to end-stage liver disease, developing liver cancer…, and /or requiring a liver transplant" (Rasada).

Extrapolating from national figures, some

> *Despite primary prevention efforts to educate the public about hepatitis C, the most prevalent blood-borne human disease in the world today, most Americans remain unaware of their infection status. Widespread screening programs established to identify those at risk have been slow to emerge and difficult to implement, especially when compared to the nations rapid response to the HIV/AIDS epidemic.*
>
> ~ ***Instone, et al.**, Lessons Learned About Barriers to Hepatitis C Testing*

600,000 Californians are HCV-positive, with 5,000 new infections annually (Edlin, et al.; DHCS; Kaiser). According to the CDC, most HCV-positive individuals are unaware they are infected (CDC, N.d.). For this reason, and because progression of HCV to end-stage liver disease has been shown to be directly related to lifestyle choices, educating infected individuals about simple strategies to slow disease progression is a key component in promoting good health among HCV-positive individuals, and slowing the increase in HCV- and HBV-related costs.

Select Populations at Increased Risk

Emerging evidence suggests that HCV transmission through sexual activity is occurring among men who have sex with men, particularly for HIV-positive men. People with HIV who contract HCV are at risk for rapid progression to liver disease (Danta, et al.).

Exposure to HBV and HCV in healthcare settings may be more common than previously thought. Recent media coverage of HCV outbreaks at an endoscopy clinic in Nevada and similar outbreaks elsewhere raise concerns about compliance with standard precautions and infection control protocols (Thompson).

Evidence also suggests that HCV transmission may occur at high rates in settings where tattoos, piercings, and other body modification procedures are practiced without properly sterilized equipment. The sharing of body jewelry has also been shown to be a risk factor for transmission (Daniel and Sheha; Haley and Fischer, 2001, 2003).

What Options Does California Have?

The federal government funds a Hepatitis C Coordinator for every state, but provides little for HCV prevention programs. The appropriation of additional funding may be challenging at best with federal and state budgets stretched thin. Below are some options for low- to no-cost interventions that policymakers may wish to consider:

Syringe Exchange Program (SEP) Statewide Authorization: SEPs provide sterile syringes, social service referrals, and linkages to drug treatment for injection drugs users who are at elevated risk for infection.

In California, SEPs and over-the-counter sales of syringes at pharmacies are county-level programs authorized under SB 1159 (Vasconcellos, Chapter 608, Statutes of 2004). Some counties lack these programs. Additionally, criminalization of drug paraphernalia possession prevents people who use drugs from accessing syringe programs due to fear of arrest, limiting these programs' public health impact (Goldberg).

We found widespread expert agreement that statewide authorization of SEPs and over-the-counter pharmacy syringe sales would improve syringe access without requiring new public spending. Additionally, removing syringes from the list of illegal paraphernalia, and deregulating syringe sales entirely, could enhance the effectiveness of syringe access programs (CHI). The expiration, in 2010, of over-the-counter pharmacy syringe sales authorized under SB 1159 raises an opportunity for revisiting syringe-access policies and

finding ways to eliminate these barriers.

SEPs have been shown to sharply reduce needle sharing, street purchase of syringes, and police incidents of needle sticks (Groseclose, Martinez). The CRB has found no credible evidence that SEPs lead to increases in crime, improper disposal of syringes, or initiation of drug use.

Despite support for SEP programs from such figures as former Health and Human Services Secretary Donna Shalala and former Surgeon General David Satcher, a federal policy prohibiting the use of federal money for SEPs remains in effect. California policymakers may wish to encourage Congress to lift this moratorium on the use of federal funds for SEPs in order to benefit from the use of federal dollars in expanding the programs (Martinez).

Enforcement of Existing Standards: California implemented legislation in 1997 (AB 186, Brown, Chapter 742, Statutes of 1997) requiring the California Conference of Local Health Officers (CCLHO) to establish sterilization, sanitation, and safety standards for persons engaged in the business of tattooing, body piercing, or permanent cosmetics. On June 30, 1998, CCLHO submitted the finalized standards to CDPH (then the California Department of Health Services), who in turn disseminated them statewide. According to a CDPH memorandum dated June 10, 2008, some county counsels have expressed concern regarding the enforceability of the standards in the absence of a local ordinance. The memorandum notes that there are no barriers to enforcement of the standards at the local level. It is unclear what level of enforcement, if any, is occurring (Baldridge). CDPH could work with local governments to determine low- and no-cost ways of ensuring the standards are being implemented in local establishments.

Enhance Outreach Through Creative Utilization of Existing Resources: Preventing disease progression, and transmission, through education of the general public, and outreach to at-risk groups, is key to reducing HCV- and HBV-related healthcare costs.

The Governor and Agency Secretaries, as their powers allow, could encourage at-risk adult service programs to collaborate. Working together, these programs would better deliver HBV/HCV-related services. Further, when state agencies (such as CDPH, California Department of Healthcare Services, California Department of Drug and Alcohol Programs, California Department of Mental Health, and the California Department of Corrections and Rehabilitation) collaborate in ways such as cross-training staff, the expanded knowledge-base will help local programs better educate the public about hepatitis B and hepatitis C.

Bibliography

Baldridge, Peter. Memorandum to Public Health Law Workgroup, Enforcement of Tattoo Safety Standards Established by CCLHO, June 10, 2008.

United States Centers for Disease Control and Prevention (CDC). National Hepatitis C Prevention Strategy 2001. Atlanta, GA: The Department, Spring 2001.

United States Centers for Disease Control and Prevention (CDC). Get Tested for Hepatitis C Brochure. N.d. http://www.cdc.gov/ncidod/diseases/hepatitis/resource/PDFs/lbtinfo.pdf (accessed June 17, 2008).

United States Centers for Disease Control and Prevention (CDC). Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease. In MMWR Weekly, October 16, 1998/47(RR19); 1-39. Atlanta, GA: The Department.

Center for Health Improvement (CHI). "Policy Brief: Syringe Exchange in California: Policy, Programs, and Progress." Center for Health Improvement, August 2007.

Daniel, A. Rebecca and Thomas Sheha. "Transmission of Hepatitis C Through Swapping Body Jewelry." Pediatrics. Vol. 116, pp. 1264-65. 2005.

Danta, Mark, et al. "Recent Epidemic of Acute Hepatitis C Virus in HIV-Positive Men Who Have Sex With Men

Linked to High-Risk Sexual Behaviors," AIDS. Vol. 21, No. 8. 2007.

California Department of Health Care Services (DHCS). The Hepatitis C Strategic Plan: A Collaborative Approach to the Emerging Epidemic in California. Berkeley: The Department, 2001.

Edlin, Brian; Marla Shu and Yolanda Barron-Vaya. Center for the Study of Hepatitis C, Weill Medical College of Cornell University. Presentation of study abstract regarding HCV Prevalence, American Association For the Study of Liver Diseases Conference, November 2005 in San Francisco, CA. www.natap.org/2005/AASLD/aasld_49.htm (accessed March 24, 2005).

Goldberg, Lina. "Legal Issues Surrounding Syringe Exchange Programs," The Knol, Internet Document, May 15, 2009. http://knol.google.com/k/lina/legal-issues-surrounding-syringe/18lnh961rb830/6?domain=knol.google.com&locale=en#.

Groseclose, S.L., B. Weinstein, T.S. Jones, et al. "Impact of Access to Needles and Syringes on Practices of Injection Drug Users and Police Officers – Connecticut, 1992-1993." Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. Vol. 10, pp. 82-89. 1995.

Haley, Robert and Paul Fischer, "Commercial Tattooing as a Potentially Important Source of Hepatitis C Infection Clinical Epidemiology of 626 Consecutive Patients Unaware of Their Hepatitis C Serologic Status." Medicine. Vol. 80, No. 2, pp. 134-51. March 2001.

Haley, Robert W., and R. Paul Fischer. "The Tattooing Paradox, Are Studies of Acute Hepatitis Adequate to Identify Routes of Transmission of Subclinical Hepatitis C Infection?" Archives of Internal Medicine. Vol. 163, pp. 1095-98. May 12, 2003.

Hayes, MO and GA Harkness. "Body piercing as a Risk Factor for Viral Hepatitis: An Integrative Research Review," American Journal of Infection Control. Vol. 29, pp. 271-274. 2001.

Henry J. Kaiser Family Foundation (Kaiser). "HIV/AIDS Policy Fact Sheet, The HIV/AIDS Epidemic in the United States," The Foundation, July 2007.

(HCAP) Hepatitis C Appropriations Partnership. Action Alert, Urge Your Members of Congress to Fund Hepatitis C in their Appropriations Programmatic Request Letters, The Partnership. http://www.hcvadvocate.org/community/Alert_feb7_08.htm.

Instone, Susan L., Tari L. Gilbert and Mary Rose Mueller. "Lessons Learned About Barriers to Hepatitis C Testing: Implications for Policy," Policy, Politics, & Nursing Practice. Vol. 4, No. 4, pp. 288-294. November 2003.

Jesse, Ann. "Testimony of Ann Jesse for the National Hepatitis C Advocacy Council." Before the Committee on Government Reform, U.S. House of Representatives. December 14, 2004.

Martinez, Joanna Berton. Narrative: Science-Based Literature on Syringe Exchange Programs (SEPs), 1996-2007. http://www.harmreduction.org/downloads/SEP%20Lit%20Review.doc (accessed May 19, 2009).

McLean, Rachel. Personal communication, May 15, 2009.

National Institutes of Health (NIH). Management of Hepatitis C: 2002 Consensus Conference Statement. http://consensus.nih.gov/2002/2002HepatitisC2002116html.htm (accessed March 3, 2006).

Rasada, Pamela. Hepatitis C: Public Policy Implications of a Silent Virus, California State Library, California Research Bureau, CRB 08-009, July 2008.

Ross, Alessandra. California Department of Public Health staff, Personal communication, April 13, 2009.

Thompson, Nicola D. et al. "Nonhospital Health Care-Associated Hepatitis B and C Virus Transmission: United States, 1998-2008." Annals of Internal Medicine. Vol. 150, pp. 33-39, 2009.

Winter, Kathleen. "HBV and HCV hospitalization data", Personal communication, April 16, 2009.

Wise, Matthew. et al. "Changing Trends in Hepatitis C – Related Mortality in the United States, 1995-2004," Hepatology, Vol. 47, No. 4, pp. 1128-35, April 2008.

Wise, Matthew, University of California Los Angeles, unpublished data, N.d.

Wong, John B.; Geraldine M. McQuillan, John G. Mchutchinson and Thierry Poynard. "Estimating Future Hepatitis C Morbidity, Mortality, and Costs in the United States." American Journal of Public Health. Vol. 90, No. 10, pp. 1562-1568. October 2000.