Testimony

Hearing
New York City Council
Committee on Health
Oversight - HIV/AIDS and Hepatitis Co-Infection: Education, Prevention and Treatment
Monday, April 11, 2011

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Good Afternoon. My name is Brian Edlin. I am a physician with training in internal medicine, infectious diseases, epidemiology, and public health. I am a Professor of Medicine at SUNY Downstate College of Medicine in Brooklyn and Adjunct Associate Professor of Medicine and Public Health at the Center for the Study of Hepatitis C at Weill Cornell Medical College. I have been doing epidemiology and public health research for 20 years, focusing primarily on HIV and hepatitis C in underserved populations. My work has been funded mainly by grants from the National Institutes of Health. I have been asked by the NIH to provide expert testimony on the treatment of hepatitis C in persons who inject drugs at their Consensus Development Conference on the Management of Hepatitis C. I sit on the New York State Hepatitis C Advisory Council.

I trained in epidemiology and public health at the Centers for Disease Control in Atlanta, where I worked in the Division of HIV/AIDS Prevention for 8 years during the 1980s and 1990s, and served as Assistant Director for Science of that Division. I wanted to work on HIV because it seemed to me to be the most important epidemic of the time. In time, I shifted my focus to hepatitis C, because so much more remains to be done on that epidemic. The hepatitis C epidemic is four times the size of the HIV epidemic in the United States, as it is worldwide. And although, unlike HIV, hepatitis C is both preventable and curable, nonetheless, incredibly, much less is known about it, and as a consequence death and disability from viral hepatitis continue to spread unchecked in our country.

Our nation has mounted a concerted effort to address the HIV epidemic. The progress that resulted demonstrated how deaths and costs could be averted through advances in prevention, care, treatment, and research on HIV/AIDS. Unfortunately, no similar effort has been made for the viral hepatitis epidemics in our country. Prevention, care, and treatment, and research are all extremely underfunded. As a result, the viral hepatitis epidemics continue to spread, many people remain undiagnosed, and many continue to suffer and die needlessly.

Like HIV, hepatitis C affects primarily disenfranchised populations. Persons who inject illicit drugs are at the core of the epidemic. Astronomical proportions of these persons are infected — 70%-90% of those who have been injecting drugs since the 1980s are already infected. While the proportion of those who started injecting after needle exchange and other harm reduction interventions were implemented is much lower, the rates of new HCV infection in these groups is still astronomical. Approximately 20% of those who are not yet infected become infected every year. But while persons who inject drugs are the population most severely affected, they are the most vulnerable, and the least equiped to respond effectively, they are the least likely to be offered treatment for their infection.

Persons who inject illicit drugs are often perceived to be a difficult population to reach and work with. In our work, however, my coworkers and I have found that they are in fact not at all hard to reach if one designs programs specifically to reach them, by going

to them rather than expecting them to come to us, addressing the wide array of their unmet needs, and treating them respectfully. In a pilot multidisciplinary, integrated care program, we have been providing antiviral treatment for hepatitis C to active injection drug users. Our SVR rate to date is 71%. That is, 71% of those we treated for hepatitis C are now free of the virus. When we remove the barriers that keep people from starting, adhering to, and finishing antiviral treatment, we can successfully treat hepatitis C even in people actively injecting drugs.

We know from research on HIV and other conditions in disadvantaged populations that multicomponent, multidisciplinary interventions are necessary to address complex problems in vulnerable populations. Our research has reinforced this message.

New antiviral drugs (protease inhibitors) are likely to become available in the coming months that will improve response rates and shorten the duration of therapy. These advances, together with the findings from our research and others' on successful approaches with vulnerable populations, provide us with new opportunities.

We are now poised to make a big impact on the hepatitis C epidemic.

Doing so, however, will require moving quickly, to take advantage of the opportunity we have now before further spread of the epidemic and further disease progression in those infected makes it too late.

It will also need to be done strategically. We know from our research and others' that comprehensive, integrated interventions are necessary to address complex problems in vulnerable populations.

NYC Responds to Viral Hepatitis

Last fall, the Department of Health and Mental Hygeine convened an expert advisory group of 30 scientific, medical, and community leaders from across the city to meet with the Commissioner of Health and convey our findings to him about the state of the viral hepatitis epidemics in New York. We told him that accelerated efforts are now needed in surveillance, prevention, testing, care, treatment, and research. The most urgent need for New York City at this time is a comprehensive program to test New Yorkers for hepatitis B and C and provide linkage to care for those testing positive and prevention services for those testing negative. This is the only way to effectively stem the extraordinary toll of illness and death these epidemics are anticipated to inflict.

The attached budget and graphic provide more details on what is needed. An effective response to the viral hepatitis needs to use methods that have proven effective at reaching and engaging those at highest risk for these infections. populations These populations include the uninsured and underinsured, ethnic minorities, veterans, immigrant populations, the homeless, the incarcerated, persons who inject drugs or use other illicit

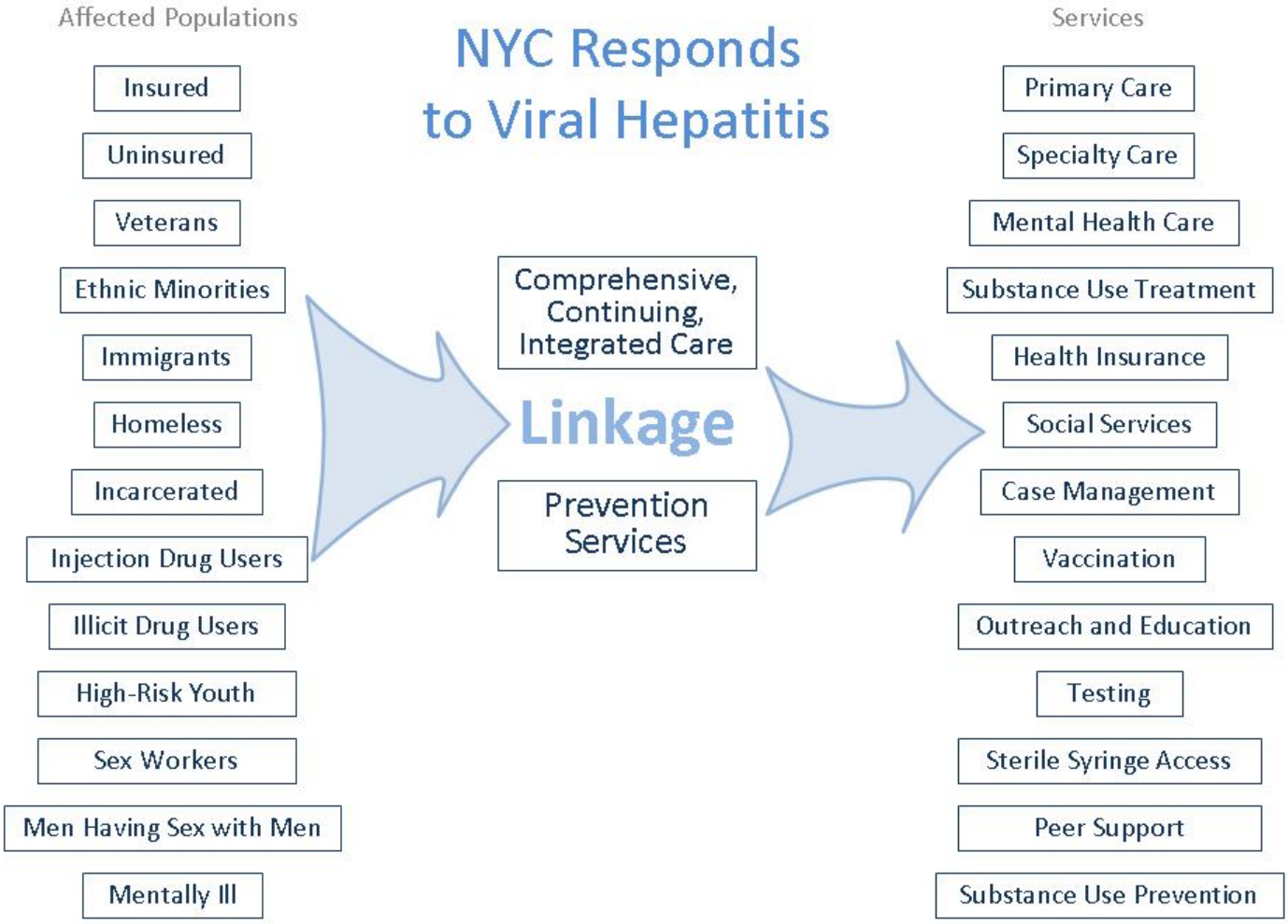
drugs, men who have sex with men, sex workers, high-risk youth, and persons affected by mental illness.

These populations need comprehensive prevention services. These include outreach and education, vaccination, effective substance use treatment, effective substance use prevention, access to sterile syringes and injection equipment, and hepatitis testing. Those testing positive need linkage to comprehensive, multidisciplinary, integrated care. This includes expert primary care, subspecialty care, mental health services, substance use treatment services, and social services, including case management and peer support.

We estimate that an investment of $3 million in the first year could be rapidly put to use to jumpstart an effective New York response to viral hepatitis. Relative to the size of the problem it is a modest amount but it is an amount we think can be used to quickly get effective programs on the ground. The time to implement this program is now. Unfortunately, our surveillance of the highest risk populations is inadequate. However, it is estimated that some five million Americans test positive for hepatitis C, and more than a million have chronic hepatitis B. Because the homeless and those behind bars are not included in our surveillance systems, and those at risk of arrest or deportation such as illicit drug users and undocumented immigrants are undoubtedly underrepresented, the true figures are undoubtedly much higher. New York City is home to some 15% of reported AIDS cases in the United States, some 20% of persons who inject drugs in the United States, and an undoubtedly still higher proportion of undocumented immigrants. The Health Department estimates that at least 250,000 New Yorkers have viral hepatitis. We believe the true number is probably in excess of 500,000.

These epidemics disproportionately affect the disenfranchised. That means that a large proportion of those infected rely on the publicly funded healthcare system. A single liver transplant costs more than $520,000. It has been estimated that some $30 billion dollars a year is currently spent on health care in the United States for hepatitis C alone. Without any new intervention, the number of hepatitis C patients with liver failure or liver cancer requiring liver transplantation is expected to triple in the next 5-10 years, and health care expenditures on hepatitis C are expected to reach $80 billion in the next 10 years, with an increasing proportion of that bill paid for by public funds. If so, that will translate to an increase from about $3 billion to about $8 billion for New York City. In the current economic situation, with anticipated cuts to Medicare, Medicaid, and the social safety net, the fragile and fragmented health care system serving the indigent and the underserved in New York City is in danger of collapse. When that happens, the pain will be felt by all New Yorkers relying on this system, regardless of the condition for which they require care. This scenario can be averted if we act now to assure that treatment is available to I urge you to act immediately to address this problem. We cannot afford to wait any longer.

Brian R. Edlin, M.D.
Professor of Medicine



SUNY Downstate College of Medicine
New York, NY

New York Responds to Viral Hepatitis

1. Building public awareness about viral hepatitis: Outreach to communities, particularly underserved communities affected by viral hepatitis, including marginalized minority patient populations, immigrant patient communities, and persons with a history of substance abuse, through media, community-based venues, and other approaches $400,000

2. Testing and screening of populations at risk: Emphasizing ethnic minority communities, immigrants, homeless, high-risk youth, and other high-risk populations $800,000

3. Linkage to care: Programs to create concrete linkages to assure that persons with newly detected infections have access to needed care.....$300,000

4. Clinician education: Building on successful models used in HIV/AIDS, programs will provide education to primary and specialty clinicians in order to get sufficient numbers up to speed on new treatment paradigms as they are developed $300,000

5. Support services for patients and clinics: Building on successful experiences to date, programs will provide patients with education and support about their disease and its care and treatment; psychiatric assessments and follow-up care; support groups; physican extenders; adherence support; directly observed therapy; and other programs .....$1.2 million

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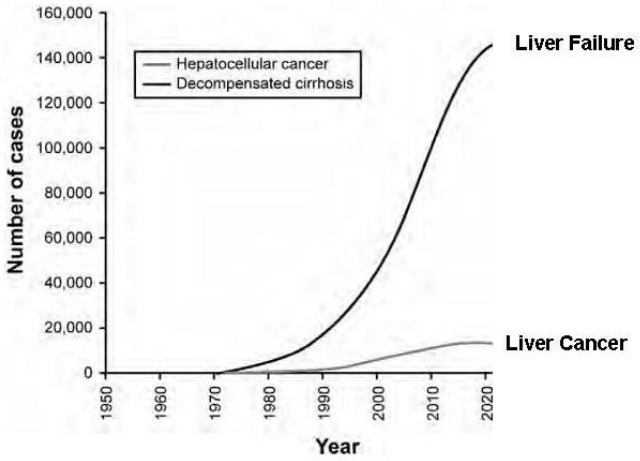
Total: .....$3.0 million

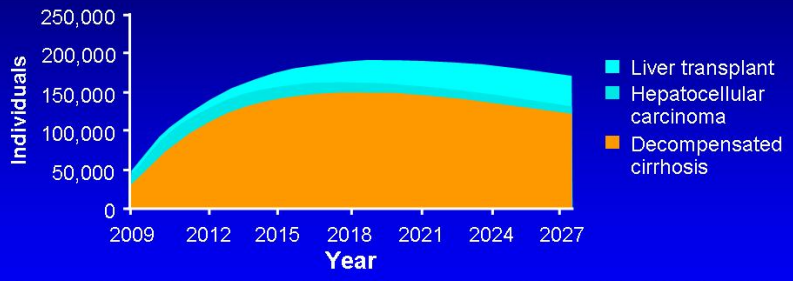
Projected Number of Cases of Liver Failure and Liver Cancer, United States



Davis *et al.* Gastroenterology 2010;138:513-21.

Advanced Liver Disease in Chronic HCV-Infected US Population, 2009-2028

Assuming No Changes in Standard of Care

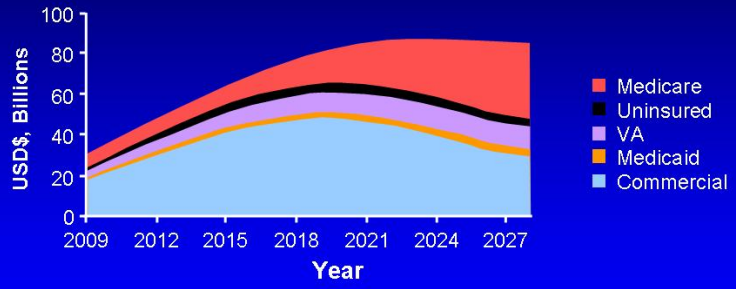


- The total number of patients with advanced liver disease is projected to increase > 4-fold in the next in 20 years

The Milliman Report. Consequences of Hepatitis C Virus (HCV): May 2009. Available at: http://www.milliman.com/expertise/healthcare/publications/rr/pdfs/consequences-hepatitis-c-virus-RR05-18-09.pdf.

Projected Annual US Medical Costs for Chronic Hepatitis C, 2009-2028

Assuming No Changes in Standard of Care



- Total medical costs for patients with HCV infection are expected to more than double from $30 billion to more than $85 billion USD over the next 20 years

The Milliman Report. Consequences of Hepatitis C Virus (HCV): May 2009. Available at: http://www.milliman.com/expertise/healthcare/publications/rr/pdfs/consequences-hepatitis-c-virus-RR05-18-09.pdf.