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1-21-2015

# Living with Hepatitis C: A Vermont Needs Assessment

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### Recommended Citation

Brown, Alexandra; Genziano, Justin; Powers, Julia; Ramadan, Samy; Schumer, Amy; Shear, Matthew; Wang, Katherine; Jacobsen, Peter; and Larrabee, Jerry, "Living with Hepatitis C: A Vermont Needs Assessment" (2015). *Public Health Projects, 2008-present*. 220. [https://scholarworks.uvm.edu/comphp\\_gallery/220](https://scholarworks.uvm.edu/comphp_gallery/220)

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## Background

### Hepatitis C (HCV)

- Viral infection of the liver spread primarily via blood-to-blood contact (e.g., intravenous drug use (IVDU))
- United States: 3.2 million chronic HCV infections (2010)<sup>1</sup>
- Vermont: 1.63 cases per 1000 people (2012-2013)<sup>2</sup>

### Barriers to Care

- Exclusion of current IV drug users from HCV treatment programs despite their high rates of infection<sup>3</sup>
- Lack of support, causing decreased treatment adherence<sup>4</sup>
- Poor access to treatment: cost, transportation, competing priorities of housing, addiction management, and food<sup>5</sup>

### HIV and HCV

- Research has shown that the multidisciplinary and integrated HIV model is appropriate for HCV<sup>6</sup>

### Vermont CARES

- Non-profit organization that provides comprehensive services to clients with HIV in Vermont

## Objectives

- What are the demographics of the most resource-limited HCV positive population in Vermont?
- Does expanding the model of care for patients with HIV at Vermont CARES appeal to patients with HCV?
- Are patients with HCV comfortable receiving services from Vermont CARES?
- Would expanding Vermont CARES case management to include patients with HCV improve their access to care?

## Methods

- Conducted a literature review and consulted Vermont experts on HCV
- Distributed a 20-question survey to seven sites across the state over a six-week period to identify the demographics and needs of Vermonters with HCV (Figure 1)
- Data were compiled into Microsoft Excel, and analyzed graphically and using VassarStats with non-parametric statistical methods.

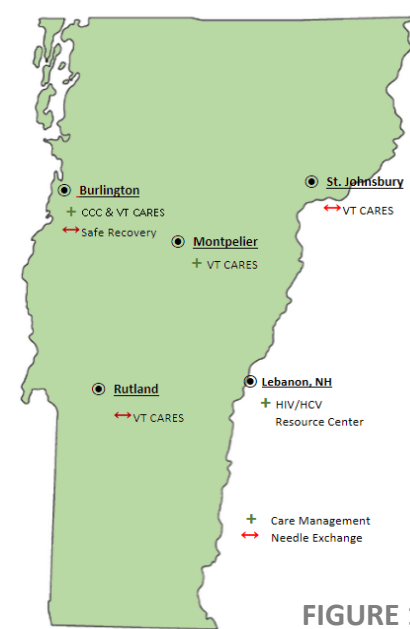


FIGURE 1

## Results

### HOW DID YOU ACQUIRE HEPATITIS C?

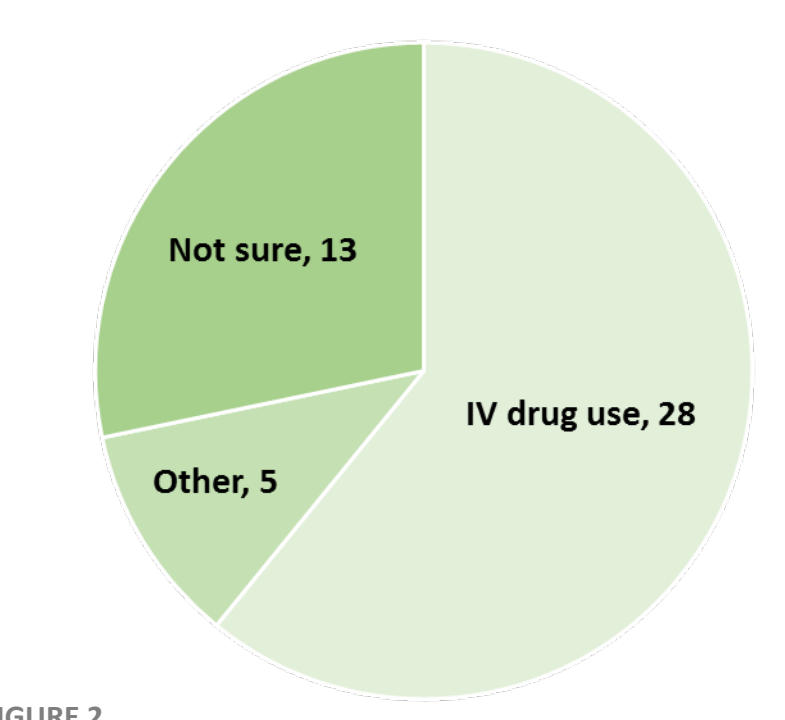


FIGURE 2

### CARE ACCESSED (PAST 12 MONTHS)

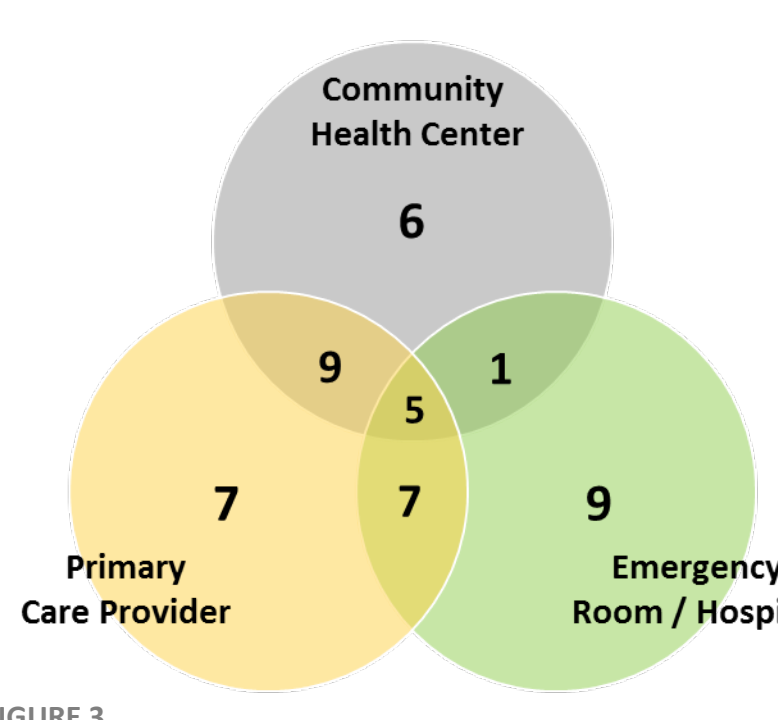


FIGURE 3

### CASE MANAGEMENT AND TREATMENT

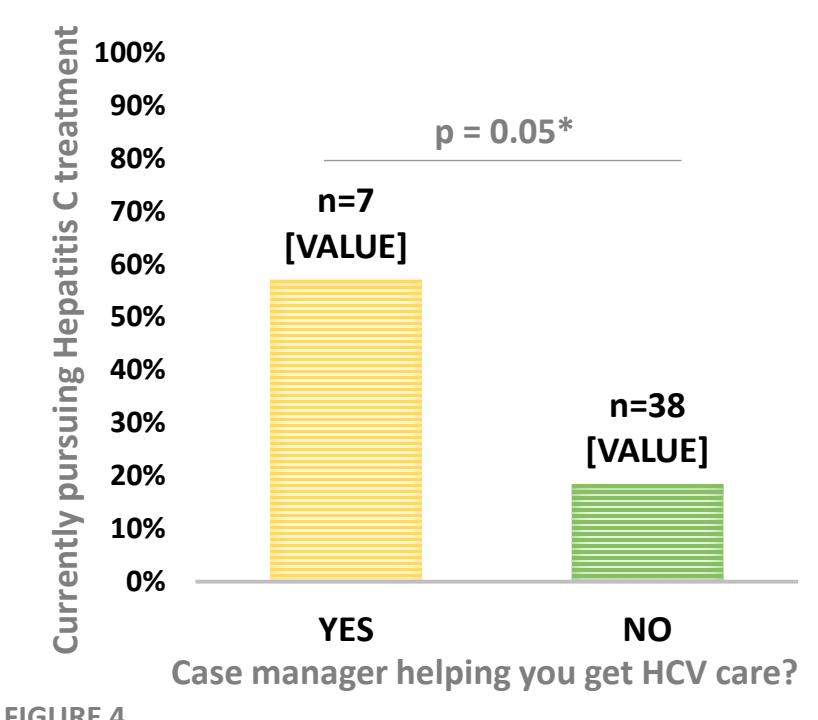


FIGURE 4

### LIVING WITH HEPATITIS C NEEDS ASSESSMENT / CASE MANAGEMENT SERVICES OFFERED BY VT CARES

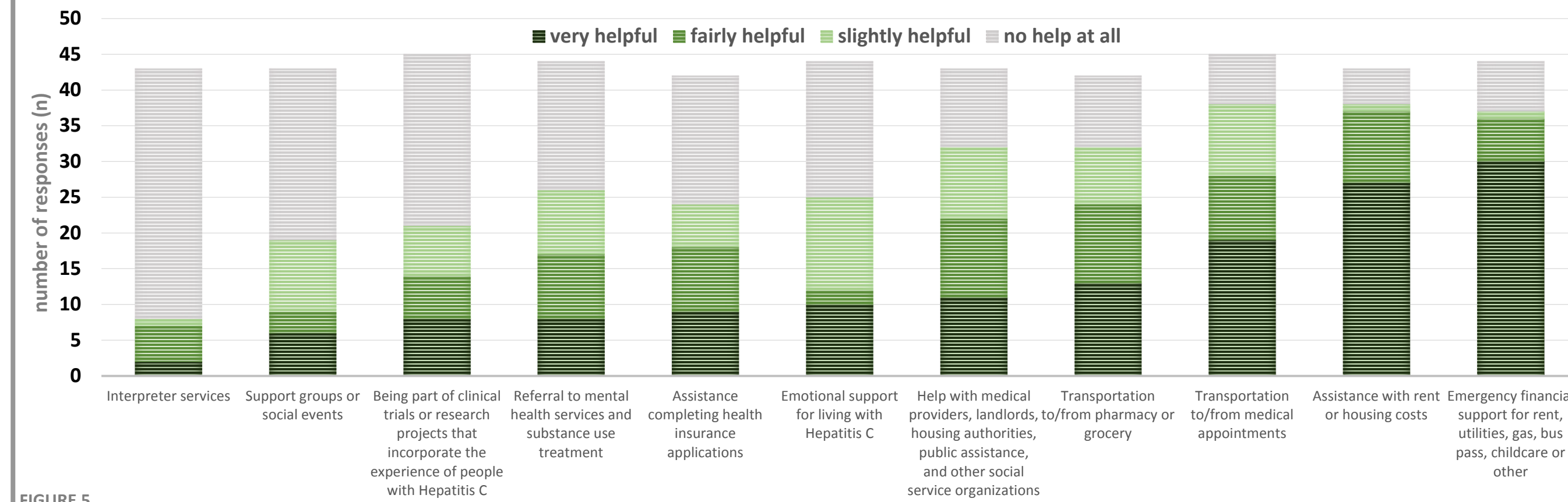


FIGURE 5

### COMFORT RECEIVING VT CARES SERVICES

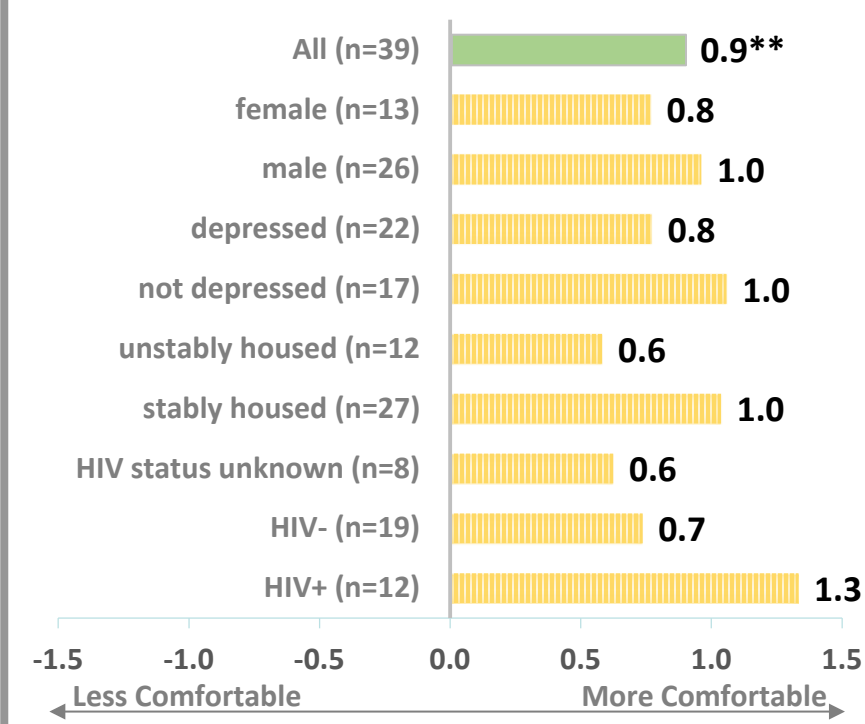


FIGURE 6

- A total of 48 surveys were collected from clinics, needle exchanges, and case management facilities across the state of Vermont.
- The average annual income of all respondents is \$15,000 +/- \$7,700 with a male to female ratio of 1.6:1 and an age range from 18-60+.
- 62% of all respondents report having had HCV for 6 or more years.
- 47 out of 48 report having health insurance, with 90% having coverage by Medicare/Medicaid, and 90% having a primary care physician.

\*Not significant after modified Bonferroni correction.

\*\*No significant differences in degree of comfort among these groups.

## Discussion

- Our sample's proportion of HCV acquisition from IVDU is similar to the national figures (58% vs. 60%)<sup>7</sup>.
- Respondents are well-connected to the healthcare system.
- Most respondents (77%) feel that at least one service currently offered by Vermont CARES would be very helpful to them. In addition, patients with HCV are comfortable receiving services from Vermont CARES, with only 4% reporting discomfort. This makes Vermont CARES a very appropriate organization for patients seeking HCV-related support services.
- 75% of respondents reported not currently pursuing HCV treatment. Respondents with case managers are three times more likely to be getting treatment than those without case managers. Expanding case management at Vermont CARES could improve treatment rates.
- It is likely Vermont CARES case management of active IV drug users and others with HCV would result in their successful treatment and a reduced community viral load.



## Recommendations

- Vermont CARES should expand its services to include patients with HCV.
- State and federal government should expand funding for HCV treatment in order to support these services.
- Vermont CARES should investigate barriers to patients pursuing HCV treatment in Vermont including:
  - Access to expensive treatments
  - Exclusion criteria based on IVDU

## References

<sup>1</sup><http://www.cdc.gov/hepatitis/C/cFAQ.htm>  
<sup>2</sup>VT Department of Health, Kate Marsi, Viral Hepatitis Prevention Coordinator  
<sup>3</sup>Arain A, Robaey G. Eligibility of persons who inject drugs for treatment of hepatitis C virus infection. *World journal of gastroenterology* : WJG. Sep 28 2014;20(36):12722-12733.  
<sup>4</sup>Larrey D, et al. Patient adherence issues in the treatment of hepatitis C. *Patient preference and adherence*. 2014;8:763-773.  
<sup>5</sup>Ford N, et al. Expanding access to treatment for hepatitis C in resource-limited settings: lessons from HIV/AIDS. *Clinical infectious diseases: an official publication of the Infectious Diseases Society of America*. May 2012;54(10):1465-1472.  
<sup>6</sup>Wiktor S, Ford N, Ball A, Hirschall G. HIV and HCV: distinct infections with important overlapping challenges. *Journal of the International AIDS Society*. 2014;17:19323.  
<sup>7</sup>CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection. *MMWR* 1998;47(RR-19):1-39.