

# Management of Hepatitis C Among Infectious Diseases Physicians: Current Practice and Opinions

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#### Abstract

*Background*: Hepatitis C (HCV) is a prevalent cause of morbidity and mortality. Updated screening guidelines, public awareness campaigns, and new direct-acting antiviral agents are likely to increase the number of patients seeking HCV care. Infectious diseases (ID) physicians have been identified as a group well suited to manage HCV, but the current and anticipated role of ID physicians has not been sufficiently evaluated.

*Methods*: Adult ID physicians were surveyed regarding their opinions and current practices related to HCV care through the Emerging Infections Network (EIN) via a 10-question survey.

*Results*: Of 1,172 EIN members in the U.S., Canada, and Puerto Rico, 550 (47%) responded. Most (71%) responded that ID physicians should evaluate and/or treat all HCV infections with gastroenterology/hepatology support, while a minority (25%) responded that ID physicians should only evaluate and/or treat patients with mild-moderate liver fibrosis or HIV co-infection. Overall, 54% of respondents currently evaluate and/or treat HCV infection in some capacity, either as HCV mono-infection (40%) and/or HIV/HCV co-infection (47%). Fifty-two percent of physicians who do not currently evaluate and/or treat HCV mono-infection indicated interest in doing so in the future. Factors influencing this decision include clinical capacity/infrastructure, interferon-free regimens for all genotypes, and training/experience. Respondents who do not plan to evaluate and/or treat HCV mono-infection in the future (27%) most commonly cited insufficient capacity/infrastructure, lack of desire, and inadequate training/experience as their rationale. Most ID physicians (61%) did not feel that graduate medical education prepared them to evaluate and/or treat HCV, and members indicated a need for a broad range of training resources.

*Conclusion*: More than 90% of respondents believe that ID physicians should be active in HCV management. The majority of ID physicians who wish to manage HCV mono-infection already provide this service, although many may increase this area of their practice. Expanding graduate medical education, emphasizing continuing medical education, and developing novel management paradigms will be necessary to optimize HCV care in the future.

#### Introduction

- Hepatitis C (HCV) is a common cause of morbidity and mortality in the U.S.
- Updated screening guidelines, public awareness campaigns, and new therapies are likely to increase the number of patients seeking care.
- ID physicians have been identified as an important provider group to manage HCV, but the current and anticipated role of ID physicians has not been sufficiently evaluated.

#### Methods

- Adult ID physicians in the U.S., Canada, and Puerto Rico were surveyed regarding their opinions and current practices related to HCV care through the Emerging Infections Network (EIN).
- A 10-question survey was distributed by electronic mail or facsimile between between 1/28/14 and 3/3/14; two reminders were sent to nonresponders to maximize response.
- Chi-square tests measured associations between categorical variables. (SAS v9.3, Cary, NC)

Table 1: Selected Demographics of Survey Respondents			
Years of Experience Since ID Fellowship	N (% of Eligible EIN Members)		
<5 years	84 (40%)		
5-14 years	154 (40%)		
L5-24 years*	146 (52%)*		
≥25 years*	156 (57%)*		
Employment Type	N (% of Eligible EIN Members)		
Hospital/Clinic	156 (47%)		
Private/Group Practice	163 (44%)		
Jniversity/Medical School	186 (48%)		
/A/Military	39 (51%)		
State Government	5 (63%)		
Primary Hospital Type	N (% of Eligible EIN Members)		
Community	150 (43%)		
Non-university Teaching	161 (50%)		
Jniversity	186 (48%)		
/A/Military	39 (51%)		
City/County	17 (41%)		
Other	6 (60%)		

<5 years
5-14 years
15-24 years*

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\* Respondents were significantly more likely than nonrespondents to have at *least 15 years of clinical experience. (p<0.001)* 

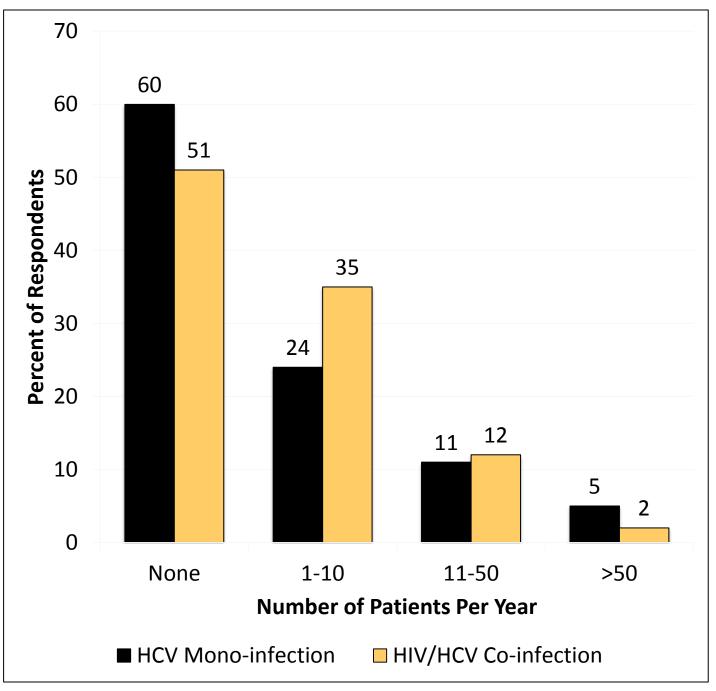


Figure 2: Number of HCV Mono-infected and HIV/HCV Co-infection Patients Managed by Individual ID Physicians per Year.

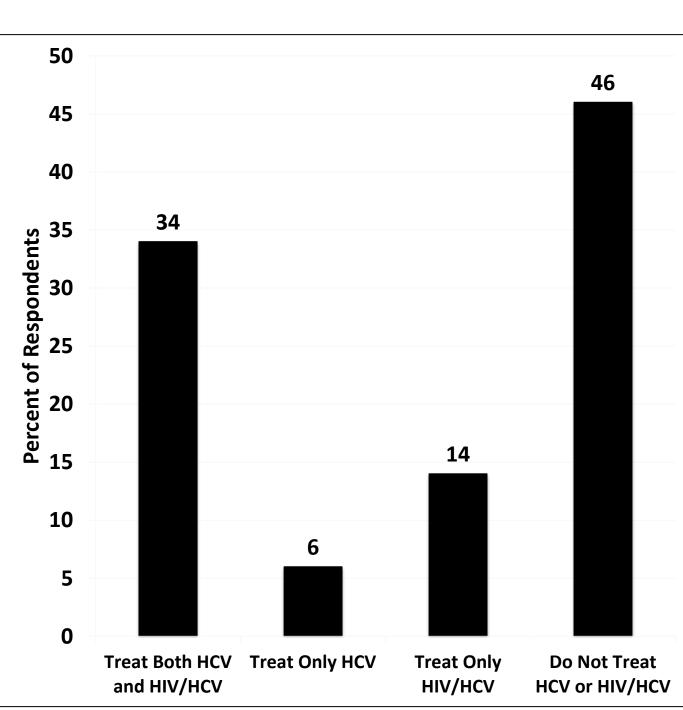


Figure 1: Percent of ID Physicians Who Manage HCV Monoinfection and/or HIV/HCV Co-infection.

#### Table 2: Barriers to Managing HCV For ID Physicians Who Do Not Plan to Treat HCV Mono-infection in the Future

Barrier	N (Total N=117)
"Insufficient clinical capacity, infrastructure or other support"	52
"Do not want to evaluate/treat HCV mono-infection"	46
"Need more training/experience"	30
"Would create tension with local colleagues who treat HCV"	22
"Insufficient access to or support from GI/hepatology"	16
"Insufficient reimbursement for HCV care"	6
"Not enough patients with HCV in my area"	4





## **Results Continued**

Survey Response

- 550/1172 (47%) physicians responded to the survey.
- There were no significant differences in response among geographic region, type of employment, or primary hospital type. Physicians were more likely to respond if they had >15 years of experience since ID fellowship. (Table 1)

#### **Opinions About ID Physicians and HCV Management**

- 71% responded that ID physicians should manage all HCV infections with GI/hepatology support.
- 25% responded that ID physicians should limit HCV management to patients without advanced fibrosis or to patients with HIV/HCV co-infection.

### *Current Management of HCV by ID Physicians*

- 54% reported they currently evaluate and/or treat HCV, either as HCV monoinfection (40%) and/or HIV/HCV co-infection (47%). (Figure 1 and 2)
- 84% responded that they regularly screen patients for HCV based on USPSTF screening guidelines.

#### *Opportunities and Barriers to HCV Management for ID Physicians*

- About half (52%) of ID physicians who <u>do not</u> currently manage HCV <u>plan to</u> manage HCV in the future.
- ID physicians who do not plan to treat HCV mono-infection in the future (27%) report multiple barriers. (Table 2)
- 61% responded that they had not received adequate training in residency/fellowship to manage HCV.

#### Conclusion

- >90% of respondents believe that ID physicians should be active in HCV care.
- The majority of ID physicians who wish to manage HCV mono-infection already provide this service, though many may start to manage HCV mono-infection in the future.
- The impact of ID physicians on HCV management may depend on how many patients are seen by each provider, not just the number of HCV providers overall.
- Expanding education and developing novel management strategies is essential to expand access for HCV.