HEPATITIS C EDUCATION
National Needs Assessment

October 2015

in partnership with

Canadian Association for the Study of the Liver
Canadian Liver Foundation

liver.ca

Canadian Association of Hepatology Nurses
Association Canadienne Des Infirmières D'HépatoLOGIE

Bringing liver research to life
Donner vie à la recherche sur le foie
Hepatitis C is a liver disease that can lead to significant harm to Canadians. In the past, management of chronic infection has focused on managing the disease to delay progression of significant liver damage or, in cases where this was not possible, liver transplantation. However, new and increasingly available direct acting antivirals offer the chance of cure for chronically infected individuals if they can be effectively distributed. To assess the current knowledge of healthcare professionals (HCPs) in the area of hepatitis C management, including screening and treatment using new antivirals, as well as the educational needs of HCPs, a national on-line survey was conducted.

The survey collected the responses from 163 individual HCPs and included a total of 29 questions related to participant and practice demographics, access to resources, screening habits, communication, knowledge of new treatments, and educational preferences. HCPs were invited to participate in the online survey through a variety of pathways; over 4000 invitations were delivered either electronically or via fax to a variety of HCP specializations. The vast majority of the participants (149) participated through targeted invitations or through the participating associations (Canadian Association for the Study of the Liver (CASL) and the Canadian Association of Hepatology Nurses (CAHN)). The survey commenced on November 14, 2014 and concluded on April 29, 2015.

Responses were collected for every question from 153 participants, with a further 10 submitting responses to at least 10 questions on the survey. Data was analyzed based on the number of responses to each individual question in the survey and included responses from all 163 participants.

While the sample size was relatively small, there were clear differences in a number of areas. Primary care physicians, who are the principle point of contact between the public and the health care system, were comfortable discussing the needs for testing and the results of testing for hepatitis C and screening patients, but were particularly uncomfortable with initiating, changing or monitoring treatment. Further, they reported the lowest access to resources such as FibroTest™ and transient elastography (Fibroscan™). Hepatology specialists were, in general, comfortable with all aspects of patient management. Nurses (who were primarily CAHN members) reported roles in ongoing monitoring and education for the patient.

Overall, all participants reported that they were comfortable with communicating and providing education to patients regarding hepatitis C. There was less comfort with discussions regarding specific issues that may be associated with each individual (such as avoiding stigma).

For educational needs, most non-primary care physician participants reported that they were very aware and in general understood the mechanisms of action of the new antivirals, a large number of primary care participants (PCP) reported they did not have sufficient education in this area. Primary care physicians also reported as the highest proportion of individuals who did not utilize any or standard guidelines for treatment and screening, highlighting the need for educational initiatives. The greatest proportion of individuals in the survey noted a preference for conferences as a group learning method, with review articles as a self-directed method.

INTRODUCTION

Hepatitis C has been traditionally considered a chronic, incurable disease and one of the leading causes of liver disease, including cirrhosis and hepatocellular carcinoma. Hepatitis C Virus infection (HCV) begins with an acute infection at the time of exposure, with liver cell damage and associated elevation of ALT levels within four to 12 weeks of infection. Symptoms are uncommon and often times silent. In approximately 60 to 85% of patients, however, infection persists, becoming a chronic infection (defined as HCV RNA in the blood for at least 6 months). Left untreated, chronic HCV can lead to liver fibrosis and cirrhosis, end stage liver disease, hepatocellular carcinoma, liver transplant and death. In the past, treatment for HCV has been recommended for patients with increased risk of cirrhosis - characterized by higher HCV RNA levels, at least moderate inflammation and necrosis, persistently elevated ALT levels and a liver biopsy with portal or bridging fibrosis. Patients with less severe disease may undergo periodic monitoring rather than treatment. Because of the limited treatment options, many physicians have not been involved in the treatment of HCV infections in their practices.
Recent advances in HCV treatment have made this disease the first chronic viral infection to be curable through pharmacotherapy, with newer antiviral medications demonstrating cure rates approaching 100%. These new antiviral agents are now available to Canadian patients and their healthcare providers. However, with the limited knowledge on HCV and the new treatment modalities, ensuring that the treatments are reaching individuals who would most benefit presents a problem. To bridge this gap, further education for a wide variety of healthcare providers is required. This education must include how to screen for patients with chronic infection, the selection of patients, and the treatment itself.

The objective of this initiative was to assess the current needs for education for healthcare professionals across the country, including their preferred method of learning and sources of information. Using this information, it becomes possible to design and implement new education programs, targeting those individuals who can effectively deliver HCV care, to allow for delivery of new therapies to patients, particularly those that may have not been served in the past.

METHODOLOGY

The needs assessment was initiated by the Canadian Liver Foundation (CLF) and the Canadian Association for the Study of the Liver (CASL), in partnership with the Canadian Association of Hepatology Nurses (CAHN). The intent of the assessment was to determine the educational needs of Canadian healthcare professionals in the area of hepatitis C treatment, particularly in light of the availability of new antiviral agents that offer cure rates approaching 100%. To most effectively deliver the cure offered by these new antivirals to the large number of patients who could benefit, there exists a need to expand the number of healthcare professionals who are comfortable treating hepatitis C.

The goals of the program were to assess the perceptions of healthcare professionals regarding hepatitis C, the learning needs for screening and the learning needs for hepatitis C patient management.

The initiative was guided through a steering committee composed of individuals familiar with the field, representing the following healthcare specialties: hepatology, gastroenterology, infectious disease, hepatology nursing, and primary care. Steering Committee Chairmen were responsible for the development of the survey, in collaboration with He\ communications, who would deliver the initiative. The survey content was developed and then circulated through the steering committee, CLF, CASL and CAHN. The final survey was IRB approved for ethics (Veritas IRB), with distribution and results collected through SurveyMonkey.com.

The survey consists of 29 questions collecting participant and practice demographics, access to resources, screening habits, communication, knowledge of new treatments, and educational preferences. Partially completed surveys (i.e., those that did not have all questions completed) were accepted, with analysis based on the number of respondents for each question.

Data analysis was through summary statistics and includes analysis of all participants (aggregated), as well as participants categorized by their declared medical role/specialization. For a series of questions specific to participant comfort for various activities, the average level of comfort was calculated. Each level of comfort ranging from very uncomfortable to very comfortable was assigned a value from 1 to 5, respectively. The average of the comfort level value was then calculated to yield a value from 1 to 5, with 1 representing, on average, very uncomfortable and 5, on average, very comfortable.

RESULTS

PARTICIPANTS

There were 163 participants who answered all or part of the question set. As the survey was delivered as a series of questions, more participants answered the first questions rather than the last (with 153 or 94% completing all the questions). In most cases, responses are broken down by specialization. Specializations were grouped as follows: hepatologists; gastroenterologists; other specialists (including infectious disease specialists, internists, and travel medicine specialists); primary care physicians (PCP);
Table 1 - Province of practice of participants by declared specialization

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<th>NL</th>
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<th>PE</th>
<th>NB</th>
<th>QC</th>
<th>ON</th>
<th>MB</th>
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<th>YT</th>
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</thead>
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<tr>
<td>Hepatologist (n=33)</td>
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<td>3%</td>
<td>15%</td>
<td>45%</td>
<td>6%</td>
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<tr>
<td>Other Specialist (n=11)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>9%</td>
<td>27%</td>
<td>-</td>
<td>-</td>
<td>18%</td>
<td>45%</td>
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<tr>
<td>PCP (n=24)</td>
<td>-</td>
<td>4%</td>
<td>-</td>
<td>-</td>
<td>21%</td>
<td>50%</td>
<td>4%</td>
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<tr>
<td>Nursing (n=75)</td>
<td>-</td>
<td>3%</td>
<td>-</td>
<td>-</td>
<td>11%</td>
<td>49%</td>
<td>4%</td>
<td>-</td>
<td>14%</td>
<td>13%</td>
<td>1%</td>
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<td>(1)</td>
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<td></td>
<td>(8)</td>
<td>(37)</td>
<td>(3)</td>
<td></td>
<td>(12)</td>
<td>(10)</td>
<td>(1)</td>
<td>(2)</td>
<td></td>
</tr>
<tr>
<td>All (n=163)</td>
<td>2%</td>
<td>2%</td>
<td>-</td>
<td>1%</td>
<td>12%</td>
<td>44%</td>
<td>5%</td>
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<td>13%</td>
<td>18%</td>
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<td>2%</td>
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<td></td>
<td>(22)</td>
<td>(29)</td>
<td>(1)</td>
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<td>(3)</td>
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</tr>
</tbody>
</table>

and nursing (nurse and nurse practitioner, in particular CAHN members). The largest proportion of participants reported practising in Ontario (44%), followed by British Columbia, Alberta and Quebec (18%, 13% and 12% respectively). The percentage of respondents from each province is presented in Table 1.

The largest proportion of participants, nearly half and nearly double the next largest group, were individuals reporting a profession of nurse or nurse practitioner (grouped as nursing), with 69 individuals identifying as a nurse and 6 as a nurse practitioner (Figure 1). Other professions included hepatologists (20%), primary care physicians (15%), gastroenterologists (12%) and then other specialists (7%, including infectious disease specialists, internists, and travel medicine specialists).

Figure 1 - Question: Type of Healthcare professional?

![Figure 1](image)

Overall, the largest proportion of participants reported treating HCV patients for 15 years or more (37% of all participants, Figure 2).

In particular, more than half of primary care physicians and hepatologists (67% and 55%, respectively) reported treating HCV patients for more than 15 years. A significantly larger proportion of gastroenterologists (45%) than hepatologists (21%) have treated HCV patients for fewer than 3 years. Gastroenterology participants reported, on average, the shortest length of time treating these patients, suggesting that gastroenterologists may potentially have less experience with treating HCV, or the nature of the survey may have selected for younger gastroenterologists with fewer years in practice. In the absence of further demographic data about the participants, the determination cannot be made.

Figure 2 - Question: How long have you been caring for patients with hepatitis C?

![Figure 2](image)

PATIENT POPULATIONS

The most common sub-population identified as being seen in their practice, noted by more than 80% of participants, is patients with cirrhosis (Figure 3). Other common populations included injection drug users, and aboriginal populations. The survey size was too small to attempt to determine if practice location influenced the type of patients that are seen in a practice. It is likely that the proportions of sub-populations will vary by geographical location, resulting in different patient spectrums in clinical practices in those locations. A potential limitation of this analysis is that the relative frequency of each type of patient cannot be determined.

Analysis by assumed clinical role (diagnosing and prescribing versus continued follow up) revealed differences in patient

*When appropriate, analysis by specialist subgroup will be included in figures; when included (except for Figure 1, which is presented in order from largest to smallest group size), specialist groups will be presented in the following order: Hepatologist, Gastroenterologist, Other specialist, PCP, Nursing, All participants.*
The most common sub-population identified as being seen in their practice, noted by more than 80% of participants, is patients with cirrhosis. Other common populations included injection drug users, and aboriginal populations.

populations seen. Physicians and nurses both most commonly reported cirrhotic patients (Figure 4). However, any other sub-population was reported by fewer than half of the physicians, while a majority of nurses report seeing other groups, including injection drug users and aboriginals. This suggests that nurses may be seeing a wider variety of patients regularly or are more familiar with the comorbidities of their patients. When specifically questioned if they treat patients on first nation reserves, 16% of all participants reported that they do.

Figure 4 - Three most commonly cited sub-populations seen in practice by either nurses or physicians

PROVISION OF CARE
When questioned regarding the aspects of care in which they participate, prescribing treatment was one of the three most commonly selected options in only one group: hepatologists (selected by 100% of hepatologists) (Figure 5).

Figure 5 - Question: Which aspects of hepatitis C care are you involved in (select all that apply)?

Hepatologists are the only group who commonly prescribe treatment for HCV.

While it was commonly reported (more than half of the participants) for gastroenterologists and other specialists (55% and 64% respectively), only 8% of primary care physicians noted prescribing treatment for hepatitis C as one of their aspects of care, while 92% reported a role in screening and diagnosis (Table 2). This suggests that primary care physicians do not feel they have the expertise or resources to prescribe treatments and they are likely going to refer patients to specialists. The highest proportion of hepatology participants, when compared with any other specialization, reported making treatment decisions, prescribing treatment, adjusting treatment, dealing with adverse effects of therapy and monitoring after treatment is completed as aspects of their practice. The majority of hepatology participants reported every queried aspect of care, with the lowest for screening and diagnosis (only 61%).

Most participants reported poor access to both telehealth and government funding for allied health (29% and 31% of participants, respectively). This was consistent across all specialties. There were only four resources that were available to more than half the participants in any specialty: FibroScan™, social worker, psychiatry, and industry funding for allied health (Figure 6).
Results for both nursing and gastroenterology participants suggest a general lack of resources: the majority in either group only reported FibroScan™ as an available resource.

Hepatologists consistently reported greater access to resources for patient treatment than gastroenterologists and other groups. This may represent improved resource allocation or local availability for these practices and it may reflect a greater knowledge by these individuals of how to access these resources.

Figure 6 - Question: In my practice, I have access to (click all that apply):

<table>
<thead>
<tr>
<th>Which aspects of hepatitis C care are you involved in (select all that apply)?</th>
<th>Hepato (n=33)</th>
<th>Gastro. (n=20)</th>
<th>Oth. Spec. (n=11)</th>
<th>PCP (n=24)</th>
<th>Nursing (n=75)</th>
<th>All (n=163)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening/diagnosis</td>
<td>61%</td>
<td>75%</td>
<td>64%</td>
<td>92%</td>
<td>65%</td>
<td>69%</td>
</tr>
<tr>
<td>Educating/counselling diagnosed persons</td>
<td>82%</td>
<td>65%</td>
<td>82%</td>
<td>54%</td>
<td>93%</td>
<td>31%</td>
</tr>
<tr>
<td>Making treatment decisions</td>
<td>94%</td>
<td>60%</td>
<td>91%</td>
<td>21%</td>
<td>57%</td>
<td>62%</td>
</tr>
<tr>
<td>Prescribing treatment</td>
<td>100%</td>
<td>55%</td>
<td>64%</td>
<td>8%</td>
<td>23%</td>
<td>43%</td>
</tr>
<tr>
<td>Adjusting treatment</td>
<td>91%</td>
<td>50%</td>
<td>64%</td>
<td>17%</td>
<td>67%</td>
<td>62%</td>
</tr>
<tr>
<td>Dealing with adverse effects of therapy</td>
<td>91%</td>
<td>55%</td>
<td>82%</td>
<td>33%</td>
<td>80%</td>
<td>72%</td>
</tr>
<tr>
<td>Monitoring after treatment is completed</td>
<td>94%</td>
<td>65%</td>
<td>64%</td>
<td>42%</td>
<td>77%</td>
<td>73%</td>
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<tr>
<td>No Response</td>
<td>0%</td>
<td>20%</td>
<td>0%</td>
<td>33%</td>
<td>3%</td>
<td>9%</td>
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</table>

Very few (8%) primary care providers prescribe HCV treatment as an aspect of care they provide, but most (92%) participate in screening and diagnosis.

When screening patients, physicians most frequently select patients with abnormal liver enzymes, while nurses most frequently selected patients with a history of injection drug use (Figure 7). Overall, nurses tended to select patients based on lifestyle factors (injection drug use, body piercing or tattoos, multiple sexual partners, etc.), however, they reported less involvement with screening in general. Primary care physicians tended to screen based on a wide variety of factors, however, the majority reported screening based primarily on medical factors (abnormal liver enzymes, for example) as well as on medical and lifestyle history. Other doctors tended to report less involvement with screening activities. The majority of the participants were either unsure or did not think that current screening guidelines would be able to identify all persons infected with hepatitis C (Figure 8). In particular, hepatologists as a group were sure that screening could not identify all infected persons (84% certain, 6% unsure); nurse participants were the most likely to think that screening could identify all infected individuals (24%). A significant proportion (50%) of gastroenterologists were not sure if screening would identify all infected individuals, suggesting that they are not confident in their knowledge of current screening guidelines or the effectiveness of screening.

Nurses tend to select patients for screening based on lifestyle factors, contrasting with primary care physicians who reported screening practices based on medical factors as well as lifestyle.
Figure 7 - Question: Which types of patients do you currently routinely screen for hepatitis C (click all that apply)?

![Screening Patients](image)

Figure 8 - Question: Do you think current screening guidelines make it possible to identify all infected persons with Hepatitis C?

![Screening Guidelines](image)

Figure 9 - Question: How comfortable are you in identifying the best treatment and recommending therapy for an infected patient who is asymptomatic?

![Comfort Level](image)

Figure 10 - Question: How comfortable are you in identifying the best treatment and recommending therapy for an infected patient who is symptomatic?

![Comfort Level](image)

Figure 11 - Question: How comfortable are you in identifying the best treatment and recommending therapy for an infected patient who is decompensated (e.g., encephalopathy, varices, ascites)?

![Comfort Level](image)

Participants were questioned regarding their comfort in identifying the best treatment and recommending therapies in a number of types of patients of varying complexity. There was a general decrease in comfort level from asymptomatic and symptomatic patients to the most complex (decompensated patients). Overall, 74% (average comfort level 3.96) of participants were comfortable or very comfortable recommending therapy for asymptomatic patients (Figure 9), 75% (average comfort level 3.95) for a symptomatic patient (Figure 10), and 58% (average comfort level 3.43) for decompensated patients (Figure 11). Throughout these questions, a high proportion of nurse participants felt that this was not applicable to their practice, reflecting that nursing usually does not include prescribing treatments. However, of concern, in each of the questions, at least one hepatology participant indicated this was not applicable to their practice; this may reflect a mistakenly entered response. Primary care physicians were generally very uncomfortable with the role of identifying and recommending treatment (with 58% to 75% reporting discomfort for the different patient types), but none indicated that it was not applicable, suggesting that primary care physicians feel poorly equipped but recognize that they should have a role in this activity.

Primary care physicians were generally very uncomfortable with the role of identifying and recommending treatment, but feel they should have a role in this activity, even though they are poorly equipped.

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*bAverage comfort level provides a summary of the selections made and is calculated by assigning a value of 1 (for very uncomfortable) to 5 (for very comfortable) to each response. The average of the numeric comfort score is calculated for each group and presented. An average of 1 would indicate all participants recording "very uncomfortable" and an average of 5 would be the entire group recording "very comfortable".*
their comfort for switching patients from one therapy to another because of poor efficacy; 70% of primary care physicians felt discomfort compared with 55% of participants expressing comfort for switching (Figure 13). Participants expressed greater comfort for monitoring patients’ current therapy with an average comfort level of 4.10 out of 5 for all participants, but again lower for primary care physicians with an average comfort of 2.83 out of 5 (Figure 14).

Figure 12 - Question: How comfortable are you with personally initiating therapy for hepatitis C in your practice?

Figure 13 - Question: How comfortable are you with switching a patient from one therapy to another in the event of lack/inadequate response?

Figure 14 - Question: How comfortable are you with managing a patient on therapy once treatment is initiated, including monitoring and side effect management?

COMFORT FOR COMMUNICATIONS

Overall, there is strong comfort for communicating with patients regarding hepatitis C, with only slight decreases of comfort associated with more difficult conversations (such as overcoming stigma associated with hepatitis C diagnosis). A large majority of participants (78% to 96%) were either comfortable or very comfortable in explaining the necessity of hepatitis C testing (Figure 15). While there was a lower proportion of nursing participants who were either comfortable or very comfortable, the average comfort level in the group was higher than primary care physicians: a larger proportion (12%) indicated that the activity was not applicable to their practice, and of those with any comfort level, the vast majority expressed they were very comfortable, while a relatively higher proportion of primary care physicians recorded comfortable (rather than “very comfortable” resulting in a lower average comfort level for that group.

Figure 15 - Question: How comfortable are you explaining to a patient why he/she should be tested for hepatitis C?

There was a general slight decrease in comfort level for participants when asked about communicating a hepatitis C positive diagnosis, however, overall, the average comfort level was still in the very comfortable range (Figure 16). There was a decrease of 1% (from 92% to 91%) for all participants reporting comfortable and very comfortable for communicating a diagnosis compared with explaining the necessity for testing.

Figure 16 - Question: How comfortable are you with communicating the diagnosis of hepatitis C to a patient who has tested positive?

The next two questions revealed a pronounced decrease in comfort for more personal discussions with patients. The questions, dealing with providing education regarding emerging treatment and assisting patients in overcoming stigma, showed greatest decreases for gastroenterology participants (decreasing from an average comfort of 4.63 to 4.05) and primary care physicians (decreasing from an average comfort of 4.23 to 3.60) (Figure 17, Figure 18).

Primary care physicians, in particular, were less comfortable with providing education regarding new treatments (only half reported being comfortable or very comfortable), perhaps reflecting a general lack of knowledge in this area.

Overall, participants felt comfortable communicating with patients regarding hepatitis C.
Primary care physicians in particular were less comfortable with providing new treatment education.

Figure 17 - Question: How comfortable are you with providing education and answering a patient’s questions about the current and emerging treatment options for hepatitis C?

Figure 18 - Question: How comfortable are you with helping a patient overcome the potential stigma associated with having a diagnosis of hepatitis C?

KNOWLEDGE OF NEW TREATMENTS

Overall, the large majority of participants agree that hepatitis C will be a curable disease within five years. However, approximately 1 in 5 nurses (21%) were unsure of the statement, while 11% of physicians were unsure or disagreed with the statement (Figure 19). Physicians were generally more in agreement with the statement than nurses (89% vs 79% agree or strongly agree).

While most participants agree that hepatitis C will be curable in the next 5 years, a significant proportion (21% and 11%, respectively) of nurses and physicians were not sure of this.

With the exception of primary care physicians, the majority of participants felt that they were aware of both the new direct acting antiviral medications, as well as their mechanisms of action. Seven of 10 primary care participants were unsure or were not aware of new direct acting antivirals (Figure 20), while 74% were not sure of the mechanisms of action (Figure 21). This contrasts with 81% of the other participants who agreed they were aware of new direct acting antivirals and 73% who agreed that they understood their mechanisms of action. When compared with questions on current knowledge of antiviral therapies for hepatitis C, participants had a similar level of agreement that they were able to keep up to date on recent clinical trial results. While 74% of participants agreed that they were aware of the medications, only 66% agreed that they were able to keep themselves informed, similar to the 66% level of agreement for understanding mechanisms of action (Figure 22). However, primary care physicians reported the lowest ability to keep up to date regarding clinical trial results (78% unsure, or disagreeing that they could keep up to date).

Figure 19 - Question: To what extent do you agree with: Within the next five years, hepatitis C will be considered a curable disease for almost all patients.

Figure 20 - Question: I am fully aware of all the new direct-acting antiviral medications that have undergone or are undergoing clinical trial evaluation for the treatment of hepatitis C.

Figure 21 - Question: I am fully aware of all the new direct-acting antiviral medications that have undergone or are undergoing clinical trial evaluation for the treatment of hepatitis C.
Figure 21 - Question: I understand the mechanisms of action of the various new direct-acting antiviral medications.

In general, there was moderate awareness of current coverage (either formulary or private) for hepatitis C drugs (Figure 23). Overall, 63% of participants agreed that they were aware; this was lowest in the primary care participants where only 22% reported awareness. Hepatology participants reported the strongest awareness with 74% agreeing that they were aware.

Figure 22 - Question: I am able to keep myself up to date on the most recent results from clinical trials of direct-acting antiviral therapies for hepatitis C.

Participants were generally comfortable with the concept of conferring with HCV experts through regularly scheduled tele-medicine calls. However, 10% of participants noted that this was not applicable to their practice, suggesting that there may be limitations with some practices for this method of education; these may include lack of infrastructure or other limitations. The hepatology participants had the largest proportion suggesting this was not applicable, perhaps indicating that they consider themselves to be the expert and therefore the trainer, rather than the trainee.

Figure 23 - Question: I am aware of which hepatitis C drugs are covered by private insurers and provincial formularies.

Participants were generally expressed a preference for professional association sponsorship of educational programs.
The majority of participants report consulting more than one set of guidelines; the most common guidelines cited were the consensus guidelines from the Canadian Association for the study of the Liver (51% of participants) and the American Association for the Study of Liver Disease (AASLD) guidelines (47% of participants). Primary care providers most frequently reported either “other” or another but credible guideline (59%) or not using any guidelines at all (45%). The high proportion of none and other guidelines by primary care physicians suggests that they are not satisfied with the major guideline products in their practice, or that many primary care physicians do not consider treatment HCV to be part of their practice (preferring specialist referral) and, as such, do not use guidelines as a treatment guide. When asked how frequently the guidelines should be updated, the most frequent response was as frequently as required by the evidence (41%). However, the most frequent response for primary care physicians was that guidelines are updated twice per year (45%). In no cases did any participant suggest that the guidelines be updated less than every two years. Overall, 32%, 37%, 50%, 32%, and 47% of gastroenterology, hepatology, other specialists, primary care, and nursing participants, respectively, recommended updates as required.

A high proportion of primary care physicians report using either no guidelines or other guidelines, however, many do not offer treatment and may not require guidelines to guide treatment.

Figure 26 - Question: Which clinical practice guidelines for hepatitis C do you use to help guide your treatment of a patient with hepatitis C?

DISCUSSION

This current survey assessed a wide variety of perceptions, practices and preferences of healthcare professionals across Canada to identify trends in understanding, treatment and education for hepatitis C, particularly in reference to the new antiviral treatments that are available.

Four major areas were examined, including screening and identification of patients at risk, treatment and monitoring of patients, understanding of new treatments and therapies, education and learning for hepatitis C. The study focused on the delivery of treatment to patients in normal healthcare professional interactions, so much of the analysis was conducted based on specific healthcare provider types to understand how patients may best access treatment for hepatitis C through pathways with which they are familiar.

Screening and identification of patients

Most participants were seeing patients with cirrhosis, who have the greatest risk for complications and hepatitis C. The majority of physicians did not indicate any other groups, while nursing staff did have a number of other groups (including aboriginals and injection drug users). This may be interpreted that either physician practices don’t reach the same demographic or that nurses are more aware of the other characteristics of the patients (or a combination of the two). Regardless of the type of patient seen in the practice, all participant groups identified a number of high-risk patients and behaviours for screening, particularly those with abnormal liver enzymes. Primary healthcare providers were the single group most likely to screen in their practice.

Participants, in general recognized that screening guidelines wouldn’t be effective for the identification of all individuals with hepatitis C. Nurses and primary care physicians were the most likely groups to think that screening would be effective for identification of all individuals, but even in those cases, it was only a minority.

Treatment and monitoring of patients

There were some profound differences in comfort levels of participants from different groups. Specialists were the most
comfortable with recommending and initiating treatment for patients, while primary care physicians were particularly uncomfortable with those roles. Those nurses who did suggest that these functions were part of their practice were, in general, more comfortable than primary care physicians. PCPs recognized that they were involved with the continued monitoring of patients, however, they were not fully comfortable with this role. Specialists were also less comfortable with continued monitoring.

Specialists were the most comfortable with recommending and initiating treatment for patients, while primary care physicians were particularly uncomfortable with those roles.

Understanding of new treatments and therapies
In general, most participants felt that they were familiar with the new direct acting antiviral medications for hepatitis C. However, again, primary care physicians, as a group, were most likely to identify with a lack in knowledge.

Education and learning for hepatitis C
The most popular education formats identified included group education, such as conferences, traditional lectures, and on an individual basis, reading review articles. This suggests that most physicians are interested in obtaining information encompassing all areas of hepatitis C treatment from a single source at a single sitting, rather than over time.

When asked to consider guidelines, there were some differences in the guideline selection for different group of participants. Primary care physicians were the most likely to not use either CASL or AASLD guidelines, either opting for no guidelines or for other guidelines that they consider credible. Many participants, including specialists, were likely to use the CASL guidelines, but hepatologists were more likely to use AASLD. The participants, in general, would like guidelines updated at least every two years, but as often as new evidence requires. The selection of AASLD guidelines (or other credible guidelines for primary care physicians) suggests that there may be some requirement to ensure changes to the CASL guidelines to make them more relevant; at least one participant noted that the guidelines were out of date and that only the introductory information was relevant. The survey, however, was started prior to the issue of the most recent 2015 update to the CASL guidelines.3

The survey demonstrated that there is considerable room for improvement in hepatitis C treatment in Canada. In particular, to ensure accessibility to new medications and treatments for hepatitis C, primary care physicians should be provided improved education and resources for screening and treatment.

ACKNOWLEDGEMENTS

Program Partners: Canadian Liver Foundation (CLF) (Dr. Eric Yoshida), Canadian Association for the Study of the Liver (CASL) (Dr. Hemant Shah), Canadian Association of Hepatology Nurses (CAHN) (Carolyn Klassen).

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Funding for the planning and execution of the survey and analysis was provided by the Canadian Liver Foundation (CLF).

We would like to thank Hc3 Communications and Scientific Insights Consulting Group for their collaboration in the development of the assessment, its implementation, and their assistance in the analysis and development of this report. We would also like to thank Veritas IRB for their initial collaboration.

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