San Francisco Health Network

Hepatitis C Treatment Evaluation

May 2017

Report prepared by

FACENTE CONSULTING

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INTRODUCTION

About the SFHN

The San Francisco Health Network (SFHN) is San Francisco's only complete system of care. In addition to cutting-edge specialty care, the SFHN, part of the San Francisco Department of Public Health, includes primary care in 10 community-based and 4 hospital-based clinics throughout the city.

Anyone who has Medicare, Medi-Cal, Healthy Workers, Healthy Kids, or Healthy San Francisco (including through the San Francisco Health Plan) is eligible to receive primary care through the SFHN, if they have selected one of the SFHN primary care clinics as their medical home.

About Hepatitis C

San Francisco is profoundly impacted by the hepatitis C virus (HCV), a communicable disease easily transmitted to others through blood-to-blood contact. HCV is a significant driver of morbidity, liver cancer, and death.

Like many communicable diseases, HCV disproportionately impacts marginalized populations, specifically people who inject drugs, people who are homeless or marginally housed, people of color (most notably African Americans), and people living with HIV.

The availability of highly effective HCV treatment that is taken through an oral pill with few side effects (known as direct acting antivirals, or DAAs) gives us the remarkable ability to cure HCV in nearly all infected patients. Due to the high cost of DAA treatment, originally the CA Department of Health Care Services (DHCS) restricted HCV treatment for Medi-Cal patients to those with documented advanced fibrosis or cirrhosis (stage 3 or 4), and patients were typically excluded based on active substance use or a number of mental health conditions. However, a major DHCS policy change on July 1, 2015 expanded treatment access to anyone in California with evidence of stage 2 or greater

hepatic fibrosis/cirrhosis, active injection drug use, or co-infection with HIV.

Within the City and County of San Francisco, there is a strong commitment to providing HCV treatment to all people living with HCV, unless medically contraindicated. For patients of the SFHN, this commitment has been realized through a comprehensive set of services to improve provider awareness and capacity to prescribe and facilitate successful treatment with DAAs.

Examples of the efforts provided to date include two 4-hour trainings in 2016 about primary care-based HCV treatment, a detailed presentation of HCV treatment procedures for SFHN providers during one of the quarterly SFHN Provider's Meetings, establishment of an eReferral system to support treatment in specific patient cases, and a team of HCV champions providing clinic-based technical assistance on an as-needed basis.

About this Evaluation

Almost two years after treatment access was expanded to patients receiving care through the San Francisco safety net, the SFDPH hired an external consultant to evaluate the barriers still preventing some SFHN providers from providing HCV treatment to their patients, and make specific recommendations to facilitate increased treatment uptake.

The landscape of HCV treatment support within the SFHN was assessed through a quantitative review of clinical prescriber and patient data, a surveymonkey survey completed by 44 primary care providers, in-depth, 1-on-1 intervews with 13 providers, running the gamut from those who had never prescribed treatment to those who were considered "HCV champions" in their clinics.

eReferral System

Screening questions for Primary Care-Based HCV Treatment

Continue

In order to schedule an appointment with the
Primary Care-Based HCV Treatment
please answer the question(s) below

Do you intend to treat this patient for HCV yourself, in the setting of your own primary care clinic? YES ◯ NO ◯

Does the patient have a HCV genotype test, a confirmed and detectable HCV viral load within the last 12 months, and tests of liver and kidney function (creatinine, platelets, albumin, INR, transaminases) in the last 6 months? YES ◯ NO ◯

Who is prescribing HCV treatment in the SFHN?

When comparing two full years of SFHN clinical data, it is clear that significant progress is being made in the area of HCV treatment. These numbers below only include accurate data for the Positive Health Program, Castro Mission Health Center, Tom Waddell Urban Health, and Southeast Health Center (with Southeast's data being partially incomplete until March 1, 2016).

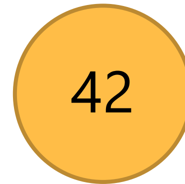
Number of patients treated

Oct 2014 – Sept 2015

Oct 2015 – Sept 2016

▲ **123%**

Number of providers prescribing

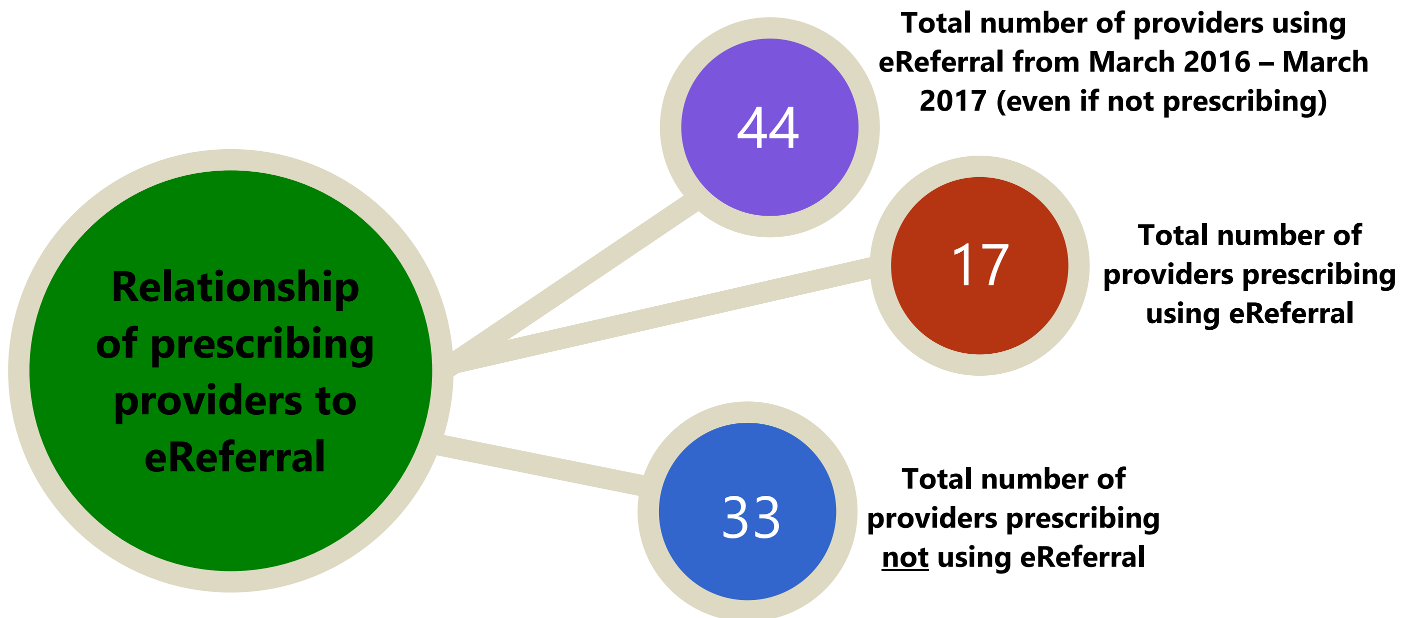


Oct 2014 – Sept 2015

Oct 2015 – Sept 2016

▲ **83%**

A total of 120 providers were trained during two HCV provider trainings in January and October 2016. From March 1, 2016 through March 31, 2017, 17 providers from those trainings used the eReferral system, a total of 64 times (with an average of 3.8 times used per provider).

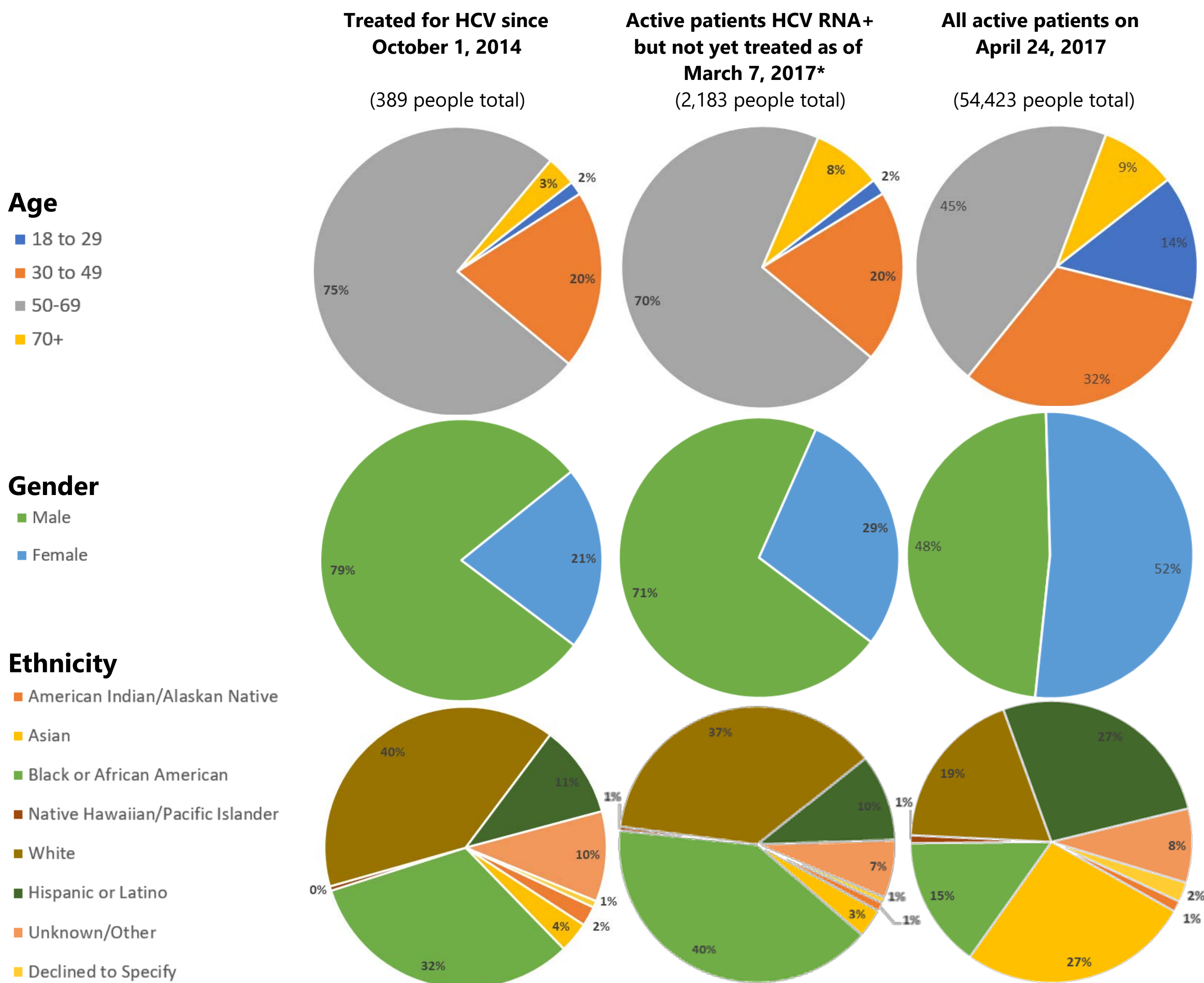


Between their date of training and March 31, 2017, 74 prescriptions for HCV treatment were written by providers who attended either of the trainings in 2016. This was an average of 3.9 prescriptions per trained provider; however, when excluding Royce Lin and Soraya Azari from the counts (as they were "super-prescribers") the total number of prescriptions drops to 30, with an average of 1.8 per provider. During that same time period, 45 prescriptions were written by providers using eReferral, and another 152 prescriptions were written by providers who did not use eReferral (though 69 of those were written by Royce Lin and prescribers at OTOP).

Who is currently being treated in the SFHN?

When comparing the SFHN patients who have been treated for HCV to those who are HCV RNA+ but have not yet been treated for HCV, there are only slight demographic differences, as can be seen in the first two columns of pie charts, below. However, the overall age, gender, and ethnicity demographics of SFHN patients who are confirmed HCV RNA+ (whether treated or not) are considerably different from all active patients overall (the third column of pie charts, below).

Most notably, a disproportionate number of baby boomers (ages 50-69), males, African American, and White patients are HCV RNA+ or were recently treated. Almost 11% of adult African Americans patients of the SFHN are living with HCV. Note that while trans women are known to have a considerable HCV prevalence in San Francisco (as high as 1 in 6), "transgender" gender is not captured in the clinical data of any SFHN clinics except Tom Waddell Urban Health. While 126 people treated for HCV (32%) were noted as having a history of injection drug use, this information is missing for most SFHN patients, making a real comparison impossible.



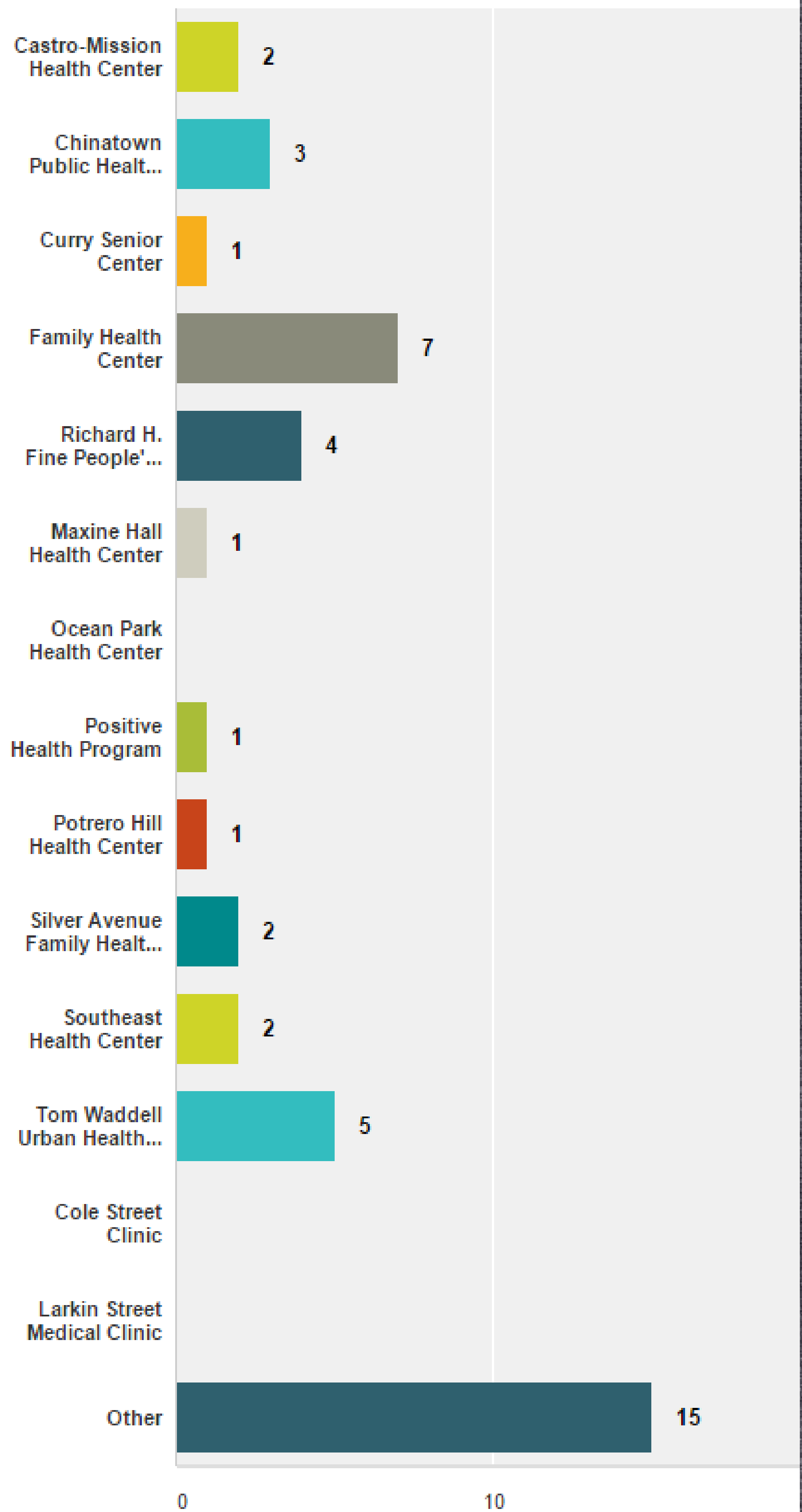
*Note that this middle column excludes 180 patients who are HCV antibody positive but had not yet had HCV RNA confirmatory testing at the time of data analysis.

Survey Results and Interviews

Out of the 120 providers who participated in one of the 2016 HCV prescriber's trainings, 111 had active emails at the time data were collected for this evaluation and they were contacted to take a brief survey using SurveyMonkey. Of those, 44 providers completed the survey, with a fairly broad spread throughout the SFHN primary care clinics, as can be seen in the graph to the right. Of the 15 providers who selected "other," specified clinics included Jail Health Services, ZSFG Urgent Care, BAART Market Street, OTOP, SF HOT / Street Medicine, and a number of supportive housing providers.

Almost 2 out of 3 survey respondents (28/44) were primary care providers licensed to prescribe HCV treatment directly. The remaining respondents were RNs (18%), pharmacists (4%), and administrative roles (e.g. program manager, medical director, nurse manager) with one medical evaluation assistant and one urgent care provider.

14 respondents completed the January prescriber training, 25 completed the October training, and 2 participated in both trainings. Three of the 44 respondents did not answer this question.

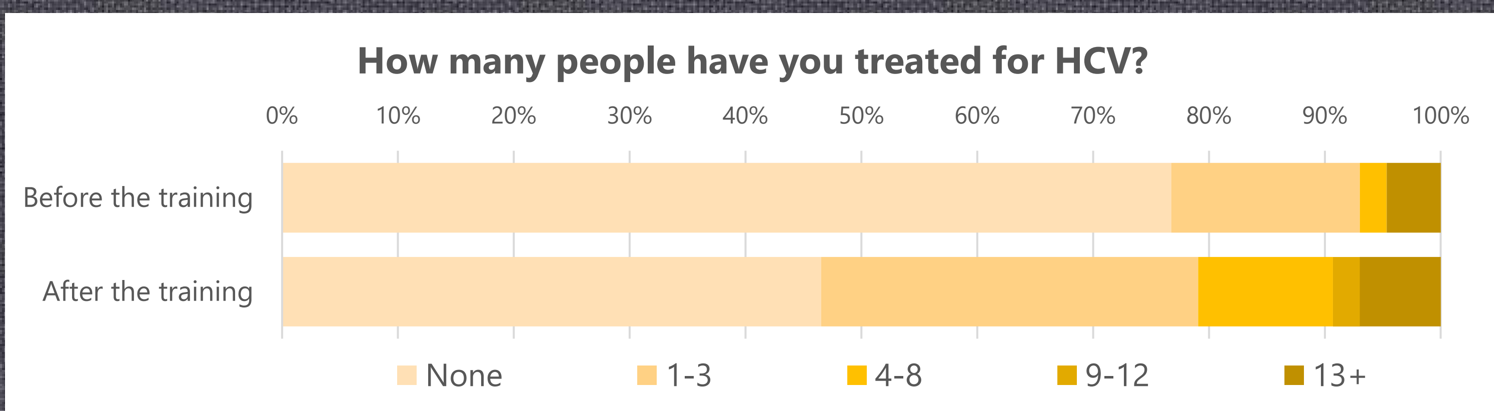


When asked why they attended the training, 36 people (82%) said it was because there is patient need/demand for HCV treatment in their practice and they needed to build skills in knowledge, 34 people (77%) said they thought it sounded interesting and wanted to learn more, and 8 said it was because their supervisor asked them to attend.

Overall, participants had very positive things to say about the provider trainings (though many of the providers interviewed said it was so long ago they couldn't remember enough detail to offer any constructive criticism). In the "additional comments" field of the survey, one respondent wrote, "The content of the prescriber training was useful and I have referred back to it several times in the course of treatment." This sentiment was echoed by those interviewed; commentary was overwhelmingly positive, with one person suggesting more concrete information (i.e. an "algorithm handout" that helps with decision-making around treatment) and another offering the idea that in future trainings, the focus might be on clinical experience people have had with complications or side effects from treatment. One of the clinic champions interviewed explained that the training "didn't quite do it for the nurses" and that it was very MD-centric, with some of the content going over nurses' heads. "When clinics are needing to beef up their whole team, it may be worth having tailored trainings depending on what their role is," she noted. Along those lines, a provider who has treated about five people since the training said,

> *When I went to the training I had zero HCV experience. I remember walking away from that training thinking, "That was great, but I don't even know where to start about how to select a treatment." Before I got into those detailed of writing a letter and all that stuff, I feel like it would have been helpful to have the nitty gritty on the medical side first. What labs to run, how to select treatment, what sort of potential side effects or bad outcomes could happen, what would you do in a situation where the medication wasn't working 4 weeks in, etc. Ultimately I think that's a good use of eReferral, but I also think it's good for providers to be aware of these things 0 like, you should be aware that 4 weeks out you should have a zero viral load. And if that's not happening, maybe you check with eReferral about what to do…but you have to know to check. I subsequently went to an outside conference to learn that stuff.*

Before the training, more than 3/4 of respondents had never treated a patient for HCV. After the training, however, that number dropped below 50%, with 16 of the 34 people who said they had treated no patients before the training reporting treating at least one patient post-training. The distribution of the number of patients treated pre and post-training can be seen in the figure below.



Why still not treating?

For those who said they still had not treated any patients for HCV post-training, there were a number of reasons why. Eight people of the 20 who still answered "zero" post-training said they had no patients in need of HCV treatment, or were unable to prescribe (e.g. they were an RN, or patients with HCV were already being treated elsewhere). Of the remaining 12, 8 said they don't have any patients they think can complete treatment successfully, and/or that they can never focus on HCV as there are too many other "fires" for their patients. The other 4 said they didn't know how to navigate the medication ordering process (2 people), they didn't feel comfortable prescribing treatments to their patients yet (3 people), or they know how to do it but there is no one at the clinic to assist and they feel like they can't do it themselves (2 people).

Of the 14 providers interviewed, all had begun treated except for one. That one said he had just been too busy, adding, "While I don't think hep C care is beyond us, I query how realistic it is to get patients and the system to come together for the necessary additional visits, to keep the visits adequately focused on hep C....it's been straightforward to get patients seen and treated at the Liver Clinic, so I don't think folks are being denied access." Two providers who were in the system as having used eReferral but not yet treated actually had begun treatment with multiple patients; however, at their clinic (Tom Waddell Urban Health) patients going to begin HCV treatment are often handed off to the "HCV treatment team" of NPs and RNs who guide the patient through the process and manage the official prescription, after referral from their primary care provider.

eReferral

Of the 35 prescribing providers who had patients who were HCV RNA+ post-training, 17 (about 1 in 2) had never used eReferral; however, 9 of those 17 providers had prescribed HCV treatment to at least one person despite not using the eReferral system. Five people had used eReferral once, 9 had used it 2-4 times, and two people had used it more than 10 times (one of these was someone who had never treated someone before the training but had treated between 4 and 8 people post-training, and the other person had gone from treating 1-3 patients before the training to treating more than 12 patients post-training).

Of those who had used eReferral, 1/3 (6 people) found it to be very useful and very user-friendly (a rating of 4 of 5 on both measures) and 2/3 (13 people) found it to be extremely useful and extremely user-friendly (a rating of 5 of 5 on both measures). No one rated it lower than a 4 on either measure.

This was echoed by the providers who were interviewed for this evaluation; of the 9 interviewees who had used eReferral, no one had any complaints or suggestions for improvements at all. Rather, they spoke about it being just detailed enough (but not too detailed), with fast enough response, helpful answers, and ease of use. One provider did mention that the technology was "a little clunky, since it's not the same system we chart in," but acknowledged that had little to do with the eReferral system itself, which worked well.

When asked on the survey to describe any improvements they would make to the eReferral system, only one provider had a suggestion: "I would have all the extra linked documents in the eReferral page in one PDF, so we don't have to click around."

As for whether they could foresee a future without eReferral, almost all providers interviewed said they hoped that would never come to pass. While one person said, "I would hope that I wouldn't keep using it every time…I feel like in a few years it will seem funny that this is a big deal. I'm hoping it starts to feel easy and normal," most saw it as a long-term solution, taking the responsibility off of them to stay current, especially because, as one noted, "I don't see a world…where any given PCP is going to be doing enough HCV treatment to feel like they are always up to date."

Other support needed

During the interviews, most providers were asked about their level of job satisfaction overall, and whether there were things about their job that created barriers to HCV treatment. Unsurprisingly, many people interviewed cited short-staffing or a general lack of time being a main factor in their work environment. Many echoed the sentiments of one provider, who said,

> *Our clinic is short-staffed overall. We have trouble getting people registered in an efficient way. We are down MAs, we are down nurses, we are down ancillary staff. But even if we had all that stuff, I think my clinic is so busy it wouldn't really make a difference. Luckily it doesn't have to, because we have this HCV team who takes [HCV treatment] on, and they do such an excellent job.*

Along these lines, one clinic champion explained that they were trying to find ways to treat HCV without increasing the burden on PCPs, since in a public system so much of the work of telephone requests and other administrative tasks are handled by doctors, instead of nurses or other support staff as might happen in a private system. Another provider spoke specifically about the support she needed for panel management, because she simply didn't have time for that part of her practice.

In general, when asked about clinic technical assistance, those in Tom Waddell Urban Health, Southeast Health Center, Curry Senior Center, and OTOP instantly referred to their HCV teams who assisted PCPs or other prescribers to help make HCV treatment happen. As one of them noted, "Having dedicated people who are helping with this topic makes it easier. They can be the expert and you can feel like the consultant…That's the model we have here at Tom Waddell, we have providers who are experts on HIV medicine, or experts on trans medicine, and that makes it easier for me to help with prescribing those things."

Another explained, "This would be MUCH harder if it wasn't for these mid-level folks helping us to make it happen. I feel like I get to write my prescription and then just take a step back. It would be near impossible with my tight clinical schedule to do two-week visits like this for multiple people at a time, without having the nurses help to follow people. I just couldn't do it." On the other hand, those providers at clinics with HCV specialty staff were often resistant to the idea of being integrally involved with their patients' treatment. One said, "They're wanting more providers to take [HCV treatment] on. But frankly I'd rather just have a specialty clinic to refer people to, rather than trying to manage it myself. I'm just there part-time, and it seems hard to navigate…the insurance stuff, the scheduling, the follow-up labs. I haven't figured out how to do all that, so I just refer." Similarly, a provider at Southeast Health Center recalled, "I've heard other providers say they're just going to ask Colleen to treat their patients, because it's so much stuff and we already have so much to do. There's a spreadsheet where we have to enter everything in, and it's a lot of stuff. So I've heard some people say that there's a barrier there, and it's easier to just pass it off to Colleen."

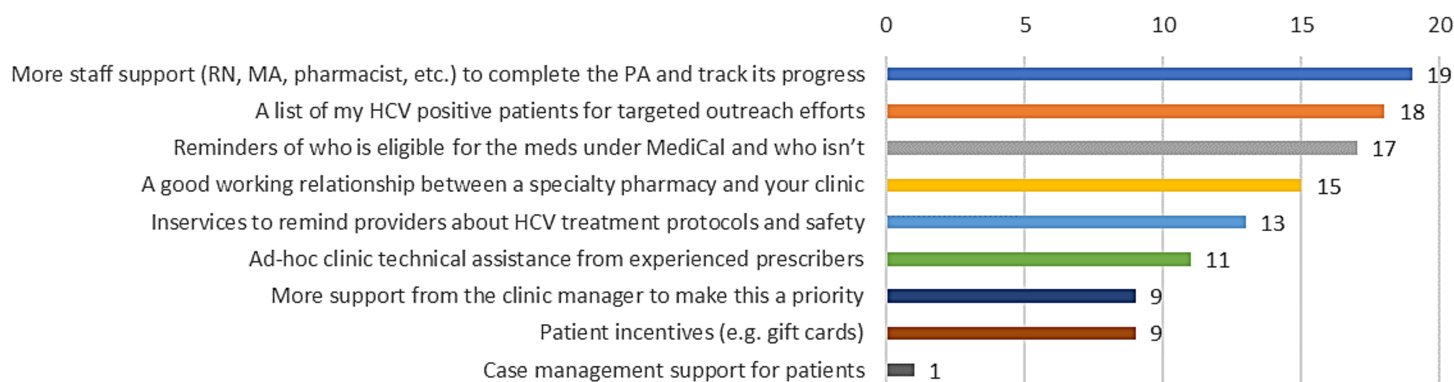
As for clinic-specific technical assistance for clinics that did not have dedicated staff to focus on HCV treatment, feedback was positive – though some providers acknowledged it wasn't enough on its own. For those who thought the staff needed general education related to HCV and how to discuss it with patients (such as at the Cole Street Clinic), the TA has been helpful and sufficient. A provider from Chinatown Public Health Center spoke happily about the work of Kelly and Ben to help with clinic workflow, along with his medical director's encouragement to try out eReferral. Yet other interviewees noted that sometimes inexperienced providers needed more than education to begin treating; it was about needing support to "build muscle memory," as one put it. This sentiment was well-illustrated by one provider, who explained,

> *I think for anybody who's remotely complicated, most providers here would probably refer to the Liver Clinic for treatment at this point. I know when I made an announcement about [the update] that if a patient had a history of HBV infection then we needed to do more tests to monitor their liver function, people were like, "Oh gosh, we're not there yet. Let's treat a few uncomplicated people first!"*

When interviewees were asked what more could be offered at the clinic level to increase the number of clients treated, those from clinics with dedicated HCV staff (NPs, RNs, or pharmacists) immediately said that increased capacity from those staff – in terms of longer shifts, the ability to do group visits, or the addition of new staff – were the most important way to increase treatment rates. One elaborated, "I kind of trickle in my patients, because I know that the nurse can only handle a panel of so many. If their capacity was more, I'd put those people on the launching pad more quickly."

Other providers mentioned a variety of ideas, including more case management options for clients in order to improve adherence, and trainings and support around panel management. Numerous providers said they would be willing to treat if it were easier to determine who was appropriate for treatment; one provider noted, "I wish there were more of a real-time dashboard so I'm not combing through the same excel file week after week. It would be great to have more skills along those lines." Another emphasized the importance of navigators who could support patients during the sometimes long wait for treatment authorization and testing to determine an appropriate regimen.

In the survey, providers were also asked what more could be offered at the clinic level to increase the number of clients treated; in general, respondents liked most of the options provided:



In the survey, respondents were also asked what other learning modalities could be helpful to them as an HCV prescriber, in addition to the eReferral system. The two most popular options were "periodic HCV treatment update webinars/trainings that are pre-recorded and self-directed (27 people) and "real-time access to an experienced provider" (20 people). Nine people said they would like to have "periodic live webinars with HCV treatment updates," and four said they would benefit from bi-weekly case conferencing.

These ideas were echoed by interviewed providers, some of whom specifically noted the trainings and resources that would be useful, including a convenient online CME that included updates about HCV treatment and nuances of treatment, such as information about racial/ethnic differences in treatment efficacy, or HBV and reactivation. One person suggested a teaching session, where providers could bring medical records or their computer, and sit with an experienced provider who can walk through it with them, to "see where they are in the steps, what the next steps are, what you're missing – build a plan....we need to show providers it's just not that hard, but it IS time intensive. Especially at first." A provider at Chinatown Public Health Center pointed out that since their providers are so experienced dealing with HBV, they could use some clinic-specific tools and technical assistance to point out the ways that HBV and HCV treatment differ, to help clear up confusion in the moment and help providers feel more confident in their ability to treat both.

Overall, there were two types of providers who participated in interviews: those who felt overwhelmed by the whole idea of treatment, and those who were completely comfortable with it. The former were usually resistant to beginning treatment in patients unless it was exceedingly straightforward or they could refer the patient to others to handle. As one explained, "I have done three or four eReferrals, but on each of those people there were small things that needed follow-up, that have taken time. Having the time to figure out the logistics and weird insurance plans has been what has limited me. It's on my list of things to do that's not urgent, and since I'm barely getting through the urgent things, it just kind of sits there." On the other hand, the latter group was almost exasperated by the challenge others felt, like the provider who said, "I don't know, I find these things to be incredibly easy. This is one of the easiest treatments I've ever taken on. I used to do the Ribavirin/Interferon combo, and that was the OPPOSITE of easy. To give someone a prescription and they just take a pill once a day, usually with no side effects, and it works? I mean, that's so easy. It's a 'just do it' kind of thing."

Conclusions

Overall, SFHN providers who participated in this evaluation were optimistic about the future of HCV treatment and were encouraged that their patients living with HCV could and should access treatment as soon as possible. While a few providers raised concerns about adherence for their most difficult patients, most found time to be the biggest barrier: time to determine which patients were candidates, time to find them and get them in for the necessary visits, and time to negotiate with insurance providers and others to successfully initiate treatment. A couple providers shared their belief that patients who are asymptomatic, not cirrhotic, or otherwise "not sick enough" could not readily obtain treatment, showing that the need for education isn't over. However, with enhanced specialty HCV teams and external support via pharmacies and eReferral, continued educational options, and time, treatment rates in the SFHN will only continue to improve.