

V. Improving VHIP: Focusing on Regular Users of SEP Services

Hepatitis Service Delivery Data (reported above) reveal significant room for improvement specific to vaccine completion, receipt of screening results, and acceptance of follow-up care for those screening positive for HCV. This section of the report examines the extent to which these outcomes are related to SEP utilization. More specifically, the hypothesis that clients who utilize the SEP more frequently will have higher vaccine completion rates, be more likely to receive screening results, and be more likely to accept and attend a medical referral for HCV evaluation and possible treatment was examined.

Methods

All clients at each SEP receive a unique agency-specific identification (ID) number. This ID number is linked to all services received at the SEPs. Data on all non-VHIP services funded by the AIDS Institute are recorded in the AIDS Institute Reporting System (AIRS), which is used by both SEPs. Although VHIP service data are not recorded in AIRS, VHIP clients can be matched to AIRS through the unique agency ID number.

The ID number was used to track the number (and type) of non-VHIP services received by clients in a one-year period, following the date of each client's first VHIP service (first hepatitis screening and/or first dose of vaccine). Several different conceptualizations of regular program usage were examined, including those that considered the frequency of services, the timing of services, and specific types of services. A particular emphasis was placed on ensuring that the final definition of "regular user" be easy to construct, have a sufficient number of cases to permit detection of differences between groups, and be programmatically actionable (e.g., permit future shifts in programmatic focus should favorable outcomes be detected). Many of the conceptualizations provided substantively similar findings. Because the simple definitions worked as well as the complex definitions (those involving service timing and service type), project team members ultimately agreed on the following simple categorization of regular usage:

- *Regular Users* – Used the SEP at least 3 times in one year for non-VHIP related services (regardless of the timing or type of services utilized);
- *Non-Regular Users* – Used the SEP less than 3 times in one year for non-VHIP related services; and
- *VHIP Only Clients Not Found in AIRS* – Received VHIP (and possibly anonymous) services exclusively at the SEP (i.e., did not receive any other AI-funded service and therefore did not show up in the AIDS Institute Reporting System).

Results

The following tables display the results of analyses testing the hypotheses that clients who utilize the SEP more frequently have higher vaccine completion rates (Table 14 and Table 15), are more likely to receive screening results (Table 16), and are more likely to accept and attend a medical referral for HCV evaluation and possible treatment (Table 17). Table 14 reveals that 164 clients were classified as regular SEP users, representing 25.1% of all those receiving an initial dose of HAV vaccine. An additional 244 clients were considered non-regular users (37.3%) while 246 clients (37.6%) were classified as VHIP only clients. Table 14 also reveals that, compared to those receiving only VHIP services (e.g., those not found in AIRS) and those with non-regular SEP usage, regular SEP users were about twice as likely to receive a second dose of HAV, and between four and six times more likely to receive a third dose of HAV vaccine (when a 3 dose regimen was used). Overall, regular users were between three and four times more likely to complete their vaccine series (2 or 3 dose regimen).

Table 14: Improving VHIP: Hepatitis A Vaccinations among Regular Users

Hepatitis A Vaccinations	# Received Dose 1	% Received Dose 2 ¹	% Received Dose 3 ²	% Completed Series ³
VHIP Only Clients	246	24.8%	11.1%	15.0%
Non-Regular User	244	21.3%	7.4%	11.1%
Regular User	164	45.7%	42.4%	34.1%
Significant Difference ⁴	----	p<.001	p<.01	p<.001

¹Limited to clients that received one dose of HAV vaccine.
²Limited to clients that received two doses of Twinrix for HAV.
³Among clients that received dose 1, these clients that completed either the 2 dose or 3 dose series.
⁴Pearson's Chi-Square Test of Independence. Fisher's Exact Test used when expected cell sizes <5.

Table 15 presents findings specific to HBV vaccine completion rates. Overall, 73 out of the 333 clients receiving an initial dose of HBV vaccine were classified as regular SEP users (21.9%). As we observed for HAV vaccine return rates, regular SEP users were significantly more likely to receive a second and third dose of HBV vaccine, compared to VHIP only and non-regular SEP users. More specifically, regular users were about 1.5 times more likely to receive a second dose of vaccine and about twice as likely to receive a third dose and complete their vaccine services.

Table 15: Improving VHIP: Hepatitis B Vaccinations among Regular Users

	# Received Dose 1 ¹	% Received Dose 2 ²	% Received Dose 3 ³
VHIP Only Clients	148	39.9%	35.6%
Non-Regular User	112	41.1%	30.4%
Regular User	73	65.8%	62.5%
Significant Difference ⁴	----	p<.01	p<.01

¹Limited to HBV negative clients.

²Limited to HBV negative clients that received one dose of HBV vaccine.

³Limited to HBV negative clients that received two doses of HBV vaccine.

⁴Pearson's Chi-Square Test of Independence. Fisher's Exact Test used when expected cell sizes <5.

Table 16 indicates that 171 out of the 698 clients screened for HBV (24.5%) and 177 of the 729 screened for HCV (24.3%) were classified as regular users. Regular users were significantly more likely to receive their HBV and HCV screening results: Nearly 70% of regular users received their HBV and HCV screening results, compared to about 40% of VHIP only and non-regular SEP user clients.

Table 16: Improving VHIP: Returning for Screening Results among Regular Users

	# Screened for HBV	% Received HBV Results	# Screened for HCV	% Received HCV Results
VHIP Only Clients	262	37.8%	276	41.3%
Non-Regular User	265	38.9%	276	40.2%
Regular User	171	67.7%	177	67.8%
Significant Difference ¹	----	p<.001	----	p<.001

¹Pearson's Chi-Square Test of Independence. Fisher's Exact Test used when expected cell sizes <5.

Although regular users were more likely to receive their HCV screening results (Table 16), among the subset of clients screening positive for HCV and returning for their results, regular users were no more (or less) likely to accept a referral for follow-up evaluation or to actually attend that referral, compared to VHIP only clients and non-regular SEP users (Table 17).

Table 17: Improving VHIP: Referrals for HCV Evaluation among Regular Users

	# HCV+ Returned for Results	% Accepted a Referral ¹	% Attended their Referral ²
VHIP Only Clients	36	63.9%	75.0%
Non-Regular User	46	69.6%	55.0%
Regular User	50	74.0%	64.3%
Significant Difference ³	---	NS	NS

¹Limited to clients that returned for their HCV positive screening results.
²Limited to clients that accepted a referral for HCV evaluation and treatment.
³Pearson’s Chi-Square Test of Independence. Fisher’s Exact Test used when expected cell sizes <5.

Improving VHIP: Focusing on Regular Users of SEP Services – Summary

Our results supported the hypothesis that regular users of SEP services experience better VHIP-related outcomes, most notably higher vaccine completion rates and screening return rates. Although regular users were not more likely to accept and attend a medical referral for HCV evaluation and possible treatment, it is important to note that this portion of the analysis was limited to HCV positive clients who received their positive test result. Thus, non-returners had already filtered out of the analysis.

Given the low rates of vaccine completion, receipt of screening results, and acceptance of follow-up care for those screening positive for HCV services among VHIP clients overall, it makes sense to attempt to target limited resources towards those most likely to utilize program services. A focus on regular users of SEP services may increase vaccine completion rates and the receipt of hepatitis screening results significantly. Practically speaking, this would mean targeting services to approximately 20%-25% of SEP clients, using the definition of regular user employed here. Finally, although a focus on regular users does appear effective at increasing programmatic outcomes, it is important to note that even with such a focus, many clients will continue to be lost to follow-up. Again, as stated earlier, these clients have very difficult lives with competing priorities (e.g., homelessness, drug use, etc.) which can make it even more challenging for them to attend to yet another one of their needs.