The Implementation of Hepatitis C (HCV) Rapid Testing Technology in HCV Counseling and Testing Sites in Ohio

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Objective:

To assess the feasibility, acceptability, and cost-effectiveness of implementing HCV rapid testing technology into an existing HCV counseling and testing project and to create an HCV rapid testing counseling and testing protocol.

Methods:

Seven HCV counseling and testing sites in Ohio were selected to participate in a pilot project to assess the feasibility, acceptability, and cost-effectiveness of implementing HCV rapid testing technology into their existing HCV counseling and testing programs. Sites collected baseline data on time and effort spent providing counseling, testing and results under the current program which utilizes the Home Access® Hepatitis C Check℠ collection kit. A draft protocol for HCV rapid testing was developed and staff at the seven sites were trained on the use of the new HCV rapid test. Each site received a finite number of HCV rapid tests, and after they had used approximately 75 percent of their allotment, they collected data on time and effort spent providing counseling, testing and results using the HCV rapid tests. Verbal feedback was also collected from participating sites both informally and through a conference call. Positive HCV rapid test results were antibody-confirmed through the use of the Home Access® Hepatitis C Check℠ collection kit which utilizes the signal-to-cut-off ratio or RIBA for antibody confirmation.

Results:

Descriptive statistics for those tested (N=430)

Race		Reactive	Non-reactive	Total persons
Black	Male	24.3%	75.7%	37
	Female	5.6%	94.4%	36
White	Male	33.5%	66.5%	218
	Female	31.8%	68.2%	110
Other	Male	20.0%	80%	11
	Female	15.4%	84.6%	13
Missing				5
Total		125 (29.1%)	305 (70.9%)	430

Year of Birth (YOB)/Age

YOB Range = 1941-1998
Mean Age = 33.4 years
Median YOB = 1983
YOB Mode = 1990

Risk Factor*	Reactive	Non-reactive	Total Number Answering Question
Blood or blood products before 1992	4.1%	5.0%	424
Exposure to another person's blood	17.7%	28.1%	428
Ever injected street drugs by needle	87.1%*	36.4%	422
Ever snorted street drugs	96.8%*	60.9%	429
Living with someone with HCV	52.5%	33.0%	426
Average number of sex partners	36	38	400
Sex with someone who has HCV	24.4%	14.1%	422
Ever treated for STD	28.2%	30.2%	426
Ever had a non-professional tattoo	56.5%	37.9%	426

*Only two clients with a reactive test reported "No" to both having ever injected street drugs by needle and ever snorted street drugs. Both of these clients reported "Yes" to having ever had a non-professional tattoo.

Baseline and Post HCV Rapid Testing Implementation Time Data*

	Current Testing Methodology -group testing events	Current Testing Methodology – individual testing	Rapid Testing
Number tested	113	92	42
Number (%) that received results	108 (95.6%)	60 (65.2%)	42 (100%)
Average time spent on pretest counseling & testing	14.4 min / client	21.1 min / client	19.2 min / client
Average time spent on posttest counseling	17.0 min / client	13.7 min / client	10.9 min / client
Average time spent following up with those who did not return for results as scheduled	103.1 min / testing event	29.5 min / client	2.7 min / client

*This was not a scientific study, but the data represent the experiences of those who participated in this project.

Of 98 reactive HCV rapid tests that were antibody-confirmed using Home Access® Hepatitis C Check℠ collection kits, 96 confirmed positive and 2 were unable to be tested.

Conference call results (follow-up with sites doing rapid testing)

Six people from four geographic areas (two urban, two rural) participated on the call.

Pros of Rapid HCV Testing

- Client leaves with result/more convenient for clients
- Test process is easier and faster
- More time available for counseling
- Staff does not have to wait for results
- Results and samples cannot be lost
- So much time is saved by not having to track down results and then track down the client to give results
- Clients do not have to endure a month of stress wondering about their result (even if negative)
- It is less obvious at group testing events, who might be positive

Cons of Rapid HCV Testing

- Cannot predict amount of time that will be needed or the number that will be able to be tested at a test site ahead of time because of the unknown number of positives
- Temperature control is an issue (but a minor one) when taking kits off-site
- Maintaining the rapid test kits is extra work compared to current testing methodology
- Lack of a lab report to give to clients and for reporting purposes (postive HCV rapid tests are reportable, so sites need to ensure proper reporting practices are in place)
- Positive HCV tests detract from HIV risk reduction counseling when both tests are conducted simultaneously
- An extra room is required for providing results
- Reactions of positive clients are more dramatic/emotional when receiving results right away

Additional Feedback

When asked which testing methodology they prefer to use, sites unanimously stated that the ability to do rapid testing far outweighed the pros of the current testing methodology and this is the test they want to use. One site would still like to have the option of using the current testing methodology when a lab slip or confirmatory antibody is needed.

When asked what they would tell a new site about implementing rapid testing they responded:

- Expect more positives than you think you are going to get
- Shadow someone who does rapid testing (either HIV or HCV) or have them come and assist with the first testing event
- Client centered counseling for HIV applies to HCV, so starting a rapid HCV testing program is easier if you are already doing HIV testing
  - If not doing HIV testing, having counseling points readily available is important
- Create a supply check list to make sure you have everything you need when going to a site to do rapid testing

Conclusions:

HCV rapid testing technology is feasible, acceptable, and cost-effective. Sites prefer the new methodology over the older methodology. Clients testing HCV-positive with the rapid test can bypass antibody confirmation and be referred directly for HCV-RNA testing.

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