Rapid HIV diagnosis in the hospital emergency department and primary care clinic settings: successful experience and challenges

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Abstract

Routine HIV testing & diagnosis in the hospital emergency department (ED) and primary care clinics (PCC) began in July 2013 for identification and linkage to care for newly diagnosed HIV-positive patients.

Relevant issues include (1) implementation of rapid testing and reporting of HIV testing in the ED and PCC; (2) follow up for newly diagnosed patients manage the linkage to care after discharged from the ED and PCC.

Relevant efforts include (1) management of the rapid testing of HIV for the FOCUS program using the updated HIV testing algorithm; (2) identification of newly diagnosed patients and link them to HIV-related medical care and support services.

The routine testing program began on July 9, 2013, and HIV Ag/Ab testing replaced HIV EIA screening on February 16, 2015; data presented here are for tests completed through November 30, 2015 (3rd generation: 19 months; 4th generation: 9.5 months).

During this period, 62,002 total tests were completed, belonging to 53,113 unique patients and 465 patients were identified with a new HIV diagnosis (0.9% of unique tested).

A higher frequency of patients were identified with acute HIV via 4th generation testing compared to 3rd generation testing (7.7% vs. 3.7% of new HIV diagnoses, p = 0.06).

62.3% of newly diagnosed patients with at least 90 days to be linked to care attended a first appointment with an HIV-care provider (223 out of 413).

70.0% of patients with acute HIV, and at least 90 days to be linked to care attended a first medical appointment (14 of 21 patients).

Disclosure

Funding for implementation of the HIV screening program described here was provided by Gilead Sciences, Inc.

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Table 1. Unique patients tested from July 9, 2013 – November 30, 2015

<table>
<thead>
<tr>
<th></th>
<th>3rd Gen (EIA)</th>
<th>4th Gen (Ag/Ab)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients newly diagnosed with HIV</td>
<td>297 (1.0% of unique tested)</td>
<td>168 (0.7% of unique tested)</td>
<td>465 (0.9% of unique tested)</td>
</tr>
<tr>
<td>Patients with an acute HIV diagnosis</td>
<td>11 (3.7% of new HIV+)</td>
<td>13 (7.7% of new HIV+)</td>
<td>24 (5.2% of new HIV+)</td>
</tr>
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Results

- From July 9, 2013 – November 30, 2015:
  - 62,002 total tests completed (53,113 unique patients), identifying 465 patients with a new HIV diagnosis (0.9% of unique tested) (Table 1).
  - A higher frequency of patients were identified with acute HIV via 4th generation testing compared to 3rd generation testing (7.7% vs. 3.7% of new HIV diagnoses, p = 0.06).
  - 62.3% of newly diagnosed patients with at least 90 days to be linked to care attended a first appointment with an HIV-care provider (223 out of 413).
  - 70.0% of patients with acute HIV, and at least 90 days to be linked to care attended a first medical appointment (14 of 21 patients).
  - Denominator for linkage to care is adjusted for patients who were unable to be linked because they were deceased, incarcerated, declined linkage, or moved out of the area.

Conclusions

- The HIV FOCUS program integrates HIV testing into the course of routine patient care in the ED and primary care settings.
- Integrated testing permits rapid diagnosis program and earlier opportunity to link to HIV care services.
- Within our population, the main reason for failure to link to care is incorrect contact information provided at registration.

Acknowledgements

We would like to thank Dr. Abigail Hankin-Wei, Nina Lamsen, and the entire Grady HIV FOCUS team.