Results of Rapid Hepatitis C Screening and Diagnostic Testing in the Highland Hospital Emergency Department

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Research support

- HIV Focus Program, Gilead Foundation
Public Health Screening – April 2014

• Universal HIV Screening
• Targeted Hepatitis C Screening
  – Birth cohort 1945-1965
  – Injection drug use
• Triage nurse driven, existing staff
• Physician-initiated testing
  - Adjunct
  - Clinically-indicated
Study objective

• To describe the preliminary results of HCV screening and diagnostic testing
Triage
NURSING TRIAGE (Adult)

HPI: PT HAS DECLINING ABILITY TO WALK SINCE SEIZURE AT HOME SUNDAY; HX OF SEIZURE W/ DILANTIN; RECENT VISIT TO WA HOSP FOR SEIZURE W/ RESULTING DEHYDRATION AND LOW DILANTIN LEVEL ADDRESSED; REPORTS BY FAMILY THAT PT CURRENT ON DILANTIN

PMH:

PUBLIC HEALTH SCREEN (>=13 years old, medically stable, able to consent)

SAY: "We ask the following questions for everyone."

Have you ever been told that you have HIV or AIDS?: HIV_Status: No (offer HIV test).

SAY: "The CDC recommends HIV testing for everyone. Please let me know if you do not want to be tested for HIV."

HIV Test offered?: HIV_test_offered: Yes -- declines HIV test.

SAY: "The CDC recommends Hepatitis C testing in patients born between 1945-1965 and/or those who have ever used injection drugs."

Have you ever been told that you have Hepatitis C?: HepC_Status: No.

Age 49-69?: BY4565: Yes (offer Hep C test).

Have you ever used a needle to inject drugs?: needle_use: No.

SAY: "Please let me know if you do not want to be tested."

Hep C test offered?: HepC_test_offered: Yes -- accepts Hep C test (order Hep C test).
Blood draw
Physician Responsibilities

- Diagnostic testing
- Disclose results
- Link to care
Unique patient visits to the ED°
26,634

Offered screening at least once
7,558 (28%)

Accepted screening at least once
3,284 (43%)

Screened at least once
2,029 (62%)

Screening Test
Positive
186 (9.1%)

Screening Test
Negative
1,843 (90.8%)

Diagnostic Tested*
576 (2%)

Diagnostic Test
Positive
81 (14.1%)

Diagnostic Test
Negative
495 (85.9%)

* Data for unique patients ≥18 years of age
*Testing was initiated by physicians on the basis of perceived HCV risk behaviors or clinical manifestations of HCV infection.
<table>
<thead>
<tr>
<th>Table 1. Efficiency of Screening, Unique Patients</th>
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<tbody>
<tr>
<td>ED Census</td>
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<tr>
<td>Overall</td>
</tr>
<tr>
<td>HCV Risk Factor</td>
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<tr>
<td>Birth Cohort (no IDU)</td>
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<tr>
<td>IDU (+/- birth cohort)</td>
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<tr>
<td>No Risk</td>
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<tr>
<td>Risk Group</td>
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<tr>
<td>----------------------------------</td>
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<tr>
<td>Overall n=26,634</td>
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<tr>
<td>Risk Group</td>
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<tr>
<td>Birth Cohort (no IDU) n=8,209</td>
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<tr>
<td>IDU (+/- birth cohort) n=739</td>
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<tr>
<td>No Risk n=18,066</td>
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HCV Antibody Positive n=267

Disclosed results during index ED visit
33% (87/267)

Confirmatory RNA testing
78% (208/267)

Confirmed HCV positive
70% (145/208)

Follow-up HCV clinic
22% (32/145)
Challenges

• Triage protocol
• Result disclosure + confirmatory testing
• Linkage to care
Conclusion

• ED important venue for HCV testing
  – Screening yield high

• Linkage to care formidable