Lessons Learned from HIV Screening: Routine HCV Screening and Linkage to Care in an Urban Emergency Department in Chicago, IL

Sinai Health System

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Conflicts of Interest

Dr. Glick has funding from Gilead Frontlines of Communities in the United States (FOCUS), consultant
HCV Epidemiology

**US:** Estimated 3.2-5.2 million (2014)
17,000 new cases each year

**Illinois:**

• HCV is the most common blood borne infection in the United States
• HCV is the primary cause of chronic liver disease, hepatocellular carcinoma, and liver transplant
• In the United States, 3 out of 4 HCV infections are from individuals born between 1945-1965
• HCV prevalence and incidence rates in Chicago are heavily underestimated
Sinai Health System (SHS)

• Urban Hospital on the West and Southwest sides of Chicago (MSH, HCH, Schwab, etc.)
• Safety-net provider and teaching hospital
• Level 1 trauma center
• HCV opt-out screening implemented in ED August 2016
• Linkage to care offered for HCV, HIV, PrEP and other sexually transmitted infections
SHS HCV Program Objectives

- All patients 18 years old and older who have blood drawn as part of an order set have HCV testing included
- Patients with a positive HCV antibody test are assessed by patient navigator (PN)
- All HCV positive antibody tests are reflexed to an HCV RNA test to expedite the linkage to care process
- If RNA test is reactive PN links patient to Fibroscan appointment followed by a medical appointment for treatment
HCV Screening Algorithm

Recommended Testing Sequence for Identifying Current Hepatitis C Virus (HCV) Infection

- **HCV antibody**
  - **Nonreactive**
    - No HCV antibody detected
      - STOP
  - **Reactive**
    - Net Detected
      - No current HCV infection
        - Additional testing as appropriate
      - HCV RNA
        - Detected
          - Current HCV infection
            - Link to care

Navigation initiated

HCV RNA Test is Reflexed
Posters and Patient Information: Why Test for HCV?

Between 50-75% of individuals with chronic Hepatitis C are unaware of their diagnosis.

- Earlier diagnosis can lead to a better prognosis and treatment outlook
- Advances in treatment accessibility and effectiveness
  - Medication is over 95% effective
- Knowledge of HCV status can lead to positive behavior change
  - Slowed HCV disease progression (e.g. reduce/stop drinking alcohol, HAV & HBV vaccination)
  - Minimize transmission of HCV to other persons (e.g. safer injection)
Patient Navigator (PN) Responsibilities

• Provide HCV education, conduct assessments, and serve as a resource for patients with HCV and their families

• Assist patients with obtaining health insurance and switching health insurance if necessary

• Schedule and remind patients of medical appointments

• Assist patients with transportation to appointments

• Obtain medical referrals

• Link patients to primary care physician care if they do not have one
### HCV RNA Positives Demographics

<table>
<thead>
<tr>
<th>Section</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positivity Rate</strong></td>
<td>12% for total tested population</td>
</tr>
<tr>
<td><strong>Key Demographics for RNA+ (N=408)</strong></td>
<td></td>
</tr>
<tr>
<td>Baby Boomers (born 1945 - 1965)</td>
<td>69%</td>
</tr>
<tr>
<td>Male</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Risk Factors for Navigated Patients (N=256)</strong></td>
<td></td>
</tr>
<tr>
<td>Current substance use</td>
<td>12%</td>
</tr>
<tr>
<td>Current/past IDU</td>
<td>18%</td>
</tr>
<tr>
<td>Co-infected with HIV</td>
<td>2.7%</td>
</tr>
<tr>
<td><strong>Disease Staging for Fibroscan Patients (N=130)</strong></td>
<td></td>
</tr>
<tr>
<td>F 0-1 (No Fibrosis, n=48)</td>
<td>37%</td>
</tr>
<tr>
<td>F2 (Mild Fibrosis, n=33)</td>
<td>25%</td>
</tr>
<tr>
<td>F3 (Moderate Fibrosis, n=13)</td>
<td>10%</td>
</tr>
<tr>
<td>F4 (Cirrhosis, n=36)</td>
<td>28%</td>
</tr>
<tr>
<td>Stage</td>
<td>Count</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>HCV Antibody +</td>
<td>581</td>
</tr>
<tr>
<td>RNA Test +</td>
<td>408</td>
</tr>
<tr>
<td>Eligible for &amp; Accepted Navigation</td>
<td>256</td>
</tr>
<tr>
<td>Completed Fibroscan</td>
<td>130</td>
</tr>
<tr>
<td>Attended Clinic &amp; Pending</td>
<td>60</td>
</tr>
<tr>
<td>Submitted Tx Application</td>
<td>26</td>
</tr>
<tr>
<td>Approved Tx Application</td>
<td>20</td>
</tr>
<tr>
<td>Tx in Process</td>
<td>20</td>
</tr>
</tbody>
</table>

January – August 2017
• Of the 581 HCV positives identified, 408 (70%) were RNA positive

• Of the 408 RNA positive identified, 256 (63%) were eligible for an accepted navigation services

• Of the 256 RNA positives being navigated, 130 (51%) have completed a Fibroscan

• Of the 130 who have completed a Fibroscan, 60 (46%) have attended or are scheduled to attend a clinic appointment

• Of the 42 who have attended a clinic appointment 26 applications have been submitted for treatment and 20 have been approved for and initiated treatment
Reasons Currently Ineligible For Navigation

- Lost to follow-up: 50
- No/incorrect contact: 29
- Deceased: 15
- Declined: 14
- Established in care: 10
- Homeless: 7
- HIV not controlled: 6
- Current drug user: 5
- Other: 5
Achievements

• People are getting tested for HCV and are becoming aware of their status
• HCV testing is feasible in a busy urban emergency department and does not hinder the normal flow of care
• Navigators are successfully identifying patients who were previously unaware of their status, providing education and linkage to medical services
• Although the process is slow, people are getting treated and cured for HCV
Many people who are identified with HCV are being lost to care due to following reasons:

- Difficulty contacting them
- Unstable housing
- Change in contact information
- Fear of reporting
- HCV therapy is very difficult to obtain for patients with state insurance (Medicaid)
- Providers do not always prioritize testing
- Multiple co-infections
- Substance use
Conclusions

• Patients receiving care at safety-net hospitals experience disproportionately high rates of chronic HCV infection

• Coordinated efforts to identify positive HCV patients and navigate them to treatment is necessary and needs continual development

• Successful navigation in Urban setting requires transformation of system-wide policies, provider-level interventions to increase awareness of HCV and acknowledgement of patients barriers to care
Thank you!

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Acknowledgements

This work was made possible in partnership with Gilead Sciences’ FOCUS program and with the assistance of Lora Branch, FOCUS Regional Lead. Sharon Sam, our PharmD and Bijou Hunt our epidemiologist.