THE GRADY LIVER CLINIC

Partnering with GA DPH to Achieve Hepatitis C Elimination

Shelly-Ann Fluker MD, FACP and Lesley Miller MD, FACP

Medical Directors, Grady Liver Clinic

NASTAD Virtual Learning Collaboration

October 18, 2023
Disclosures

• Dr. Miller receives grant funding from Gilead Sciences through Emory University and consulting fees from AbbVie

• Dr. Fluker receives consulting fees from Roche Pharmaceuticals
Objectives

• Review the current epidemiology of hepatitis C in the US
• Describe the Grady Liver Clinic model
• Describe the Grady Liver Clinic HCV elimination activities
HEPATITIS C IN THE US

Epidemiology
Acute Hepatitis C 2014-2021

Acute Hepatitis C 2006-2021

Newly reported chronic Hepatitis C 2021

ADULTS DIAGNOSED AND CURED* OF HEPATITIS C IN THE U.S. 2013–2022

1 IN 3 CURED OVERALL

1 IN 4 CURED WITHOUT HEALTH INSURANCE**

1 IN 4 CURED UNDER THE AGE OF 40

1 IN 6 CURED UNDER THE AGE OF 40 AND WITHOUT INSURANCE

*Cured is defined as viral clearance, which is an undetectable hepatitis C virus ribonucleic acid (HCV RNA) after a prior test result of detectable HCV RNA.

**Referred to as Other (client or self-pay) in the analysis

Source: Centers for Disease Control and Prevention

HCV Infected Persons with viral clearance

Highest rates of cure among people 60 and older with Medicare or commercial insurance but still only 49% are cured.

https://www.cdc.gov/mmwr/volumes/72/wr/pdfs/mm7226a3-H.pdf
THE GRADY LIVER CLINIC

Model
Grady Health System Fast Facts 2022

Staff

7,800 Total staff
- Physicians on Grady medical staff: 1,100
- Nurses on staff: 1,645

Payor Mix

- Commercial: 15%
- Medicare: 26%
- Medicaid: 5%
- Other: 5%

Facilities

- Licensed beds: 953 Total
- 6 Neighborhood
- 1 Infectious
- 1 Behavioral

Statistics

- Adult admissions: 31,694
- Observations: 7,615
- Births: 2,205
- Average length of inpatient stay (days)
  - Adult: 6.91
  - Newborn: 3.51
- Average hospital daily census: 596
- Total patient days: 213,921

Patient origin

- Fulton County: 54%
- DeKalb County: 31%
- Other: 6%
- Clayton County: 4%
- Cobb County: 2%
- Gwinnett County: 2%
- Henry County: 1%

Outpatient Visits

- 344,169 Specialty Clinic visits
- 220,678 Neighborhood Health Center visits
- 158,014 Emergency Department visits
- 160,959 EMS responses

_gradyhealth.org_
Grady Liver Clinic (GLC)

- Nationally recognized, innovative model for HCV care (est. 2002)
- Primary care-based, generalist run
- Provides critical access to care and treatment for un- and underinsured patients
- Serves as a linkage venue for screening programs
- Trains future generations of HCV providers
Grady Liver Clinic (GLC)

- Multidisciplinary Team
  - General internists and NP
  - Clinical Pharmacist
  - Medication Access Coordinator
  - Patient Navigator
  - Program Manager

- Collaboration
  - Across the health care system
  - DPH & community organizations
## GLC HCV Elimination Activities

<table>
<thead>
<tr>
<th>Screening and linkage to care</th>
<th>Treatment</th>
<th>Building community treatment capacity</th>
<th>Policy action</th>
</tr>
</thead>
</table>

---
Evolution of Routine HCV Screening at Grady

No Program
• Pre-2012
• ?Prevalence

TILT-C (CDC funded)
• 2012 – 2015
• 30 months
• 5,282 tested
• 409 HCV Ab+ (8%)

FOCUS
• 2015 – 2023
• 7 years
• 95,000 tested
• 6,664 HCV Ab+ (7%)
Grady HCV Screening Expansion

2012-2016
- Primary Care Center
- Neighborhood Health Centers (6)

2017
- Ambulatory
- Inpatient

2019
- ED
- Walk-In Clinic

2020
- OB/Prenatal Clinic
Grady Emergency Dept. Screening Algorithm

EHR Logic
- Age 18-79
- No HCV Diagnosis
- No prior HCV TEST

Triage Navigator
- Meets Criteria?
- HCV Screening Tab Appears

Automated Order
- Opt out offer, nurse places order
**HCV Screening as a Health Maintenance Care Gap**

<table>
<thead>
<tr>
<th>Service</th>
<th>Status</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flu Vaccine (1)</td>
<td>Overdue since 9/1/2020</td>
<td>Imm Details</td>
</tr>
<tr>
<td>HIV Screening</td>
<td>Overdue since 9/4/2020</td>
<td>1 year(s)</td>
</tr>
<tr>
<td>Mammogram</td>
<td>Ordered on 9/18/2020</td>
<td>1 year(s)</td>
</tr>
</tbody>
</table>

**Upcoming**

<table>
<thead>
<tr>
<th>Service</th>
<th>Due Date</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Eye Exam</td>
<td>Next due on 9/4/2021</td>
<td>2 year(s)</td>
</tr>
<tr>
<td>Depression Screening</td>
<td>Next due on 10/19/2021</td>
<td>1 year(s)</td>
</tr>
<tr>
<td>Pap Smear w/ Cotest HPV (21-65)</td>
<td>Next due on 9/4/2024</td>
<td>5 year(s)</td>
</tr>
<tr>
<td>HPV Cotest w/ Pap Smear</td>
<td>Next due on 9/4/2024</td>
<td>5 year(s)</td>
</tr>
<tr>
<td>Colorectal Cancer Screening</td>
<td>Next due on 12/4/2027</td>
<td>10 year(s)</td>
</tr>
</tbody>
</table>

**Completed or No Longer Recommended**

<table>
<thead>
<tr>
<th>Service</th>
<th>Status</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis C Screening</td>
<td>Completed</td>
<td>Once</td>
</tr>
</tbody>
</table>
Grady HCV Screening Outcomes 2015-2022

- 95,312 tested
- 6,664 HCV Ab + • 7% prev.
- 5,925 RNA tested • 89% tested
- 3,003 HCV RNA+ • 51% viremic (3% of tested)
- 1,776 linked to care • 59% linked
Grady Liver Clinic Services

- Counseling
- Treatment
- Education
- Vaccination
- Cirrhosis Mgmt.
- Fibrosis Staging
GLC Telehealth Treatment: "Contactless Cure"

- **Treatment Start**:
  - Office visit
  - Medication given

- **Week 4**:
  - Phone visit
  - Medication sent

- **Week 8**:
  - Phone visit
  - Phone call with results
  - Treatment ends

- **12 Weeks After Treatment**:
  - Phone reminder
  - Lab visit
Grady Liver Clinic population, 2015-2019

Table 1. Hepatitis C–related characteristics of the Grady Liver Clinic population, Atlanta, Georgia, 2015-2019a

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total no. of patients (N = 2689)</th>
<th>Started treatment</th>
<th>P valueb</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No (n = 606)</td>
<td>Yes (n = 2083)</td>
<td></td>
</tr>
<tr>
<td>Age, mean (SD), y</td>
<td>64.3 (9.0)</td>
<td>63.3 (10.2)</td>
<td>64.6 (8.5)</td>
</tr>
<tr>
<td>Male sex</td>
<td>1720 (64.0)</td>
<td>400 (66.0)</td>
<td>1320 (63.4)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2251 (83.7)</td>
<td>478 (78.9)</td>
<td>1773 (85.1)</td>
</tr>
<tr>
<td>White</td>
<td>354 (13.2)</td>
<td>108 (17.8)</td>
<td>246 (11.8)</td>
</tr>
<tr>
<td>Other</td>
<td>84 (3.1)</td>
<td>20 (3.3)</td>
<td>64 (3.1)</td>
</tr>
<tr>
<td>Genotype</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2385 (89.7)</td>
<td>502 (86.9)</td>
<td>1883 (90.5)</td>
</tr>
<tr>
<td>2</td>
<td>132 (5.0)</td>
<td>31 (5.4)</td>
<td>101 (4.9)</td>
</tr>
<tr>
<td>3</td>
<td>60 (2.3)</td>
<td>19 (3.3)</td>
<td>41 (2.0)</td>
</tr>
<tr>
<td>Other</td>
<td>82 (3.1)</td>
<td>26 (4.5)</td>
<td>56 (2.7)</td>
</tr>
<tr>
<td>Cirrhosis</td>
<td></td>
<td></td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Yes</td>
<td>617 (23.0)</td>
<td>149 (24.9)</td>
<td>468 (22.5)</td>
</tr>
<tr>
<td>No</td>
<td>2039 (76.1)</td>
<td>424 (70.8)</td>
<td>1615 (77.5)</td>
</tr>
<tr>
<td>Unknown</td>
<td>25 (0.9)</td>
<td>26 (4.3)</td>
<td>0</td>
</tr>
</tbody>
</table>

aData source: medical records of Grady Liver Clinic. All values are number (percentage) unless otherwise indicated. Not all categories sum to the total number because of missing data; participants with missing data were excluded from percentages.

bDetermined by Pearson χ² and unpaired t tests. P = .05 was considered significant.

Includes Hispanic and Asian/Pacific Islander; the options in the medical record were Black, White, Hispanic, and Asian/Pacific Islander.
Grady Liver Clinic population

- 50% Hypertension
- 20% Diabetes
- 17% Chronic Pain
- 12% Lung Disease
- 10% Heart Disease
- 28% Depression
- 72% current or former alcohol use
- 64% former drug use

Miller L et al. J Natl Med Assoc 2012; 104:244-250
Grady Liver Clinic Cure Rates 2002-2020

- 2002-07: 17.0%
- 2011-13: 47.6%
- 2014: 92.0%
- 2015: 89.0%
- 2016: 97.1%
- 2017: 96.7%
- 2018: 97.8%
- 2019: 96.4%
- 2020: 95.6%

- Achieved SVR12 (among those tested)
- Failed Treatment
Building Treatment HCV Capacity

- GA DPH Provider Trainings
- GA DPH ECHO
- On-site Community Partner Trainings
- CME Trainings
On-site Community Partner Trainings

• SUD Programs
  • St. Jude's Recovery Center, Atlanta, GA
  • Alliance Recovery Center, Decatur, GA
• Community Clinics
  • St. Mary's Clinic, Savannah, GA
  • Coastal Community Health, St. Mary's GA
  • Pineland CSB, Statesboro, GA
  • Mercy Care, Atlanta, GA
• Health Systems
  • St. Joseph's Candler, Savannah, GA
CME Trainings

- Hands on Hep C Symposium
- Block HCV
- Bridge HCV
- AMA telementoring (CDC funded)
- AAFP Regional Meetings
HCV Policy Action

- GA DPH Viral Hepatitis Elimination Workgroup
- GA DPH Viral Hepatitis Elimination-Medical Treatment subgroup
- HepVu and NASTAD Viral Hepatitis Surveillance Steering Committee
- NVHR Hepatitis C State of Medicaid Access Steering Committee
Conclusion

• The Grady Liver Clinic plays an important role in HCV elimination efforts in Atlanta and beyond through its HCV screening, linkage to care, treatment and educational programs
• The Grady Liver Clinic has had a long and fruitful partnership with both the CDC and DPH, working collaboratively on HCV elimination efforts
• Future goals include expanding the HCV treatment workforce through provider trainings and telementoring via Project ECHO and continuing to work on state and nationwide elimination efforts