Limited Receipt of Routine Preventive Care Services among Medicaid Enrollees Living with HIV in the US South

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Preventive care for people with HIV

• ↑ risk of age-, non-age-related conditions for people with HIV (PHW)

• Annual routine preventive care services are recommended

Primary Care Guidance for Persons With Human Immunodeficiency Virus: 2020 Update by the HIV Medicine Association of the Infectious Diseases Society of America


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Knowledge gap

• Few studies examine receipt of routine preventive care services among PWH
  – Limited in geographic scope, specific to a clinic or clinical network, and/or limited number of services examined

• Limited knowledge about racial disparities in receipt of routine preventive care services among PWH
  – Higher risk of certain preventable conditions (e.g., diabetes)
  – Documented disparities in non-PWH populations
Objective

• Gain insight into quality of preventive care for PWH, including racial disparities, by examining annual receipt of 5 recommended routine preventive care services.
Data

- Person-level Medicaid claims (Medicaid Analytic eXtract, 2008-2012) from 16 southern states & DC
  - Large sample, urban and rural locales, large geographic area
  - Demographics, care engagement reflect current Medicaid population*
- County-level data
  - AIDSVu 2015 (HIV prevalence), HRSA 2010 (socioeconomic indicators, health care accessibility and supply), NCHS 2013 (urbanicity)

Sample

• Non-elderly adult Medicaid enrollees with HIV

• Excluded
  – Enrollees dual-eligible for Medicare, had other insurance
  – Enrollee-years representing <12 months continuous enrollment or with missing individual- or county-level characteristics
  – Specific to each service, enrollee-years with diagnosis of the condition for which routine preventive services were assessed.
Key variables

• Outcomes for 5 annually recommended preventive services
  – Lipid, glucose, syphilis and cervical cancer (women only) screening and influenza vaccination

• Predictors
  – Individual demographics, race and ethnicity, age group, sex
  – $\geq 1$ coinfections, comorbidities and AIDS-defining conditions
  – Managed care coverage
  – County HIV prevalence, health care supply, education, unemployment, household income, urbanicity
Statistical analysis

• Generalized estimating equations to estimate the adjusted annual probability of each service

• Sub-group analysis
  – Intensive HIV and intensive general health management
  – Managed care enrollment
  – Younger age (aged <45 years)

• Stratified analysis
  – Non-Hispanic Black, Non-Hispanic White enrollees
Low annual service receipt

57,695 enrollees with HIV (N); 187,295 enrollee-years (Ny)

<table>
<thead>
<tr>
<th>Routine Preventive Care Service</th>
<th>Percent of Total Enrollment Years Service Received</th>
</tr>
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<tbody>
<tr>
<td>Lipid Screening (Ny = 173,895)</td>
<td>41.9%</td>
</tr>
<tr>
<td>Glucose Screening (Ny = 166,241)</td>
<td>71.7%</td>
</tr>
<tr>
<td>Influenza Vaccination (Ny = 187,295)</td>
<td>20.2%</td>
</tr>
<tr>
<td>Syphilis Screening (Ny = 187,295)</td>
<td>38.8%</td>
</tr>
<tr>
<td>Cervical Cancer Screening (Ny = 61,803)</td>
<td>26.9%</td>
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Low annual probability of service receipt

<table>
<thead>
<tr>
<th>Routine Preventive Care Service</th>
<th>Annual Probability of Service Receipt Adjusted (95% Confidence Interval)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lipid Screening</td>
<td>0.45 (0.41-0.48)</td>
</tr>
<tr>
<td>Glucose Screening</td>
<td>0.81 (0.78-0.83)</td>
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<tr>
<td>Influenza Vaccination</td>
<td>0.39 (0.35-0.42)</td>
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<tr>
<td>Syphilis Screening</td>
<td>0.44 (0.41-0.48)</td>
</tr>
<tr>
<td>Cervical Cancer Screening</td>
<td>0.27 (0.23-0.31)</td>
</tr>
</tbody>
</table>
Summary of analyses

Estimated Annual Probability of Receipt of each Service

- Lipid Screen
- Glucose Screen
- Influenza Vaccination
- Syphilis Screen
- Cervical Cancer Screen

Main Analysis

Intensive Specialty Mgmt.

Younger Age
Key limitations

• Could not specify “fasting” lipid or glucose screen
• Syphilis recommendation is specific to sexually active PWH
• Do not have enrollee socioeconomic data (e.g., income)
• Unable to identify sites of specialty HIV care (e.g., Ryan White clinics)
Suboptimal receipt of preventive care

Lessons learned, applied today

- Limited awareness of HIV-specific primary care guidelines
  - 2020 IDSA Primary Care Guidelines

- Greater care coordination needs for this population
  - Does an individual have a primary care provider?
  - Awareness among non-HIV experienced providers

- Patient hesitancy in receipt of certain services
  - Continuing to build trust and rapport with patients
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