Evaluating the HIV Continuum of Care within a Large Integrated Health System

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Background

Human Immunodeficiency Virus (HIV)• Nearly 1 million persons ≥ 13 years of age in the United States are diagnosed and living with HIV¹• HIV is associated with 12,000 deaths from any cause per year in the United States²• Antiretroviral therapy (ART) induces viral suppression and allows survival rates of those with HIV to become nearly equivalent to people without HIV²• Viral suppression is defined by a viral load (VL) < 200 copies/mL

Acquired Immunodeficiency Syndrome (AIDS)• Untreated HIV may progress to AIDS defined by CD4 count < 200 cells/µL³• 7,000 deaths per year are due directly to AIDS³

HIV Care Continuum• 2013 Centers for Disease and Control (CDC) initiative⁴• Aimed to categorize the nation’s HIV-infected population• Wisconsin performed a statewide evaluation using similar methodology• In Wisconsin’s study, the proportion of patients diagnosed with concomitant HIV and AIDS decreased from 30% to 18% between 2012 and 2015⁵• Aurora Health Care (AHC), the largest not-for-profit health system in Wisconsin, sought to perform a similar evaluation within its 16 hospitals and 149 clinics

Objectives

Primary• To describe the HIV continuum of care within the AHC system

Secondary• To identify opportunities within the continuum to improve HIV care with a special focus on patients without ART and those not linked to care• To compare AHC data to national and statewide results

Methods

Patient Inclusion Criteria• ≥ 13 years of age and still living at the end of the specified time period• Positive HIV rapid antigen and/or HIV antibody test within AHC between January 1, 2012 and August 1, 2016

Patient exclusion criteria• Known diagnosis of HIV prior to the positive test within AHC

Data Collection• All patients categorized below based upon data within one year from diagnosis⁶

Results

Patient selection• 211/79,442 (0.27%) patients initially queried had a reactive result• 66/211 (40.8%) unique patients remained after removing duplicate medical record numbers and those excluded per criteria

Baseline Characteristics

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<thead>
<tr>
<th>Characteristic</th>
<th>Result</th>
<th>Characteristic</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age at diagnosis, (years)</td>
<td>39 (36, 49)</td>
<td>CD4 count (cells/µL)</td>
<td>203 (33, 492)</td>
</tr>
<tr>
<td>Vital load (copies/mL)</td>
<td>63.327 (16,952, 226,391)</td>
<td>Lab services not specified collection setting</td>
<td>52 (60.4%)</td>
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<tr>
<td>Male, n (%)</td>
<td>71 (82.6%)</td>
<td>Caucasian, n (%)</td>
<td>43 (50%)</td>
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Conclusions

• Retention to care was the largest disparity compared to national and state data with a strong correlation to viral suppression
• Current literature suggests improving HIV care via mobile reminders or HIV service coordinator positions, but research is ongoing⁶⁻¹²
• AHC aims to investigate external references and potentially create an internal referral network for newly HIV diagnosed patients

References