

Colorectal Cancer Screening in Persons Living with HIV: Assessing Screening of Urban Underserved Populations.

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Abstract:

Background:

Antiretroviral therapy has increased longevity and decreased mortality in persons living with human immunodeficiency virus (PLWH). Colorectal cancer (CRC) is the third leading cause of cancer-related death in North America and disproportionately affects African Americans, reflecting recent changes to screening guidelines. Our project will assess if we are screening our majority African American PLWH population for CRC at our Infectious Disease clinic.

Methods:

This study was approved by the Rutgers University Institutional Review Board. A database of patients who had visited the clinic for HIV management between the ages of 45 and 75 from the last four years was generated. Of the 1242 patient charts, 1199 were analyzed. Patient charts were excluded if they did not meet screening criteria. Retrospective chart review was conducted through Epic. Patient charts were assessed for adequate CRC screening based on the 2017 recommendations from the U.S. Multi-Society Task Force of Colorectal Cancer, which are detailed in Table 1 and 2.

Results:

The average age of our PLWH population was 58.7 years old and 79% was African American. For our general patient population, 74% were referred for CRC screening and 43% underwent screening. For our African American patients, 73% were referred for CRC screening and 41% underwent screening. When applying the new ACG and ASGE guidelines for African Americans between the ages of 45 and 50, we found that 56% had been referred for screening and 31% underwent screening. The results are shown in Table 3 and 4.

Conclusions:

In comparison to other Medicaid populations, our screening rates are comparable. The pandemic caused by the novel coronavirus (COVID-19) may have contributed to lower screening rates during this period as well. Provider and community-based education of new screening guidelines may help increase screening rates in this population.

Table 1: Tiers of Screening

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|---|------|
| U.S Multi-Society Task Force of Colorectal Cancer Recommendations | Tier |
| Colonoscopy every 10 years Annual Fecal Immunochemical Test | 1 |
| CT Colonography every 5 years FIT-Fecal DNA every 3 years Flexible Sigmoidoscopy every 5-10 years | 2 |
| Capsule Colonoscopy every 5 years | 3 |

Table 2: Recommendations

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|---|
| U.S Multi-Society Task Force of Colorectal Cancer Recommendations |
| 1.) We recommend that screening begin in non-African American average-risk persons at age 50 years |
| 2.) We suggest that screening begin in African Americans at age 45 years |
| 3.) We recommend that adults age < 50 years old with colorectal cancer bleeding symptoms undergo colonoscopy or an evaluation sufficient to determine a bleeding cause, initiate treatment, and complete follow-up to determine resolution of bleeding. |
| 4.) We suggest that persons who are up to date with screening and have negative prior screening tests, particularly colonoscopy, consider stopping screening at age 75 or when life expectancy is less than 10 years. |
| 5.) We suggest that persons without prior screening should be considered for screening up to age 85, depending on consideration of their age and comorbidities. |

Table 3: CRC Screening Referral Results

| | Total number of patients | Number of patients referred for CRC screening | % of patients referred for CRC screening | 95% confidence interval | At Worst | At Best |
|--------------------------------|--------------------------|---|--|-------------------------|----------|---------|
| Persons Living with HIV (PLWH) | 1199 | 887 | 74% | 71%-76% | 71% | 76% |
| African American PLWH | 945 | 688 | 73% | 70%-76% | 70% | 76% |

| | | | | | | |
|--|-----|-----|-----|---------|-----|-----|
| African American PLWH between ages 45-50 | 183 | 103 | 56% | 49%-63% | 49% | 63% |
|--|-----|-----|-----|---------|-----|-----|

Table 4: CRC Screening Results

| | Total number of patients | Number of patients screened for CRC | % of patients screened for CRC | 95% confidence interval | At Worst | At Best |
|--|--------------------------|-------------------------------------|--------------------------------|-------------------------|----------|---------|
| Persons Living with HIV (PLWH) | 1199 | 510 | 43% | 40%-45% | 40% | 45% |
| African American PLWH | 945 | 391 | 41% | 38%-45% | 38% | 45% |
| African American PLWH between ages 45-50 | 183 | 56 | 31% | 24%-38% | 24% | 38% |