Comparing Colorectal Cancer and Breast Cancer Screening Rates in an HIV Infectious Disease Clinic to Standardized Health Maintenance Goals

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I. Introduction

The University of Utah clinic has been providing primary care to people living with HIV (PLWH) via funding through the Ryan White Program.

A majority of PLWH do not have a primary care physician, leaving the responsibility of preventive care to infectious disease specialists.^{1,2}

Leading to the research question: For patients receiving care at the University of Utah HIV Clinic, do the screening rates for colorectal cancer and breast cancer meet the University of Utah health maintenance goals from January 1, 2022, through December 31, 2023.

II. Methods

Project Design:

- Retrospective Cross-Sectional Analysis
- SlicerDicer program within EPIC

Inclusion Criteria:

- Colorectal Cancer Screening: Individuals 50 75 years of age
- Breast Cancer Screening: Individuals 40 75 years of age
- Individuals who received care from the U of U HIV clinic between January 1, 2022, and December 31, 2023

Exclusion Criteria:

- Colorectal Cancer Screening: Individuals under 50 and over 75 years of age
- Breast Cancer Screening: Individuals under 40 years of age and over 75 years of age

Analysis:

- Comparing U of U HIV clinic colorectal cancer and breast cancer screening rates to the U of U Health Maintenance goals (68.6% and 74.5%, respectively)
- Goals established by Health Effectiveness Data and Information Set (HEDIS) and overseen by National Committee for Quality Assurance (NCQA)³
- Descriptive Statistics: Mean, Standard Deviations
- Statistical Significance: Z-scores, Two-tailed p-values



III. Results

Breast Cancer Screening:

- 293 female patients seen at U of U HIV Clinic during research time period
 81.2% received mammogram
- **Colorectal Cancer Screening:**
- 1149 total patient seen at U of U HIV Clinic during research time period
 46.3% received CRC screening
- ➤ 72% of patients in Salt Lake County who were due for a mammogram received one compared to a 92.4% average amongst all counties
- > Patients who listed their race as "other" were less likely to have CRC screening completed
- ➤ 18.8% of patients in Washington county had CRC screening completed compared to a mean of 40.5% amongst all counties



IV. Discussion & Conclusion

The colorectal cancer (CRC) screening rate of 46.3% reveals a substantial gap in achieving recommended targets, particularly among female and Spanish-speaking patients. Addressing these disparities requires enhanced screening efforts and improved communication to ensure equitable access to preventive care for all demographic groups.

The mammography screening rate of 81.2% among female patients at the U of U HIV clinic indicates successful implementation of breast cancer screening programs, surpassing the institutional goal. Discrepancies in screening rates were observed, with patients in Salt Lake County having a lower rate of 76.7%, suggesting the need for targeted interventions in this area.

Strengths include use of SlicerDicer for extensive demographic data collection, large sample sizes, detailed demographic analysis, and recent data. Key limitations include inability to determine exact CRC screening eligibility, small sample sizes in some demographics and inability to distinguish clinic vs. external screenings, and issues with race and gender data. Future research should refine data collection, especially for CRC eligibility, and include exclusion criteria. Culturally sensitive materials, multilingual support, and accurate gender data are crucial. Including insurance information could enhance insights into screening rates. Better data management will improve research and screening outcomes at the U of U HIV clinic.

V. References

- Lakshmi S, Beekmann SE, Polgreen PM, Rodriguez A, Alcaide ML. HIV primary care by the infectious disease physician in the United States - extending the continuum of care. AIDS Care. 2018;30(5):569-577. doi:10.1080/09540121.2017.1385720
- HIV/AIDS care: Ryan White program. University of Utah Health | University of Utah Health. May 22, 2023. Accessed January 22, 2024. https://healthcare.utah.edu/infectious-diseases/ryan-white-program.
- Healthcare Effectiveness Data and Information Set (HEDIS) Healthy People 2030 health.gov. Accessed April 6, 2024. https://health.gov/healthypeople/objectives-and-data/data-sources-and-
- methods/data-sources/healthcare-effectiveness-data-and-information-set-hedis