Rural-Urban Disparities in Colorectal Cancer Screening among Military Service Members and Veterans

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MY TOPIC OF STUDY

• Colorectal cancer (CRC)
  – 16 in every 100,000\(^1\) (rate among veterans)
  – 38.9 in every 100,000\(^2\) (rate among the general population)

• Early detection of CRC is key to improved CRC outcomes
  – CRC screening options: colonoscopy, FIT, sigmoidoscopy, FOBT

  – CRC screening rate:
    • 80\%\(^3\) (veterans), 64\%\(^4\) (general population)

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IMPORTANCE OF MY TOPIC

• In the general population, research has shown that disparities exist among rural and urban dwellers in their adherence to CRC screening guidelines\(^1\)

• 24% of veterans live in rural areas of the U.S.\(^2\)
  – Only 60% of rural dwelling veterans utilize the VA healthcare system,\(^2\) likely because of long travel times to facilities\(^3\)

• Little is known about rural-urban disparities in CRC screening adherence among military veterans specifically
  – If rural veterans are less likely to be screened for CRC (as in the general population), public health programming and outreach may be needed

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What have I discovered?

• Nationally, while 81% of urban dwelling veterans reported having been screened for CRC, only 75% of rural dwelling veterans reported having been screened\(^1\)

• The overall CRC screening rate in Illinois for veterans is 72%
  – 5\(^{th}\) lowest rate in the United States

\(^1\) Odds Ratio = 0.829 [95% CI = 0.763, 0.901], adjusted for gender, income, educational attainment, race, ethnicity, comorbid health conditions, health insurance coverage, marital status, employment status, and age (\(n = 16,371\))
Relevance to Southern Illinois

CRC Incidence Rate per 100,000
- No Data
- 0.00 - 40.00
- 40.01 - 50.00
- 50.01 - 65.00
- Counties Outside Southern 7
Tools for Addressing the Disparity

• A home-based fecal immunochemical test (FIT) mailed to rural-living veterans increased CRC screening rates within six months\(^1\)

• One mobile smartphone application (mHealth app) exists for colorectal cancer prevention and detection\(^2\)
  – Most veterans report ownership of a smartphone or tablet (76%) and express interest in mHealth apps (82%)\(^3\)

