

# Colorectal Cancer

## A collaborative approach to improve education and screening in a rural population

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**BACKGROUND:** Colorectal cancer (CRC) is the third most commonly diagnosed cancer and second leading cause of cancer death for men and women in the United States. Although early detection and diagnosis greatly affect survival rates, only about half of the U.S. population participates in screening.

**OBJECTIVES:** The purpose of this project was to implement community-based CRC education and screening. Outcomes included CRC knowledge, CRC screening kit return rate, and rate of positive screening results.

**METHODS:** Partnering with a community hospital, CRC educational sessions and free screening opportunities were provided for 193 local city government employees. CRC knowledge was assessed before and after education with the Knowledge Assessment Survey. A paired t test indicated significant improvement in mean CRC knowledge.

**FINDINGS:** More than half of the participants elected to take home fecal immunochemical test kits. Of the 29 participants who submitted their screening kits for evaluation, eight had positive results and received referral recommendations. All participants were notified of their screening results. The community-based CRC project was effective in improving CRC knowledge and screening participation.

### KEYWORDS

colorectal cancer screening; human caring theory; evidence-based practice

### DIGITAL OBJECT IDENTIFIER

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**COLORECTAL CANCER (CRC) INCLUDES ANY CANCER THAT** starts in the colon or rectum. Most begin as an adenomatous polyp and grow into the wall of the colon or rectum before metastasizing by invading tissues or structures, the bloodstream, or the lymphatic system. About 95% of CRCs are adenocarcinomas (American Cancer Society [ACS], 2017b). The ACS (2017a) projected that 135,430 people would be diagnosed with CRC in the United States in 2017. Although the CRC death rate has been dropping for the past 20 years, the ACS still estimated 50,260 CRC-related deaths during 2017 (ACS, 2017a).

The Centers for Disease Control and Prevention ([CDC], 2017) recommends screening for precancerous polyps for anyone aged 50 years or older. Although early detection and diagnosis greatly affect survival rates, only about half of the U.S. population participates in screening (ACS, 2017a). A fecal immunochemical test (FIT) is a noninvasive test used to detect blood in the stool that cannot be seen with the human eye (Tresca, 2017). People at home use the FIT kit by obtaining a sample of the stool with one of the FIT kit sticks and inserting the sample back in the vial. The FIT kits are then either mailed or hand-delivered to a laboratory for blood detection, most specifically from the lower gastrointestinal tract (Tresca, 2017).

The State Cancer Profiles report by the National Cancer Institute (NCI) and CDC (2014) ranked Kentucky seventh for mortality, with a death rate of 17.6 per 100,000 compared to a national rate of 15.1. At the time of this project, the CRC death rate in Hopkins County, Kentucky, was 14.1 per 100,000, one of the highest in the state. The death rate in Kentucky has been trending downward over time from 25.8 in 1982 to 17.6 in 2013 (NCI and CDC, 2014). Incidence and death rates are depicted in Figure 1.

In 2008, the Kentucky Colon Cancer Screening Program (KCCSP) was formed with the passage of Kentucky Regulatory Statute 214.540 to increase CRC screening, reduce morbidity and mortality from CRC, and reduce costs for CRC treatment. The goal of the KCCSP is to increase the number of CRC screenings in Kentucky, using 75% FIT kits and 25% colonoscopies (Justia, 2011).

About 39% of CRCs are diagnosed at the local stage or confined to the primary site, but 56% have already spread to regional lymph nodes or have metastasized. If diagnosed at the localized stage, there is a 90% five-year relative survival rate, but this decreases to 14% when the cancer is in distant sites. The survival rate for regional sites is 71% and 35% for unstaged. NCI (2017a) projects that early detection of CRC could improve survival rates by about 60%.