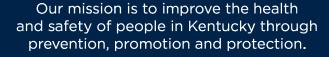
Kentucky Department for Public Health

KCCSP FY23
Data Report





# **Message from Committee**

Colorectal cancer is the second leading cause of cancer death when rates for men and women are combined. Recent years have seen an increase in colorectal cancer among younger adults and, therefore, an increased need to educate healthcare providers and the public about the need for screening soon after reaching age 45 or earlier, depending on family history or symptoms. Despite success in raising screening rates in Kentucky, many Kentuckians are not screened for colon cancer according to the American Cancer Society (ACS) guidelines. Screening is important because early detection and removal of polyps can reduce the risk of developing cancer.

According to the Kentucky Revised Statutes <u>214.540-544</u>, the Kentucky Colon Cancer Screening and Prevention Program and the <u>Kentucky Colon Cancer Screening Advisory Committee</u> were established for three purposes:

- 1) Increasing colon cancer screening.
- 2) Reducing morbidity and mortality from colon cancer.
- 3) Reducing the cost of treating colon cancer among citizens of the Commonwealth.

As part of KRS 214.544, the Kentucky Colon Cancer Screening and Prevention Advisory Committee (KCCSPAC) provides recommendations for the overall implementation and conduct of the screening program and provides reports on program implementation outcomes and recommendations.

In January 2020, the Cabinet for Health and Family Services accepted a donation from the Exact Science Corporation for access to 1,000 Cologuard test kits. The contract was effective through December 30, 2023. Cologuard is a non-invasive colon cancer screening test used at home to collect a stool sample to detect altered DNA from adenomatous (pre-cancerous) polyps which could become cancer. The Kentucky Department for Public Health (KDPH) contracts with the Kentucky Cancer Link (<a href="https://kycancerlink.org/">https://kycancerlink.org/</a>) to establish relationships with colonoscopy providers, evaluate individuals for program eligibility, provide education about how to complete the test and place the order for the Cologuard test via an electronic portal.

The outcomes reported here show that this program is making good progress in expanding colorectal screening services to our target population while meeting high clinical standards. In the next fiscal year, committee members and KDPH staff will work together to expand public awareness for the program and continue to educate primary care providers about the efficacy of high-quality stool-based testing.

Whitney Jones, MD

Chair, Kentucky Colon Cancer Screening Program Advisory Committee



## Contents

Message from Committee	2
Acknowledgements	4
Section 1: Brief Overview of the Status of CRC in KY	5
Section 2: KCCSP Services for Fiscal Year 2023	6
Demographics	6
Reasons for Colonoscopy	7
Section 3: Results of Screening	8
Cologuard Results and Follow-up.	8
Colonoscopy Results	8
Quality Measures	8
Section 4: Recommendations and Sources	9
Recommendations	9
Sources	9
Appendix	10



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Partners of the Kentucky Colon Cancer Screening and Prevention Program (KCCSPP)

- Kentucky Department for Public Health
- Kentucky Cancer Link
- Kentucky Cancer Program East
- Kentucky Cancer Program West
- Kentucky Cancer Registry

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## Section 1: Brief Overview of the Status of CRC in KY

According to the National Institutes of Health, the national age-adjusted invasive colorectal cancer (CRC) rate in 2020 was 32.9 per 100,000 people (NIH SEER, 2023). In the same year, Kentucky's CRC incidence rate was higher than the national rate at 41.5 cases per 100,000 people (KCR, 2023). Overall, colorectal cancer rates have steadily declined in the past two decades for both Kentucky and the nation; however, the gap in incidence persists.

Moreover, the gap in colorectal cancer mortality rates between the commonwealth and the nation continues to widen. In 2020, Kentucky's mortality rate was 15.4 per 100,000, which is higher than the national rate at 12.6 per 100,000 people (KCR, 2023; NIH SEER, 2023). CRC mortality and incidence rates have both continued to decline steadily for the last decade due to regular screenings, which can identify pre-cancerous polyps or detect early-stage cancer (CDC, 2023). Colorectal cancer outcomes are better when detected in earlier stages, since early-stage cancer can be treated more effectively. According to the US Centers for Disease Control and Prevention (CDC), "88% of adults diagnosed with colorectal cancer at an early stage live for 5 years or more, compared to only 16% of those diagnosed with late-stage cancer," (CDC, 2023).

Data from the Behavioral Risk Factor Surveillance System (BRFSS) estimates that 7 in 10 adults aged 50-75 are up to date with their CRC screening (CDC, 2023). The BRFSS is one method to examine CRC screening rates in the US. It is important to note that the BRFSS has revised the survey question structure for colorectal cancer screening twice, once in 2013 and again in 2020. Kentucky's CRC screening rate for adults aged 50 and older was 75.4 in 2020, which would be a 5.8 point increase from 69.6 in 2018. The Uniform Data System's (UDS) colorectal screening rates for federally qualified health centers (FQHC) in Kentucky illustrate much lower rates in comparison to BRFSS. UDS reports in 2018 a screening rate of 44.21% while in 2021 a rate of 47.33% (HRSA, 2023). The UDS reported a national CRC screening rate of 41.93% in 2021, a rate which Kentucky has exceeded (HRSA, 2023).

It is important to note that Kentucky faces socioeconomic challenges that many other states do not equally carry, such as higher poverty rates and lower educational attainment. Despite these challenges, collective work of colon cancer prevention programs across the state over the past two decades, has resulted in a 40% increase in colorectal cancer screenings, a 30% decrease in colorectal cancer incidence and a 34% decrease in colorectal cancer mortality statewide. There is still a tremendous amount of work to be done, however these changes represent a remarkable public health accomplishment.

The Kentucky Colon Cancer Screening and Prevention Program (KCCSP) was established in 2008 through statute KCR 214.540. The program was initially established to provide free colorectal cancer screenings to uninsured Kentucky residents; however, the statute was later amended to include under-insured individuals after Medicaid expansion in 2014. The program utilizes an experienced partner, Kentucky Cancer Link, for patient eligibility and enrollment, patient navigation and contracting colonoscopy sites across the state. There are currently sixteen contracted service sites located in fourteen different counties. In fiscal year 2023, KCCSP served patients in sixty-nine counties.



### Section 2: KCCSP Services for Fiscal Year 2023

There was a total of 300 screenings rendered throughout fiscal year 2023: 75 Cologuard tests and 225 colonoscopies. Eleven patients received both a Cologuard and colonoscopy through the program.

### **Demographics**

Table 1: Gender, Race, Ethnicity Unduplicated Patients Source: KCCSP Database			
Year	FY23	Percentage	
Female	173	60%	
Male	116	40%	
White	252	87%	
Black	23	8%	
Asian	13	4%	
Other	1	1%	
Hispanic	23	8%	
Non-Hispanic	266	92%	
<b>Total Patients</b>	289	100%	

The demographics of the program's patient population can help to identify gaps in coverage. For instance, the male to female ratio is skewed with only 40% of participants being male. Additionally, 12% of patients identified as black, Asian, or other. The race and ethnicity percentages of the program closely reflect that of Kentucky's racial demographic as a whole; however, in counties such as Jefferson and Fayette, black populations make up a greater portion of the residence at 23.9% and 16.2%, respectively (Census, 2023). With three major contracted colonoscopy sites residing in these counites and the highest patient populations (see map below), there is room to increase outreach in the black community.

Table 3: Age Range Unduplicated Patients Source: KCCSP Database				
Age Range	FY23	%		
<30	16	6%		
30-44	33	10%		
45-49	54	19%		
50-64	147	51%		
65-75	34	12%		
76+	5	2%		
<b>Total Patients</b>	289	100%		

Furthermore, program promotion could be increased to target underinsured patients (patients who have a high deductible plan or plan that does not cover preventive cancer

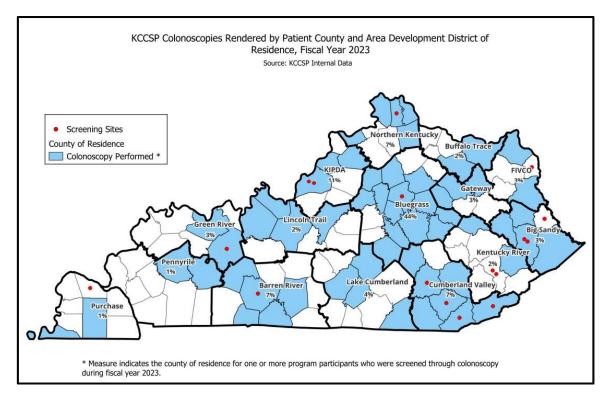
Table 2: Insurance Status Source: KCCSP Database			
Insurance Status	FY23	%	
Uninsured	177	61%	
Underinsured	112	39%	
<b>Total Patients</b>	289	100%	

screenings). Table 2 demonstrates a significant portion of patients are uninsured (61%) rather than under-insured (39%).

Table 2 indicates approximately half of the program

participants were between the ages of 50 and 64, with a large portion representing ages below 50, as well. In 2023, the CDC and ACS released new guidance for colorectal cancer screening; the new recommended age to start screening is now 45 years old, which was lowered from 50 years old. This new guidance was the result of the rising number of CRC diagnoses in the under 50 age group over the last couple decades (Wolf et al., 2018). Even within the KCCSP program, there has been an upward trend of younger patients requesting screening services. From fiscal year 2020 to 2023, there was an increase in the percentage of patients under 50; 22% of the total patient population was under the age of 50 in fiscal year 2020 compared to 39% in fiscal year 2023.

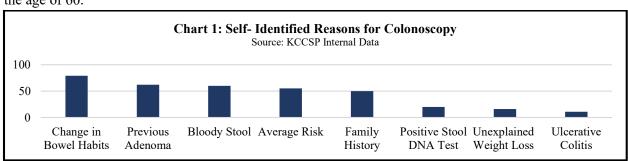




The map above illustrates the county of residence for KCCSP participants who received a colonoscopy during fiscal year 2023. It also portrays the percentage of program participants within each area development district (ADD). Additionally, the map displays the locations of the seventeen contracted screening sites. As previously stated, the Bluegrass and the KIPDA districts are the two largest areas of coverage with 44% and 11% respectively. Areas in western Kentucky, such as Purchase and Pennyrile ADDs, only have 1% of total patient participation; this indicates a need for program promotion and increased accessibility in these districts.

### **Reasons for Colonoscopy**

The chart below illustrates the patient's self-identified reasons for colonoscopy; note, that patients may select multiple reasons for screening. The top five reasons for scope include: recent change in bowel habits, previous adenoma removal, blood found in stool, average risk and family history of CRC diagnosed under the age of 60.





# **Section 3: Results of Screening**

This section illustrates the results of the colonoscopy or Cologuard screening, in addition to the subsequent quality measures to ensure quality of care in all services provided by the contracted sites' physicians.

### **Cologuard Results and Follow-up**

Throughout fiscal year 2023, seventy-five Cologuard test kits were performed. There were sixty-three negative tests and twelve positive tests. Of the twelve positive test results, eleven have completed their follow-up colonoscopy through the program, while the last patient refused follow-up screening. A 92% follow-up screening rate was achieved thanks to the efforts of our long-time partner Kentucky Cancer Link, and their dedication to active patient navigation.

#### **Colonoscopy Results**

One hundred twenty-three patients screened had a negative or normal result. There were twenty-four patients that had hyperplastic polyps, which are typically not cancerous (ACS, 2024). Around 29% of participants had a non-high-grade adenoma removed and 3% of patients had a high-grade adenoma removed. Four patients were diagnosed with cancer through the program- two cases of rectal cancer and two of colon cancer. All four patients were confirmed to have started or completed cancer treatment.

Table 8: Colonoscopy Results Source: KCCSP Database			
Fiscal Year	FY23	%	
Negative/ Normal	123	55%	
Hyperplastic Polyp	24	11%	
Non-High-Grade Adenoma	66	29%	
High Grade Adenoma	7	3%	
Rectal Cancer	2	1%	
Colon Cancer	2	1%	
Incomplete Procedure	1	0%	
<b>Total Colonoscopies</b>	225	100%	

### **Quality Measures**

Colonoscopy providers report if the endoscope reached the furthest most portion of the colon, known as the cecum; this measure ensures the entirety of the colon has been screened. In fiscal year 2023, the cecum reached rate was reported as 98%, which is the target for KCCSP contracted sites.

Bowel preparation quality (BPQ) is an important quality measure for colonoscopies as it may indicate the level of visibility within the colon. Practitioners will rate the BPQ on a scale: excellent, good, fair, or poor. If a patient has a poor BPQ, the practitioner may discuss other preparation methods and schedule another follow-up screening. Out of 225 colonoscopies, 93% were rated as excellent (63%) or good (30%) prep. Only 2% (5) of patients were reported as having poor bowel prep, and 4% were reported as fair prep.

Adenoma detection rate (ADR) is the rate at which the operating physician removes one or more adenomatous polyps in average-risk patients. The standard target ADR is 25% for men and women combined (Rex DK, et al.). KCCSP participating physicians exceeded this standard with a rate of 36.36% in fiscal year 2023.



## Section 4: Recommendations and Sources

#### Recommendations

Per <u>KRS 214.544(7)</u>, the advisory committee is providing recommendations for future planning and implementation of the Kentucky Colon Cancer Screening and Prevention Program. These recommendations for the program are to:

- 1. Consider increasing funding from the legislature for program expansion.
- 2. Continue to focus on public awareness activities which improve CRC screening rates, including creating messaging about the CRC increase in younger adults.
- 3. Continue to educate and inform legislators and other decision makers about opportunities to support CRC screening through policy changes.
- 4. Continue to educate and inform both the primary care providers and the healthcare ecosystem about the change in guidelines to reduce age of screening to age 45 and the efficacy of high-quality stool-based screening tests for patients resistant to undergo colonoscopy or who have barriers to easily completing a colonoscopy.

#### **Sources**

- 1. CDC, Health and Economic benefits of colorectal cancer interventions | Power of Prevention. (2023). https://www.cdc.gov/chronicdisease/programs-impact/pop/colorectal-cancer.htm.
- Kentucky Health Center Program Uniform Data System (UDS) data. (2023). https://data.hrsa.gov/tools/data-reporting/program-data/state/KY https://data.hrsa.gov/tools/data-reporting/program-data/state/KY
- 3. Rex DK, Schoenfeld PS, Cohen J, et al. Quality indicators for colonoscopy. Gastrointest Endosc 2015;81:31-53. 10.1016/j.gie.2014.07.058
- Understanding your pathology report: colon polyps (Sessile or traditional serrated adenomas). (2024).
   American Cancer Society. https://www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests/understanding-your-pathology-report/colon-pathology/colon-polyps-sessile-or-traditional-serrated-adenomas.html
- 5. United States Census Bureau QuickFacts. (2023). U.S. Census Bureau QuickFacts: Kentucky. Census Bureau QuickFacts. https://www.census.gov/quickfacts/fact/table/KY/PST045222
- United States Census Bureau QuickFacts. (2023). U.S. Census Bureau QuickFacts: Kentucky. Census
  Bureau QuickFacts
  https://www.census.gov/quickfacts/fact/table/louisvillecitykentucky,louisvillejeffersoncountymetrogovern
  mentbalancekentucky/POP010220
- 7. United States Census Bureau QuickFacts. (2023). U.S. Census Bureau QuickFacts: Kentucky. Census Bureau QuickFacts https://www.census.gov/quickfacts/fact/table/fayettecountykentucky/PST045223
- 8. Wolf, A. M. D., Fontham, E. T. H., Church, T. R., Flowers, C. R., Guerra, C. E., LaMonte, S. J., Etzioni, R., McKenna, M. T., Oeffinger, K. C., Shih, Y. C. T., Walter, L. C., Andrews, K., Brawley, O. W., Brooks, D., Fedewa, S. A., Manassaram-Baptiste, D., Siegel, R. L., Wender, R. C., & Smith, R. A. (2018). Colorectal cancer screening for average-risk adults: 2018 guideline update from the American Cancer Society. Ca, 68(4), 250–281. https://doi.org/10.3322/caac.21457



### **Appendix**

# **Kentucky Colon Cancer Screening and Prevention Program** Fiscal Year 2023 Annual report The goal of KCCSP (est. 2008) is to reduce colon cancer deaths though prevention and early detection of colon cancer. This is done by giving uninsured and underinsured Kentuckians access to free, high-quality colon cancer screening services, including colonoscopy. Services Stool DNA Test Rendered Results Negative 84% **Demographics** Gender Female Stool DNA Follow-up **Colonoscopy Status** Reasons for Scope 92% Complete Colonoscopy Results TEAM 🚄 KENTUCKY. CABINET FOR HEALTH AND FAMILY SERVICES Adenoma- Not High Grade Adenomatous Polyp (High Grade) Kentucky Public Health

