

Cancer Screening Rates Higher for Medicare Advantage Than Traditional Medicare

Team A: Dave Little, MD; Eric Barkley

Team B: Ally Paul, RN; Brendan Joyce

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Key Findings:

- Medicare Advantage patients have higher screening rates for breast cancer and colorectal cancer than traditional Medicare patients.
- Screening rates for both types of cancer are around 50–60% for both Medicare Advantage and traditional Medicare.

Cancer screening is a core component of preventive healthcare, allowing early identification and treatment of cancer to improve life expectancy and potentially prevent more advanced cancers.¹ Breast and colorectal cancer screenings are recommended for many patients who are eligible for Medicare insurance coverage. Breast cancer screening is recommended biannually for women aged 50 to 74,² and colorectal cancer screening by colonoscopy is recommended every 10 years for patients aged 45 to 75, and selectively to those ages 76 to 85.³

We analyzed patients with continuous Medicare Advantage or traditional Medicare coverage to determine whether there were differences in cancer screening rates between groups. Both groups were similarly distributed by patient age, sex, race, and ethnicity. We found that screening rates for both breast and colorectal cancers were higher for the Medicare Advantage population compared to the traditional Medicare population, as shown in Figure 1. Around half of patients had a colorectal cancer screening when recommended. More than half of patients had recommended breast cancer screenings performed.

Cancer Screening Rates for Medicare Advantage and Traditional Medicare

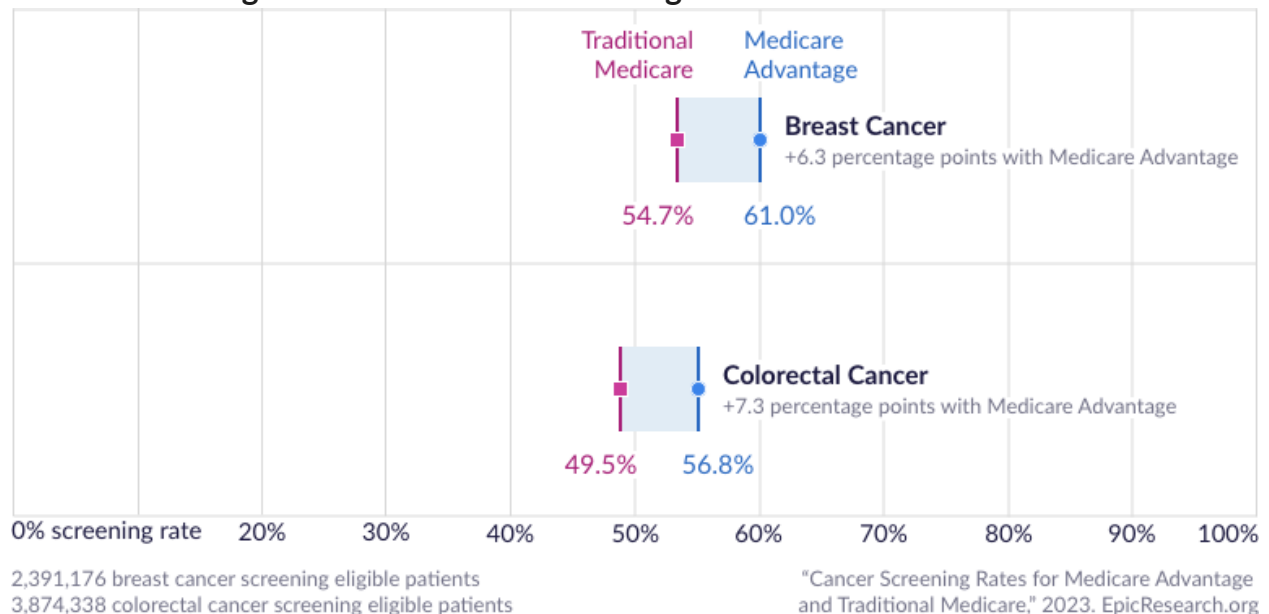


Figure 1. Screening rates for breast and colorectal cancer by insurance type.

These screening rates may be undercounted as screenings performed outside of a Cosmos healthcare organization may not be represented in the data. This study is limited to cancer screening rates and did not assess cancer diagnosis rates or screening outcomes.

These data come from Cosmos, a HIPAA-defined Limited Data Set of more than 220 million patients from 221 Epic organizations including 1,260 hospitals and more than 27,100 clinics, serving patients in all 50 states and Lebanon. This study was completed by two teams that worked independently, each composed of a clinician and research scientists. The two teams came to similar conclusions. Graphics by AJ Hinkens.

References

1. Screening tests. National Cancer Institute. Published March 24, 2015.
<https://www.cancer.gov/about-cancer/screening/screening-tests>. Accessed November 20, 2023.
2. Breast cancer: Screening. US Preventive Services Task Force. Published January 11, 2016.
<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/breast-cancer-screening>. Accessed November 20, 2023.
3. Colorectal cancer: Screening. US Preventive Services Task Force. Published May 18, 2021.
<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening>. Accessed November 20, 2023.

Data Definitions

Term	Definition
Study period	New coverage started 1/1/2017 - 7/31/2022.
Study population	<p>Patients 65 or older with Medicare coverage of one type for at least a year continuously that started by age 73. We defined screening windows starting from the date of the patient's first Medicare encounter until they switched Medicare coverage type or had their most recent encounter. These windows were divided based on the frequency of screening expected.</p> <p>For example, a female patient who started Medicare care between March 2018 and April 2021 would have a two-year breast cancer screening window from March 2018 to March 2020 and another from March 2020 to April 2022. We expect to see a breast cancer screening in each of those windows.</p>
Outcomes	Breast cancer screening or colorectal cancer screening.
Breast cancer screening	<p>Women 65-75 Screening window: 2 years</p> <p><u>Exclusions:</u> Diagnosis of breast cancer or mastectomy.</p> <p><u>Screenings:</u> Diagnosis with ICD-10-CM code Z12.31 or SNOMED code 268547008, 24623002, 384151000119104, or 12275351000119103. Procedure with LOINC code 24606-6 or SNOMED code 24623002 or 384151000119104.</p>
Breast cancer	Diagnosis with ICD-10-CM code C50*, D05*, or Z85.3, or SNOMED code 254837009.
Mastectomy	A diagnosis with: ICD-10-CM code Z90.1* or Z42.1

	<p>ICD-9-CM code V45.7 or V51.0 SNOMED code 1231734007, 14714006, 17086001, 172043006, 22418005, 22964006, 274957008, 27865001, 287653007, 287654001, 359728003, 384723003, 428540007, 428564008, 428571003, 429400009, 446109005, 447135002, 456903003, 66398006, 72269009, 76468001, 136071000119101, 137671000119105, 137681000119108, 239176002, 406505007, 427959001, 428529004, 429009003, 429242008, 433977002, 690691000119101, 714111001, or 714252004.</p> <p>Or a procedure with: CPT code 19300, 19301, 19302, 19303, 19304, 19305, 19306, 19307, 19140, 19160, 19180, 19182, or 19294. ICD-9-CM Volume 3 85.23, 85.41, 85.42, 85.46, 85.47, 85.48.</p>
Colorectal cancer screening	<p>All patients 65 and older. Screening window: 10 years</p> <p><u>Exclusions:</u> Diagnosis of colon cancer.</p> <p><u>Screenings:</u> Diagnosis with ICD-10-CM code Z12.11 or Z12.12, or SNOMED code 275978004, 275979007, or 31001000119109. Procedure with SNOMED code 275978004 or 275979007. Lab component with LOINC 77353-1, 77354-9, 14563-1, 14564-9, 14565-6, 2335-8, 27396-1, 29771-3, 50196-5, 57803-9, 58453-2, 57905-2, 56490-6, 56491-4, 80372-6, 12504-7, 27926-5, 27401-9, 12503-9, or 27925-7. Procedure with name including “sigmoidoscopy”, “colonoscopy”, or “colonography”.</p>
Colon cancer	<p>Diagnosis with ICD-10-CM code C18*, D01.0*-D01.4*, or Z85.03*-Z85.04*, or SNOMED code 23968004 or 781382000.</p>

Table 1: Population Demographics – Breast Cancer Screenings

Grouping	Subgrouping	Traditional Medicare		Medicare Advantage		SMD
		Count	Rate	Count	Rate	
Overall	Overall	1,600,605	100.00%	996,535	100.00%	0.000
Age Group	[65, 70)	1,201,349	75.06%	719,481	72.20%	0.065
	[70, 75)	399,256	24.94%	277,054	27.80%	-0.065
Race Ethnicity	Black/Non-Hispanic	131,488	8.21%	125,912	12.63%	-0.145
	Hispanic or Latino	58,792	3.67%	52,021	5.22%	-0.075
	Other/Non-Hispanic	91,383	5.71%	50,663	5.08%	0.028
	White/Non-Hispanic	1,318,942	82.40%	767,939	77.06%	0.133
Census Region	Midwest	724,083	45.24%	422,509	42.40%	0.057
	Northeast	222,158	13.88%	194,666	19.53%	-0.152
	South	441,834	27.60%	287,730	28.87%	-0.028

	West	212,113	13.25%	91,363	9.17%	0.130
RUCA Grouping	Rural	150,663	9.41%	72,323	7.26%	0.078
	Urban	1,418,816	88.64%	912,468	91.56%	-0.098
SVI Quartile	[.0,.25)	414,529	25.90%	227,288	22.81%	0.072
	[.25,.5)	398,373	24.89%	239,349	24.02%	0.020
	[.5,.75)	392,421	24.52%	250,945	25.18%	-0.015
	[.75,1]	356,628	22.28%	263,395	26.43%	-0.097

Table 2: Population Demographics - Colorectal Cancer Screening

Grouping	Subgrouping	Traditional Medicare		Medicare Advantage		SMD
		Count	Rate	Count	Rate	
Overall	Overall	2,495,663	100.00%	1,711,340	100.00%	0.000
Sex	Female	1,362,288	54.59%	973,699	56.90%	-0.047
	Male	1,133,114	45.40%	737,467	43.09%	0.047
Age Group	[65, 70)	1,966,097	78.78%	1,255,607	73.37%	0.127
	[70, 75)	529,566	21.22%	455,733	26.63%	-0.127
Race Ethnicity	Black/Non-hispanic	197,027	7.89%	202,799	11.85%	-0.133
	Hispanic or Latino	91,906	3.68%	91,075	5.32%	-0.079
	Other/Non-hispanic	148,292	5.94%	90,347	5.28%	0.029
	White/Non-hispanic	2,058,438	82.48%	1,327,119	77.55%	0.124
Census Region	Midwest	1,091,914	43.75%	712,134	41.61%	0.043
	Northeast	366,731	14.69%	343,294	20.06%	-0.142
	South	704,105	28.21%	496,333	29.00%	-0.017
	West	332,129	13.31%	159,134	9.30%	0.127
RUCA Grouping	Rural	244,942	9.81%	127,556	7.45%	0.084
	Urban	2,203,786	88.30%	1,560,279	91.17%	-0.095
SVI Quartile	[.0,.25)	648,068	25.97%	390,902	22.84%	0.073
	[.25,.5)	627,677	25.15%	411,169	24.03%	0.026
	[.5,.75)	609,903	24.44%	429,250	25.08%	-0.015
	[.75,1]	550,752	22.07%	449,708	26.28%	-0.098

Table 3 - Cancer Screening Rates for Medicare Advantage and Traditional Medicare

		Traditional Medicare				
	# of Patients	Windows	Screenings	Rate	Lower CI	Upper CI
Breast	2,391,176	2,624,673	1,436,666	54.74%	54.71%	54.77%
Colorectal	3,874,338	2,593,486	1,283,065	49.47%	49.44%	49.50%

		Medicare Advantage				
	# of Patients	Windows	Screenings	Rate	Lower CI	Upper CI
Breast	2,391,176	1,528,846	932,974	61.02%	60.99%	61.06%
Colorectal	3,874,338	1,819,648	1,034,133	56.83%	56.80%	56.87%