

## **Preliminary analyses of TCR Medicaid Linked Data**

- **Sample Size Estimates using semi-standard criteria**
- **First look at study on prevalence of coverage gaps and impact**

## Potential Sample Size for Study after Exclusions – Breast Cancer Patients < 66 years

	No. pts Remaining	No. pts Excluded	% Remaining
<b>Total in file</b>	<b>12,776</b>		<b>100%</b>
<b>1<sup>st</sup> ca, not autopsy, diagnosed 2000 – 2007, microscopically confirmed</b>	<b>9755</b>	<b>3021</b>	<b>76%</b>
<b>Medicaid 1 mo prior to 6 mos post (or death)</b>	<b>1198</b>	<b>8557</b>	<b>9%</b>
<b>Fee for service only in obs. window</b>	<b>827</b>	<b>371</b>	<b>6%</b>
<b>Full Medicaid coverage in obs window</b>	<b>707</b>	<b>120</b>	<b>6%</b>
<b>No private ins or Medicare in obs window</b>	<b>457</b>	<b>250</b>	<b>4%</b>

## Potential Sample Size for Study after Exclusions – CRC Patients < 66 years

	No. pts Remaining	No. pts Excluded	% Remaining
<b>Total in file</b>	<b>7663</b>		<b>100%</b>
<b>1<sup>st</sup> ca, not autopsy, diag 2000 – 2007, microscopically confirmed</b>	<b>6214</b>	<b>1449</b>	<b>81%</b>
<b>Medicaid 1 mo prior to 6 mos post (or death)</b>	<b>734</b>	<b>5480</b>	<b>10%</b>
<b>Fee for service only in obs window</b>	<b>535</b>	<b>199</b>	<b>7%</b>
<b>Full Medicaid coverage in obs window</b>	<b>452</b>	<b>83</b>	<b>6%</b>
<b>No private ins or Medicare in obs window</b>	<b>282</b>	<b>170</b>	<b>4%</b>

## Potential Sample Size for Study after Exclusions – Lung Cancer Patients < 66 years

	No. pts Remaining	No. pts Excluded	% Remaining
<b>Total in file</b>	<b>11310</b>		<b>100%</b>
<b>1<sup>st</sup> ca, not autopsy, diag 2000 – 2007, microscopically confirmed</b>	<b>8796</b>	<b>2514</b>	<b>78%</b>
<b>Medicaid 1 mo prior to 6 mos post (or death)</b>	<b>1028</b>	<b>7768</b>	<b>9%</b>
<b>Fee for service only in obs. window</b>	<b>775</b>	<b>253</b>	<b>7%</b>
<b>Full Medicaid coverage in obs window</b>	<b>637</b>	<b>138</b>	<b>6%</b>
<b>No private ins or Medicare in obs window</b>	<b>416</b>	<b>221</b>	<b>4%</b>

# **Prevalence of Coverage Delays and Gaps among Medicaid Beneficiaries with Cancer**

# Objectives

- To describe the prevalence of delays in coverage and gaps in coverage, and changes in prevalence over time, among Medicaid beneficiaries in Texas diagnosed with cancer
- To describe the characteristics of patients with and without delays and gaps in Medicaid coverage including demographic factors, site and stage of primary cancer, comorbidities, antineoplastic therapy received, provider specialty and experience, practice environment, and geographic region
- *To describe the prevalence of symptoms for which effective supportive care interventions exist (nausea, vomiting, infections, pain, diarrhea, cardiac conditions, fractures, oral complications) among those with and without gaps and delays in Medicaid coverage*
- *To describe the utilization of healthcare services and the cost of care for those with and without delays and gaps in coverage*

# Definitions

**Continuous Coverage:** Medicaid coverage from diagnosis (month 0) until month 24, death, or end of study (Dec, 2008)

**Incomplete Coverage:** Medicaid coverage for at least one month, but not continuous due to coverage delay, gaps, or termination of coverage prior to death, month 24 or end of study

**Delayed coverage:** Coverage for at least one month between months 1 and 24, but NO coverage in the month of diagnosis (month 0).

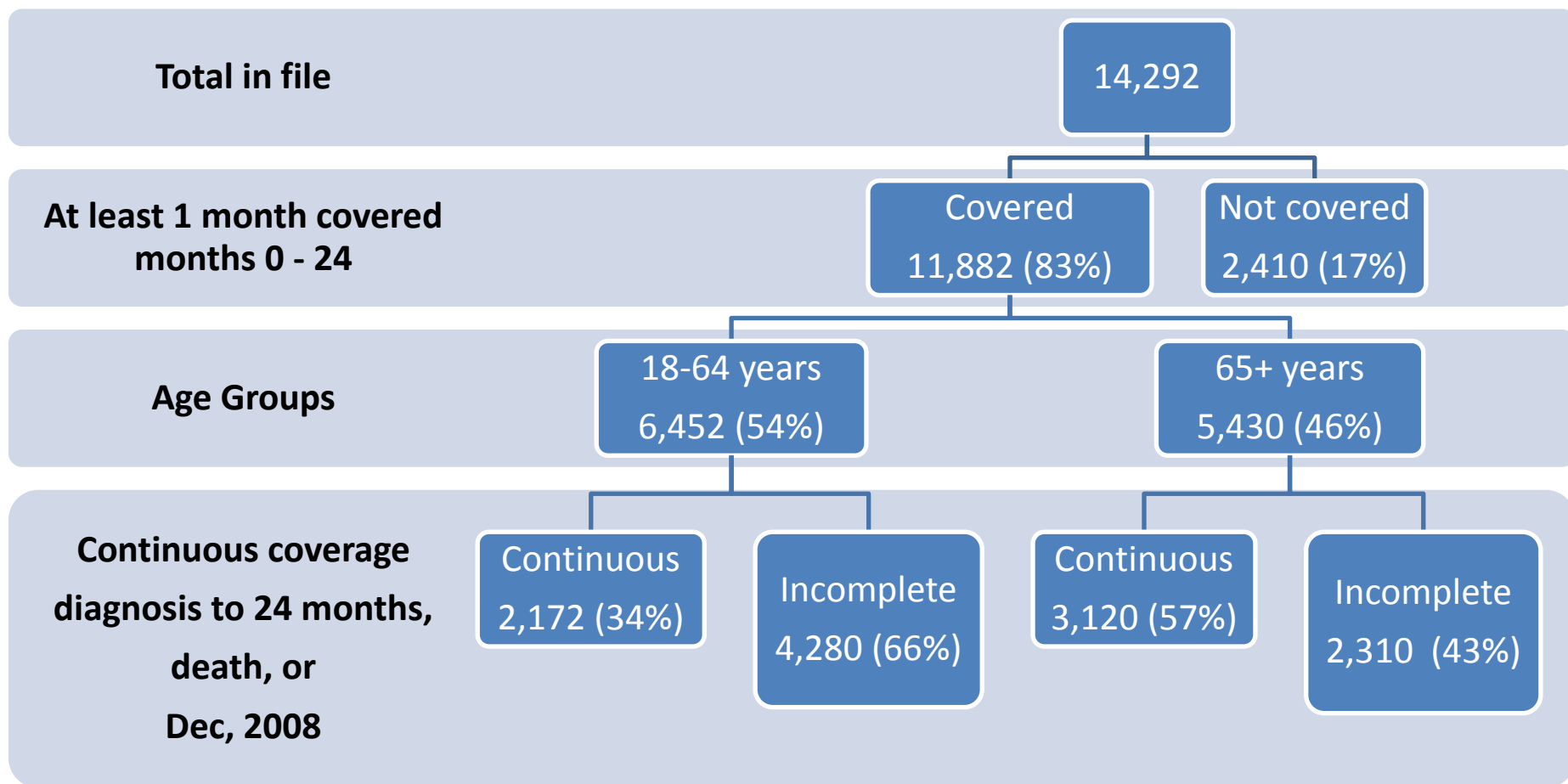
**Delay Duration:** The number of months between diagnosis (month 0) and the first month of coverage after diagnosis

**Coverage Gap:** An episode of non-coverage separating two periods of coverage of at least one month each

**Gap Duration:** The number of consecutive months without coverage, between two periods of coverage

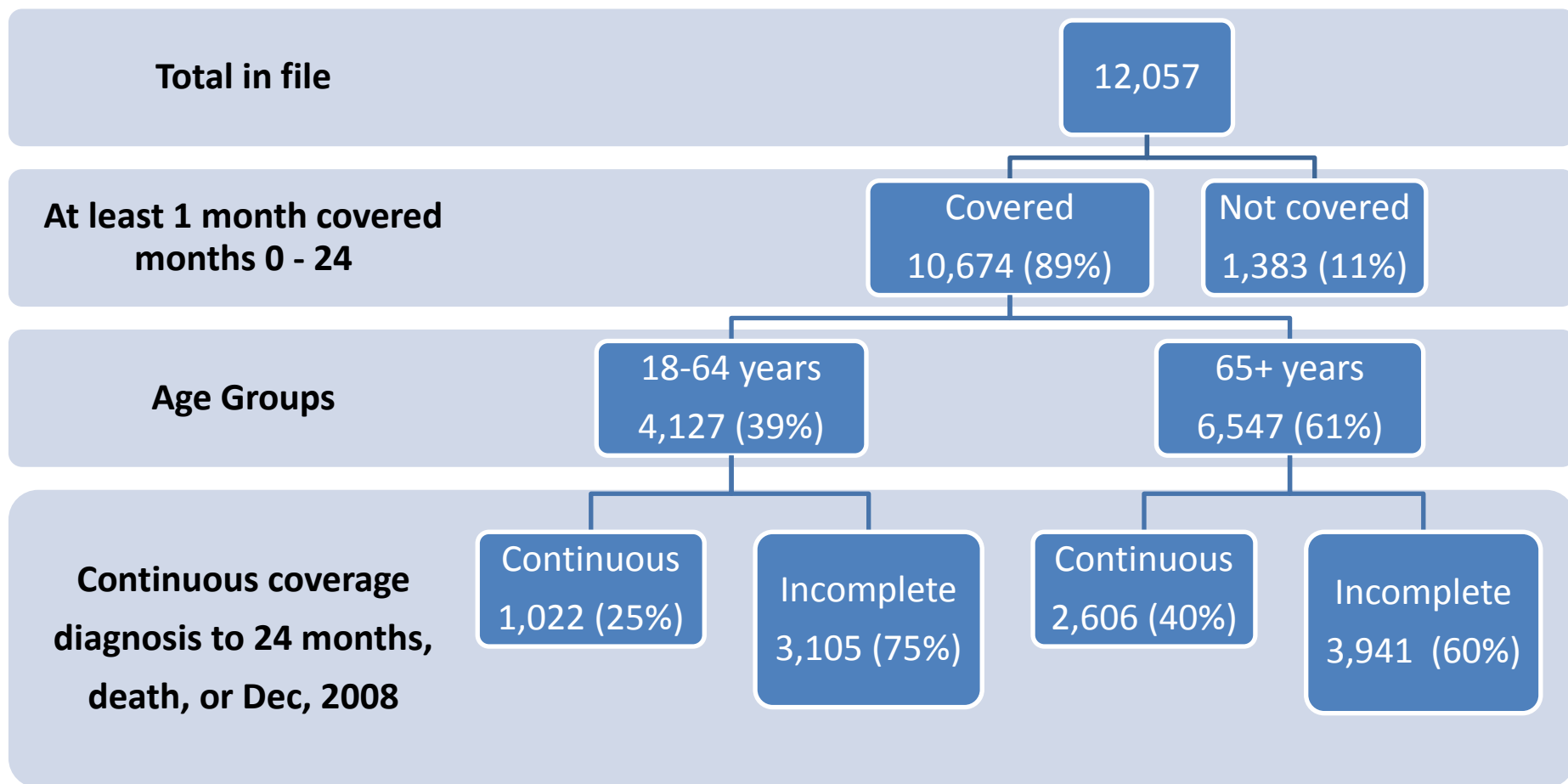
**Early Termination of coverage:** The last month of coverage occurs prior to the month of death, month 24, or the end of study.

# Medicaid Coverage among Breast Cancer Patients in Medicaid File

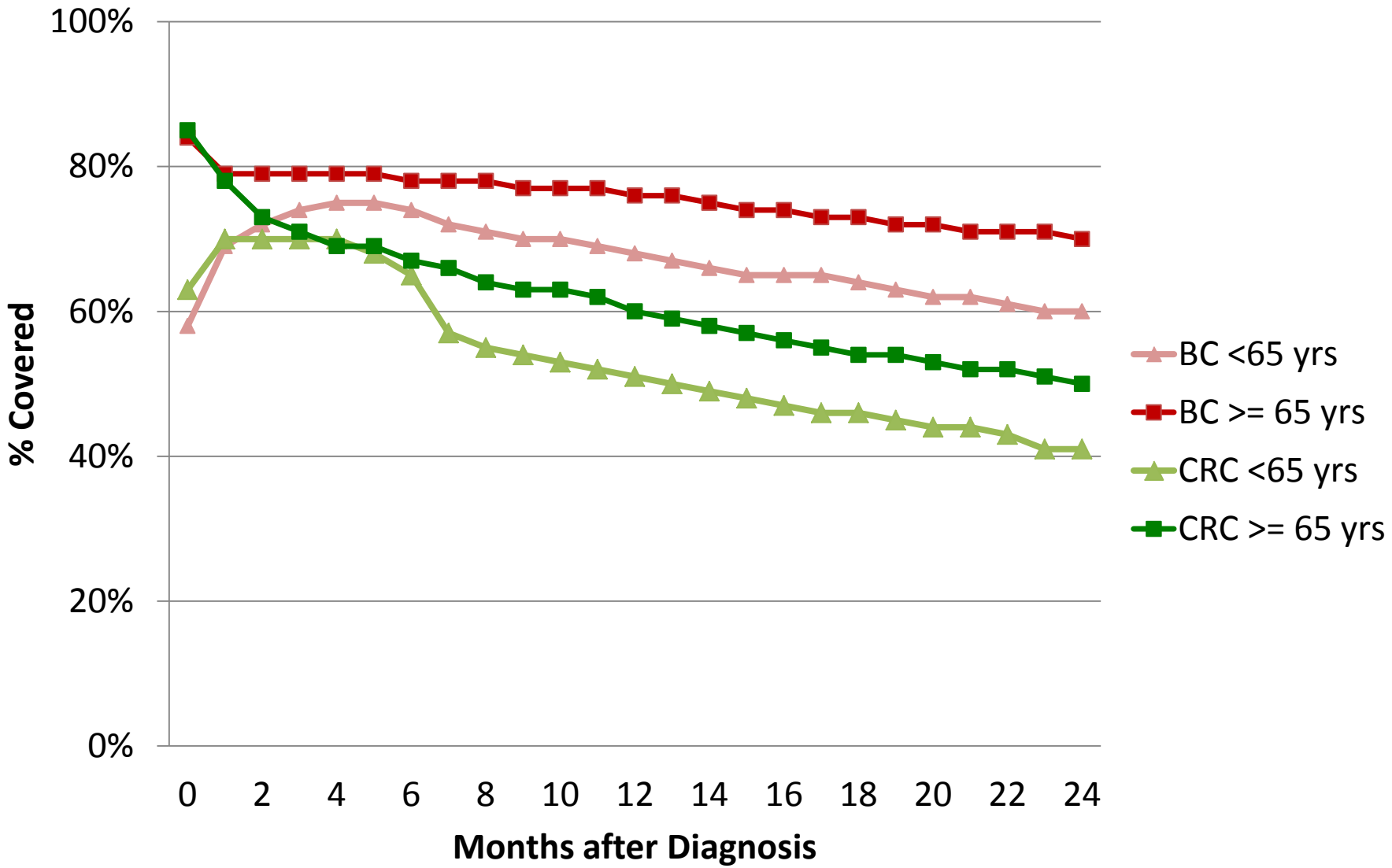




# Medicaid Coverage among CRC Patients in Medicaid File

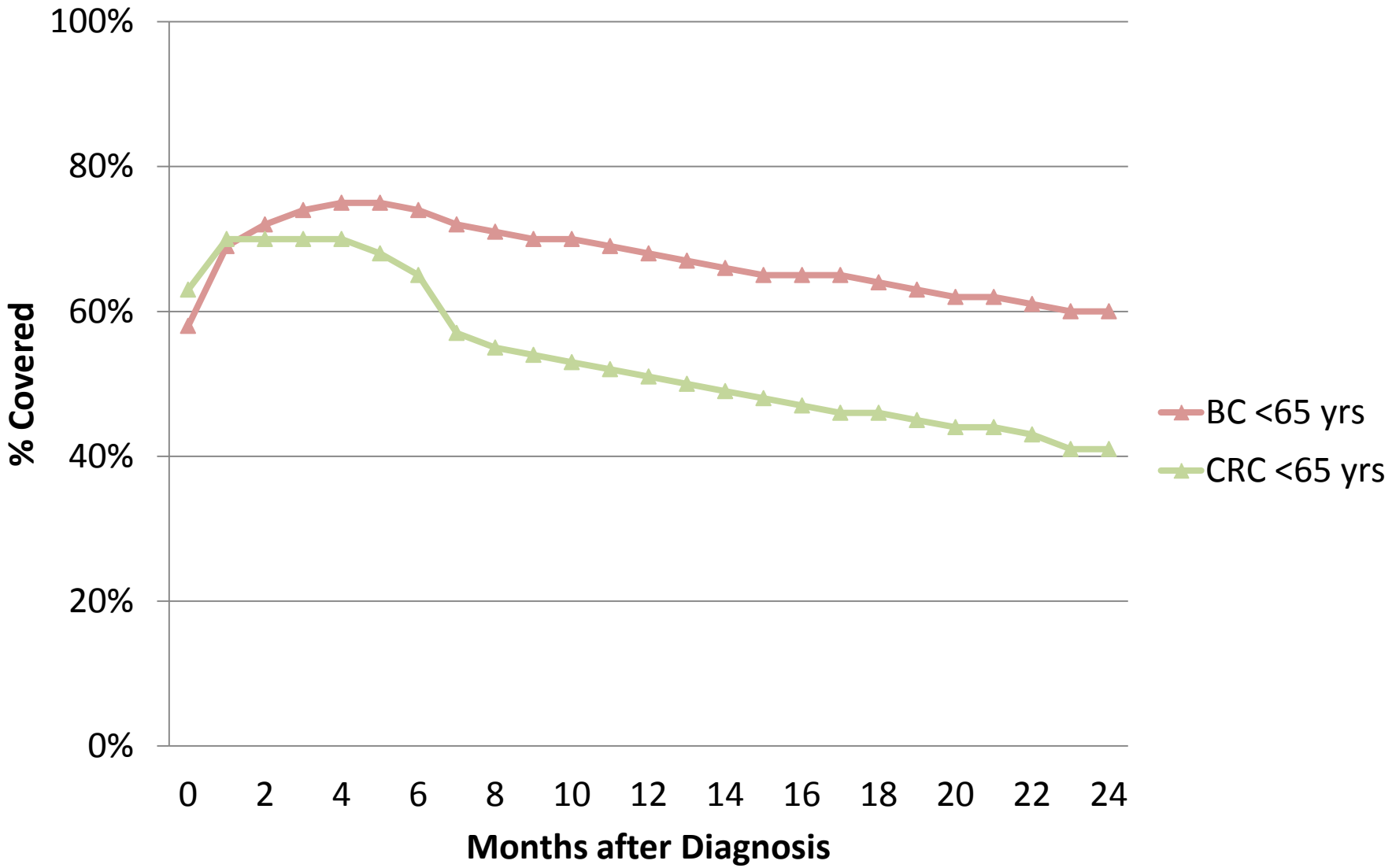


# Monthly Medicaid Coverage among Patients with **Breast** or **Colorectal** Cancer with at least one month of coverage

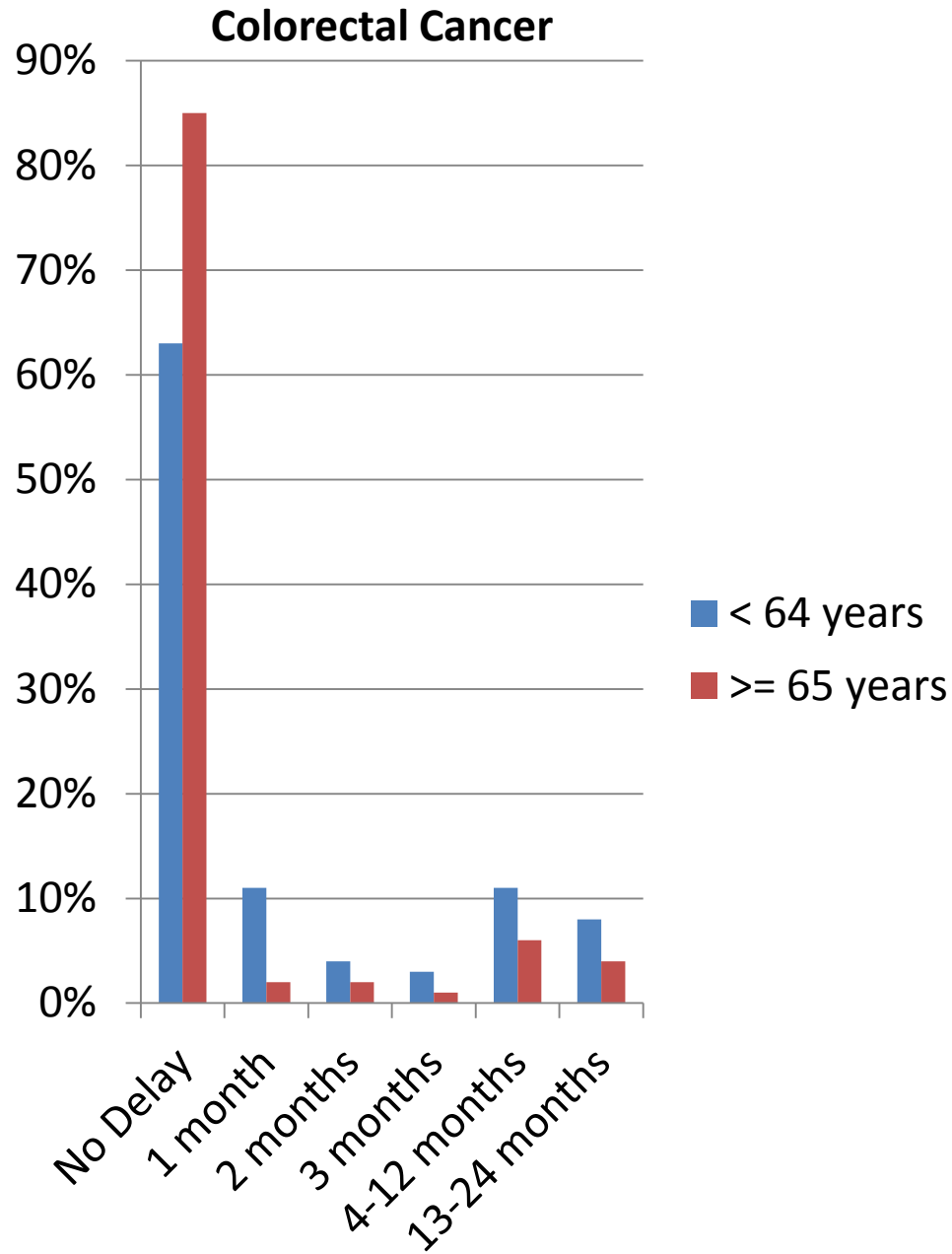
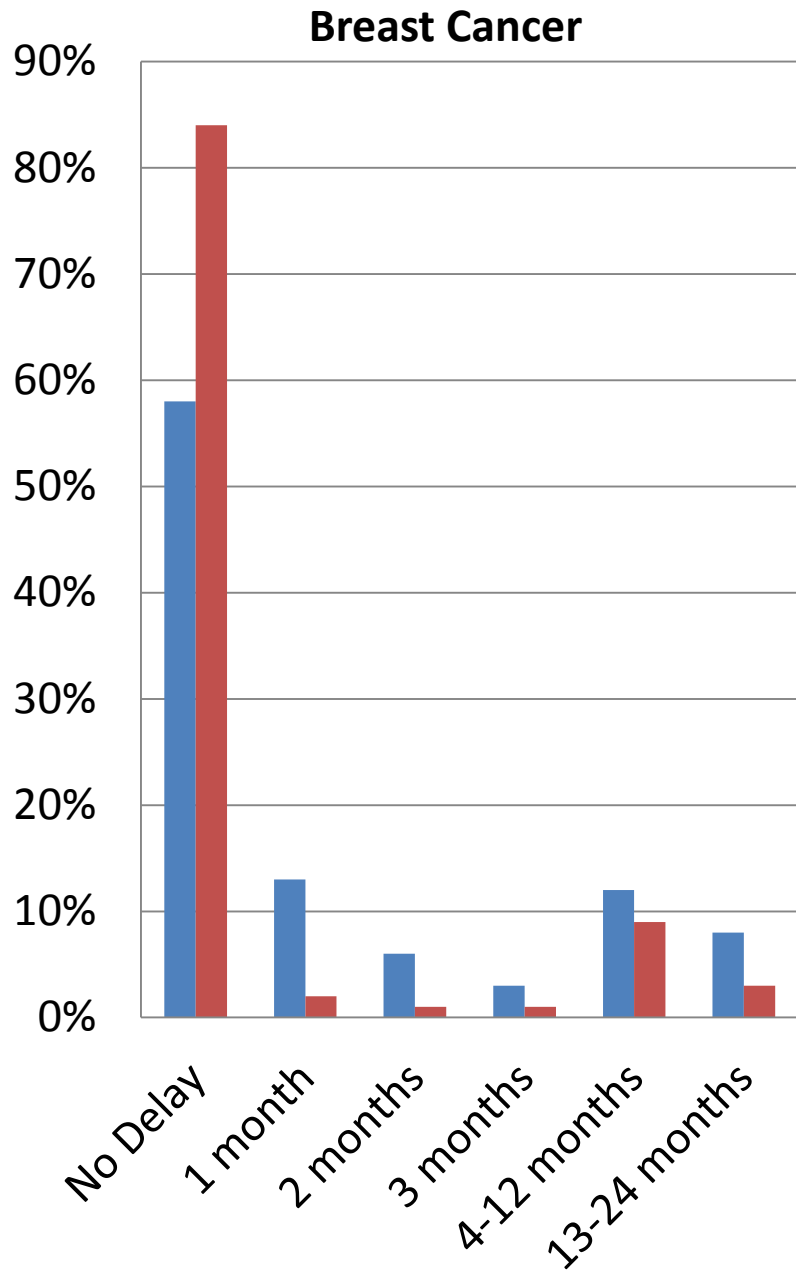


# Monthly Medicaid Coverage among Patients with **Breast** or **Colorectal** Cancer with at least one month of coverage

Age < 65 years

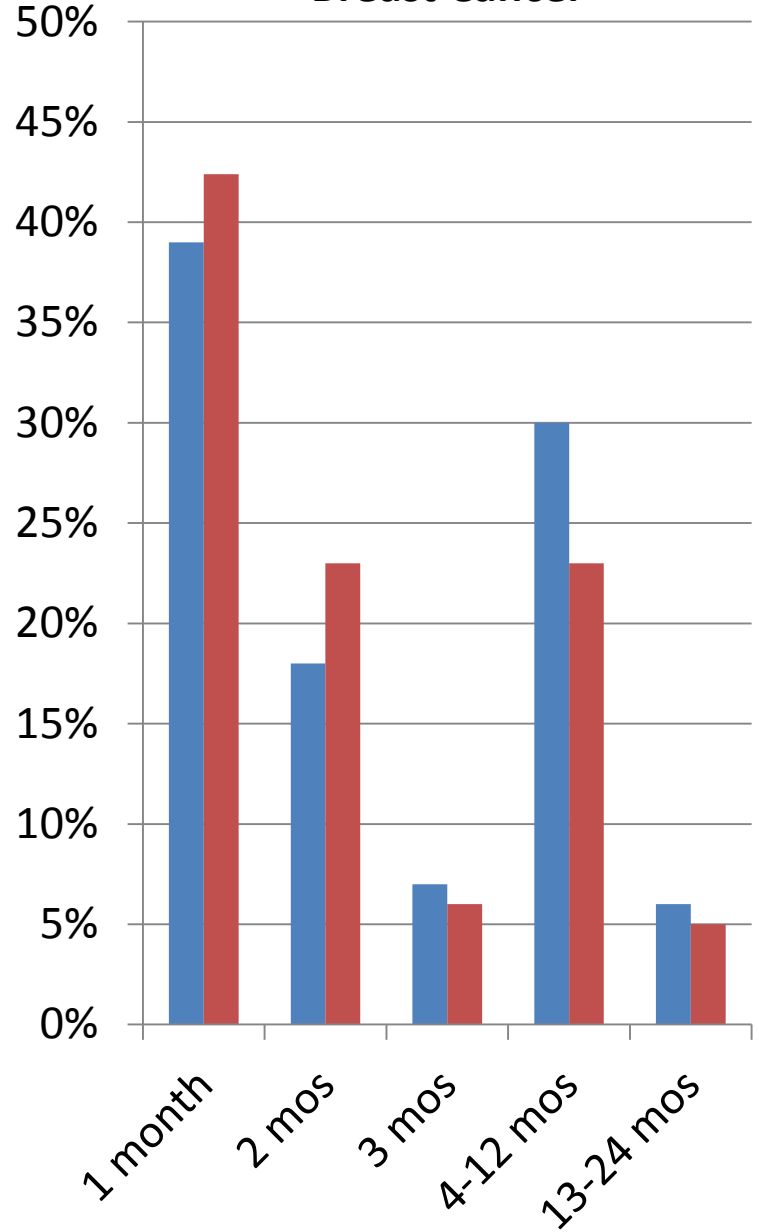


# Medicaid Coverage Delays after Cancer Diagnosis

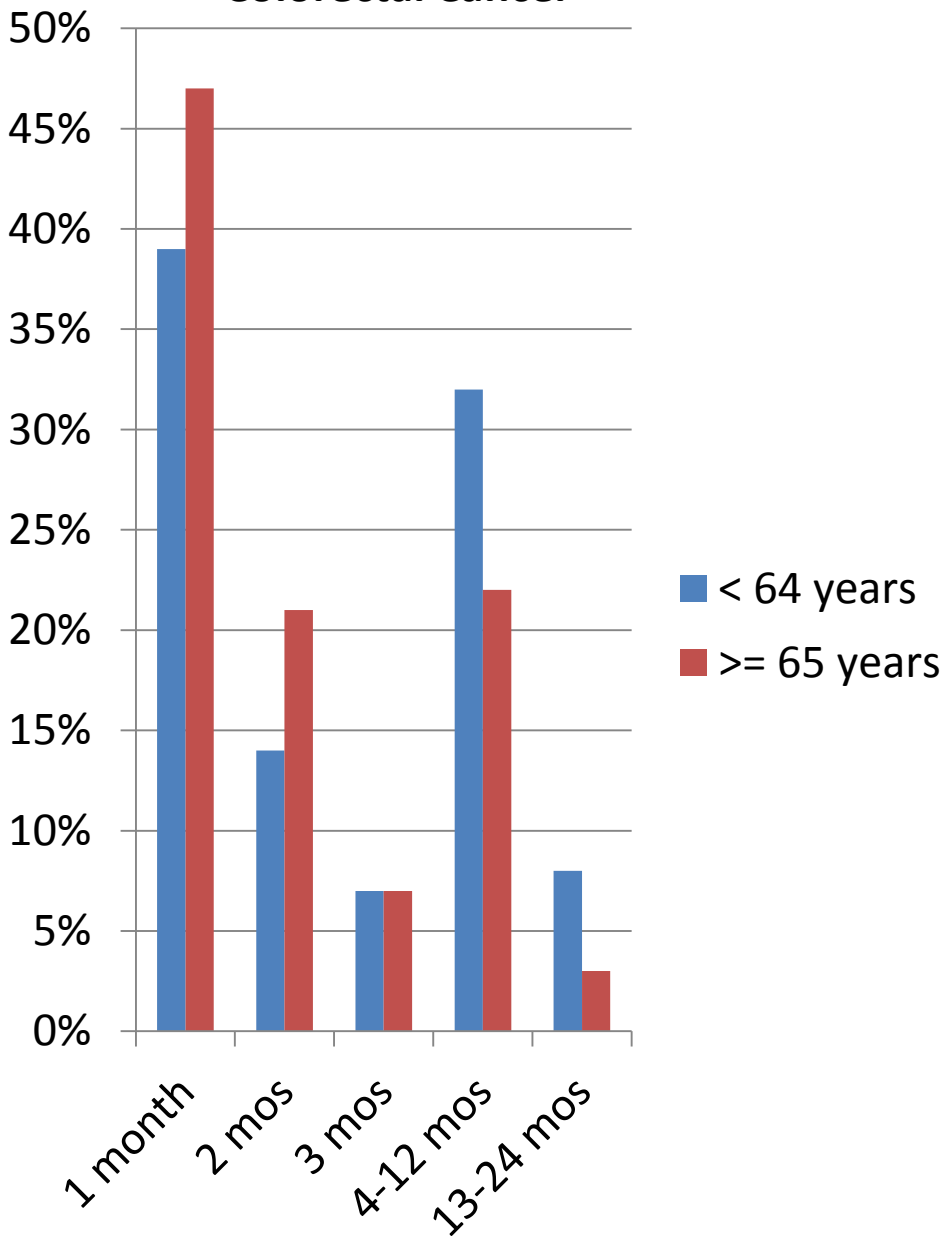


# Duration of First Medicaid Coverage Gap after Cancer Diagnosis

## Breast Cancer



## Colorectal Cancer



# Medicaid Claims during Coverage Delay- Breast Cancer Patients

## Duration of Delay

	1 month % with claims in delay	2 months % with claims in delay	3 months % with claims in delay
<b>Any claim</b>			
< 65 years	2%	1%	3%
≥ 65 years	0%	1%	0%
<b>Inpatient claim</b>			
< 65 years	2%	0.5%	1%
≥ 65 years	0%	1%	0%
<b>Outpatient claim</b>			
< 65 years	0.5%	1%	2%
≥ 65 years	0%	0%	0%

# Medicaid Claims during Coverage Delay - CRC Patients

## Duration of Delay

	1 month % with claims in delay	2 months % with claims in delay	3 months % with claims in delay
<b>Any claim</b>			
< 65 years	23%	9%	7%
≥ 65 years	1%	1%	2%
<b>Inpatient claim</b>			
< 65 years	22%	7%	4%
≥ 65 years	0%	0%	0%
<b>Outpatient claim</b>			
< 65 years	2%	6%	5%
≥ 65 years	1%	1%	2%

# Medicaid Claims during Coverage Gaps- Breast Cancer Patients

## Duration of Gap

	1 month % with claims in gap	2 months % with claims in gap	3 months % with claims in gap
<b>Any claim</b>			
< 65 years	8%	11%	15%
≥ 65 years	15%	0	25%
<b>Inpatient claim</b>			
< 65 years	4%	2%	5%
≥ 65 years	7%	0	13%
<b>Outpatient claim</b>			
< 65 years	5%	9%	10%
≥ 65 years	7%	0	25%



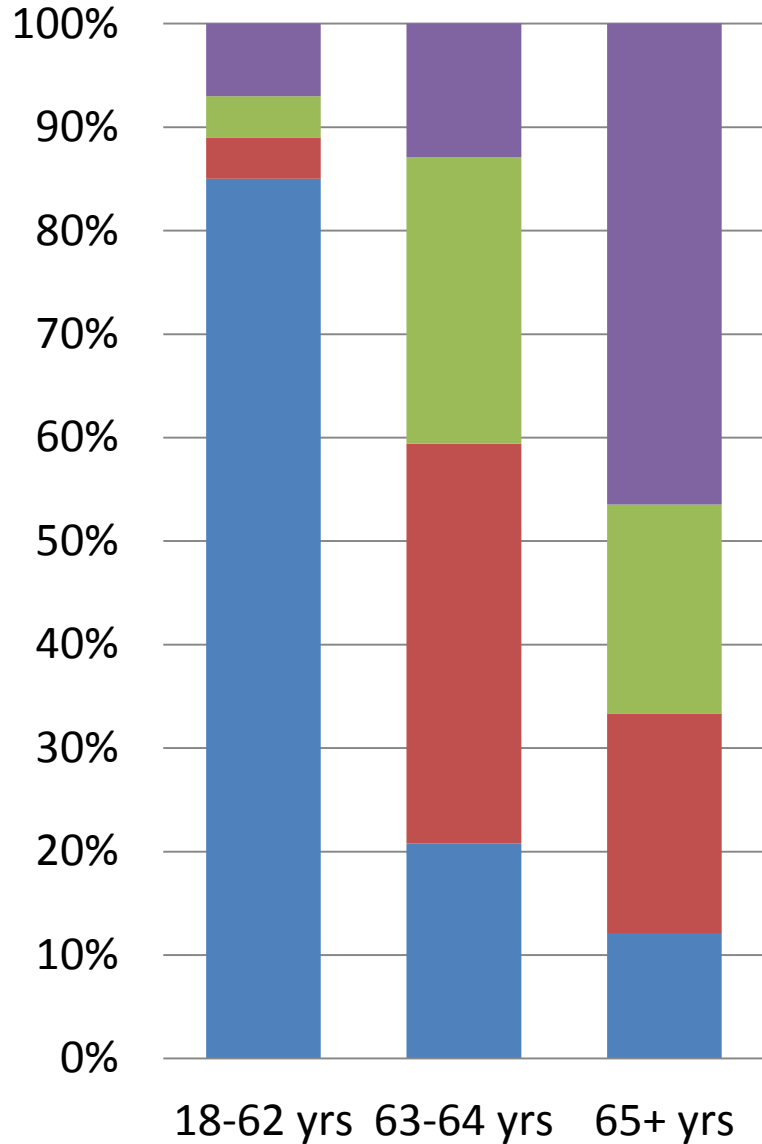
# Medicaid Claims during Coverage Gaps- CRC Patients

## Duration of Gap

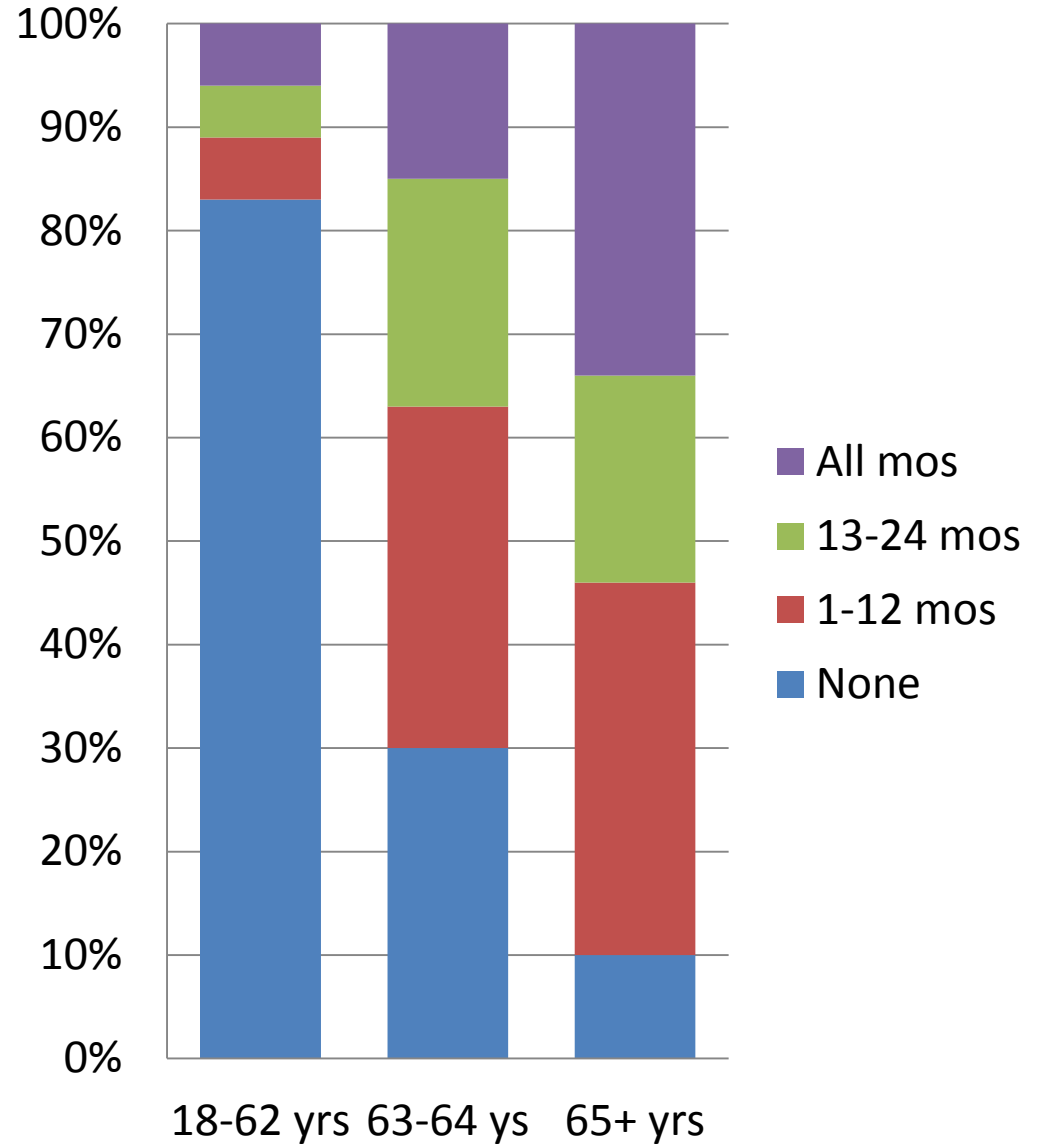
	1 month % with claims in gap	2 months % with claims in gap	3 months % with claims in gap
<b>Any claim</b>			
< 65 years	17%	6%	8%
≥ 65 years	11%	7	15%
<b>Inpatient claim</b>			
< 65 years	5%	2%	5%
≥ 65 years	2%	0	0%
<b>Outpatient claim</b>			
< 65 years	13%	4%	0%
≥ 65 years	10%	7%	15%

# Medicare coverage during study period

## Breast Cancer



## Colorectal Cancer



# Medicaid Coverage after Breast Cancer Diagnosis



	< 65 years N = 6452	≥ 65 years N = 5430
<b>Continuous coverage</b>	<b>2172 (34%)</b>	<b>3120 (58%)</b>
<b>Incomplete coverage</b>	<b>4280 (66%)</b>	<b>2310 (42%)</b>
<b>Early coverage termination only</b>	<b>1131 (26%)</b>	<b>1354 (57%)</b>
<b>Delay (+/- gaps or early term)</b>	<b>2733 (64%)</b>	<b>861 (36%)</b>
<b>At least one Gap (+/- delay or early term)</b>	<b>714 (11%)</b>	<b>132 ( 2%)</b>
<b>Only 1 Gap</b>	<b>612 (86%)</b>	<b>122 (92%)</b>
<b>2 Gaps</b>	<b>68 (10%)</b>	<b>7 (5%)</b>
<b>≥ 3 Gaps</b>	<b>34 ( 4%)</b>	<b>3 (2%)</b>

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# Medicaid Coverage after CRC Diagnosis



	< 65 years N = 4127	≥ 65 years N = 6547
<b>Continuous coverage</b>	<b>1022 (25%)</b>	<b>2606 (40%)</b>
<b>Incomplete coverage</b>	<b>3105 (75%)</b>	<b>3941 (60%)</b>
<b>Early coverage termination only</b>	<b>1358 (44%)</b>	<b>2782 (71%)</b>
<b>Delay (+/- gaps or early term)</b>	<b>1516 (49%)</b>	<b>1013 (26%)</b>
<b>At least one Gap (+/- delay or early term)</b>	<b>368 (12%)</b>	<b>196 ( 5%)</b>
<b>Only 1 Gap</b>	<b>319 (87%)</b>	<b>185 (92%)</b>
<b>2 Gaps</b>	<b>34 ( 9%)</b>	<b>10 (5%)</b>
<b>≥ 3 Gaps</b>	<b>15 ( 4%)</b>	<b>1 (2%)</b>

## Next steps

Add Lung cancer?? Others??

Analysis by gender, race

Analysis by stage at diagnosis: Do pts who require only surgery for limited disease (for example stage 1 BC or CRC) have adequate coverage for surgery? Is definitive surgery delayed in people with delayed coverage?

Geographic analysis: Are gaps or delays more or less prevalent among pts who live in counties with county safety net hospitals/clinics or UTMB? How about rural pts?

## **Collaborators...**

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