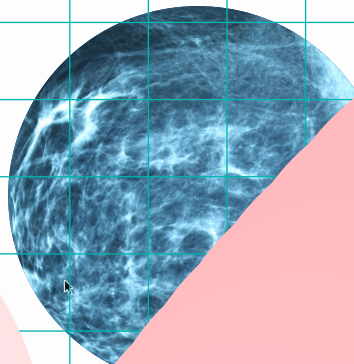
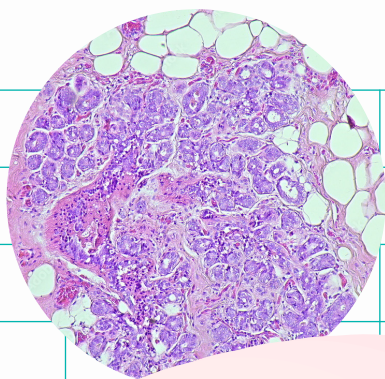


# The financial impact of missed screenings is growing.

Treatment costs for unscreened breast cancer patients have surged 21.7% in the last three years.



# Why this report matters

At Nomi Health, we believe that fixing the business of healthcare is the key to changing the experience and delivery of care for the better. Self-funded employers face rising costs, complex benefits decisions, and challenges in preventive care engagement. By rethinking how healthcare is paid for and accessed, we can improve both outcomes and affordability.

Breast cancer remains one of the most significant health concerns for working-aged women, and employers play a critical role in early detection efforts.

In this report, we analyze breast cancer screening and diagnosis trends across multiple age groups to understand where screening gaps exist—and what they cost self-funded employers. Our findings show that screening rates do not always align with diagnosis risk, and missed screenings lead to significantly higher treatment costs and late-stage diagnoses.

By understanding these patterns, employers can make data-driven decisions that improve workforce health while managing healthcare expenses.

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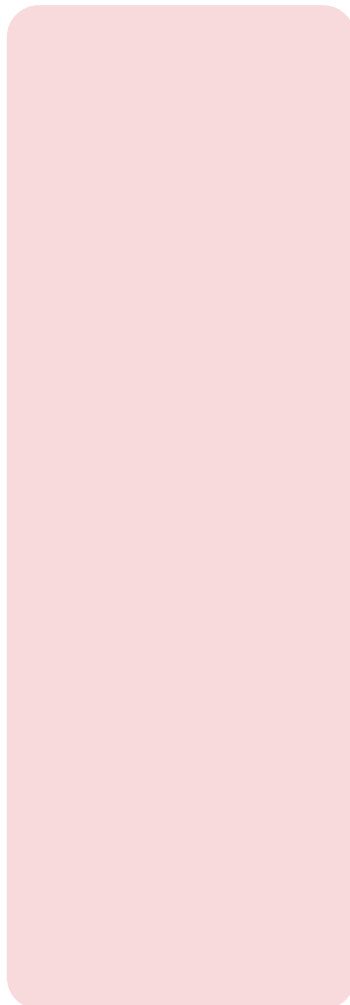
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# Mammograms: A story of care and cost

What it means for your business when  
one-third of eligible women skip  
life-saving mammograms.

Every day, employers face a silent challenge that affects both the health of their workforce and their bottom line: one in three eligible women misses their recommended screening mammogram.

Behind this statistic lies a larger story of missed opportunities—one of preventable costs, and lives that could be saved through early detection.



# Understanding the numbers

Our analysis reveals progress, but also persistent challenges.

↗ Breast cancer screening compliance improved from **59.8% in 2021 to 64.2% in 2023**.

🕒 Yet, **more than a third** of women still miss these critical screenings.

The increase tells a story of recovery, particularly post-pandemic, as more women returned to regular healthcare routines. But diagnosis rates tell a different story.

Incident rates (new diagnoses)  
of breast cancer per 1,000 women

20.23	20.39	20.65
2021	2022	2023

Despite more women participating in screening, the rate of breast cancer diagnoses remains steady and rising.

This raises a critical question:  
**Are we screening enough women, early enough?**

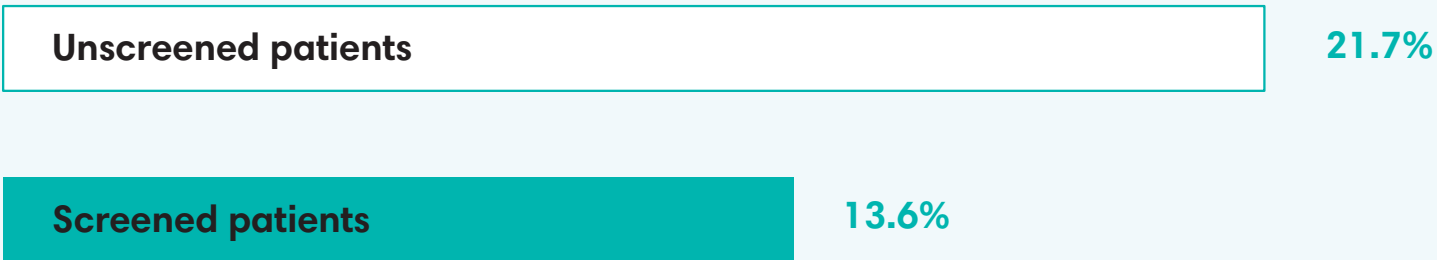


“Behind every delayed diagnosis is a person, a family, and a harder road ahead. We’re seeing advanced breast cancer treatments costing up to \$120,000 per episode for unscreened patients – that’s over \$44,000 more than those who were screened – these aren’t just numbers. They represent thousands of women and families facing more intensive treatments that could have been caught earlier. Making preventive care accessible isn’t just about managing costs, it’s about protecting your workforce and their loved ones.”

**Mark Newman**

Co-Founder and CEO  
of Nomi Health

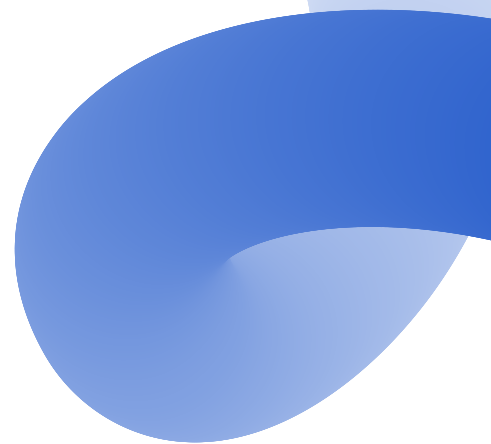
The financial impact of missed screenings is growing. **Over the past three years, breast cancer treatment costs for unscreened patients increased by 21.7%, compared to a 13.6% increase for those who were screened.** The trend underscores how early detection not only improves health outcomes but also helps self-funded employers manage rising healthcare costs.





# A closer look at cancer diagnoses by age

Understanding which age groups are most affected by breast cancer helps employers design smarter, more effective healthcare strategies. Our data highlights distinct utilization\* (total number of screenings) and diagnosis rates, revealing where employers have opportunities to make the biggest impact.



## Early detection (Ages 40-49)

**Utilization rate**  
30.48% (40-49 yrs)

**Diagnosis rate**  
7.74% (40-44 yrs)  
12.24% (45-49 yrs)

**Key insight**  
Diagnosis rates jump significantly in the late 40s, despite similar utilization rates. This suggests that earlier, more proactive screening could catch cancers sooner.



## Peak detection (Ages 50-64)

**Utilization rate**  
35.76% (50-59 yrs)

**Diagnosis rate**  
17.72% (50-54 yrs)  
19.94% (55-59 yrs)

**Utilization rate**  
27.62% (60-64 yrs)

**Diagnosis rate**  
21.86% (60-64 yrs)

**Key insight**  
Diagnosis rates increase more sharply than screening rates, peaking at ages 60-64. This highlights the importance of sustained screenings beyond initial eligibility years.



## Later years and declining rates (Ages 65+)

**Utilization rate**  
27.62% (65-69 yrs)

**Diagnosis rate**  
9.25% (65-69 yrs)

**Key insight**  
While diagnosis rates decline after 65, this could partly reflect lower engagement rather than reduced risk. Ensuring continued awareness and access to screenings remains essential.

\*Utilization here is based on the number of mammograms performed during the year for all women in the specified age group NOT just eligible women. This does NOT represent screening compliance rates for each age group.

## What this means for employers



Screening is most effective when started early. The sharp jump in diagnoses from early 40s to late 40s suggests that higher screening rates lead to higher detection rates which ultimately leads to better outcomes and lower long-term costs.



Sustained engagement is crucial. While screening rates plateau in the 50s and 60s, diagnosis rates continue rising, reinforcing the need for ongoing screening programs beyond the initial years.



Older employees still need support. After 65, screenings drop, but risk doesn't disappear. Employers can help maintain access and awareness among older populations.

# The power of early detection

Regular screening leads to earlier detection. More than **73%** of screened patients who were diagnosed with breast cancer had a severity level 1.02 or lower. But perhaps more telling is what happens without screening: the rate of advanced stage breast cancer at the time of diagnosis (severity level 3.03) more than doubles, from **3.79% in screened patients to 8.92% in unscreened patients.**

The trend is clear—women who undergo regular screenings detect cancer earlier, allowing for less aggressive, more effective treatment.

Since 2021, diagnosis rates in screened women have declined—from **5.12% to 4.63%.**

What this means: Screening doesn't just detect cancer, it reduces the number of women who reach advanced stages at all.



"I have numerous friends who have fought breast cancer. The impact on the entire family is real. For me, it isn't about a number on a spreadsheet—it's lives changed forever. Every missed screening represents a woman who may not know she has cancer until it's harder to treat, more expensive to manage, and more disruptive to her life, her family, and career.

**Amy Wykoff**

Chief Product Officer  
of Nomi Health

Stage	Screened	No Screening
0	9.47%	9.17%
1.01	9.33%	6.19%
1.02	73.05%	69.82%
1.04	4.26%	5.72%
3.02	0.09%	0.19%
3.03	3.79%	8.92%

0.00 - History of carcinoma of the breast

1.01 - Carcinoma in situ of the female breast

1.02 - Malignant neoplasm of female breast of unspecified size or cystosarcoma phyllodes

1.04 - Carcinoma female breast 2-5cm diameter w/single ipsilateral node involved

3.02 - Carcinoma of female breast extends to skin/chest or int mamm node involved

3.03 - Carcinoma of the female breast with metastasis



# When cancer is detected later

## Advanced breast cancer is more expensive to treat

When cancer is detected at later stages, treatment becomes more aggressive, complex, and expensive.

Screening status	Treatment cost for stage 3.02	Likelihood of reaching this stage
With regular screening	\$76,456	0.09 of screened patients
Without screening	\$120,485	0.19 of unscreened patients

### Key takeaways

## 2x

Unscreened women are twice as likely to be diagnosed at an advanced stage.

## \$44,029

Treatment costs jump by \$44,029 when cancer is caught late.

Late-stage treatment requires more complex protocols and longer recovery times.

**Missed screenings don't just increase the risk of late-stage diagnoses, they drive up costs at every stage.**

In 2023, the average cost per breast cancer episode for unscreened women was **\$25,765—18% higher than the \$21,757 spent on screened patients.** This cost gap persists across all diagnosis stages, reinforcing the financial advantage of early detection.

### The hidden business costs

For self-funded employers, late-stage diagnoses lead to broader workplace challenges:



#### Extended employee absences

Treatment is more intensive, leading to longer medical leave



#### Higher disability claims

More employees require long-term disability support.



#### Increased staffing costs

Employers absorb the costs of replacement workers and lost productivity.



#### Retention risks

Employees dealing with serious health issues are more likely to exit the workforce.

# A changing workforce, changing needs

Your workforce is changing, and so must your approach to screening programs:



## Baby Boomers

Declining participation—screenings dropped from **39% to 26% as they retire.**



## Generation X

Most engaged—make up **59%** of screenings, despite being **only 21% of the workforce.**



## Millennials

Fastest growth—now the largest generation in the workforce (**29% of enrolled females**), their screening rates have **tripled from 4% to 15%.**



“What fascinates me about this data is the story it tells about workplace health. Millennials are now our largest workforce generation, and as they reach recommended screening age, we’re seeing their screening rates grow from 4% to 15%. With this massive demographic shift underway, employers who make it easy for their workforce to prioritize preventive care today will see the benefits for years to come.”

**Betsy McVay,**  
President of Artemis by Nomi Health

## What this means for employers:

Millennials will drive screening demand in the coming years. Education and accessibility will determine your long-term cost-savings.

Silent Generation	1928–1945	79–96 years old
Baby Boomers	1946–1964	60–78 years old
Gen X	1965–1980	44–59 years old
Millennials	1981–1996	28–43 years old
Gen Z	1997–2012	12–27 years old
Gen Alpha	Early 2010s–2025	0–11 years old

# A closer look at changing mammogram trends

The shift toward 3D mammography has redefined breast cancer screening, but what does it actually cost?

## What exactly is a 3D mammogram, and why does it matter?

3D mammography, technically called tomosynthesis, takes 15 X-ray images of the breast from multiple angles and reconstructs them into a three-dimensional image.

Think of it this way: while traditional mammography produces one flat image – like a single photo – 3D mammography allows radiologists to examine breast tissue one millimeter at a time, like flipping through pages of a book. This more complete view has two major advantages:



### Improved detection

3D mammography detects 40% more invasive cancers than traditional mammography



### Fewer false alarms

The clearer, more detailed view means fewer women are called back for “second looks”

Mammogram type	Average cost paid in 2023
2D mammogram	\$176.25
3D mammogram (Additional cost)	\$72.83

## The good news?

Even as technology has advanced, cost increases have remained moderate:

**3D mammograms:** 9.24% increase over four years

**2D mammograms:** 13.68% increase over the same period

Despite these moderate cost increases, patient and provider preference for 3D mammography has grown substantially:

**2020:** 76% of screenings were 3D

**2023:** 92% of screenings are 3D

**Today:** 99.5% of employer health plans cover this advanced screening

## The takeaway

Technology isn't the barrier, engagement is.



# Every missed mammogram has a cost. Let's eliminate that risk.

Nomi Health helps employers take action before it's too late for patients and budgets.



## Analytics

**Understand your population**  
Powered by Artemis

**Spot the gaps before they become problems.**  
Our analytics platform helps you identify who's missing recommended screenings, especially those at higher risk.

**Uncover hidden disparities.**  
Use data to understand which groups are falling behind in preventive care and why. Social, economic, and geographic barriers are all in the picture.

**Turn insights into action.**  
Drive personalized outreach that connects the dots for your population. Show women when they're due for screenings and why it matters.

**Track real impact.**  
Measure how interventions improve access, reduce costs, and lead to better outcomes.

## Network

**Delivering value through direct healthcare access**  
Powered by Nomi Network

**Lower the cost of screening by up to 30%.**  
Our direct provider partnerships eliminate unnecessary middlemen which brings down costs for employers and employees alike.

**Remove financial barriers completely.**  
No copays. No deductibles. When cost is off the table, more women say yes to screening.

**Help women find the right care, fast.**  
Our dedicated care guides help employees navigate options and schedule screenings with providers that deliver quality care at the best price.

**Go beyond the first screening.**  
Cover follow-up testing, callbacks, and care navigation with no out-of-pocket costs.

**Breast cancer doesn't wait and neither should your benefits strategy.** Discover how Nomi Health can help you close the screening gap and control rising healthcare costs.  
[Learn more at nomihealth.com](https://nomihealth.com)

# About this report

## About Nomi Health

At Nomi Health, we help self-funded employers take control of their healthcare costs by eliminating unnecessary expenses and expanding access to quality care. Our direct healthcare model makes it easier to provide cost-effective, accessible solutions that benefit both employers and employees.

How we help employers save:



### Analytics

We turn your data into actionable insights that drive smarter healthcare decisions.



### Direct provider networks

We leverage direct provider networks to reduce your health benefit spend.



### Pharmacy benefits

We provide transparent, cost-effective pharmacy benefits that lower your drug costs.



### Payment solutions

We simplify how care is paid to eliminate inefficiencies and delays.

**3,200+ customers**  
**\$150B in healthcare spend**  
**30M+ lives impacted**

[nomihealth.com](https://nomihealth.com)

## Methodology and approach

This analysis is part of the Nomi Health Trends in Spend series, designed to help self-funded employers turn healthcare spending insights into meaningful action.

## Scope

Breast cancer screening and treatment data for women ages 40-74.

## Timeframe

January 1, 2021 – December 31, 2023 (excluding women with bilateral mastectomy).

## Data evaluation

Uses HEDIS-like clinical definitions and proprietary Artemis methodologies to evaluate screening compliance, diagnosis trends, and treatment costs.

## Conducted by

Artemis, a Nomi Health company, recognized as an industry-leading analytics platform.

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## Why this matters for employers:

- Reveals screening trends that impact early detection and cost management
- Quantifies financial impact of missed screenings and late-stage diagnoses
- Empowers data-driven strategies to lower healthcare costs while improving outcomes

Employers don't have to be reactive, understanding this data means they can take action before costs escalate.

# Healthcare rebuilt.

Better screening. Better outcomes. Better healthcare. The cost of missed screenings isn't just measured in dollars—it's measured in lives. Employers have the opportunity to change that by making preventive care more accessible, driving earlier detection, and ultimately improving outcomes for their workforce.

At Nomi Health, we're committed to helping self-funded employers take control of healthcare costs while ensuring employees get the care they need—when they need it.

Learn more about how direct healthcare and analytics-driven solutions, direct healthcare, transparent pharmacy benefit and modern financial payments can work for your organization.

**Visit [nomihealth.com](https://nomihealth.com)**