SARASOTA MEMORIAL

BRIAN D. JELLISON CANCER INSTITUTE

Enhancing Community Health by Expanding Lung Cancer Detection

A case study of a scalable approach to early detection and follow-up

2022–2025

Executive Overview

Located on Florida's Gulf Coast, Sarasota Memorial Health Care System (SMH) is a community-owned health system that has been caring for people on the Suncoast since 1925. Repeatedly ranked among the nation's best hospitals for quality and safety, SMH is also one of the most respected, known for its **unwavering commitment to clinical excellence, public stewardship, and comprehensive care.**

The only publicly owned, not-for-profit health system in the region, SMH reinvests all its profits into programs, services, facilities, and specialists that promote the health of the community. That includes more than $1 billion in its state-of-the-art Brian D. Jellison Cancer Institute. Launched in 2020, the Institute is made up of three premier cancer care facilities equipped with the latest technology and a multidisciplinary cancer team caring for more than 7,000 newly diagnosed cancer patients each year.

As Sarasota Memorial set out to broaden the region's access to world-class care and improve cancer outcomes, lung cancer emerged as one of its priority focus areas. In addition to recruiting top-tier cancer physicians and researchers, the health system increased its investment in early detection and follow-up support. Today, that investment is yielding benchmark results, helping the lung cancer team identify more patients in the earliest phases of the disease and establishing a coordinated follow-up approach that could be used to address other types of cancer.

7,000+
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Background: Building on a Strong Foundation

Sarasota Memorial launched its low-dose CT lung cancer screening program in 2016 and, through community education and outreach, steadily expanded participation for the past decade. But clinicians knew the elective screenings captured only a small percentage of the population at risk. In many cases, the earliest indicators of lung cancer appear as incidental pulmonary nodules detected on chest x-rays or scans ordered for unrelated conditions.

With more than 430,000 radiology exams performed each year, Sarasota Memorial recognized a significant opportunity existed to address incidental findings earlier — by pairing multidisciplinary clinical expertise with technology that supports early detection and ongoing follow-up.

430,000+
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"We knew there was more we could do for our community. Our imaging volumes are enormous; we just needed a reliable way to flag incidental findings in real time, so we could proactively reach all of the people who could benefit from earlier evaluation."

Amie J. Miller, MSN APRN
Program Lead

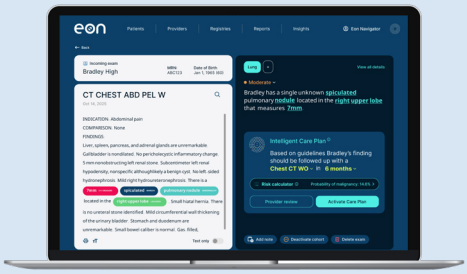
Challenges & Opportunities

As clinical leaders evaluated existing systems and workflows, three key challenges and opportunities emerged.

The first was expanding coordination and follow-up of incidental findings to support earlier detection. Radiologist reports contain detailed clinical information, much of it documented in free text. Identifying incidental pulmonary nodules across hundreds of thousands of studies each year would require tools capable of flagging abnormalities requiring follow-up in real time, without changing radiologist workflows, and regardless of the patient's entry point or reason for entering the health system.

The second was establishing a standardized process to ensure patients were returning for timely follow-up care. While patients enrolled in the health system's screening programs follow structured pathways for guideline-based follow-up care and surveillance, those with incidental findings that put them at risk needed access to the same level of coordinated follow-up — regardless of how a finding was discovered.

The third was public service and stewardship. As a community-owned public health system, Sarasota Memorial recognized that real-time insights — patient volumes, experience, and outcomes — were necessary to demonstrate the community benefit and value of the program.



1

Analyze radiologist reports in real-time as soon as they are completed.

2

Identify abnormalities that may require follow-up.

3

Support coordinated care over time.

A Technology-Enabled Approach to Longitudinal Coordination

To advance these goals, Sarasota Memorial sought a technology platform capable of analyzing radiologist reports in real-time as soon as they were completed, identifying abnormalities that may require follow-up, and supporting coordinated care over time.

After evaluating options, the health system implemented Eon, an early detection and longitudinal care platform enabled by artificial intelligence and used by clinical teams to support coordinated follow-up.

When a radiologist finalizes a report, the platform analyzes the findings, identifies at-risk patients in real time, flags abnormalities that may require follow-up, extracts clinically meaningful information from radiology reports, and enriches those findings with relevant patient risk factors. Using established clinical guidelines, the platform prompts appropriate next steps and helps track patients over time — alerting staff when care gaps are anticipated, when new imaging reflects a change in the clinical picture, or when recommended follow-up becomes overdue.

This approach broadens communication and coordination, while supporting clinical judgment. It also reduces the need for time-consuming manual tasks, allowing nurses, navigators, and other team members to spend more time providing direct patient care and support.

Impact: Reaching More At-Risk Patients

The impact of this coordinated follow-up approach was immediate and significant.

After implementing Eon's AI-powered real-time analysis of radiologist reports, the volume of incidental findings sent to Sarasota Memorial's lung cancer team spiked from 1 to 2 per week to an average of 170 per week.

That represented a more than 100-fold increase in the team's ability to proactively assess incidental pulmonary nodules in patients who potentially require follow-up.

With the expanded volume, Sarasota Memorial created a dedicated lung nodule clinic and supported the team in engaging with thousands of additional at-risk patients in timely evaluation and surveillance — patients who might otherwise have gone undetected for some time.

Before

1 to 2 incidental reports sent to Sarasota Memorial's lung cancer team per week

vs.

After

170 incidental reports sent to Sarasota Memorial's lung cancer team per week

Strengthening Follow-Up and Improving Adherence

Automated longitudinal monitoring, paired with coordinated outreach by clinical teams, strengthened patient follow-up and adherence across the lung program, resulting in 87% of screening patients returning for recommended follow-up, with 92% adherence among high-risk patients.

These results reflect the **effectiveness of consistent engagement and targeted intervention, allowing staff to focus attention where it is most needed.**

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According to the American Cancer Society, non-small cell lung cancer (NSCLC) accounts for **80-85%** of all lung cancer diagnoses, which are highly responsive to early-stage interventions.

In 2025, SMH's Lung Cancer Screening and Incidental Lung Nodule Program diagnosed **53** lung cancers – **98%** were NSCLC and **75%** were detected in the earliest, most treatable Stage I and II.

Diagnosing More Cancers Earlier

The increasing number of incidental nodules flagged for follow-up, along with the lung team's coordinated outreach and care, translated directly into earlier diagnosis.

Between 2022 and 2025, the health system enrolled more than 9,000 patients across screening and incidental pathways and diagnosed 147 cancers, 144 of which were lung cancer. Those incidental findings, along with comprehensive community education and outreach, has allowed SMH's Lung Cancer Screening & Incidental Lung Nodule Program to diagnose more than half of its lung cancer patients (67%) in the most treatable Stage I and II phases. These benchmark results are more than double the state and national averages for early detection of lung cancer, 25.8% and 28% respectively. While the state and national statistics cover a broader patient population, the specialized screening program demonstrates the tangible benefits of proactive lung health initiatives in the community.

These results underscore the importance of identifying and managing incidental findings at scale and highlight the leadership of Sarasota Memorial's clinical teams in delivering timely, guideline-based care.

Looking Ahead

Building on a proven framework in lung cancer, leaders at the Brian D. Jellison Cancer Institute are continuously exploring other tumor sites where technology-based early detection approaches can have the greatest impact, and where incidental findings of other cancers could benefit from a longitudinal approach. By thoughtfully expanding upon this model, Sarasota Memorial aims to identify disease earlier, close gaps in care, and improve outcomes for the community it serves.

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For questions or information about Sarasota Memorial's Lung Nodule Management Program, call (941) 917-5864 (LUNG) or email Amie Miller, program lead, at lungcancerscreening@smh.com