CASE STUDY

# Bringing about a Paradigm Shift in Lung Cancer

## How FMOL Health | Our Lady of the Lake doubled early detection and transformed lung cancer outcomes

FMOL Health | Our Lady of the Lake

## Executive Summary

**In Southern Louisiana, less than a quarter of all lung cancers are diagnosed early.** Often this is because fragment systems and manual workflows make scaling early detection programs nearly impossible. And that means patients with actionable findings fall through the cracks and opportunities to improve outcomes are missed. Thoracic surgeon Dr. Emily Cassidy and her team at Our Lady of the Lake (OLOL) found this unacceptable.

So they decided to partner with Eon.

Implementing Eon's longitudinal care management platform for incidental findings, enabled OLOL to transform its lung program — delivering measurable improvements in both clinical and operational outcomes — by detecting cancers earlier and ensuring ongoing, appropriate patient follow-up.

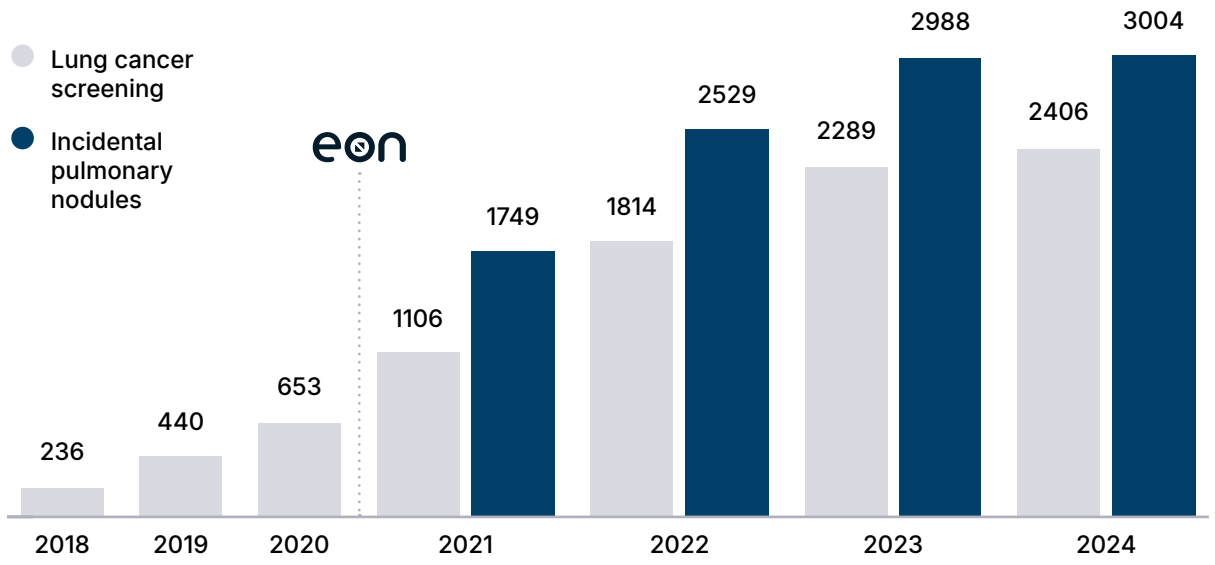
**24.3%**
**Louisiana's avg. early diagnosis rate**

**70%**
**Stage I or II diagnosis rate at OLOL**

OLOL's was able to build a scalable model for clinical impact, operational efficiency, and health system growth saving lives, improving outcomes, and setting a new standard for lung nodule management.

eon

## Increases in Early Detection Using Eon's AI Platform




**260**
**lung cancers identified**

**75%**
**on-time return rate for incidental findings**

**12.5x**
**growth in downstream exams**

# Addressing Process Limitations to Improve Outcomes

Given the high prevalence rate of lung cancer in Louisiana, the clinical urgency was clear. However, the OLOL team knew that to save lives, they needed to be able to scale their early detection program. And their existing process was not built for it.

At the time, manual processes built around spreadsheets couldn't support the thousands of patients that would need to be put into long-term surveillance to improve diagnosis and treatment rates, especially as imaging volumes grew and incidental findings became more common. This is not an uncommon problem.

Most health systems across the country lack the infrastructure to track and follow incidental findings reliably and longitudinally. The team knew they needed a better model. They needed a platform that could bring consistency, coordination, and clinical intelligence to every part of the workflow.

> ***"I remember asking a patient, 'Were you aware you had this lung nodule a couple of years ago?' And the patient wasn't sure. That moment stuck with me."***
>
> – Dr. Emily Cassidy, Thoracic Surgeon

# Building scalable success for lung nodule management

Eon's longitudinal management program uses a powerful, proprietary AI platform to precisely identify early cancer indicators and automatically develops next steps based on patient risk and health system guidelines. Once the partnership with Eon was in place, the team at OLOL migrated began by migrating their lung cancer screening and incidental findings workflows to Eon's platform, which calmost overnight, transitioned siloed tools and manual processes into a streamlined infrastructure capable of identifying, tracking, and managing patients across the care continuum.

***"Each missed nodule represents a potential stage I lung cancer, and without the proper follow-up in place, there's a certainty of disease progression."***
– Dr. Emily Cassidy

With the platform automatically extracting relevant details from imaging reports and patient records, the team no longer had to read every radiology report manually or search charts for risk factors such as smoking history or prior cancer. The data arrived fully validated and ready for clinical decision-making.

The platform also recommended care pathways tailored to each patient's clinical context and based on evidence-based guidelines. For low- and moderate-risk cases, the team could now activate care plans with a single click, while routing complex or high-risk patients for provider review, keeping clinical oversight focused where it was needed most.

The system also monitored for changes in clinical status or missed care. If a patient failed to return for follow-up or a new imaging study changed the care trajectory, the workflow adapted accordingly and surfaced those cases for timely intervention.

What began as a single-site program has now expanded to seven imaging locations. Centralized tracking and standardized workflows mean consistency and quality across the entire system. Every patient, regardless of where imaging occurs, receives the same level of coordinated, guideline-driven follow-up. And, eliminating manual burden and enabling real-time, adaptive workflows enabled OLOL to manage rising volume of cases without adding staff, while also improving patient outcomes. No only that, their team could focus on what mattered most, delivering life-saving care to more patients, earlier in the disease course.

# Earlier diagnoses, exponential growth, and measurable clinical impact

Since implementing their new system, OLOL has transformed lung cancer care across their health system. They now have a scalable model for early detection, timely intervention, and systemwide growth.

Their team could focus on what mattered most, delivering life-saving care to more patients, earlier in the disease course.

As the program matured, the OLOL team was also able to reduce the size threshold for tracked incidental nodules from 10mm to 8mm, and eventually to 6mm because the infrastructure could support the increase in volume without compromising quality or overwhelming their staff. Capturing more nodules at smaller sizes meant more opportunities for early diagnosis. This was only possible because their infrastructure could support the higher volume without compromising quality or overwhelming staff.

> ***"The volume and stage shift we've seen is way beyond what I thought was possible here in Southern Louisiana."***
>
> – Dr. Emily Cassidy

> ***"We now have the technology that allows us to biopsy lesions that we never would have gone after before."***
>
> – Dr. Emily Cassidy

## Driving Downstream Diagnostic Interventions

Reducing the nodule size threshold, and increasing the number of lung nodules surfaced for further diagnostic intervention, enabled OLOL to perform more robotic bronchoscopies, which meant the hospital system was better leveraging a major capital investment and improving clinical outcomes.

## Impact since Eon implementation

**260**
**Cancers diagnosed**
across LCS and IPN*

**70%**
**Lung cancer found**
in early stages**

**75%**
**Successful IPN**
patient returns***

**3.4x**
Growth in new patients**

**12.5x**
Growth in downstream exams**

**2.2x**
Growth in thoracic clinic****

**207%**
Growth in Ion bronchoscopies**

**~2x**
Growth in thoracic oncology surgeries**

**247%**
Growth in thoracic oncology referrals**

* Since 2021, ** 2021–2024, *** 2024, **** FY22–FY23,

To learn how your hospital system can successful, scalable program to identify lung cancer using incidental findings, watch Dr. Cassidy's webinar, **"From Missed Nodules to 70% Early Detection."**

## About FMOL | Our Lady of the Lake

FMOL Health | Our Lady of the Lake provides care for a full range of illness or injury, including those that are extremely complex, for both pediatric and adult patients. We are a nonprofit, Catholic healthcare ministry based in Baton Rouge with more than 7,500 employees and more than 2,900 active physicians, including more than 600 employed physicians.

We are committed to building a healthy community through excellence in patient care and education. Being our best earns us the trust and loyalty of our community, and our culture of excellence is directly tied to our mission.

We believe in the value of receiving a broad range of healthcare from one trusted provider, and we pursue and provide a comprehensive range of advanced programs, treatments and technologies.

## About Eon

Eon is a healthcare technology company focused on supporting health systems in the identification and ongoing management of patients at risk of cancer and other life-threatening conditions. Powered by condition-specific clinical AI, Eon's longitudinal care management platform extracts incidental findings documented in radiology reports and helps ensure patients receive timely, guideline-based follow-up and remain in appropriate surveillance over time.

More than 70 health systems across over 1,200 facilities rely on Eon and its care management services to scale early detection programs, enable earlier diagnosis and treatment, and support sustained patient engagement — outcomes that also carry meaningful financial implications for health systems.

## Ready to transform your early-stage lung cancer detection?

See how Eon can help your health system achieve results like OLOL's. **Learn more at eonhealth.com**