

# Catching more cancers, earlier, with AI-powered lung cancer screening solution

Baptist Health South Florida and the Miami Cancer Institute rely on PowerScribe Lung Cancer Screening to support their high-volume, high-value community program.

## Challenge

- Need to grow lung cancer screening program through dedicated cancer institute
- Support high-volume community program
- Automate and ensure effective patient tracking and follow-up

## Solution

- PowerScribe Lung Cancer Screening
- PowerScribe 360 Reporting
- PowerScribe Workflow Orchestration
- PowerConnect Communicator

## Results

- 26 proven lung cancers caught and treated—86% at early stages, well above the 16% average
- 2,470 qualified patients scanned over initial 3.5-year period, with 3% needing follow-up testing

## Making sure no one falls through the cracks

Lung cancer is the leading cause of cancer death in the U.S., yet routine screening programs have only just been established in recent years. Baptist Health South Florida's Miami Cancer Institute (MCI) has quickly become a premier destination for lung cancer screening (LCS). To support their successful program, they have adopted a range of AI-powered diagnostic solutions from Nuance. MCI's chief of thoracic imaging, Dr. Juan Batlle, notes that the organization is catching more cancers at their earliest stages, when they're most treatable—and that's having a profound impact on patients.



“Tracking patients is not something you can do with sticky notes and spreadsheets, and manual uploads for a substantial program like ours just don’t make sense. You need a way to streamline and automate reporting, which Nuance does for us.”

**Dr. Juan Batlle**

Chief of Thoracic Imaging  
Baptist Health South Florida and the Miami Cancer Institute

Dr. Juan Batlle was born and raised in Miami. After completing his education in Boston, he found his way back to Florida, where he now is the chief of thoracic imaging at Baptist Health South Florida and the Miami Cancer Institute. MCI takes a multidisciplinary approach to treating patients with all forms of cancer, but Dr. Batlle notes he takes a special interest in lung cancer.

“Lung cancer is the leading cause of cancer death in the United States,” he explains. “Yet we have had no recognized screening program—unlike prostate, breast, and colon cancers.” The seeds of change were sown, however, around 2010, when a research trial revealed a significant mortality benefit to annual screening for smokers, particularly when the screening was combined with smoking cessation programs.

So compelling were the results from this trial that Dr. Batlle and the MCI team began the process of creating their own lung cancer screening program, underscored by three key objectives:

1. Catch cancers early enough to have a positive impact on outcomes.
2. Achieve year-over-year program growth.
3. Make sure no one falls through the cracks.

To address the first two objectives, Dr. Batlle explains that the team adheres to the CMS-specific parameters for screening eligibility: the program is designed for people who have a minimum 30-pack-per-year smoking history, have not quit smoking within the past 15 years, and are aged 55-80. “For self-pay patients in this group, we offer our lung cancer screening for \$35 per scan. The accessible price point is important, otherwise you’re not doing anyone any favors. You would have done all of the work to set up the program, but you wouldn’t have anyone using it.”

As for ensuring no one falls through the cracks, MCI relies on PowerScribe Lung Cancer Screening to underpin their comprehensive LCS program, further supported by a combination of Nuance radiology solutions, including PowerScribe 360 Reporting, PowerScribe Workflow Orchestration, and PowerConnect Communicator.

**PowerScribe Lung Cancer Screening offers an end-to-end workflow solution for MCI**

According to Dr. Batlle, these technologies are the backbone of this program for a variety of reasons, not the least of which is the fact that MCI’s program quickly ramped up to handle as many as 1,800 cases per year—one of the busiest programs in the nation. “You need to track eligible patients, even before their CT scan, and a way to enable communications between the patients and the nurse navigators managing the program. That way, when a patient does arrive for their scan, we can look in the database and find their smoking history, demographics, and so on. It also gives us a way to connect to pathology, if that’s needed, and to manage any follow-up communications,” he says.

As an example, PowerScribe Lung Cancer Screening automatically alerts MCI’s nurse navigators if a patient is due for a follow-up but has not made an appointment. “It’s a good way to make sure no one is falling through the cracks,” he says. Further, MCI relies on the solution to track patient results, send letters to patients, and communicate with referring physicians about their patients’ scans.

Likewise, the Nuance solution supports MCI in their cancer registry reporting efforts, a program component that is required by Medicare. “Tracking patients is not something you can do with sticky notes and spreadsheets, and manual uploads for a substantial program

“You need a real system that’s HIPAA compliant, can talk to your EHR, accurately renders the radiologist’s narrative, and keeps all reports and imaging together. Nuance is the glue that keeps all of this together for us.”

**Dr. Juan Batlle**

Chief of Thoracic Imaging  
Baptist Health South Florida and the Miami Cancer Institute

like ours just don’t make sense. You need a way to streamline and automate reporting, which Nuance does for us,” notes Dr. Batlle. He goes on to say: “You need a real system that’s HIPAA compliant, can talk to your EHR, accurately renders the radiologist’s narrative, and keeps all reports and imaging together. Nuance is the glue that keeps all of this together for us.”

PowerScribe 360 Reporting, PowerScribe Workflow Orchestration, and PowerConnect Communicator have also supported Dr. Batlle and the other radiologists at MCI as they prioritize worklists, collaborate with colleagues, interface with patient data from the EHR, and create diagnostic reports.

Overall, Dr. Batlle notes that he and the team at MCI are very happy with how the Lung Cancer Screening program has progressed, and he is proud that in the first three and a half years, they found and treated 26 proven cancers, after scanning nearly 2,500 eligible, qualified patients. The vast majority of these cancers were in their earliest stages, which, according to Dr. Batlle, “inverts the therapy dynamic in favor of the patient. Most of these cancers have been caught early enough to be surgically cured, which is not typical of lung cancers.”

By combining these screening efforts with smoking cessation programs, Dr. Batlle is optimistic for what the future holds, particularly in light of the program’s ability to find cancers earlier, when they’re most treatable. As such, he looks forward to growing MCI’s Lung Cancer Screening Program. “It is great to be a part of the Miami Cancer Institute, and to continue offering excellence to our patients and the community.”

---

**About Nuance Communications, Inc.**

Nuance Communications, Inc. is a leading provider of voice and language solutions for businesses and consumers around the world. Its technologies, applications and services make the user experience more compelling by transforming the way people interact with devices and systems. Every day, millions of users and thousands of businesses experience Nuance’s proven applications. For more information, visit [www.nuance.com/healthcare](http://www.nuance.com/healthcare) or call 1-877-805-5902. Connect with us through the healthcare blog, [What’s next](#), [Twitter](#), [LinkedIn](#) and [Facebook](#).

---