# HACKENSACK UNIVERSITY MEDICAL CENTER

## CUSTOMER PROFILE: Synapse® Enterprise Imaging
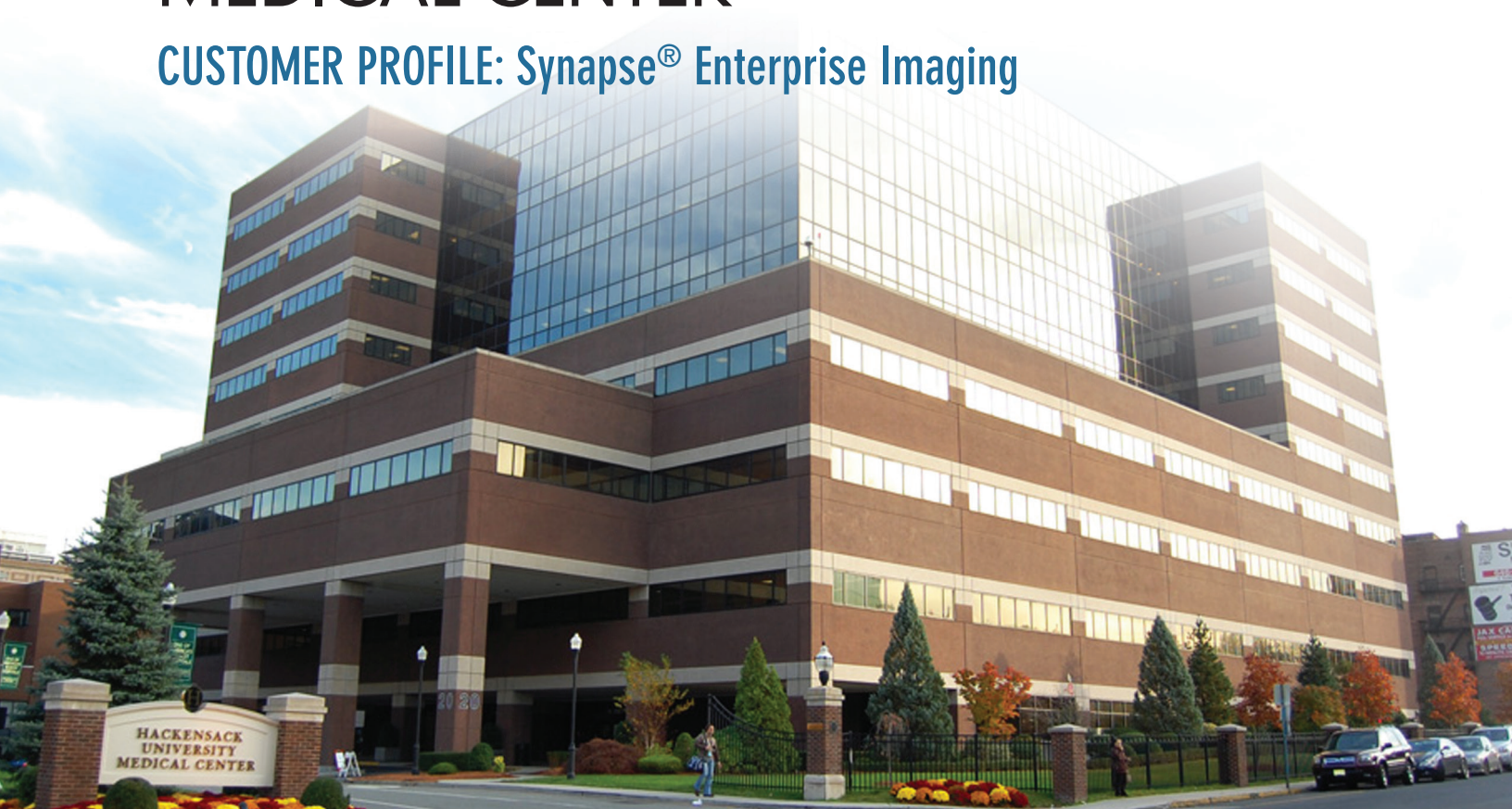
## Server-side PACS and Remote Radiology Training Help Hackensack University Medical Center Successfully Treat COVID-19 Patients

Founded in 1888 with just 12 beds, Hackensack University Medical Center (HUMC) was the very first hospital in Bergen County, New Jersey. Today, this nonprofit, teaching, and research institution has grown to become the largest provider of inpatient and outpatient services in New Jersey. The medical center is part of Hackensack Meridian Health, which has more top-ranked hospitals than any system in New Jersey according to U.S. News and World Report.

New Jersey is among the U.S. states that have been hardest-hit by the COVID-19 pandemic. In fact, HUMC was at the epicenter of the COVID-19 outbreak in the northeast. Throughout the pandemic, Hackensack Meridian Health has implemented a number of initiatives to combat the havoc wreaked on the state of New Jersey, including the opening of the state's first COVID-19 recovery center, the development of a rapid-response coronavirus test, and more.

But perhaps the most noteworthy accomplishment came on April 28, 2020 when HMUC announced it successfully treated and discharged its 1,000th COVID-19 patient.

Hospital leadership believed achieving this milestone provided a much-needed dose of hope and optimism to both staff and the community. However, they also realized that the fight against COVID-19 was far from over. As trailblazers during this unprecedented time, it was imperative for HUMC to remain a step ahead in battling the virus. Even more had to be done to protect the health and safety of New Jersey citizens as well as the hospital staff. Ultimately, technology would prove to be one powerful weapon in the arsenal of this awe-inspiring hospital.

## Safety Concerns Speed up Server-side PACS Project

Dr. Sean D. Pierce is Chairman of Radiology at HUMC. Charged with overseeing radiology across HUMC, Dr. Pierce understood the need for his radiologists to continue delivering care—which includes reading and interpreting patient exams and creating care plans—during the daunting days of the pandemic. However, he also knew they needed to do it safely and in compliance with social-distancing mandates.

A key component of any health system's radiology program is the ability to share patient images and data across the enterprise. Prior to the start of the pandemic, HUMC was in the process of replacing their legacy PACS system and implementing Synapse® Radiology PACS, Fujifilm's server-side image rendering technology.

One of the strengths of utilizing server-side rendering technology is that radiologists are no longer tied to specific reading rooms or workstations. Rather, they can access exams from anywhere they have internet access. The timing of the pandemic with the deployment of Synapse PACS positioned Hackensack Meridian Health to leverage their new technologies for their radiologists on day one.

Radiology reading rooms are close quarters and were never designed to fit into new social distancing guidelines. Recognizing the need to reduce the staff headcount on campus while maintaining high quality patient care, Dr. Pierce decided to speed up HUMC's Synapse PACS implementation so he could send his team home.

"We needed to keep our staff safe and healthy, and since Synapse PACS performs as well at home as it does in the hospital, we accelerated our timeline to transition the entire radiology team to remote reading capabilities," said Dr. Pierce.

## Addressing Challenges for a Smooth Transition

A very high-volume practice, HUMC's team of 40 radiologists read up to 400,000 imaging exams annually. With that kind of activity, it was critical to make the transition from their legacy system to Synapse PACS as smooth as possible.

"Moving to a more modern, web-based server-side rendering PACS system was something we'd been looking to do for quite some time," said Dr. Pierce. "There was a good deal of anticipation and excitement about it. However, we did not expect to try to do this during a pandemic."

Despite experiencing a few hurdles that are expected with any implementation, the transition to Synapse PACS was relatively smooth.

**"During the bulk of the implementation process, we really felt the strength of Fujifilm in terms of support and their ability to quickly respond to our concerns and requests, as well as concerns and requests on the part of our technical staff, our technologists, and our IT people," said Dr. Pierce.**

With Synapse PACS up and running, HUMC's radiologists were deployed to read remotely from home—minimizing their exposure to COVID-19 without losing their ability to get the job done effectively.

"In fact, I think what we have experienced is the ability to read in our home environments is equal if not superior to what we were able to do when we were located in the hospital," said Dr. Pierce.

Dr. Pierce's home reading station

# Hackensack University Medical Center

## Virtual/Hybrid Training Supports Rapid Adoption

Learning to use a new PACS system, under a tight timeline, during a global pandemic is a huge adjustment.

In the best of times, typical customer training often requires in-person sessions and poses a number of challenges including logistics, time, and overall cost. Dr. Pierce was confident that Fujifilm addressed all of these pain points through its unique training platform, Synapse® Learning Cloud 360 (SLC360).

Using proven learning methods that support product adoption and sustainment—two foundational elements for successful organizational change—SLC360 uniquely pairs coaching support with autonomous learning, helping to ensure organizational proficiency and success with Synapse PACS.

So when HUMC found itself in a highly unusual situation—going live on a new PACS system with a fully remote radiology staff —the staff was encouraged to take full advantage of this innovative vendor-developed training.

Thorough and fast training was paramount to ensure accurate and swift diagnoses for both COVID-19 and non-COVID-19 patients. Hackensack's radiology team embraced SLC360, utilizing every module of the training, in addition to having on-site support from Fujifilm.

"Even though some of our radiologists have had some experience working with Synapse previously, through the learning modules they were picking up on tips and tricks that were very constructive," said Dr. Pierce.

Modules included web-based training (WBT) with interactive simulations and role-based practicums; instructor-led training (ILT); and quick-reference guides that directly compliment the WBT and ILT curricula. In addition, Fujifilm's SLC360 gave the Hackensack team hands-on experience with user database (DB) and logo setup, tracking and analytics reports, and adoption coach development.

"Fujifilm's virtual training served as a springboard for asking additional questions and pursuing new ways in which we could be more effective," said Dr. Pierce. "Our radiologists who elected to really explore (SLC360) in that fashion were really impressed."

Moreover, HUMC's technologists who may not have had the benefit of interacting with Synapse previously found the training to be a strong foundation.

Overall, the core focus of the training plan to support rapid Synapse PACS adoption and sustainment across the organization was successful!

## Reaping the Rewards of Technology and the Power of Partnership

Since the installment of Fujifilm's Synapse PACS, HUMC has experienced a number of benefits in terms of workflow and efficiency.

"One of the clear benefits of moving to a server-side PACS system is flexibility," said Dr. Pierce. "It requires a fairly minimal footprint on an infrastructure, which strategically was appealing to us and also imperative to our long-term success."

What's more, during the pandemic, Synapse PACS enhanced safety for the hospital's radiologists because the technology made working from home possible.

Today, HUMC's radiologists are leveraging Synapse to the fullest and enjoying expanded capabilities.

"Our radiologists are exploring the capacity to do some of their own image processing via integrated applications and pushing the limits of how server-side rendering reacts and responds in a remote environment," said Dr. Pierce.

On another positive note, Dr. Pierce says that the Fujifilm support team and trainers are listening to feedback from his radiologists. The company is open to their ideas on improvements that might be incorporated into future product development.

"I've been very impressed with the Fujifilm team in terms of capabilities, knowledge and willingness to interact and really engage with our radiologists," said Dr. Pierce. "Our relationship with Fujifilm is a partnership that continues, and one that that we highly and sincerely value."

**Click to learn more about:**
**Hackensack Meridian Health**
**Fujifilm's Synapse Enterprise Imaging Portfolio**
**Fujifilm's SLC360 Training Platform**

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