SUNY DOWNSTATE MEDICAL CENTER

CASE STUDY: Synapse® Enterprise Imaging
THE CHALLENGE: Consolidate Data in an Image-enabled EMR

Serving Brooklyn’s 2.5 million residents, State University of New York Downstate Medical Center (SUNY Downstate) is a mecca of both healing and learning. The institution’s three-pronged mission includes patient care, physician education and medical research. As if that were not a tall enough order, advancing that mission requires mining, organizing and managing data on a truly massive scale.

That’s why several years ago, SUNY Downstate’s leadership set out to consolidate all patient data—with automated data capture whenever possible—in its EMR.

The over-riding objective of the project was to better facilitate care, teaching and research—while also providing its physicians and researchers with the ability to collaborate with outside healthcare organizations and entities in the region.

“The whole idea is that health information should follow the patient wherever the patient goes to receive care, whether within the SUNY health system or outside it,” said Dilip Nath, MBA, deputy CIO and assistant vice president at SUNY Downstate.

At first, the task of consolidating enormous amounts of patient data, the consolidation task of enormous amounts of patient data seemed daunting—especially since SUNY Downstate was operating with a homegrown RIS, PACS and imaging order-entry system. It was time to upgrade those systems first if the institution was ultimately going to realize its goal of automating and consolidating data management in an image-enabled EMR.

THE SOLUTION: Flexible, Robust Technology plus Superior Customer Support

In 2014, SUNY Downstate’s IT team began surveying the many IT vendors with expertise in imaging systems. While several vendors offered solid technological solutions, the IT team was seeking a partner they could trust.

After all, the hospital had over 60 clinical systems—many still paper-based. For a successful EMR consolidation, the hospital needed to know it could rely on their vendor for highly attentive customer support.

“Everybody has the technical skills. They all have solutions,” said Roy Sookhoo, CIO at SUNY Downstate. “What sets Fujifilm apart, from our experience, is their partnership with us. Rather than just supply us with a tool, they’ve been more collaborative with us.”

By 2015, SUNY Downstate had selected and installed Fujifilm’s Synapse Radiology PACS, Cardiology PACS and RIS—with approximately 50% of the systems going live in 2016.
Next, the team began building a user-friendly interface connecting Synapse PACS/RIS with both the EMR and a partner regional health-information organization (RHIO), Manhattan-based Healthix, along with a second RHIO serving another part of New York.

The team began with radiology and cardiology images and information, planning to fold in other clinical departments—including those producing non-DICOM images—later on.

“We have medical images all over the place, and we had more systems for handling them than we needed,” said Nath. “It was sometimes very difficult to find an image. It was chaos.”

As the overarching idea was to make all medical images easy to find and access for all credentialed clinicians, Synapse VNA was the logical next install.

With Synapse VNA, physicians would not have to concern themselves about where a digital medical image is stored or how to access it securely—the robust technology solution took care of all that.

“The goal was to give clinicians one viewing pane in which they can see labs, images, clinical notes, prescriptions, everything they need,” said Sookhoo. “Fujifilm offered a solution that could give us the interoperability we wanted, bringing all clinical information within the interface of the EMR.”

**RESULTS & NEXT STEPS: Better Productivity, Collaboration and Care**

Thus far, the results from SUNY Downstate’s VNA implementation are impressive, and include more productive clinicians, enhanced collaborations and better patient care. Looking ahead, SUNY Downstate hopes to bring in additional datasets from siloed radiology and cardiology systems into the VNA, followed by information within obstetrics, gastroenterology and other departmental IT systems.

The consolidated, automated and image-enabled EMR makes standardization possible, which in turn, ensures optimal care for all patients.

“When you standardize, you help clinicians work better,” said Mafuzur Rahman, MD, vice chair of the department of medicine and CMIO. “They know what to do, whom to call, how to look something up. Workflow is improved. Clinicians provide care better, quicker and with less expense.”

The IT team believes the future looks bright, thanks to Synapse VNA.

“Once we have many providers with everything at their fingertips, they will champion the project, telling other providers how valuable these tools are,” said Nath. “The ability to read other facilities’ images—and have them read ours—is an important opportunity for us. We want to do more cross-institution collaboration in an effort to make care portable for the patient.”
About Fujifilm

FUJIFILM Medical Systems U.S.A., Inc. is a leading provider of diagnostic imaging products and medical informatics solutions to meet the needs of healthcare facilities today and well into the future. From an unrivaled selection of digital x-ray systems, to the Synapse® brand of PACS, RIS and cardiovascular products, to advanced women’s health imaging systems, Fujifilm has products that are ideal for any size imaging environment. FUJIFILM Medical Systems U.S.A., Inc. – Endoscopy supplies high quality, technologically advanced endoscopic imaging solutions and devices to the medical field. TeraMedica Division delivers healthcare informatics, and is the leading provider of vendor neutral, enterprise-wide solutions for unrestricted medical image management. FUJIFILM Medical Systems U.S.A., Inc. is headquartered in Stamford, CT. For more information please visit www.fujimed.com and www.fujifilmendoscopy.com.

About SUNY Downstate Medical Center

SUNY Downstate Medical Center, founded in 1860, was the first medical school in the United States to bring teaching out of the lecture hall and to the patient’s bedside. A center of innovation and excellence in research and clinical service delivery, SUNY Downstate Medical Center comprises a College of Medicine, College of Nursing, College of Health Related Professions, a School of Graduate Studies, School of Public Health, University Hospital of Brooklyn, and a multifaceted biotechnology initiative including the Downstate Biotechnology Incubator and BioBAT for early-stage and more mature companies, respectively.

SUNY Downstate ranks twelfth nationally in the number of alumni who are on the faculty of American medical schools. More physicians practicing in New York City have graduated from SUNY Downstate than from any other medical school.