



The math and motivation behind upgrading from a single slice to the SOMATOM Definition AS 64 CT system for a Critical Access Hospital

Community Memorial Hospital

Case Study

www.usa.siemens.com/healthcare

SIEMENS



Community Memorial Hospital

Key Benefits



Clinical:

Outstanding image quality including angiographic studies combined with dose-reduction features designed to help protect patients from unnecessary dose.



Workflow:

Comfortable 78-cm gantry allows for faster patient positioning and comfortable imaging even for the most challenging patients.



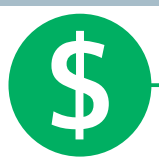
Financial:

Peace of mind of investment in an easily upgradeable scanner featuring a small footprint for easy siting.

A 25-bed, critical access hospital in Staunton, IL, Community Memorial Hospital has a small team of experienced physicians offering general surgery, family practice, internal medicine, and pediatrics to its community. The hospital's doctors are supported by a variety of specialists who either provide outpatient clinic services and diagnostic testing or are available for expert consultation.

In fact, the hospital works with an outside radiology group, which includes radiologists who read onsite at Community Memorial four half-days a week and are available to read remotely 24 hours a day/seven days a week. In recent years, both the radiologists as well as Community Memorial's executives have recognized the need to upgrade the hospital's single-slice CT scanner.

The SOMATOM Definition's upgradeability was key in moving from a single-slice to a 64-slice system.



“The biggest advantage has been speed. It literally takes longer to get the patient positioned on the table than it does to actually do the exam. It takes just seconds. And the patients really like the openness of the system. The whole experience has been very positive, right from the beginning.”

Wendy Webster, Radiology Manager
Community Memorial Hospital



Offer More Services, Improve Satisfaction

“It served our basic purposes, but it was very limited in the type of reconstructions it could do and in the quality of our PE studies,” says Wendy Webster, radiology manager at Community Memorial Hospital. “We wanted to be able to perform CT angiograms, and we knew we needed to upgrade our equipment in order to do that.”

And although the hospital does not have issues recruiting and retaining physicians, it was concerned about the overall satisfaction of its medical staff. “We knew the system wasn’t going to serve our needs into the future,” says Sue Campbell, chief executive officer of Community Memorial Hospital. “We have cardiologists who visit here and they encouraged us to improve our CT scanning capabilities, as did our radiology group. Not only would our physicians be happy with additional imaging capabilities, but we could improve our services to our patients.”

The executive team, which included Webster, Campbell, and a team leader from the Radiology Department (Joanne Baum), began planning for about two years to make the upgrade from the single-slice scanner. The next step was to determine where to upgrade to—what would meet the clinical needs of physicians and patients but still be cost appropriate for this small, critical access hospital?

Adaptability to Existing Space

Webster performed a comprehensive comparison of vendors and systems, including what those systems would cost to install and operate. "It basically came down to footprint," says Webster. "The SOMATOM Definition AS did not require hard construction to be installed in our CT scanning room. In particular, the system could be air cooled, which meant we didn't need to modify the room."

The SOMATOM Definition™ AS is the world's first adaptive spiral CT system. For many hospitals, it offers a unique advantage: it can be air or water cooled. This cooling option enables the system to better adapt to existing infrastructure, thus saving costs associated with room modifications and construction.

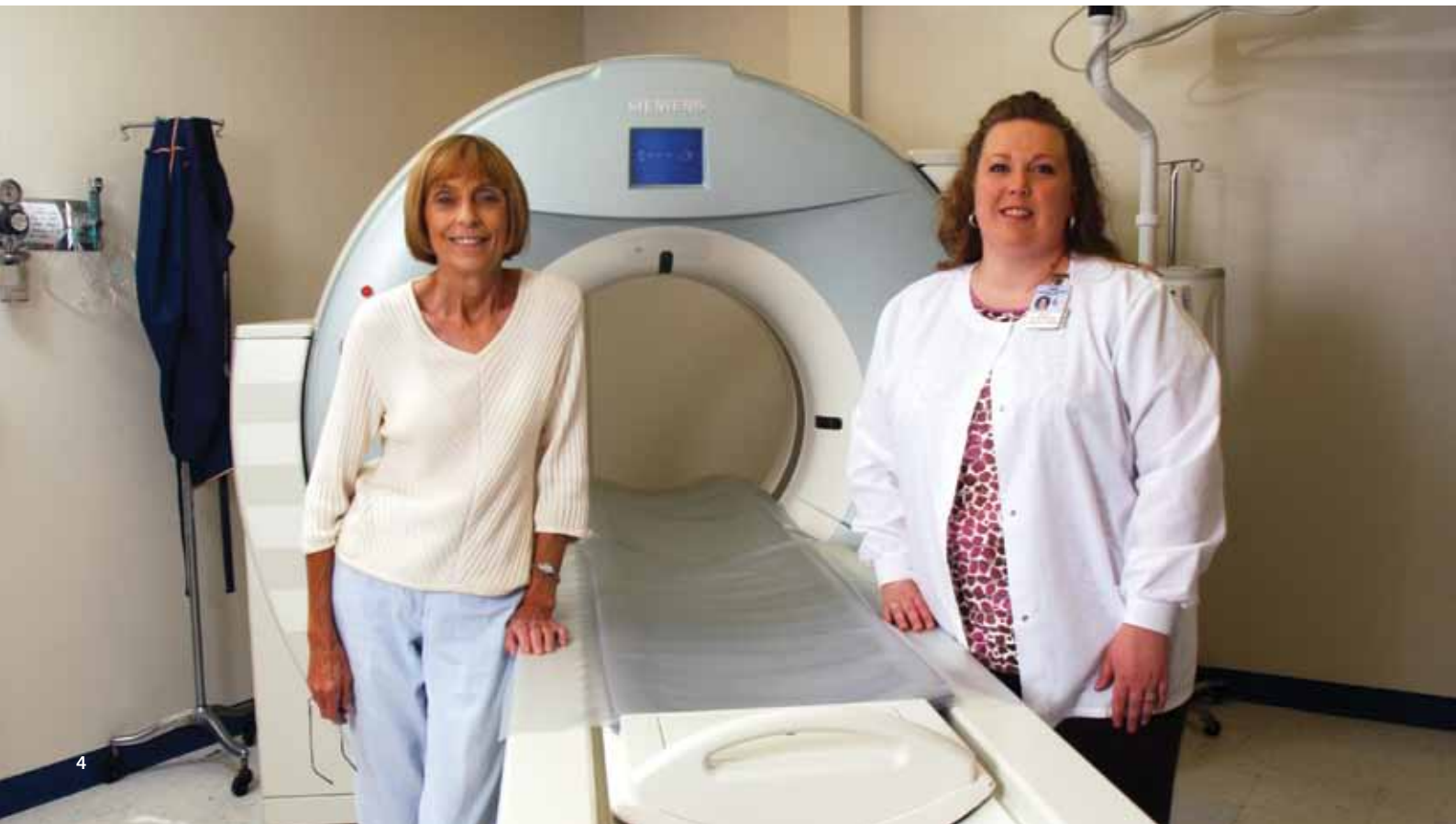
An Upgradeable 64 that Aids in the Reduction of Dose

In addition, the SOMATOM Definition's upgradeability was key in moving from a single-slice to a 64-slice system. "We were concerned that if we went with a lower-slice system, we'd need to upgrade in maybe another five years," says Campbell. "What Siemens offered fit our needs perfectly."

For many facilities, it can take some time to get capital expenditures approved. And, once they are approved, it's important to obtain the latest imaging technology in order to prevent technological obsolescence. Community Memorial Hospital, for example, had its single-slice CT scanner for nine years and will likely stay with its SOMATOM Definition AS for a similar length of time.

Upgradeability can, therefore, also be an important part of the buying equation, and, unlike many other scanners, the SOMATOM Definition AS 64 can actually be upgraded to a 128-slice system. "At this point, I don't know if we'll upgrade to a 128," says Campbell, "but the fact that the system is upgradeable was a very important component of our decision."

The system also features Adaptive Dose Shield technology, which helps to protect the patient from unnecessary dose. It automatically contours and blocks irrelevant areas from receiving dose, further ensuring organ-specific dose reduction.





“We have cardiologists who visit here and they encouraged us to improve our CT scanning capabilities, as did our radiology group. Not only would our physicians be happy with additional imaging capabilities, but we could improve our services to our patients.”

Sue Campbell, Chief Executive Officer, Community Memorial Hospital



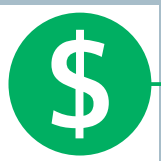
Even More User-Friendly than Expected

Prior to the installation in December 2008, the staff was somewhat apprehensive about making the leap from a single-slice to a 64-slice system. "In terms of the technology, we were concerned about what it would be like to move from a single to a 64-slice system," says Webster, "but the transition was actually much smoother, much easier than we anticipated. The platform is very user-friendly."

The SOMATOM Definition AS uses Siemens unique *syngo*® user interface. "We had another vendor's equipment prior to this installation," Webster continues. "We were pleasantly surprised how intuitive the Siemens system is. It very much follows a logical, sequential order."

Community Memorial Hospital sent two technologists to the Siemens Training Center in Cary, NC, to attend the *syngo* classroom training prior to the installation. Siemens Clinical Education Specialists spent four days onsite training the technologists on the new system and software applications. The hospital has also leveraged Siemens UPTIME Services® Center, which instantly connects callers to Clinical Applications and Technical Service Experts who can help with questions.

"The UPTIME Services Center has been very helpful. With any kind of new technology, you'll always have questions that come up that you won't be able to cover during formal training," says Webster. "The Siemens application team has been extremely helpful with fine-tuning some of our application settings on our CT scanner."



“The SOMATOM Definition AS did not require hard construction to be installed in our CT scanning room. In particular, the system could be air cooled, which meant we didn’t need to modify the room.”

Sue Campbell, Chief Executive Officer, Community Memorial Hospital

The system also features Adaptive Dose Shield technology, which aids in the protection of the patient from unnecessary dose. It automatically contours and blocks irrelevant areas from receiving unnecessary dose, further ensuring organ-specific dose reduction.



Faster Exams, Happier Patients

Since the installation, patient volume has increased by approximately 20 percent.* “We’re able to perform CTAs now and our PE studies are of a much higher quality. And, we’ve noticed our primary care physicians are ordering other types of CT scans,” says Webster. Before, these patients would have to travel for miles in order to gain access to some of the applications that were not provided at Community Hospital. For many, the additional travel was not possible due to fragile health or increased cost.

“But the biggest advantage has been speed,” Webster continues. “It literally takes longer to get the patient positioned on the table than it does to actually do the exam. It takes just seconds. And the patients really like the openness of the system. The whole experience has been very positive, right from the beginning.”

“I’m thrilled to have the SOMATOM Definition AS at our facility,” agrees Campbell. “Siemens has an excellent reputation that is well earned. We’ve been very impressed with the quality of the system and the price is right.”

* Results may vary. Data on file.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products included in this brochure are available through the Siemens sales organization worldwide. Availability and packaging may vary by country and is subject to change without prior notice. Some/All of the features and products described herein may not be available in the United States.

The information in this document contains general technical descriptions of specifications and options as well as standard and optional features which do not always have to be present in individual cases.

Siemens reserves the right to modify the design, packaging, specifications and options described herein without prior notice. Please contact your local Siemens sales representative for the most current information.

Note: Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

Local Contact Information

Siemens Medical Solutions USA, Inc.
51 Valley Stream Parkway
Malvern, PA 19355-1406
USA
Phone: +1-888-826-9702
www.usa.siemens.com/healthcare

Global Business Unit

Siemens AG
Medical Solutions
Computed Tomography
Siemensstr. 1
DE-91301 Forchheim
Germany
Phone: +49 9191 18-0
www.siemens.com/healthcare

Global Siemens Headquarters

Siemens AG
Wittelsbacherplatz 2
80333 Muenchen
Germany

Global Siemens Healthcare Headquarters

Siemens AG
Healthcare Sector
Henkestrasse 127
91052 Erlangen
Germany
Phone: +49 9131 84-0
www.siemens.com/healthcare

Legal Manufacturer

Siemens AG
Wittelsbacherplatz 2
DE-80333 Muenchen
Germany

www.siemens.com/healthcare