

Hancock Medical Center

Hancock Medical Center, located in Bay St. Louis, Mississippi, has served the community's healthcare needs since 1960. The 110-bed facility provides a wide range of specialty medical services, including cardiopulmonary rehabilitation, obstetrics, and radiology. As patient referrals to a variety of specialists continue to increase, the need for high quality, cost-effective image duplication capabilities has increased dramatically.

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Director of Radiology,
Hancock Medical Center

an innovative, new digital film duplication software program—CopyExpress™—developed by VIDAR Systems Corporation and offered by Agfa HealthCare as part of its DigiCopy™ System.

Film Duplication at Hancock Medical Center

In an effort to reduce the number of X-rays checked out of Hancock Medical Center, administrators adopted a new policy that allowed the department to use copies of films in referral situations. Unfortunately, the existing film duplication system in use at the facility delivered poor image quality and limited the types of X-rays that could be duplicated—especially mammography films, which require high image resolution. In addition, the existing film duplication

system could only be operated by trained personnel and required a darkroom for copying, which had limited access.

According to Randy Patterson, director of radiology at Hancock Medical Center, the department's largest challenge was the backlog of films that needed copying and the negative effect it was having on patient satisfaction. “We have only one darkroom to handle the imaging needs of the entire facility, and it was often unavailable for making copies,” Patterson said. “Once the darkroom became available, duplicating films was an ordeal. We had to roll the machine into the room, and then we could only make one copy at a time. The system just wasn't fast enough, and we were having trouble keeping up with demand.”

VIDAR Systems Corporation, the leading manufacturer of X-ray film digitizers, is committed to providing high quality, reliable, and affordable digitizers to meet the needs of healthcare providers worldwide. The company also is committed to promoting an exchange of information that helps healthcare providers improve their delivery of care. In keeping with this philosophy, VIDAR has developed the VIDAR Case History Series to relate the experiences of healthcare organizations that have adopted its line of advanced film digitizers. For new and prospective users, these experiences illustrate how VIDAR's technology can bring quality and value to their institutions and help support the delivery of patient care.

The VIDAR Mission

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As a result, patients often experienced delays in receiving copies of their films and occasionally had to return the next day to pick up duplicates. The shortage of technicians qualified to operate the system also added to the delays. In rare instances, the Radiology Department was forced to check out hard-copy films, which were seldom returned.

Problems associated with the existing system prompted the Radiology Department to look for an alternative method for duplicating films. In order to ensure that the new system met the facility’s needs, department administrators outlined several criteria, determining that the system had to be:

- Fast
- Cost-effective
- Easy to use
- Capable of delivering excellent image quality

A New Approach to Film Duplication

In November 2001, VIDAR Systems Corporation debuted its *CopyExpress* digital film duplication software at the Radiological Society of North America’s annual meeting. The software, which is included in the product offerings of leading systems solution providers such as Agfa HealthCare, FUJIFILM Medical Systems, and Philips Health Care Products, creates high-quality copies of original films using VIDAR’s clinically proven digitizers.

The system enables users to cost-effectively duplicate hard-copy films using a personal computer, *CopyExpress* software, VIDAR’s *DiagnosticPRO™ plus* or *SIERRA™ plus* film digitizer, and a film printer. *CopyExpress* overcomes many of the significant barriers to wet-based film duplication, including poor quality copies, high cost, messy chemicals, and the expense and inconvenience of maintaining a darkroom.

According to Patterson, once the department’s administrators learned about *CopyExpress*, they quickly began an evaluation to determine if it was suitable for Hancock Medical Center. Importantly, the new system met all of the department’s key criteria and did not require the use of a darkroom, spurring the decision to purchase the system.

Image Quality, Ease of Use & Cost Savings

Patterson said it is vital that referring physicians receive copies of the same caliber as original films in order to render accurate diagnoses. The high-quality images delivered by the *CopyExpress* System have



CopyExpress™ Digital Film Duplication System





enabled the Radiology Department to copy every case—even those that in the past could not be effectively duplicated—and original films no longer need to be checked out.

“The largest benefit of the system is the image quality it delivers,” he said. “We asked the radiologists to compare copies created with the *CopyExpress* System against the original films, and they said they wouldn’t have any qualms about reading from the copies. The ability to produce high-quality duplicates allows us to keep our originals in the department, which cuts down on the number of lost films.”

In addition, since incorporating the *CopyExpress* System, efficiency in the radiology department has improved dramatically. The speed at which the department is able to copy films and have them ready for patients has increased, and because the software does not require the use of a darkroom, delays due to darkroom availability have been eliminated. According to Patterson, these benefits translate into improved patient satisfaction.

Importantly, Patterson said that the software is easy to use and can be operated by technical and clerical staff—saving time and improving efficiency. “The entire department uses the system now and can make a copy in about 90 seconds,” he said. “It’s not unusual for us to copy five cases before 10 a.m. Plus you can drop in 25 films at a time, walk away, and come back later to pick them up.”

Hancock Medical Center’s Radiology Department also has experienced cost benefits from using *CopyExpress*—in large part because the system uses multi-fleck film rather than traditional duplication film. “Duplication film is the most expensive you can buy, so we have lowered costs dramatically by switching to multi-fleck film,” Patterson said. “When you combine that with increased department productivity and a reduction in lost films, the *CopyExpress* System is much more economical.”

Improving Efficiency in the ICU

Perhaps the most dramatic change resulting from the department’s adoption of *CopyExpress* has been in the way X-rays from the Intensive Care Unit (ICU) are handled. Previously, X-rays were delivered to the ICU for use by attending physicians conducting patient rounds. Typically, films were returned to the Radiology Department in the late afternoon for reading by a radiologist. The constant shuffling of films between the ICU and the Radiology Department

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made it difficult to know exactly where films were. As a result, X-rays were in constant danger of being lost.

With *CopyExpress*, the Radiology Department simply makes a copy of each X-ray, enabling the physician and radiologist to review films simultaneously. In the past, reports were not completed until evening. Now reports are finished and delivered to physicians by early morning—improving efficiency and patient care.

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CopyExpress Software

The CopyExpress System is a “plug-and-play” digital image duplication system that creates high-quality copies of original films and eliminates the high cost and inconvenience of traditional film duplication.

The system allows users to duplicate hard-copy films using a personal computer, CopyExpress software, a film printer, and a VIDAR film digitizer.

The CopyExpress System, which has received U.S. Food & Drug Administration marketing clearance (510k), prints high-quality copies of original films on either dry laser film or plain paper and provides exceptional grayscale reproduction. Users can view and format images prior to printing, and the system’s network capability allows images to be transported to printers throughout a healthcare delivery system. CopyExpress is compatible with two of VIDAR’s most popular film digitizers, the DiagnosticPRO plus and SIERRA plus, to suit the needs of healthcare facilities regardless of size.

The VIDAR Family of Film Digitizers

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VIDAR Systems Corporation offers a family of award winning, high-quality film digitizers designed for a variety of clinical applications. The image quality of VIDAR’s digitizers has been proven in clinical studies at leading centers around the world. VIDAR’s family of film digitizers serves the PACS, remote primary diagnosis, teleradiology, telemedicine, mammography, and oncology markets and has been selected by more than 100 leading systems solution providers for inclusion in their product offerings. For more information about VIDAR’s medical imaging products and services, call 1-800-471-SCAN or visit www.filmdigitizer.com.



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