



CASE STUDY

WILLIAM W. BACKUS HOSPITAL



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ENHANCING HEALTHCARE DELIVERY WITH CLEARCUBE TECHNOLOGY

Backus Hospital has provided state-of-the-art healthcare to the residents of eastern Connecticut for more than 111 years. The 213-bed, acute care community hospital is the primary source of health services for nearly a quarter-million people. Since its founding in 1893, the non-profit hospital has continually expanded by providing new programs, implementing the latest technologies, and forming strategic alliances with other healthcare organizations and providers.

As a rapidly growing regional hub, Backus Hospital needs to maintain its high level of patient care while ensuring that the technology infrastructure enhances daily workflow. The hospital was searching for a computing solution that would allow it to run the hospital efficiently and economically. Its ideal solu-

tion would be: Secure in high traffic areas, non-intrusive at the patient bedside, considerate of sterilization issues, and compatible with both the hospital's Picture Archiving Communication Systems (PACS) as well as its Health Care Information System (HCIS).



THE CHALLENGE

To find an efficient, cost-effective, and space-saving computing solution that would improve security, maintain a sterile environment, and complement critical technology systems.



THE BENEFIT

Increased security of physical and data assets, facilitated easy support and maintenance, saved space, and enhanced existing technology infrastructure.



THE SOLUTION

Deploy ClearCube's PC Blade solution in patient and operating rooms throughout the hospital.

THE CLEAR CHOICE FOR HOSPITAL COMPUTING

Backus Hospital evaluated traditional PCs, thin clients, and PC Blade technologies. While traditional PCs were powerful enough to meet the hospital's needs, they were ruled out in operating and patient rooms due to both space considerations and sterilization issues.

The fans in the PCs circulate airborne contaminants around the rooms, potentially spreading contagious disease or infection. In addition, operating rooms are scrubbed down after each operation, leaving traditional PCs susceptible to damage by cleaning solutions and physical contact. In patient rooms, work space at the bedside is limited, and the noise and heat generated by the PC fans reduced patient comfort.

Thin clients solved many of the hospital's space concerns, but they were found to be non-compliant with HCIS, a full range of software applications for health care facilities that is an important component of accurate diagnosis, treatment, patient care, and billing.



The Backus Hospital IT team also evaluated other blade technology solutions but found that ClearCube's technology provided the superior performance required to meet the hospital's computing needs. After a detailed analysis, Backus Hospital chose the ClearCube PC Blade solution, which met its needs for sufficient processing power, minimal space/heat/noise incursion, and maximum software compliance. ClearCube delivers fully functional Intel®-based P4TM computing to the end user's workstation from a secure, centralized location.

The traditional bulky PC box is removed from the patient's bedside and replaced with a small User Port about the size of a VHS tape. At the centralized location, ClearCube's rack-mounted PC blades deliver full on-demand computing to end users anywhere in the hospital as well as at off site facilities.

Additionally, the ClearCube Management Suite efficiently manages the entire solution and allows a single technician immediate access to all of the hospital's computers, facilitating lower total cost of ownership.

CLEARCUBE DEMONSTRATES HEALTHY BENEFITS

The ClearCube solution increased security of physical and data assets throughout Backus Hospital, helping minimize the theft of both the hardware and patient information. IT managers can also "lock out" end users from connecting storage devices (e.g., floppy drives, thumb drives), thus preventing unauthorized software uploads and patient data downloads.

In addition, the User Port that sits at each workstation has no moving parts or fans, thus minimizing noise and heat. In operating rooms the User Port is attached to the back of a flat screen monitor, and in patient rooms the User Port is attached to a mounting arm, saving significant space in each location.

"Selecting technology is a very difficult process that must be balanced with user need and the total cost of ownership. For the Operating Room arena, we wanted to deliver a technology robust enough to handle any application, meet the standards of epidemiology and be remotely supported."

Ed Fisher, CIO
The William W. Backus Hospital

The ClearCube solution is the first choice in infectious disease centers and operating rooms, and fits perfectly in Backus Hospital's sterile environments.

IT personnel appreciate that they do not have to enter sterile areas to fix a PC. Instead, they can remotely diagnose any issues and if necessary, hot swap to a spare blade in a matter of seconds. Since the User Port does not generate heat or require cooling fans, it can be locked away in a plastic case enabling cleaning staff to sterilize the hardware without fear of damaging the equipment.

CLEARCUBE POPULAR WITH DOCTORS AND NURSES

The ClearCube solution is compatible with both the Stentor PACS system and Meditech Software (HCIS), critical components of Backus Hospital's technology infrastructure. Before the hospital installed Stentor on the ClearCube system in the operating room, physicians had to view plain film — a cumbersome and expensive process.

The physician had to request the film to be brought to the operating room, then find and hang the appropriate film. With the PACS system installed on the ClearCube system, physicians now have immediate access to their images on flat screen monitors without the annoyance of a cumbersome PC at their feet.

The ClearCube solution at Backus Hospital has been extremely popular with both the physicians and the nursing staff. Because Meditech is the chosen healthcare information system at Backus Hospital, it was imperative that they had a smooth installation on ClearCube blades. "ClearCube passed the test with flying colors!" said Kevin Fredrick, Manager of Technical Support.

Through its optimal blend of powerful computing, minimum footprint, high security, and elimination of noise/heat/air circulation, ClearCube was able to meet all of the requirements for Backus Hospital. ClearCube's compatibility with critical software programs and low total cost of ownership has made it the ideal solution.

"The ClearCube solution has been great wherever we have deployed it."

**Jere Roché,
Network Services Team Leader Clark Memorial Hospital**

