



University Hospital Uses Black Box AV-over-IP Solution to Enhance Sharing of Patient Information

- **Industry:** Healthcare
- **Client:** University Hospital
- **Region:** Denmark
- **Solution:** AV over IP Distribution
- **Product:** MediaCento

BACKGROUND

Optimizing doctors' and nurses' time is a global problem throughout many hospitals. According to khn.org, "It's not unusual for primary care doctors' appointments to be scheduled at 15-minute intervals. Some physicians who work for hospitals say they've been asked to see patients every 11 minutes."¹

In a similar vein, at a large university hospital in Denmark, the doctors and nurses were pressed for time. They needed to optimize their workflow so they could move quickly from one patient's room to another. They didn't have time to walk back to the nurses' station between patients to view information about the next patient on the screen located at the nurses' station or pick up a paper chart. The doctors and nurses wanted to spend more of their valuable time talking with the patient. So they wanted to be able to quickly access the detailed information they needed to direct patient care while they were in the room with the patient.

THE CHALLENGE

At this hospital, the doctors and nurses decided to carry a portable PC to each patient's room and manually bring up the patient's information on the screen. But, still, this cut into the

time the doctor or nurse could spend actually interacting with the patient. They wanted to be able to view content on screens located in patient rooms without fumbling with or being distracted by operating a PC.

Clearly, the hospital needed a system that could easily convey detailed patient information or general information that applies to all patients on screens throughout many rooms in each hospital department. Ideally, the system would be able to display the same screen in all rooms, or individual screens for each patient.

To begin with, the system required signal display plus extension to disseminate the information to patient rooms efficiently. Plus, the interface to the HD screens had to be compatible with both HDMI and DisplayPort to support every display in the patients' rooms. The system also needed to run over a CAT5 network to work with their currently installed CAT5 cable and network.

The system integrator working with the hospital reached out to Black Box because the system integrator had a previous working relationship with a specific salesperson who now works for Black Box. The integrator knew that the salesperson could provide a targeted solution that meets the hospital's requirements.

THE SOLUTION

Black Box recommended MediaCento Transmitters and Receivers because they support HDMI over IP extension, enabling installers to place the end-user displays in patient rooms distant from the source PCs at the main nurses' stations. This solution delivers the requested HD display resolution and is compatible with both HDMI and DisplayPort interfaces. Because the solution can be controlled remotely,



it is flexible enough to change the source image from the transmitter located in the nurses' stations, and manage all screens from MediaCentro Controllers. Black Box also recommended Gigabit Managed Ethernet Switches to complete the installation. In addition, the customer purchased an extra transmitter and switch for fail-safe redundancy, so they would have the extra equipment on-site with no wait time to swap out equipment in the unlikely event that one of the components might fail.

RESULTS

At this hospital today, doctors and nurses do not have to walk to the nurses' station to view patient information or carry a portable PC to take to patient's rooms to view patient information inside the patient rooms. The hospital now has a MediaCentro system that optimizes how patient information is displayed on screens in patient rooms. While they are in a patient's room, doctors and nurses can view content originating from three nurses' stations. Each nurses' station supports 16 to 20 screens located in patient rooms.

This makes it easy to convey important information throughout many rooms in each hospital department. This flexible system can display the same screen in all rooms, or individual screens for each patient.

The MediaCentro solution optimizes doctors' and nurses' time and streamlines their workflows. The solution's HDMI and DisplayPort video ports allow every critical screen to connect to the system with no complications. The medical staff is pleased to report that they now have the resources they need and a few more precious minutes to focus on individual patient care.

The hospital was impressed with how fast Black Box was able to provide this solution. The time from when the solution was proposed to the point of purchase was only about two weeks. Because the customer was very happy and excited about this solution, it will serve as a test case for future planned expansion within this hospital system.

<https://khn.org/news/15-minute-doctor-visits/>

