

DAS))))
))))Simplified

Auburn Medical Center: 1970s Era Hospital Updated with 100% Wireless Coverage

What is a DAS?

Wireless technologies and devices are rapidly changing the way we work, play and live. Mobility and productivity have improved because of these devices and applications, but challenges exist because service quality can be impacted indoors. RF (radio frequency) signals are blocked by walls, metal structures, and energy-saving glass. Additionally, new building codes mandate that building owners install public-safety wireless system for emergency services like police and fire department. In the past, two separate systems were built to accommodate wireless needs, but now building owners have the choice of one combined DAS (distributed antenna system) for both public safety and commercial cellular, lowering overall cost and leveraging shared infrastructure.

Auburn Medical Center has served the Seattle community for over sixty years. Today, as part of Multi-Care, the main hospital built in 1975 has grown into a 350,000 SF three-building campus. However, facilities designed and constructed decades ago simply had no provisions for accommodating today's wireless technologies. Multi-Care turned to **DAS Simplified**.

The Challenge

Like many hospitals, Auburn Medical is constructed of thick stone, concrete, and other building materials that severely deplete RF signal. Management at Multicare knew they needed to have a DAS for public safety emergency responders, as well as commercial cellular for productivity and convenience- and they were aware that their aged facility provided significant challenges for a successful implementation.



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The Solution

Multi-Care turned to DAS Simplified when they learned of their new EOS Enterprise product for DAS. With **EOS Enterprise**, DAS Simplified provides a design methodology and criteria that are simple and easy to administer. By using pre-made cable assemblies, on-site crews are able to quickly pull them to fixed locations for antennas, such that systems can be installed and turned up in a matter of days.

With traditional DAS installations, rigid 50-ohm cable that is 0.5 inches in diameter is pulled in ceilings and terminated by field technicians. The challenge with this method is that the field termination process is very exacting and prone to error. By pre-constructing smaller (0.337 inch OD) and more flexible cable assemblies in a controlled environment, DAS Simplified technicians are able to provide a 100% guarantee that every cable, connector and antenna works.

In addition, patient disruption in a hospital is something to be avoided at all costs. With DAS Simplified's pre-built methodology, cables are rapidly installed with minimal disruption and fewer open ceiling tiles. Technicians are on site for hours, rather the days

or even weeks required for a typical wireless system.

The **EOS Enterprise** system provided by DAS Simplified guaranteed the required wireless signal strength needed for any device to operate in every corner of Multi-Care's facility, 100% of the time.

The installation was completed by DAS Simplified on time, on budget- and with no change order requests. They submitted and received approval from wireless carriers for the system design, which is imperative since a DAS retransmits the signal that the carriers own. Absent carrier approval, building owners face significant fines by the FCC.

To ensure maximum uptime, DAS Simplified installed a UPS (uninterruptible power supply) to provide the required 12 hours of system performance in case of a black-out, as well as an SNMP-based supervisory tool to ensure 24x7 operation. DAS Simplified's Network Operations Center (NOC) has a direct link, giving them detailed status of the

customer's equipment to meet required building codes.

With a DAS successfully installed at Auburn Medical Center, Multi-Care has earned their spot as one of the **nation's "Most Wired" health care organizations** for the fourth year in a row, according to a survey by Hospitals and Health Networks magazine.

"The planning and coordination that is required to successfully deploy an enterprise DAS system is complex and full of pitfalls. DAS Simplified has the experience to navigate these variables and has consistently provided Multi-Care successful project implementations."

Gordon Wolfe, Network Ops Manager, Multi-Care

Auburn Regional DAS Simplified solution includes:

- AT&T
- Verizon
- Sprint
- T-Mobile
- 150 MHZ Paging
- 450 MHZ Radio
- 700 MHZ Public Safety
- 800 MHZ Public Safety
- 900 MHZ Paging

Warranty & Maintenance:

- One year warranty
 - Remote monitor & Control
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