# GRADY HEALTH SYSTEM DELIVERS DIGITAL HEALTHCARE WITH COMCAST BUSINESS ETHERNET



#### **SITUATION**

Grady Health System
 is one of the largest health
 care systems in Georgia,
 and serves as a level 1
 trauma center in the
 Metro Atlanta area

#### **CHALLENGE**

- System-wide network is built with various technologies from different vendors that present challenges to operate, manage and maintain
- Slow connectivity inhibits ability to embrace modern healthcare services and applications

#### **SOLUTION**

- Comcast Business
   Ethernet Network Service
- Comcast Business Ethernet Dedicated Internet

### **RESULTS**

- High-performance WAN connectivity to support digital healthcare
- Use of single vendor for multiple services manages costs and streamlines operations
- Improved communications focused on patient care
- Foundation to introduce future healthcare technology initiatives

Georgia's Largest Health System Connects 17 Sites; Supports Electronic Medical Records, Digital Medical Imaging and Telemedicine with High Performance Wide Area Network

## 121-YEAR-OLD HEALTH SYSTEM PROVIDES CRITICAL CARE TO METRO ATLANTA PATIENTS

Grady Health System was the vision of Henry W. Grady, editor of the "Atlanta Constitution," who worried about the lack of quality health care for Atlanta's poor. On June 1, 1892, his extraordinary dream came true when the doors to Grady Hospital were officially opened. At that time, Grady Hospital had 110 beds and one operating room with an amphitheater for students and staff.

Grady Health System has grown considerably from its original three-story, 110-bed facility and now stands as one of the largest public health systems in the United States. Its facilities include Grady Memorial Hospital (formerly Grady Hospital) – the largest hospital in Georgia, with a license for 953 beds. It is also a premier level 1 trauma center serving the Metro Atlanta area. In addition, the health system operates six neighborhood health centers, an outpatient pharmacy, Crestview Health & Rehabilitation Center, and Grady EMS, the 911 ambulance service for the city of Atlanta, which responds to more than 100,000 calls each year.

## COMPLEX NETWORK CONFUSING TO OPERATE AND MANAGE, AND EXPENSIVE TO MAINTAIN

Today, Grady is well-recognized throughout Georgia for its trauma center and other innovative programs. As the health system has grown over the years, so too has its supporting network infrastructure and services, which are required to sustain a modern healthcare system. Grady sourced a number of services from different providers – from T1 to Ethernet services – to connect its facilities, which made network management, maintenance and billing extremely complex.

"Grady Health System has been in existence for 100+ years. We've grown tremendously during this time, and our network has also grown to include a combination of technology that spans a century," said Kevin Yearick, Director of Network Services at Grady Health System. "We needed to modernize our network infrastructure across all of our facilities in order to effectively deliver digital healthcare services to all of our patients."

## COMCAST BUSINESS DELIVERS SCALABLE NETWORK CAPACITY TO SUPPORT MODERN HEALTHCARE SERVICES

Grady was already using Comcast Business TV across its facilities. Based on this positive experience – and the fact that Comcast could deliver fiber-based Ethernet services to each location, versus the continued patchwork approach – Grady decided to expand its relationship with Comcast to upgrade its infrastructure.



"The implementation process was simple because Comcast provides fiber connections right to all of our buildings, so we can connect 17 different sites and realize the benefits of EMR and PACS throughout all of our facilities."

Kevin Yearick

Director of Network Services

Grady Health System

Comcast installed an Ethernet Network Service to provide 300 Megabits per second (Mbps) of scalable capacity to Grady's data centers and 50 Mbps connections to 15 other remote sites to enhance connectivity between facilities. Grady also added an Ethernet Dedicated Internet line that provides a 100 Mbps connection to the Internet. As the sole service provider for Grady's vast network footprint, Grady was now also able to reach out to one vendor for support services for improved response time. They also dramatically simplified the billing and vendor management process by using a single vendor for Ethernet and TV services.

Yearick added, "Comcast Business Ethernet Services give us five times more bandwidth than we had before at a low cost, and it helped us to simplify our network infrastructure while streamlining the support services associated with change control, and the other administrative functions, which is important in an organization this large."

Before Comcast, Grady's larger facilities had adequate bandwidth to access and transmit patient's digital records, but it was difficult, if not impossible for its smaller facilities. Now, high-performance Ethernet from Comcast Business is providing network capacity and connectivity for Grady's remote offices to use EMR, PACS and telemedicine programs for its patients. These programs enable real-time transfer of digital medical records and high-resolution radiology files, which help improve the speed of diagnosis and information sharing between Grady healthcare professionals to enhance patient care.

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In addition, professionals at Grady's Marcus Stroke and Neuroscience Center are now able to use a regional PACS system, which lets them to work closely with facilities in surrounding counties – patients' digital radiology files can be sent remotely for diagnosis by leading specialists to see if the patient should be admitted to the Marcus Center. This can reduce or eliminate long trips into Atlanta for patient visits, and expands access to specialists for those in remote areas.

Further, by consolidating data and video services into a single relationship with Comcast through Comcast Business Ethernet and TV services, Grady can more easily manage and grow its network operations over time. In the future, Grady intends to introduce educational content to the patient room television as well as waiting areas, and experiment with other technologies.

"We really don't know what new digital healthcare technology will be coming down the pike, but with Comcast Business, we know we have the right service partner in place to take advantage of it, whatever it may be," added Yearick.