

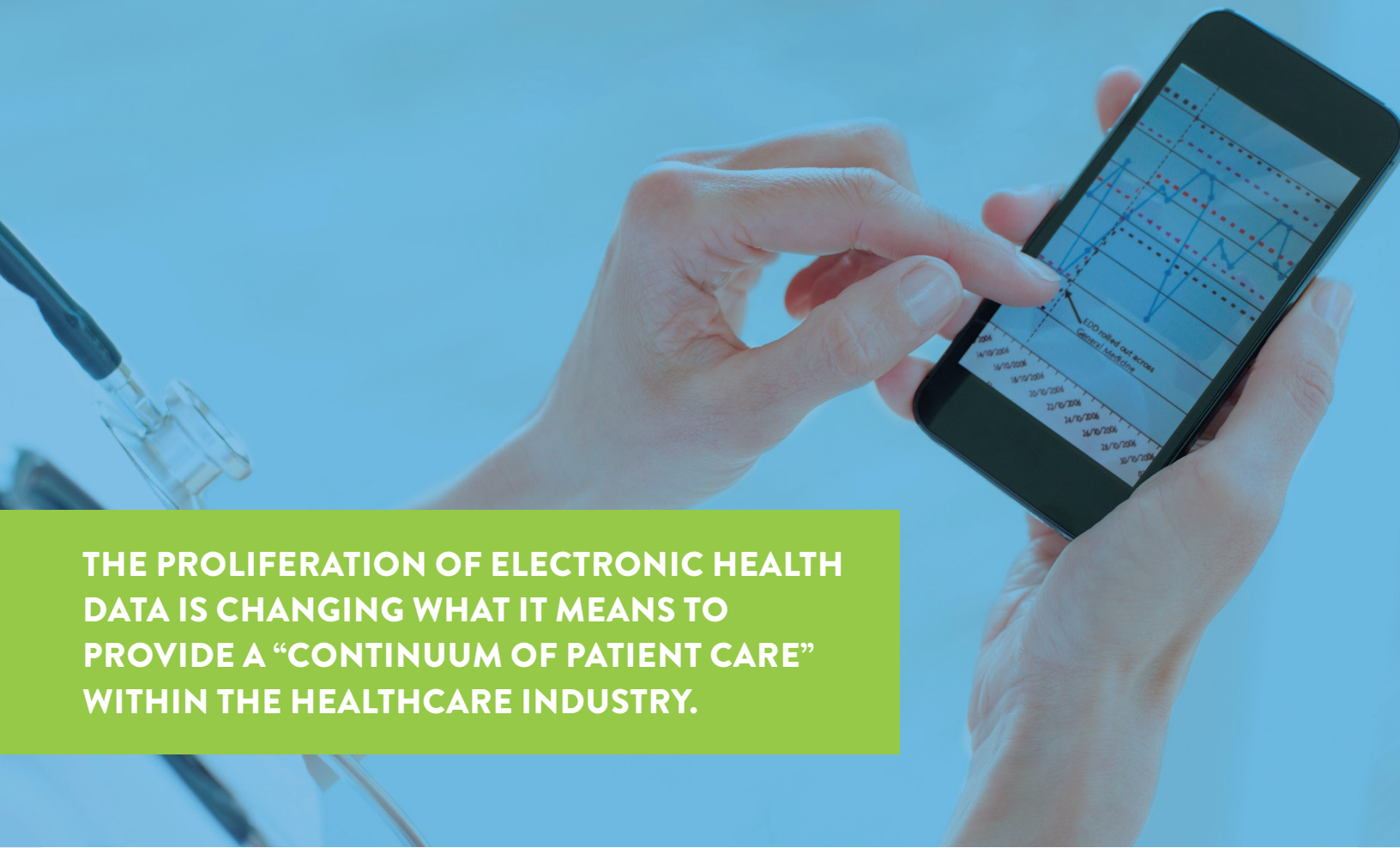


**ENABLING BETTER  
PATIENT CARE THROUGH**

# **MOBILITY**

Insights for Healthcare Organizations  
Looking to Improve Patient Outcomes

COMCAST  
BUSINESS  
**B4B**  
BUILT FOR BUSINESS™



**THE PROLIFERATION OF ELECTRONIC HEALTH DATA IS CHANGING WHAT IT MEANS TO PROVIDE A “CONTINUUM OF PATIENT CARE” WITHIN THE HEALTHCARE INDUSTRY.**

The digitization of data has empowered both healthcare providers and patients to improve how, when and where healthcare is administered, giving patients greater control over their personal health and well-being.

The promise of delivering real-time communication, increased collaboration, and cost efficiencies is already being realized. From electronic health records (EHRs) and picture archive and communications systems (PACS) to remote diagnostics and patient-centered apps, vast amounts of data are being generated, analyzed and used to improve the quality of patient care. But how is that data accessed, managed and shared to help provide more personalized and consistent patient care?

The key to success lies in the ability to get the right information to the right people at the right time. And a **crucial enabler** of improved communications is the ability to transfer data across like and disparate systems through **mobile technology**. This was the topic at a recent focus group Comcast Business held at HIMSS14 that included healthcare IT professionals from six leading healthcare providers. The participants shared the following insights on how advancements in data mobility can engage the entire healthcare ecosystem and help improve patient outcomes.

---

*The use of mobile technology in healthcare is rapidly growing and is being used across the entire spectrum of the delivery system to help clinical teams deliver care and help patients better engage in their own care.*

## MOBILE TECHNOLOGY:

# CHANGING THE WAY CARE IS ADMINISTERED

From anywhere/anytime access to care and closer, more customized provider/patient relationships, to better time management, there are many examples of ways in which mobile technology has changed how healthcare is administered.

**Consider the tablet and mobile phone.** These ubiquitous devices are helping clinicians in a variety of ways:

- Fast access to EHRs and patient information – even from remote locations
- Quick documentation of patient encounters
- Real-time bed management (environmental services, nutrition, transport)
- Call scheduling
- Anywhere, anytime training and education
- Physician-to-patient communications for appointment reminders or test results

**Remote monitoring and video conferencing technologies** are also enabling physicians to meet patients where they are, breaking down the barriers of time and distance to allow for:

- Improved access to specialists
- Remote diagnostics and tracking of critical and complex patients (in ICU and at home)
- E-Visits to patients in rural or remote areas
- Retail-based healthcare kiosks for tests and other health assessments
- Clinician-to-clinician consultations
- Language interpretation

**Patient-centered apps and devices** allow individuals to better manage their own care and provide added information to clinicians, often automatically. These include wearable medical devices like blood pressure cuffs, blood sugar monitors, and body fitness trackers. And **patient portals** – accessible from desktop PCs as well as phones and other mobile devices – let patients communicate with doctors and caretakers, schedule appointments, check in remotely/early, manage medications, review lab results and more.

## DATA MOBILITY HAS PROMISE BUT WHAT ARE THE CHALLENGES?

As healthcare organizations increasingly adopt mobile technologies, they face real challenges related to security, connectivity, and scalability.

The addition of mobile devices to an organization's technology infrastructure means increased vulnerabilities. Healthcare professionals need to make sure that their communications are secure and HIPPA Compliant, including when communicating externally. The underlying network that provides the connectivity backbone must also be secure.

There are also substantial concerns about how connectivity is managed between buildings on a healthcare campus, among different facilities in a regional or national healthcare network, and from individual clinicians and patients into the network. In some cases, healthcare organizations are hampered by geographic limitations and bandwidth constraints.

Scalability is another issue of special concern for healthcare organizations. As providers align with health networks and those networks consolidate to realize economies of scale, IT professionals must coordinate technology across multiple locations and add new locations to the core network. The sheer size of the data files involved requires a scalable network to handle the bandwidth requirements of today and tomorrow.

## HIGH-PERFORMANCE ETHERNET NETWORKS ENABLE SECURE & SCALABLE SOLUTIONS

For healthcare organizations to overcome the challenges and realize the promise of mobile technologies, they need to take a hard look at the limitations of their internal legacy data networks and determine the viability of existing external networks keeping pace with growing bandwidth demand.

Many organizations find that their existing technology infrastructures aren't optimized for handling and storing the vast amounts of data being generated from multiple applications and mobile devices. That's why it's imperative for organizations to adopt a unified, scalable and secure high-performance network that enables continuity of care across multiple locations.

**Ethernet can be the engine** that drives mobility by helping to improve productivity and collaboration. Its blend of sheer capacity and scalability make it ideal to support mission-critical applications for EHRs, PACS, remote diagnostics and other data-intensive mobile healthcare applications – including cloud-based applications.

## WHY ETHERNET?

- Manages multiple types of traffic (data, video and voice) on one network, maximizing performance
- Scales quickly and easily across multiple locations so expanding network capacity is easy
- Mission critical data is secure as it travels over a private network to and from the data center/cloud provider – not the public Internet
- Can be more cost effective than T1s or other similar technologies

## COMCAST BUSINESS CAN HELP

Comcast Business is a trusted technology partner and single-source solution for healthcare organizations looking to capitalize on the cost efficiencies and patient-care advantages of mobile data.

**Comcast Business Ethernet** offers a robust, scalable backbone to support data mobility among hospitals, clinics, doctors' offices, patients and data centers. With carrier-grade, MEF-certified fiber optic solutions that scale from 2Mbps up to 10Gbps, Comcast Business Ethernet can securely connect multiple facilities – including remote facilities – with no routers in between and with the same speed as if they were co-located.

Comcast provides the secure connectivity healthcare organizations need. Data is transferred safely and securely over the Comcast Network, not over the public Internet. Comcast Business also builds extra redundancy into its network design to maximize availability.

Comcast Business also offers a cloud-based, hosted voice option, **Business VoiceEdge™**, which helps support telemedicine initiatives that connect doctors with patients through point-to-point video conferencing. Its advanced mobility features provide anytime/anywhere access so medical personnel can be accessible to their patients by office phone, home phone, cell phone, laptop or mobile device – whether they're at different office locations, at the hospital, or even in transit – all from a single phone number.

Now is the time for healthcare organizations to build the right network infrastructure to support data mobility, connect multiple and remote locations, manage reams of electronic data, and cater to the demands of 21st-century clinicians and patients.

Visit [comcastbusiness.com/healthcare](http://comcastbusiness.com/healthcare) to access case studies that illustrate how Comcast Business and healthcare providers work together to help deliver on the promise of quality patient care in an evolving “mobile” healthcare world.

**For more information, contact 888.299.8952**