Healthcare delivery is no longer limited to a certain place at a certain time. Due to advances in consumer and health-focused technology, patients can engage in their healthcare journey from start to finish, and organizations are becoming proactive and flexible in ways that support patients on this journey from first contact ... to receipt of care ... to post-discharge consultation and monitoring. A continuous flow of information between patients and providers creates a new kind of healthcare system, with patients at the center, supported by an infrastructure of knowledge, technology and care.
Introduction

The U.S. healthcare system is undergoing major transformational change. Public and private reforms are ushering in a new kind of system that integrates technology in ways that reward innovation and collaboration, and puts the patient, not the provider, at the center of care. Hospital buildings will remain a core focus as centers of excellence. But, more and more, the leading healthcare organizations are reaching out to patients through virtual technologies to deliver care when and where it’s needed.

The future leaders of healthcare will be determined by an ability to deploy the appropriate mix of clinical and operational assets across the continuum of care. Integration models that span the healthcare journey promote accountability for patient populations by improving care coordination, encouraging investment in infrastructure and redesigning care around quality. This revolution requires healthcare organizations to redesign their organizational structures and business models to meet evolving patient needs and a shift to outpatient services.

A noticeable shift is underway in patient access, along with the processes and technologies to provide high quality, patient-centric care at an affordable cost. A slow-moving, one-size-fits-all approach is no longer good enough.

At the Global Center for Health Innovation, several organizations are making this vision of the future a reality now. On the cutting edge of healthcare delivery, these organizations are working to integrate technological solutions to the most fundamental problems in healthcare today. It begins with first contact, continues through the delivery of care and extends past the clinical consultation. As a result, patients have quicker, more efficient access to the right care when, where and how they need it.

Making Contact a Positive First Impression

Imagine patients wishing to embark on their healthcare journeys. They expect to connect with their providers the same way they connect with their banks or airlines or retailers: through online chat, text message, phone call or email. They do not expect to be put on hold for long periods, or transferred around different departments, trying to find the right one. All too often, however, this is the reality in healthcare.

To meet patient expectations, healthcare organizations must have well-designed and optimized patient access strategies built around an efficiently operated contact center model. The contact center is often the first point of engagement between patient and provider. Healthcare organizations must ensure it is a positive patient experience on which a lasting relationship can be built. In an environment where the majority (65 percent) of physicians now work within healthcare systems, it is essential that contact centers are organized and operated to maximize efficiency so that patients can be directed where they need to go.

RelateCare and the Cleveland Clinic developed a state-of-the-art Access to Care contact center in Cleveland. Staffed with appointment caregivers and registered nurses, the center offers multi-channel access for patients seeking to make appointments or receive medical advice. It is a world-leader in healthcare contact center operations, putting the patient first at every opportunity and leading the way in ease of access.
RelateCare specializes in this kind of Patient Access optimization for healthcare organizations. In the face of growing pressure on health systems to increase access, while maintaining high levels of patient satisfaction, it designs and implements patient appointment scheduling systems to bring patients and providers together. RelateCare ensures patients receive the right care, at the right time, in the right place by leveraging technology design and utilization in the development of efficient appointment scheduling systems. In addition, its clinical calling programs ease care transitions, extending care beyond the hospital setting.

The key is placing the patient at the center of care and developing the right access points and infrastructure (people, processes and technology) to elegantly execute on this new access model of care delivery.

While standard practice in other industries, this cultural shift is a welcome revolution for patients and healthcare providers.

**Care Driven by Consumer Demand**

Once the connection is made, it is no longer the case that patients who wish to receive high-quality medical care must travel long distances to physical locations. Patients can receive care in a multitude of ways. The use of smart, connected devices now enables care to be brought to patients, no matter where they are.

For Cisco Systems, this involves incorporating the “on-demand” philosophy of consumer goods into healthcare. Any device (phone, TV, tablet or desktop) and any means of communication (video, voice, data or text) can be used to connect patients with healthcare professionals. Technology used in this way can transcend borders of space and time, and Cisco provides the network infrastructure to share data in a way that is safe and convenient.

A strong technology infrastructure not only enables state of the art healthcare call centers to connect with their patients, it also makes Remote Patient Monitoring a reality. For example, a handheld EKG that is attached to a phone, can push data through the cloud where it is read and analyzed by a specialist. Information is then delivered back to the patient in meaningful, actionable steps, all from the comfort of one’s home. Leveraging the Internet of Things for healthcare means everything is connected, all the time; and the data is analyzed and interpreted to give instant feedback, if and when it is necessary.

Part of making this leap towards the Internet of Things for healthcare is the design of devices that people can use intuitively. SmartShape Design is creating technology hardware that is easy to use and fits seamlessly into the care journey of patients. Ergonomic, wearable health-monitoring devices enable continuous monitoring of ECG, skin temperature, heart rate, posture and a range of other health indicators. Meaningful information is fed back to patients and physicians via smartphones and web portals.

Other SmartShape Design advancements improve care by giving patients the power to engage in their health, 24/7, from the comfort of their homes through well-designed medical device technology:

- Implantable nerve stimulators help patients control pain relief
- iPad apps test and detect the symptoms of Parkinson’s disease
- Sleep apnea devices monitor breathing and vitals
- Curb-climbing power scooters and wheelchairs eliminate mobility barriers
- Imaginative redesigns of smart, connected insulin pens improve diabetes care

Access to care at healthcare systems is evolving, as well, through innovative alternatives that break down the provider-centric model. Cleveland Clinic, for example, offers patients a choice when they seek care: an in-person appointment at a healthcare facility, or a virtual visit through its Express Care app.
• In-person visits can be at centralized locations or walk-in Express Care Clinics. The clinics do not require an appointment and patients receive medical care for a multitude of issues by board-certified nurse practitioners and physician assistants who are trained to diagnose and treat common medical conditions.

• ExpressCare Online telehealth sessions bring healthcare providers to patients through their phones, tablets or computers when they need care. The connections can lead to a diagnosis or prescription, when appropriate. More efficient and cost-effective for patients in some situations, the sessions are covered as a regular office visit by many insurance companies.

Even when a visit to a brick and mortar hospital is the most suitable way to deliver care, healthcare systems are innovating with new approaches. RelateCare’s Nurse Triage service enables patients to connect with Registered Nurses at any time of the day, in whatever method is most convenient to receive medical advice. They also determine whether an appointment is needed or the steps that can be taken to alleviate pain and suffering.

Effectively managing a patient through the continuum of care requires sophisticated data analytics to support mobile technology, virtual visits and connectivity back to the brick and mortar settings. The availability of data to and from devices needs to be interpreted, analyzed and presented in a meaningful way for patient use.

Post-visit Care Suited to Patient Needs Helps Improve Outcomes

While hospital buildings as centers of excellence will remain essential, more and more follow-up care is being delivered virtually. Healthcare doesn’t end when the patient visit – virtual or real – is over. Using connected devices means patients can be monitored and connected at all times. Post-discharge follow-up programs, such as those run by RelateCare, deliver care to patients after the visit to ensure they adhere to medication and discharge instructions. Many surgical practitioners at the Cleveland Clinic perform a virtual visit post-operatively instead of making patients travel to their tertiary care centers. Some patient populations require more proactive communication than others, depending on risk factors. The Cleveland Clinic provides a mix of access points that cover the span of the continuum – outpatient health centers, Ambulatory Surgery Centers (ASC), community hospitals – while recognizing the role of the tertiary academic medical center for acute/complex care. It’s patient care driven by patient needs, not one-size-fits-all solutions.

Health systems across the nation have different levels of resources and capabilities to manage patients after they leave the acute care center. Pre- and post-discharge tools enable health systems to blend a range of high tech and high touch solutions that fit the needs and preferences of the patient. Not all patients use technology, and not all patients want to learn. By recognizing the variance in patient age, geographic location, and willingness to use personal technology, both Cleveland Clinic and RelateCare manage a diverse patient population to deliver the right care, in the right way at the right point of access.

Conclusion

The future of healthcare is happening now. These organizations, through collaboration and innovation, are working to ensure that as many patients as possible have access to the highest quality care; this is the measure of a successful healthcare system. With the advances in personalized technology, data analytics, and flexible operational models, a patient-centered, value based model of care is emerging from the hype as something tangible and real.

Patients, providers and technologists are partners in the delivery care, working together to give the right care, to the right person, at the right time.
Contributing Tenant Partners


- **Cleveland Clinic** – A world-renowned healthcare system, Cleveland Clinic is breaking down the barriers to care while maintaining the highest level of excellence through Express Care Clinics and a best-in-class Access to Care system. More at: [www.clevelandclinic.org](http://www.clevelandclinic.org)

- **RelateCare** – A global leader in the delivery of patient access solutions, that helps healthcare organizations optimize patient access strategies through specialized contact center models and a focus on patient experience. More at: [www.relatecare.com](http://www.relatecare.com)

- **SmartShape Design** – A full-service product development consultancy that designs and develops researched-informed innovative products of all shapes and sizes, including smart-connected healthcare apps, and ergonomic medical devices and equipment. More at: [www.smartshape.design](http://www.smartshape.design)