

A NEW APPROACH TO CONNECTED HEALTH

How Technology Can Improve the Care Journey For Patients & Providers

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EXECUTIVE SUMMARY: LET'S PUT AN END TO WHACK-A-MOLE HEALTHCARE

The state of healthcare in the U.S. today is one of flux, uncertainty, change, and trepidation. Consider the dynamics: An aging baby boomer population, rising healthcare delivery costs with corresponding reimbursement uncertainties for providers, increasing individual healthcare expenditures, rapid advances in wildly different treatment options and modalities, and an explosion of clinical data that no one seems capable of efficiently managing or sharing.

It's no wonder the healthcare system appears, to the general public, less focused on the patient and more focused on the "business of healthcare."

Over the last decade, a wide variety of technology solutions have emerged in an attempt to improve how healthcare is delivered. Bedside Patient Engagement Systems, Patient Portals, Telehealth, Remote Patient Monitoring, Wireless Tracking Devices and Smart Phones, and even Smart Pills – all have had some positive impact on patient care and patient outcomes. Yet these technologies haven't necessarily improved the way we deliver care, especially from a patient point of view. Instead, we've created a disconnected healthcare ("sick care") marketplace where a condition or encounter can be "fixed" in one place, only to pop up again in another place, just like the game of Whack-a-Mole. This situation is exacerbated by the variety of acute and chronic care treatment venues, proliferation of treatment options, and number of different, fragmented systems that aggregate patient data.

Given the inherent obstacles of this disconnected marketplace, how can healthcare providers deliver a more comprehensive care that is at the core of their mission? And how can patients and family caregivers keep up with all the information that they need to recover and optimize their health and wellness? How can we make the care journey more seamless to the patient?

The answer is "Connected Health,"¹ "Technology Enabled Care,"² "Patient Centric Care" – whatever you may choose to call it.

While lack of true interoperability raises inherent limitations, an effective technology-powered **Connected Health** strategy can enable improved collaboration and coordination of care for patients, providers, and family caregivers.

A Connected Health approach can facilitate a more productive "end to end" patient experience across the care continuum to help improve patient satisfaction, patient compliance, and clinical outcomes at every stage of the

care journey, even when multiple venues and providers are involved.

This approach requires a new breed of integrated Connected Health and Patient Engagement platforms that closes the communication gaps and enables timely and seamless information-sharing across multiple venues of care.

In other words, it's time to stop living with disconnected Whack-a-Mole healthcare.

Smart investments in a true Connected Health/Patient Engagement platform can help health systems and providers transition from volume to **value-based care** that incorporates personalized medicine with the recognition "one size does not fit all." A Connected Health approach can help improve patient experience and clinical outcomes, while enhancing the ability of health systems to attract and retain today's consumers. It can also boost staff productivity and staff morale, resulting in a more efficient and cost-effective care delivery network.

THE BOTTOM LINE

Health Systems must move beyond the siloed "toe in the water" approach and adopt a Connected Health strategy across the entire care continuum, from ambulatory/primary care to the inpatient (bedside) to post-acute care settings and the patient's home. The Connected Health paradigm keeps information flowing between patients, caregiver families, primary care providers, specialists, ancillary service providers, etc. – any provider that is part of the patient's care journey, no matter how many venues are involved.

Fortunately, a new generation of technology-enabled platforms is now available to help make this connected experience – and connected information-sharing – a reality. The days of fragmented venue-based care, where multiple individual venues have difficulty sharing information and insights about the same patient, may be coming to an end.

PATIENT-FOCUSED TECHNOLOGY MOVES INTO THE MAINSTREAM

Over the years, the challenges of implementing a true “patient-focused” approach have ranged from excessively expensive technology, to poor consumer acceptance, to poor provider acceptance, to inadequate reimbursement. Or sometimes no reimbursement at all.

More recently, some of these obstacles have been overcome and individual consumers have recognized more of the delivery benefits. Providers have become more confident in the applicability and value of these solutions to their practices. And regulatory and reimbursement barriers have begun to come down. Go to any healthcare technology showcase like the annual Healthcare Information and Management Systems Society (HIMSS) event, and you'll be overwhelmed with the variety of technology-enabled healthcare solutions, such as:

- **Bedside Patient Engagement Solutions** that assist the in-patient care team, enable patient education and sharing of clinical information, provide entertainment options, and connect the patient and on-site care teams with remote clinicians and family members.
- **Patient Portals**, probably the most prevalent technology solution in the market. Typically available to many patients from their primary care provider, these solutions enable the online scheduling of appointments, secure electronic message exchange with clinicians, access to test results, and tracking/trending of clinical information.
- **Telehealth** (in its simplest form, video-based care delivery) – of all current technologies, telehealth has the most momentum and has impacted the most patients, from the Veterans Administration Health System to virtual visits in retail stores like Walmart to Rural Telehealth initiatives. As telehealth reimbursement has become increasingly common amongst both governmental and commercial payers, many mainstream health systems around the country are evaluating and/or implementing telehealth programs.
- **Remote Patient Monitoring** for home or post-acute care. On the rise across the country, this monitoring capability enables shorter in-patient stays, reduced readmissions, and improved responsiveness for patients in an emergency (or potential emergency) situation.
- **Wireless Devices** for chronic condition or post-acute care monitoring (for CHF, diabetes, joint replacement and other applications). These devices demonstrate significant value in reducing readmissions and address-

ing health status changes before they reach a critical level and require costly clinical interventions.

- **Wearables and Mobile Apps like FitBit and Apple Watch**, which are starting to become more mainstream and less novelties. As these apps become more accurate, there is an opportunity to integrate their data into patient portals and EHRs.
- **Patient Outreach/Engagement** solutions that can involve mobile technology or merely outbound call center follow-up for discharged patients, or for chronic disease management.

THE LIMITATIONS OF “VENUE-CENTRIC” CARE

Even with all of these innovations, the healthcare world still has significant obstacles to overcome in order to meet the Connected Health challenge.

THE CONNECTED HEALTH CHALLENGE:

Improving information-sharing, collaboration, and coordination to ensure an interconnected, information-rich, **venue-independent** patient experience across the entire care journey.

The problem in meeting this challenge? Today's conventional solutions, such as EMRs and related patient portals, can successfully aid in the care of the patient in a single care venue, health system or IDN. HIEs can further enhance communication between venues and providers in certain markets. But it is still limited, mostly venue-centric care.

When multiple unconnected care venues are involved, the limitations of EMRs and HIEs can cause serious collaboration issues. Venues can't easily share patient information, diagnostics, and treatment plans between themselves, nor easily confer together to enhance next steps for the patient. As soon as patients leave one venue, there is a loss of communication as they move to the next venue.

Providers cannot easily follow their patients – and collaborate with other providers downstream – as these patients navigate multiple venues across the care continuum.

And when providers cannot coordinate between themselves or with patients effectively, it leads to a plethora of issues:

- Inability to share critical patient and diagnostic information quickly and efficiently.
- Delays, miscommunications, reduced clinical visibility, and potential detrimental impacts on delivery of care.
- A frustrating and confusing experience for patients and their families, who have to navigate through a disconnected healthcare journey.

CASE IN POINT: A FAMILY CAREGIVER'S PERSPECTIVE THROUGH A DISCONNECTED HEALTH JOURNEY...

He is an 84-year-old retired engineer – a smart, fact-based individual who wants to know details about his care and what he needs to do to get better. He lives in a Central Florida retirement community and has access to every kind of doctor specialist and testing facility available, so access to care is not an issue for him.

Yet even with good insurance, and access to many specialists and treatment options, this past year has been a debilitating and frustrating one for him and his family as he goes from doctor to doctor to doctor trying to figure out how to get the right balance of care to address his symptoms and restore his quality of life.

Over the past 18 months, he has been admitted to the ER five times, admitted to the hospital six times (including observation, surgeries, cardiac ICU), had four different stays in Rehab facilities, had double bypass surgery, placement of a pacemaker, bilateral pneumonia (2x), numerous TIAs, 4 vertebroplasties, as well as living with chronic conditions of neuropathy, CHF and osteoporosis. He takes more than 12 different prescribed medications (which change based on the last episode of care) and has seen 15+ different physicians. He also receives care from the Veterans Administration for vision and other primary care services.

Each of the hospitals has a different EHR, as well as the providers who also have their own practice EHR. Transferring clinical information, test results, X-rays, etc., is very cumbersome and not done on a timely basis. In every

transition from one facility to another, it's difficult to get the information needed to efficiently and effectively move him into his new care setting and begin the appropriate treatment plan.

Thanks to tireless efforts from family and friends, his care has been addressed, but it has been an arduous process, thoroughly confusing for him, and overwhelming at times even for the family caregiver ... someone who actually knows how to navigate the system. While the care providers have been competent and caring, the fact remains that his care remains siloed and totally centered around whatever specific care venue he is in.

His care is venue-centric. It is neither connected nor patient-centric.

HOW CAN WE DO THIS DIFFERENTLY?

I'd like to think that this case is unique, but it's not. As a healthcare consultant for over 25 years, I've seen this set of circumstances multiple times across multiple venues – Acute Care Hospitals, Large Physician Groups, ACO's, Health Plans, Ambulatory Surgery Centers, Skilled Nursing Facilities, and Inpatient and Outpatient Rehab Centers, Urgent Care and Emergency Departments. Each of these organizations does their best to care for the patient “in their own house” usually with good results, including improved scores for HCAHPS, CGCAHPS, Star Ratings, Press Ganey or Net Promoter metrics.

But when it comes to measuring patient satisfaction and outcomes, none of these venues can measure the **end-to-end patient experience.**

In today's evolving marketplace, it's no longer good enough to fix an individual health issue and send the patient elsewhere to treat the next problem. We as consumers and patients should expect more. Health systems that want to stay competitive in their markets need to help deliver a more patient-centric, venue-independent, end-to-end healthcare experience.

THE BOTTOM LINE

Patient communication, patient engagement, patient satisfaction, provider collaboration, care coordination, clinical data sets, patient outcomes – these are all interconnected issues and must be woven into the tapestry of delivering outcomes-based health care. All should be measured on a connected basis. When they are working together, they can help drive more successful clinical outcomes and an improved patient experience. In other words, the Triple Aim of U.S. Healthcare can be finally achievable: to deliver (1) cost-efficiencies and (2) high-quality clinical outcomes, with (3) a great patient experience (and great provider experience as well).

CONNECTED HEALTH: THE INDUSTRY'S HEALTHY NEXT STEP

So what, exactly, is Connected Health?

In a paper published in 2013 by Oxford University Press on behalf of the Association of Physicians³, the authors defined Connected Health in the following way:

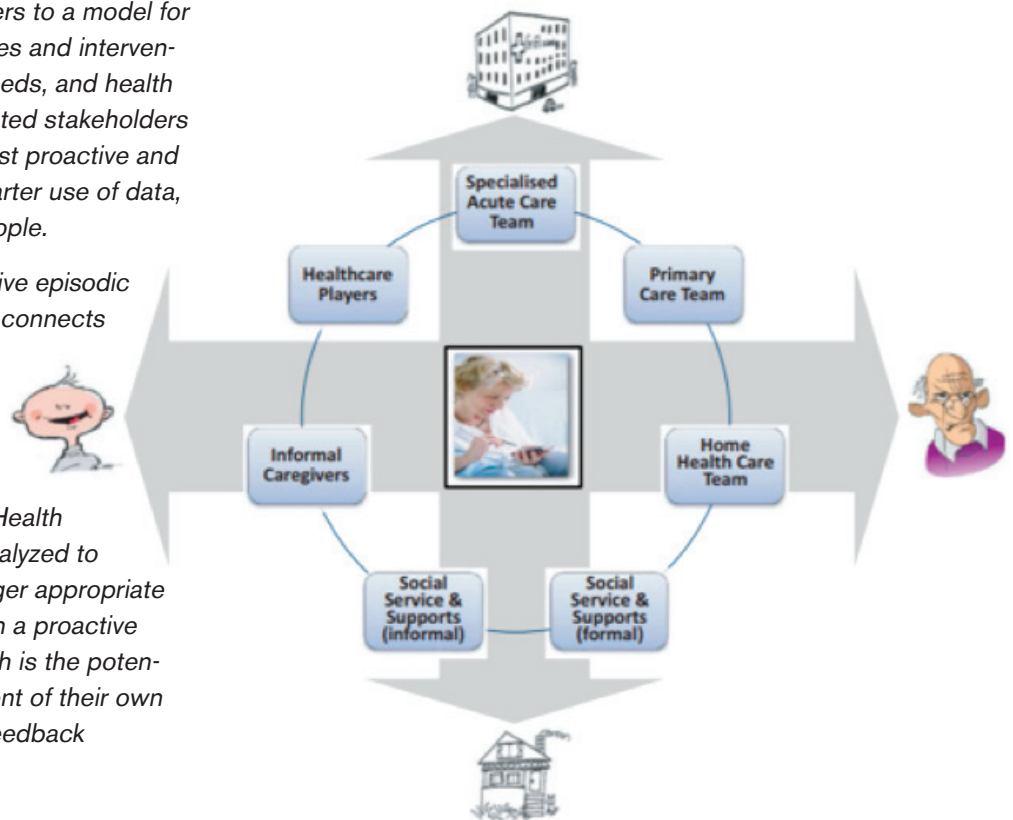
A system that encompasses terms such as wireless, digital, electronic, mobile and telehealth - and refers to a model for health management where devices, services and interventions are designed around the patient's needs, and health data is shared in such a way by all connected stakeholders so that the patient receives care in the most proactive and efficient manner possible, through the smarter use of data, devices, communication platforms and people.

This approach enables a shift from a reactive episodic care model to a more proactive model that connects stakeholders across the spectrum from the home to the acute care setting throughout their lifespan and puts the patient at the center of the process.

The data collected as part of Connected Health can be aggregated, stored, shared and analyzed to derive actionable information that can trigger appropriate interventions and outreach to the patient in a proactive manner. A key feature of Connected Health is the potential to bring the patient into the management of their own health by means of provision of ongoing feedback regarding their health status or lifestyle.

Some health systems are already integrating components of Connected Health into their day-to-day workflows and care processes, with promising results so far:

- In a recent telehealth webinar, Matt Stanton, Senior Director of Distance Health at Cleveland Clinic, talked about how telemedicine has become a part of the fabric of healthcare for Cleveland Clinic, including urgent care, specialty follow up care, remote second opinions, remote monitoring and chronic care. "Providers really need to be thinking about using telemedicine, if we really want to make a difference in our patient's lives."³
- Judd Hollander is Senior Vice President of Healthcare Delivery Innovation at Philadelphia's Thomas Jefferson University, and Associate Dean for Strategic Health Initiatives at SJU's Sidney Kimmel Medical College. "The virtual visit doesn't necessarily replace the visit to the doctor's office," says Mr. Hollander. "It replaces whatever method of healthcare is most convenient and economical at the time that healthcare is needed."⁴
- Dr. Randall S. Moore, president of Mercy Virtual, says that health systems have to move away from so-called "sickness care" and toward health + care, working inside and outside the walls of the hospital or doctor's



office to promote wellness, intervene before a health crisis develops, and maintain an ongoing relationship with patients. “I think if we don’t do something different, things will come crashing down in a hard way,” he warned.

Many health systems today, says Dr. Moore, can treat a patient who walks through their doors and send him or her home in less than five days. But then they’ll just come back again when they’re sick – or end up at a different care venue with no record of previously provided treatment/diagnosis.

“Why do we wait for people to show up in our emergency rooms?” Dr. Moore asks. Why not, instead, “extend what we do in the hospital into the home?”

HOW CONNECTED HEALTH CAN HELP

Patients and providers alike can benefit from a true Connected Health approach in multiple ways. A few illustrative examples:



- **In an acute care facility at the patient’s bedside,** Bedside Engagement Solutions can be used for patient education, entertainment, family communication, and video-based collaboration (telehealth) with outside providers. Providers and other care team members have greater flexibility to get the patients and their family caregivers the information they need on a timely basis while efficiently sharing clinical and administrative information. They also should be linked via the Patient’s Primary Care Portal, so no information is lost amongst key stakeholders between inpatient and outpatient settings.



- **Outside the care facility,** such as at home, patients can leverage telehealth to conveniently consult with their care team using bi-lateral or multi-party video conferencing. Providers can typically conduct an effective examination and usually provide a diagnosis and treatment plan via video, without the patient having to travel. Information can be shared between the telehealth provider and the Patient’s Portal, again, so no information is lost. Providers, patients, and family caregivers have shared access to the complete care record across the care continuum.



- **With telehealth, providers can connect with one another to share consults, expertise, and knowledge during patient care.** For example, a provider in a rural emergency department might consult a clinician in a larger, city-based hospital. The hospital clinician may have knowledge, equipment, or specialist expertise that the rural provider does not, making the telehealth consult ideal for patient care. Again, information can be made accessible to multiple providers and patient. Medical decisions can be made in a more timely and collaborative fashion when a Connected Health Platform is used to bridge the gap between all providers, as well as the provider-patient gap.



- **When a patient is discharged**, compliance with dietary, medication, and other instructions is critical to full recovery and keeping the patient out of the hospital. In a Connected Health environment, the patient and/or family caregiver can view their care plan or be automatically reminded to follow their instructions, and technology-enabled devices can be used for such items as blood pressure, pulse ox, blood sugar levels, etc., sending alerts to providers when data is outside of the optimal ranges. When patients comply with post discharge instructions, everyone benefits. Ongoing, consistent patient engagement can prevent missed appointments and improve adherence to care schedules. All this can be achieved with a minimum of provider effort and lead to better patient outcomes with higher clinical efficiencies.

WHAT TO LOOK FOR IN A COMPREHENSIVE CONNECTED HEALTH PLATFORM

Health systems seeking a technology partner/vendor must find companies who have the ability to engage and share information across their key stakeholders (patients/providers/family members) at all points of contact and venues across the health system – from inpatient to outpatient settings, physician offices, post-acute care providers, home health, and family member locations.

We don't need any more well-intentioned but still siloed solutions that only perpetuate the Whack-a-Mole state of care.

Here are some capabilities to look for in a platform that brings Connected Health and Patient Engagement functionality together:

1. **Engagement that begins at home**, moves to the inpatient bedside, and then across the care continuum to continue following the patient to post-acute venues and then back home again.

2. **Multi-party video (telehealth) capabilities** – for example, patient-to-provider-to-remote family member, or patient-to-primary care provider-to-specialist provider, or patient-to-family member-to-post acute care team or home health care provider.
3. **Ability to utilize a range of devices** appropriate for the specific venue of care, from bedside terminals to high-end video conferencing to iPads to smartphones. This includes the ability to integrate data from remote monitoring devices, back into the health system of record.
4. **Integration with the EHR/EMR** as well as into provider-based Patient Portals. The platform should deliver system agnostic video-rich digital services, which can integrate with any health information system or environment via web services. State-of-the-art video workflows should be embedded inside the EMR/EHR system for a seamless user experience.
5. **Ability to leverage the venue's existing investments** in network/telecom infrastructure and IT systems to minimize upfront costs, accelerate implementation, and integrate with systems previously unable to share clinical information.
6. **Ability to integrate with Patient Outreach solutions** to engage the consumer before, during, and after a clinical encounter.
7. **Intuitive, user-friendly interfaces** with touch id or other secure ways to view information.
8. **Connected Health applications** that run on a wide range of personal communication devices to accommodate consumer needs and preferences, from desktop to laptop to tablet to smart phone.

THE BOTTOM LINE

Leverage your existing investments in EHR systems and IT/network infrastructure. Do not reinvent the wheel.

Do not compromise – select a Connected Health platform that offers improved integration, collaboration, and information access across the continuum. Find one that brings in-patient engagement, outpatient services with high adoption rates, clinical workflows, and digital consumer needs into one integrated platform for all stakeholders – patients, caregiver families, clinicians/providers, and administration.

Focus on adoption, not just deployment. Incent and expand usage by staff, clinicians, patients, and their families.

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Another Level Consulting

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Another Level Consulting is a healthcare strategy and sales performance improvement consultancy focused on helping Healthcare Solution Vendors to implement new client-facing strategies and tactics to address the evolving healthcare marketplace. We focus on the key issues in developing effective post-acute care coordination, population health strategies, engaging with patients/consumers and physicians to help them effectively navigate and use healthcare IT, and driving new ways of connecting and communicating across the entire continuum of care. We also focus on helping vendors create a long-term revenue growth engine through the “Five Rs” that will improve their sales team’s effectiveness and efficiency in acquiring new clients and growing existing accounts.



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