

Supporting Patients on Complex Care Journeys: How Technology Can Bridge the Gaps

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A close relative was recently diagnosed with follicular lymphoma. He was cared for at a high-ranked cancer center by physicians with demonstrated expertise, and even had the support of a care navigator. Still, he was often left feeling overwhelmed and confused, holding an inch-thick stack of papers, instructions, and pamphlets. As he left his treatment planning visit, reeling from the emotional burden of his diagnosis and all the unfamiliar terminology, he didn't know what to do or what to expect. Later, when he experienced early signs of tumor lysis syndrome, he struggled to reach his care team for triage and guidance. When he went to the emergency room, his oncologist was never informed.

This scenario is unfortunately common, and versions of this scenario play out thousands of times each day across the US health system. Within the clinic and hospital setting, patients receive excellent care from their providers, but a disconnect emerges once the patient leaves these medical settings: patients at home struggle to find guidance and support, while care teams lack the tools to engage patients between visits or monitor their health across care settings, providers, or episodes of care.

Leveraging Technology to Move From Episodes of Care to Complex Care Journeys

The use of automated messaging, artificial intelligence and natural language processing–driven chat experiences, and text-based support is becoming more common. However, health care lags behind other industries in the adoption of these technologies.^{1,2} The slow pace can be warranted, given that health care is more complicated and higher risk than inquiring about a lost package, ordering groceries, or applying for a mortgage. At the same time, many of the consumer engagement tools used to guide an applicant through the multiple steps and complexities of their home loan process or to prompt viewers to select new shows to binge have applications in health care.

Over the past few years, technologies have emerged that guide patients through complex care journeys and allow care teams to monitor and engage patients between visits. These solutions come in different formats, but generally patients can receive messages on their phones that contain disease-specific educational content, prompts to fill prescriptions and take medications, and reminders and guidance on how to prepare for appointments and procedures. These programs also collect relevant data from patients through survey and electronic patient-reported outcomes instruments, as well as connected patient monitoring devices, that help track patient progress and identify issues as they arise. Many programs also incorporate symptom triage pathways and use natural language processing to respond automatically to patient questions and concerns.^{3,4}

These technology solutions can automate many tasks that in the past required a care team member to spend hours on the phone. Newly freed from such repetitive tasks, care teams can now focus on more in-depth interactions with those patients who are most in need—the types of interactions that are more satisfying and rewarding. Such assistance is particularly needed today with the staffing shortages faced by most health systems.⁵

In addition, technology allows teams to see the panel of patients they are caring for and to quickly identify and take action on any specific needs or issues. Care teams can focus on any patient and see where they are in their journey. When appropriate, some solutions also allow care teams to engage directly with patients through text-messaging, creating a seamless experience and unified communication channel. Ideally, these solutions should be linked or embedded within the electronic health record or other primary system of record, so that

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teams can easily access these tools through their existing workflows and avoid creating yet another interface to navigate.

The Impact of Low-Tech Solutions to Deliver High-Touch Support

There is evidence showing that digital patient navigation tools impact patient care. In the oncology setting, patients with a digital navigator have achieved over 95% adherence rates with complex oral chemotherapy regimens (Memora Health Unpublished Data. 2022.). In the postpartum setting, a text message–based program improved screening rates for postpartum depression and did so with very high patient satisfaction ratings.⁶ Particularly notable is the fact that this depression screening program achieved these results in a population that was predominantly low income, with more than half belonging to underrepresented minority populations.⁶

We believe these digital patient navigation technologies, specifically low-tech solutions that don't require app downloads, portal log-ins, or high-speed internet, will transform care delivery over the next 5 to 10 years. Successful management of complex conditions like diabetes or cancer requires more than 3 hours of care each day,⁷ yet most patients spend only 1 or 2 hours per month directly interacting with their health care providers. However, most patients carry their phones with them at all times, and artificial intelligence–enabled text support is “always on” to provide support, monitoring, and guidance, wherever a patient happens to be when assistance is needed.

Shifting the Model to Support a Lifetime of Care

While still in the early stages of development, these tools have the potential to radically alter the practice of medicine, shifting the focus from episodic interactions to continuous journey-based care delivery. Outside of an acute event bringing a patient into the clinic or emergency room, many patients go a year or more without seeing their primary care providers.⁸ During that time, an immense

amount of information is underreported or completely lost. Capturing this information in real-time and more holistically over a person's lifetime of care could provide physicians better insight to both better manage and more fully evaluate the success of treatment plans by tracking patient symptoms, pain, and functional status over time. With this more longitudinal view of the patient, we see a pathway towards achieving the Quadruple Aim: patients who are more supported will achieve better outcomes at lower cost, they will have a better experience, and care teams will be empowered to focus their time on more satisfying activities rather than repetitive administrative tasks.

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Disclosures: Dr. Flyckt and Dr. Colbert are employed by Memora Health, an organization that helps health care systems digitize and automate care journeys.

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