Connected Health — Establishing Valuable Relationships at Every Step of the Patient Journey

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Opportunities for Connected Health

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It's a rich two-way exchange of information between the clinician and the patient. That connection can happen with a wearable, a vital sign collection like blood pressure, or a home test. It also presents an opportunity for remote coaching.

Through these opportunities, we get to know a person in a way that we can't otherwise. Essentially, we meet the patient where they are, which reduces the burden of coming to a doctor's office to fill out paperwork. So, whether it's getting that chance to offer them education, or ask them open-ended survey questions, the interaction goes much deeper than people think. These value propositions help feed remote patient monitoring (RPM), where vital signs and other information can be exchanged directly with clinicians on a frequent basis, and decentralized trials, where we can significantly improve access and compliance with research trials. It's all about the patient at the center.

What is Remote Patient Monitoring?

Remote patient monitoring gathers vital signs, survey data, behavioral data, and other clinical information from the patient in their home setting. It provides the patient an interaction with a clinician, who guides them through the process of addressing their individual conditions. These groups of patients are helped by RPM programs and can also become potential participants in research trials. One of the promises of clinical research as a care option (CRAACO) is that it improves outcomes overall for patients and studies.

Typically, remote patient monitoring revolves around the patient's specific needs for an ongoing condition. For example, if the patient has a post-thoracic surgery event, we can monitor them for infection or other reasons they might escalate back to the hospital. The time frame of this monitoring usually ranges from 30 to 60 days.

However, we can also monitor chronic conditions. Here, we use a combination of vital sign collection, education, prompts, and tools to help the patient manage their long-term condition.

As another example, a congestive heart failure patient remains aware of their daily weight, fluid intake, and salt in his or her diet. RPM can arm them with additional tools to eliminate hidden salt from their diet, get the right exercise at the right moments, and manage their overall health.

All information collected goes to the clinician, who understands the status of their patients and their experiences. They can provide the right education and help the patient on the way to a better outcome.

Even in the pandemic, many people aren't scheduling frequent visits to their PCP. If you come into the doctor's office on a 90-day basis or 30-day basis, that's a snapshot in time. With RPM and a connected approach, we can gather information every day or even multiple times a day.

RPM and decentralized trials work hand-in-hand. Much of our forward-looking product development right now is focused on understanding the patient in a healthcare setting and giving them the opportunities to participate in the appropriate clinical research settings. This is classic CRAACO — when you have an enduring connection with a person in one setting, that can carry over to other settings, too.

With that said, CRAACO is currently

only available to 5% of the population. When we apply connected health in order to expand who's aware, who's available, and who's connecting through their phone or other means, it opens up a whole new world of possibilities. That's when we start to identify and understand what's going on with patients and the appropriate ways to marry CRAACO with connected health.

Obstacles Currently Facing Effective Connected Health Program Development

One potential challenge is the perception that someone is looking over your shoulder, like a "Big Brother" figure. What we find time and time again is that there's a clinician on one side of the connection, and a patient on the other. It turns out that one is there to help the other.

Consider someone feeling isolated — especially during the COVID-19 pandemic. In this situation, they have someone watching out for them; someone who's on their team. We've often heard that when patients come to the end of the program, they feel sorry to leave the people who have helped them through their journey.

Innovation brings challenges along with opportunity. There are still trials that are constructed around pencil and paper, or telehealth opportunities that aren't fully reimbursed by private insurance. People always ask, "Why do we have to change this method now? This method is what works for me."

We must change it, because this is an opportunity to reach more people with higher compliance and more effectively capture information. This is enabled through the clinical, technical, and operational aspects of connected health.

You can certainly keep the narrow view that everything we've done in the past has worked, but by doing that, you give up the opportunity to expand to a wider audience. You give up the opportunity for that rich two-way interaction that leads to higher compliance, better adherence, and better patient satisfaction.

There are plenty of challenges surrounding reimbursement and unfamiliarity, but those are just bumps along the road. We have the capabilities to overcome those bumps and evolve into a more convenient, yet more human-centric version of healthcare.

> The nudge to embrace connected health is usually just a helping hand, like a nurse, who's available at the right moment to give the patient a feeling of control and participation. This is a good reminder of our guiding principle — keeping the patient at the center means a vital connection between the patient and the clinician.

What Does a Fully Realized Connected Health Setting Look Like?

In remote patient monitoring, the largest cohorts generally come from areas like congestive heart failure, type 2 diabetes, and COPD. Many of those cohorts are hard to recruit for clinical trials. Yet, they contain patients who could benefit the most from clinical trials.

When we're establishing patient populations in connected health trials, we often discover that there's a built-in advantage along the way, which helps us access those patients and provide them more opportunities and more participation. We don't want to just think of small point solutions, we want to think of how to keep connecting with the patient as we go through different stages with them.

The industry has suffered from "one and done" problems on the trial side. There's six months that encompass patient recruiting and patient collection, and then the whole infrastructure is torn down. On the remote patient monitoring side, it's exactly the same thing. It's never beneficial to patients in a long-term program when you lose touch with them right at the moment you completed a big objective.

When we're designing products, we make sure they're meant to make participation easier for patients — that's the guiding principle at

the center of a fully realized connected health setting. This is any patient who is receiving remote healthcare and may become eligible for a trial, or who can take advantage of in-home testing. All of our solutions have two long-term goals: to establish an enduring connection with the patient and make it easier for them to move between a healthcare and research setting.

Connected Health as a Household Term

Looking at connected health in a broader sense helps us understand more of what's happening in the patient's environment.

Let's use everyone's favorite example of a connected device — the "smart fridge." If we have access to that kind of information, knowing that people are actually getting multiple interactions and nutrition throughout the day is super important. Think about it from someone who has low activity levels — the fridge's interaction data might prove that person is experiencing an energy level problem, a diabetic-related problem, or maybe even a depression or social isolation problem.

Understanding connected health in the broader sense starts with the individual, but all of those devices in the home are valuable bits of information that feed into the whole picture.

The learning curve with technology has happened much faster than I originally anticipated. These kinds of interactions are happening every day. My own elderly Mom, for example, is more than fluent with texting, email, and apps on her iPad — things we wouldn't have anticipated 10 years ago. But it's also normal for her to take her weight and blood pressure every day — data that we can easily capture in a connected health setting. The nudge to embrace connected health solutions is usually just a helping hand, like a nurse or customer support, who's available at the right moment to give the patient a feeling of control and participation. This is a good reminder of our guiding principle — keeping the patient at the center means a vital connection between the patient and the clinician. (PV)

PRA's Connected Health solutions allow you to leverage the technology at patients' fingertips, linking them to a wider, more efficient network of care. See how at: prahs.com/dct.