



Protecting, preserving and promoting
HEALTH OUTCOMES

Is there a doctor in the house?



Even before 2020, the number of health care providers in the U.S., specifically primary care providers, had been dropping.¹ The pandemic has exacerbated this shortage.

Between 60% and 75% of health care providers are described as exhausted, depressed, suffering from sleep disorders and experiencing PTSD. Around 20% of health care providers have left the field, and we have no way of knowing how many will choose to return.² Remaining health care providers are bearing the brunt of worsening staffing shortages. Wait times for appointments, especially for new patients in non-emergency situations, are getting longer.

HEALTH CARE WORKERS SINCE THE PANDEMIC



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The encouraging news is the number of applications for medical schools set a new record in 2021, but these new providers will have their own challenges to face as they enter the profession.³ There are, of course, the mental and physical demands of many years of study and long hours caring for patients in sometimes very challenging conditions during training. In addition, the cost of the education required can leave many young physicians to begin their health care careers with a staggering amount of debt.⁴ When new health care providers are ready to enter the field, they're often driven to more lucrative specialties in affluent areas, leaving the fundamental field of primary care wanting for their talents.

As a result, millions of Americans — 14 million, to be exact — live in a medically underserved area.⁵ Today, nearly 80% of rural America is considered medically underserved, having fewer than 10% of doctors despite being home to 20% of the U.S. population.⁶ Importantly, the shortage of primary care health services also extends to some of this country's most populous geographic areas including our urban centers and suburbs. It's a universal problem.

Soon, we'll have more seniors than children

As the numbers of available health care providers is falling, our population is aging — and getting sicker at the same time. By 2034, the United States Census Bureau predicts that the number of people in the U.S. over 65 will be higher than the number under 18.⁹ Given that 4 in 10 Americans have 2 or more chronic conditions, and that the average appointment duration is around 18 minutes, how can we expect a diminishing number of providers to care for a rapidly aging population and still deliver quality health care?^{10, 11}

This is where organizations like ActiveHealth can add value. Our patented CareEngine® technology sorts and organizes large amounts of member data from hundreds of sources. We translate and analyze the data using peer-reviewed, evidence-based clinical analytics to find opportunities to improve care. We then share these insights with members and their treating health care providers — directly in the electronic health record when possible.



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This maximizes our ability to impact health outcomes right at the point of care. The next challenge is to help providers and patients make limited face-to-face time both more efficient and more valuable.

We aren't communicating effectively

The language of health care is distinctly different from anything we encounter in the ordinary course of our lives. According to the Centers for Disease Control and Prevention (CDC), nearly 9 in 10 adults have trouble understanding and using health information when it's presented to them using complex terminology.¹² That seems impossible considering the literacy rate in the U.S. is 99%, but that metric refers to the ability to read and write a simple sentence.¹³ If we look deeper, the percentage of people who read and write above a basic level, meaning they can understand a book written at a seventh-grade reading level, drops dramatically to 48%.¹⁴ The number of people who read and write with proficiency and for pleasure is closer to 10%.¹⁵

In this context, the fact that 9 in 10 adults have trouble with complex medical language isn't surprising. People trust their providers to direct their care and help guide them toward making choices that will improve their health, an inclination that's reinforced by cultural norms that encourage patients to follow their doctors' orders without question. Without a doubt, providers can move

more efficiently through their appointments if they gather relevant symptoms, review diagnostic results and relay their conclusions in the language of their profession. What is the value of that interaction to the patient, though? In the end, patients leave the office with a list of instructions they don't understand and may or may not follow correctly. The CDC estimates that if we, as a nation, could improve health literacy – the ability to understand and use health information – we could prevent 1 million hospitalizations and save more than \$25 billion a year.¹²

Experienced coaches and case managers can enhance the provider-patient relationship by helping people to translate the language of health care. They can take the time to help patients understand their health, the reasons behind the instructions from their providers and how to integrate them into their daily lives. They can answer questions patients and their families may have, and they can help them be more prepared for their next interaction with their provider, making those visits more informative and productive for both provider and patient.



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Health care is both an art and a science

Providers must have the knowledge and skill to recognize and treat conditions, but they must balance that with what is right for the individual patient and what the patient will agree to. The convergence of these factors is evidence-based medicine, a concept that dates all the way back to Europe in the 1800s. The clinical experience and expertise of the provider and the foundation of trust between patient and provider is critical, and both are, to some degree, factors the provider can control. The more difficult factor to manage is staying up to date with the latest advances in medicine and technology to assure treatment options are aligned with the current standards of care.

In any given year, the U.S. Food and Drug Administration may approve upwards of 50 new drugs for clinical use.¹⁶ They may also remove drugs and revise prescribing guidelines. New health care devices and new medical procedures may emerge, and professional organizations may revise their guidelines. At ActiveHealth, we have a full-time team of clinicians tasked with evaluating the medical literature, incorporating new medications and reviewing new guidelines as they are issued. In 2021, they reviewed close to 400 new standards of care and treatment guidelines.¹⁷ It's simply not possible for busy health care providers who may have close to 2,000 patients in their panel to stay up to date with that volume of information, and that creates risks for gaps in care.¹⁸

Strategic collaborations can be of help here as well. Treating providers can retain their focus on patient care while organizations with expertise in health care analytics assess opportunities to close any gaps they find.

Technology can help turn data into actionable insights

More than 20 years ago, a doctor heard a story about a man in his mid-30s who had a stroke. The conversation was centered around treatment planning, but a question lingered. Why did a man in his mid-30s have a stroke? It may have been the first "why" question, but it wasn't the last, and the drive to answer it is why ActiveHealth is here today. We were founded on the notion that answers can be derived from data if you have enough of it, and that these insights, when offered to clinicians and their patients, can measurably improve health outcomes.

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Since then, the value that intelligent technology can offer health care providers and their patients has been a foundational construct for us. The quantity and quality of data we can ingest has grown significantly since we first introduced it. We can now assess established factors that contribute to an individual's health, like underlying medical and mental health conditions and social determinants of health, and factors we can impact, like biometric risk factors, lifestyle behaviors and medication adherence.

Using these various dimensions, we can quantify a person's ideal health, compare it to their current state and offer insights for prioritized actions to improve it.

Available insights range in importance and urgency from missing preventive screenings to drug interactions, and sometimes a single piece of data makes an immediate and lasting impact. For example, one man was experiencing puzzling and painful gastrointestinal bleeding. His doctor had changed his blood thinner with no effect. Our clinician was able to review his data set and saw a prescription from a different provider for 600 mg ibuprofen. A quick call resulted in a new prescription for acetaminophen, and the bleeding stopped. Another man reported that he was a smoker for many years, and our clinical rules indicated that a screening for abdominal aortic aneurysm would be appropriate. His doctor agreed and ordered a screening that uncovered a large aneurysm. They scheduled an immediate surgery, and the surgeon told the member that too often aneurysms are discovered when it's too late and they burst. In both cases, data compared to clinical best practices produced an insight that had a real-world impact for the patient.

Interoperable data creates opportunities at the point of care

The original electronic health records (EHR) were developed in the 1960s by private institutions and used primarily to improve scheduling and billing functions. The concept of a single EHR that followed a patient across providers and hospital systems was inconceivable for most of the day-to-day users at that time. In the 1990s, the Institute of Medicine published studies making the case for using EHRs to improve patient records and reduce medical errors, but recognized that there were significant barriers to wide adoption, including data security and cost.¹⁹

Since then, in spite of the cost and administrative effort to implement them, EHRs have been shown to improve health outcomes and quality of care, reduce medication errors and unnecessary investigations and improve communication and interaction among members of the patient's health care team. We can take those improvements a step further by gathering data from the EHR and adding it to information available in self-reported data, medical claims and pharmacy data. This enlarged pool of data compared to existing evidence-based clinical rule sets creates even richer patient insights. We can then redistribute them into the patient's EHR for access by treating providers, and more significantly, at the point of care.



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3. Improve communication and interaction among members of the patient's health care team

Let's look at some numbers

If we followed pure science, compliance with standards of the latest treatment guidelines would be at 100%, but in the real world there are a variety of factors that cause deviations from standards of care. Emotions, culture and religion can impact the health care choices someone makes, as does the level of understanding a person has about their options. Unfortunately, there are socioeconomic impacts as well. People may not be able to access the care they need, and they may not be able to afford it. We can't control those parts of the equation, but we can give providers close-to-real-time access to health data and highlight opportunities for improvement. When we do that, we can both improve health outcomes and reduce unnecessary health care spending.

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An independently validated study of almost 1.2 million members showed²⁰:

\$8.79 (1.3%)

savings in medical and pharmacy costs per member, per month

3.1%

reduction in inpatient costs

1.2%

reduction in cardiac procedure costs



We can reinforce and enhance the provider-patient relationship

As we age our health needs become more complex. For the most part, providers enter the health care field out of a desire to be of service, but the exhaustive demands on the hearts, minds and bodies of our health care professionals are driving people out of the field at an astounding rate. If we are going to protect, preserve and promote quality health outcomes and quality of life for patients and health care providers, then we must think creatively

and expansively. Strategic collaborations between who we serve and organizations that have experience with sophisticated analytics and care coordination can alleviate some of the administrative burden on practices that are stretched beyond capacity.

When we are suffering in mind or body, we look to health care providers to make us well. Our health care system is fragmented, and providers and patients are suffering as a result. As a society, we owe it to them — and to ourselves — to find a way to restore balance.



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Independent, third-party validation — Validation Institute

Validation Institute is a professional community that advocates for organizations and approaches that deliver better health value - stronger health outcomes at lower cost. They connect, train, and certify health care purchasers, and they validate and connect providers delivering superior results. Founded in 2014, the mission of the organization has consistently been to help provide transparency to buyers of health care.



ValidationInstitute

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