

Insight Driven Health

Virtual Health: The Untapped Opportunity to Get the Most out of Healthcare

High performance. Delivered.

Combining virtual health and traditional patient care models can help address the nation's clinician labor cost and capacity challenges

The United States spent \$2.6 trillion on healthcare in 2010¹, with wages accounting for more than half of that sum, making healthcare one of the most labor intensive of all industries. For decades, healthcare leaders and policy makers have worked to reduce healthcare spending. Over that time, it has become increasingly evident that cost-reduction strategies focused on utilization and quality improvement will fall short if nothing is done to lower the cost of labor per unit of service. Unlike other industries in which technology has significantly boosted productivity, healthcare has experienced no such gains during the past 20 years.

At the same time, the U.S. is faced with health professional shortages. For example, a projected shortage of as many as 31,000 primary care physicians (PCPs) by 2025, according to the American Association of Medical Colleges.²



¹ Health Care Costs: A Primer, Key Information on Health Care Costs and their Impact, Henry J. Kaiser Family Foundation. May 2012

² The Complexities of Physician Supply and Demand: Projections from 2013 to 2025, American Association of Medical Colleges, March 2015

Virtual health: Healthcare's overlooked opportunity

How can the industry and individual health organizations bend the cost curve in a meaningful way, particularly at a time when chronically ill and aging patient populations are growing, and more consumers have health insurance than ever before? A solution to balancing the demand/capacity equation is through virtual health approaches. In this way, healthcare can not only reach consumers who have been underserved, it can also serve in a better way those who already have routine care.

Virtual health can enable more clinical care work to get done without expanding the workforce, by streamlining work and redirecting clinician time to high-value tasks. Virtual health

care models can expand clinician capacity in three critical ways: shift tasks and work to patients, replace labor with technology, and automate tasks.

Combined, these three levers can streamline clinician work, decrease clinician demand and focus clinician time where their training and experience have the greatest value.

More available time means greater coverage for more patients, without increasing workforce size. The optimal combination of traditional in-person and virtual interactions could also offer the best patient experience and has the potential to create a new standard of care across the entire range of clinical services.

The real impact of virtual health: Scenarios to illustrate the opportunity

These three common primary and ambulatory care scenarios illustrate the opportunity of virtual health approaches and reveal both the potential time savings and economic value to healthcare. The industry faces clinician shortages in areas other than primary care, of course, but familiar primary care scenarios serve to highlight the possibilities of virtual health.



The typical office visit



37,000 PCPs



18% of workforce



~\$7 billion

The need to palpate, auscultate or take samples for lab tests requires that most diagnostic encounters today remain in-person. However, in any "typical" office visit much of the physician's time is spent gathering patient information, reviewing the information, considering potential treatment options and interacting with the patient. **Often, the patient shares information in bits and pieces at different points in the exam, sending the physician back through the diagnosis and treatment option cycle.**³

Imagine, instead, if the patient provides information prior to the scheduled appointment. Common consumer devices, such as wearable sensors and digital weight scales, allow the patient to capture and share biometric information prior to the exam, which the patient can submit through a secure portal, with concerns or discussion items for the visit. The portal is also where a "virtual character"—a computer generated medical assistant—can guide the patient through

the standard intake questions, such as family medical history and physical. Then, analyzing the combined information with a diagnostic engine, clinical options can be suggested to the physician prior to the in-person exam.

Reducing the amount of time gathering patient information and considering options prior to the exam can significantly streamline in-person encounters. **Accenture analysis shows that applying virtual health to annual ambulatory patient encounters can save each U.S. PCP an average of five minutes per encounter. This is a time savings equivalent to as many as 37,000 PCPs—or 18 percent of the PCP workforce—with an economic value of more than \$7 billion annually across the U.S. health system.**

Equally important, after that initial exam, most of any follow-up visit can be conducted via video for greater patient access and both patient and physician convenience.

What is virtual health?

Virtual health combines clinical care and professional collaboration through telemedicine, telehealth and collaboration at-a-distance to connect clinicians, patients, care teams and health professionals to provide health services, support patient self-management and coordinate care across the care continuum.

Specific to physician-patient encounters, virtual health enables live and asynchronous clinical interactions, clinical practice and patient management supported by a wide range of communication, collaboration and cognitive computing technologies along with digital devices and data.



³ G Talley Holman et al, "The myth of standardized workflow in primary care," Journal of American Medical Informatics, September 2, 2015



Ongoing patient management



1500 PCPs



1% of workforce



~\$300 million

eVisits are becoming an increasingly common alternative to in-person office visits to manage patients' ongoing clinical needs. eVisits are asynchronous clinical exchanges completed via secure messaging in which patients submit information, questions and images for physician review and response. eVisits typically take fewer than 10 minutes of physician time.

One example where eVisits can be applied is hypertension management. Twenty-six percent of outpatient physician visits each year are related to hypertension.⁴ According to Accenture, if each patient has one in-person annual physical with half of the remaining hypertension-focused encounters converted to eVisits, the time savings could be the equivalent of around 1500 PCPs—roughly 1 percent of the workforce—with an approximate annual value of \$300 million.



Patient self-management



24,000 PCPs



11% of workforce



~\$2 billion

Virtual health can support those with chronic conditions to self-manage their conditions to remain medically stable. As an example, adults with diabetes can use sophisticated mobile technology to effectively manage their lifestyles and conditions, and reduce the need for in-person encounters. Available technologies with sophisticated analytics can track, trend and assess patient—and medical device—provided data (such as blood glucose levels). The same technology can also offer prompts and suggest a personalized self-management plan—and that plan can evolve as the patient's

health status changes. Further, the information can be made available to the clinical team when needed. The goal is to maximize patient self-care and allow physicians to practice "by exception." In fact, such FDA-approved technology is available via physician prescription today.

Accenture analysis reveals that a care model comprised of an annual physician exam and technology-enabled self-management the rest of the year can save time equivalent to approximately 24,000 PCPs—representing 11 percent of the workforce—for a value of almost \$2 billion annually.



The health system view



5 minutes saved



320 PCPs



~\$63 million

The enterprise-level impact of these scenarios is just as compelling as the industry-level view already described. Consider a large regional health system or independent practice association with approximately 1,800 affiliated or employed PCPs. Accenture analysis shows that an average of five minutes saved across all ambulatory annual encounters

can release almost \$63 million in physician capacity per year, the equivalent of about 320 practicing PCPs. For a smaller system or clinically integrated network, a staff of about 800 PCPs is more the norm. A five-minute savings across all annual encounters for that organization can release the equivalent of roughly 140 physicians' time with a value of almost \$28 million annually.

⁴Centers for Disease Control and Prevention (CDC) National Ambulatory Medical Care Survey (NAMCS)

Toward a new gold standard of care

Virtual care and in-person care are equally important and complementary, the best mix depending upon the nature of the encounter. The ratio of virtual to in-person will shift over time as technologies evolve to enable more patient self-testing and caring.

The scenarios described are only some of the many ways that virtual approaches can unlock the time and capacity of the highly

valuable clinical workforce. The gold standard of care will become the best combination of in-person and virtual approaches that support sound clinical practice, continuity of care, and episodic clinical needs as well as ongoing care for those with chronic conditions.

This is not a far and distant opportunity; technologies exist now that can help deliver quality care in a more affordable way by

optimizing clinicians' time. The industry as a whole, as well as individual organizations, must act now to integrate virtual care models into everyday clinical practice. Only then will healthcare begin to address the looming cost and labor crises impacting the industry at national and organization levels.

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Methodology

Accenture clinicians, technologists and economists analyzed the workflows of the most common physician office visits, as documented by the National Ambulatory Medical Care Survey (NAMCS), evaluating how virtual health could be applied to diagnostic, follow-up and condition management encounters. Accenture examined encounters ranging from common preventive care office visits and routine infant or child health checks to visits for upper respiratory conditions, hypertension, arthropathies and diabetes. To calculate the monetary value of physician capacity, Accenture referenced the American Academy of Family Physicians (AAFP) and Medscape data on average annual primary care physician salaries, and AAFP data about average hours worked annually. Accenture also referenced data from the following sources: American Diabetes Association, Centers for Disease Control and Prevention (CDC), Healthcare Bluebook, U.S. Bureau of Labor Statistics, and World Health Organization's International Classification of Diseases Ninth Revision (ICD-9). The analysis was conducted in collaboration with THINK-Health LLC in September 2015.

About Accenture Insight Driven Health

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