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A virtual channel for value

As healthcare payment reform accelerates, telemedicine can give providers a competitive advantage

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Telemedicine and telehealth can be important catalysts for the change to value-based healthcare.

Introduction

For healthcare providers, the time for denial about payment reform is over. Forward-looking organizations and hospital administrators are facing this reality and responding with a variety of operational initiatives – from bundling services, to forming ACOs and other risk-sharing models, to measuring outcomes and sharing patient health data.

As providers manage this transition over the next two to 10 years, care delivery models must evolve as well. Telemedicine and telehealth,* with their emphasis on taking costs out of the system and their potential to maximize outcomes for individual patients and key populations, can be important catalysts for the change to value-based healthcare.

This paper explores telemedicine's contribution to payment reform by examining its relationship to the various imperatives driving the transition from fee-for-service (FFS) to value-based purchasing (VBP):

- Growing consumerism
- The Affordable Care Act's (ACA's) emphasis on improving outcomes
- The need for better population health management
- Continuity of care.

Contents

A dual evolution **Payment reform and telemedicine**

The fee-for-service model centers on the needs of providers and growing, or at least maintaining, patient volume. However, as we move toward value-based purchasing, value-centric measures and consumer satisfaction are becoming paramount. The value-based-purchasing world is going to look very different on at least four different fronts, which will, in turn, drive demand for telemedicine.

1 Consumerism

The focal point of each of these models is vastly different. In FFS, the provider's needs have been at the forefront, with the primary objective of driving as much patient volume as possible through a practice. In this environment, consumers have had very little power, as there has been almost no transparency into the relationship between services provided and fees charged. By contrast, the VBP world is being driven by an increasingly empowered and engaged consumer. Faced with high deductibles and out-of-pocket costs, patients are exercising their right to choose the doctors they want, demanding fair pricing, and crying foul when their customer experience isn't up to par. Telemedicine offers much greater physician and care setting choices at a fraction of the cost. And interestingly, many consumers report that, although the doctor is not in the same room, they feel they get more time and focused attention via telemedicine than they do during in-person visits.

2 Better Outcomes

In the FFS model, there has been very little tracking of outcomes over both short- and long-term timeframes. When providers operate on an encounter-by-encounter basis, there is incentive to maximize fees and determine whether to order procedures based on what health plans will reimburse. In the coming VBP environment, providers will be incented on their ability to minimize negative outcomes, such as hospital-acquired infections and re-hospitalizations in the post-acute-care period; and contain costs by avoiding unnecessary testing and procedures for those managing chronic conditions and discouraging ER visits for non-emergencies. With its ability to provide care to patients wherever they are, even on weekends or late at night, telemedicine can minimize the risk of patients ignoring symptoms or delaying treatment until an office visit is possible.

3 Population Health Management

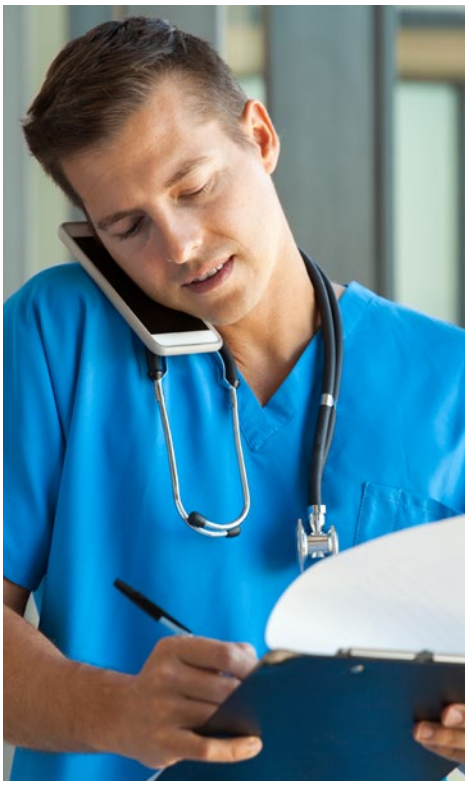
In addition to the need to track outcomes on an individual level, providers are increasingly being rewarded or penalized based on their ability to manage health on the population level. In FFS, a lot of the risk resided with health plans, thus driving the desire to enroll relatively healthy members. In the new VBP environment, the government is demanding that improvements be made in population health, so that providers can better serve those with acute needs related to unmanaged chronic conditions or lack of care due to geography or economics. Telemedicine allows the underserved to access high-level care remotely, a vast contrast to the lack of care with which they have traditionally been saddled. And, when it comes to the chronically ill, telemedicine offers an unprecedented opportunity to improve long-term outcomes by regularly monitoring medication adherence and self-care, responding to alarming symptom flare-ups in near real time, and funneling much-needed education and support tools to this population.

Telemedicine can minimize the risk of patients ignoring symptoms or delaying treatment until an ofice visit is possible.

A comparison of FFS & VBP

4 Continuity of Care

The FFS model has allowed providers to operate in silos. Once an encounter concludes successfully, the system has done little to encourage providers to track patients' progress long term. By contrast, in VBP, continuity of care is required in order to improve and track outcomes. As reflected by EHRs and more flexible means of care like retail and mobile health, there has been a growing and undeniable need for collaboration and communication between providers across the spectrum of care. Telemedicine is the next step in this evolution.



FEE FOR SERVICE	VALUE-BASED PURCHASING
Provider-centered	**Patient-centered** – higher deductibles and OOP costs lead to more purchasing power
High cost variation – patient assumes risk	**Data-driven costs based on "value" and evidence-based clinical outcomes** – provider assumes primary risk but seeks to share with payers and patients
Objective is volume – providers are incented to attract and retain patients who need multiple interventions	**Objective is population health management** – providers are incented to achieve "equitable access" based on clinical and social need
Payers drive decisions – procedures ordered based on what payers will reimburse	**Patients drive decisions** – diagnostic and clinical procedures and services must demonstrate "appropriate use"
Individual encounter model – siloed patient care	**"Continuity of care" model** – extends across not only traditional physicians' offices but to retail outlets, mobile health and now telemedicine
Key data sources – coded claims data and financial transactional data systems	**Key data sources** – shared data facilitated by standardized infrastructureand clinical intelligence platforms and workflows

In the following sections, we will take a look at how these industrywide developments correlate with the need for providers to take a serious look at telemedicine as an avenue of care.

Telemedicine and consumerism

Meeting the needs of the discerning patient

We have now entered the age of the empowered consumer. With higher deductibles and out-of-pocket costs coming out of their pockets, patients are in the position to demand choice among care alternatives and transparency into the true cost of treatment.

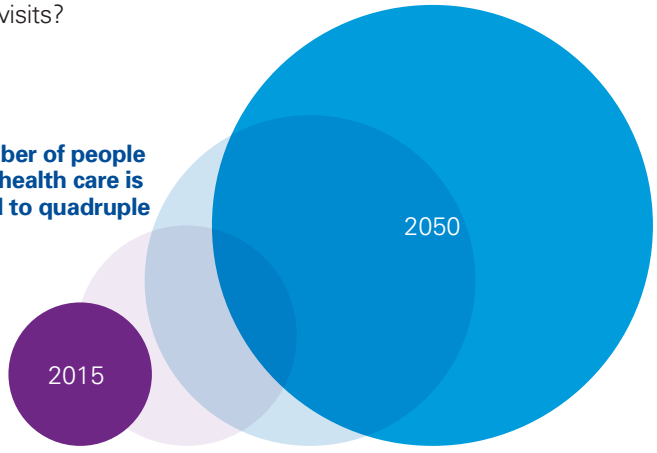
Telemedicine is appealing to discerning consumers because of the lower cost, immediate access to providers and the convenience. Patients particularly appreciate being able to minimize disruption by receiving off-hours care from home rather than during the work or school day. At a much lower cost per encounter, telemedicine provides consumers with a significant opportunity to save money for both urgent care (e.g., respiratory infections requiring antibiotics) and maintenance of chronic conditions (e.g., diabetics tracking their progress at home or checking their HbA1C levels at a clinic lab).

Providers who have been resistant to telemedicine have been concerned about cannibalizing their traditional brick-and-mortar businesses. After all, why would physicians want to see patients via video feed at a cost of $40-42 per encounter when they could charge a much higher fee for in-person visits?

The answer is that there simply aren't enough providers in the system or hours in the day to see all of the people currently comprising the patient landscape. Passage of the ACA has brought millions into the healthcare system. Add to that the aging of the Baby Boom Generation, and the number of people needing care is expected to quadruple by 2050.[1] Finally, it is imperative that provider organizations consider the influence and preferences of Millennials. Outnumbering baby boomers by 8 million people, they will account for 41 percent of spending by 2025. This group not only prefers but demands the convenience, immediacy and heightened consumer experience that telemedicine can provide.

Instead of focusing on how telemedicine might temporarily erode their current patient base, providers would be wise to think of it as another means of attracting new patients, retaining current ones, and engaging patients with tools and personal information that can influence treatment adherence, improve outcomes and encourage self-management of care when appropriate.

The number of people needing health care is expected to quadruple by 2050



1 Berwick, C., Steel, C. (2015). Capitalizing on telehealth to reduce cost and improve quality in healthcare provision. http://www.paconsulting.com/our-thinking/capitalising-on-telehealth-to-reduce-cost-and-improve-quality-in-healthcare-provision/

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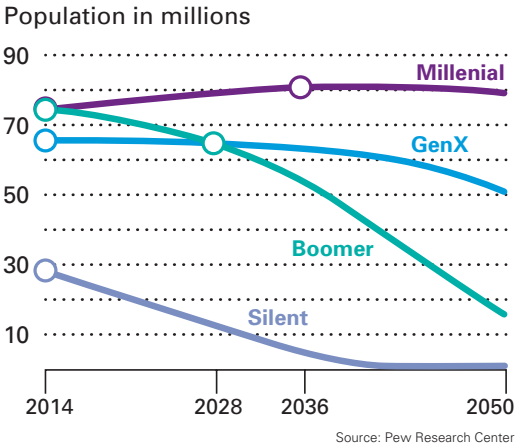
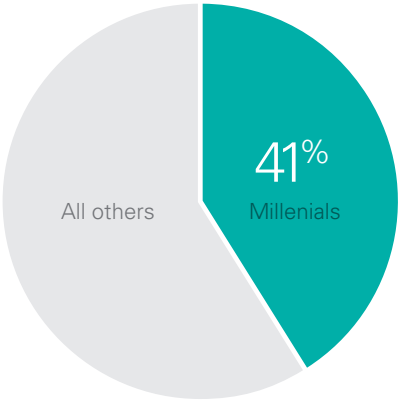
Millennials demand the convenience, immediacy and consumer experience that telemedicine can provide.



Source: Pew Research Center

2015 is the year millenials are projected to pass the Baby Boom generation. By 2025 they will account for 41 percent of healthcare spending.



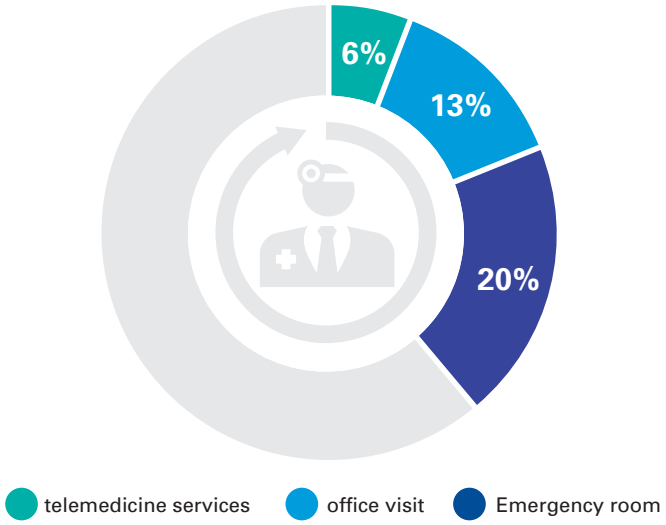
Healthcare spending in 2025

Telemedicine and better outcomes

Controlling unnecessary costs and treatments

One of the central assumptions of the ACA is that it is possible to improve health outcomes even while reining in costs, a balancing act that is now connected to provider reimbursement levels, bonuses and penalties. Clearly, there are many compelling motivators for providers to do whatever they can to improve outcomes. And studies show they are open to exploring telemedicine and its increased data transparency as one means of achieving better value: According to a nationwide survey of 2,000 primary care physicians conducted by American Well, almost 60 percent of doctors would be willing to see patients via video.[2] They know that telemedicine can help raise their outcome ratings because, by its very nature, it helps patients avoid unnecessary treatment, catch problems before they become emergencies and better manage chronic conditions. Recent studies show that only six percent of patients who used telemedicine services required follow-up consults, compared to 13 percent of those who were seen in an office and 20 percent of those who visited an ER.[3]

Telemedicine consults compare favorably to more conventional services when reviewing patients who subsequently required follow-up medical services after initial treatment.



One particularly cost-heavy phenomenon is unnecessary usage of ambulances and trips to the emergency room. For example, chronically ill patients can experience sudden worsening of symptoms that can send them running for emergency care. More often than not, these issues could be addressed with a change in medication, diet, or other adjustment – recommendations easily made via telemedicine. This is equally true of the chronically ill residing at home and those living in nursing homes. (See sidebar on page 7.)

At present, certain medical specialties are more likely to use video consults than others. According to a recent survey of providers conducted by American Well, 76 percent of respondents felt dermatology was the most appropriate specialty for telemedicine, followed by psychiatry at 54 percent, infectious disease at 46 percent, pain management at 37 percent, and neurology, cardiology and rheumatology at 36, 34 and 32 percent, respectively.[4]

Medical specialties particularly suited to video consults:

Dermatology	76%
Psychiatry	54%
Infectious Disease	46%
Pain Management	37%
Neurology	36%
Cardiology	34%
Rheumatology	32%

2 Frist, B. (2015). Telemedicine: A solution to address the problems of cost, access, and quality. Health Affairs Blog.
3 The Institute for Health Care Consumerism (2015). Study: Telehealth expands access to health care.
4 American Health (2015). Telehealth Index: 2015 Physician Survey.

There are two types of visits most appropriate for telemedicine:

Patient-initiated, unplanned services: This type of care can range from adult patients calling in with minor respiratory ailments, to school children with complaints that don't require in-person visits (poison ivy, bee stings, minor asthma flare-ups), to patients in post-acute-care facilities with non-life-threatening symptoms. In such cases, medical assessment and care can be delivered via remote video, thus freeing up physicians' time to see more critical patients in person. This should improve outcomes for both the relatively well and the critically ill over time.

Provider-initiated services for the chronically ill: People with chronic illnesses, such as diabetes mellitus, COPD, congestive heart failure, and mental illness, sometimes require critical care for major flare-ups. More often, however, they need regularly scheduled maintenance appointments so their physicians can monitor key measurements and assess their self-management activities. Under the FFS model, some providers have been reluctant to treat chronic patients in this manner, since this approach lowers in-office patient volume. However, others realize that, when we reach a value-based reimbursement model, this will be one of the most important steps they can take to improve long-term outcomes for their patients and at the same time meet the growing demand for clinical services.

Use case:

Improving outcomes for nursing home patients

Florence is an 86-year-old resident of a nursing home for seniors with dementia. When she is in a heightened state of confusion, she sometimes lashes out physically. This can result in self-injury, ranging from minor bruising to deep lacerations. In the past, if Florence injured herself on a weekend or after hours, the nursing home would transport her to a local emergency room. More often than not, the injuries required nothing more than anti-bacterial cream and a bandage, thus rendering the expensive ambulance and emergency department visit unnecessary. By contrast, now that the nursing home has telemedicine services (two-way video-conferencing and a high-resolution camera), patients like Florence can be seen by a remote doctor immediately after an injury occurs, and most of the time the on-site nurses are well equipped to follow the doctor's orders.

Savings from such remote interventions can be significant. According to a recent study in *Health Affairs* magazine, in facilities that used telemedicine services regularly, hospitalization rates declined by 11.3 percent, amounting to an approximate Medicare savings of $150,000 annually.[5] Extrapolated out to all nursing homes nationwide, savings from using telemedicine could reach millions of dollars.

5 Crowe, M.R. (2014). Could your facility benefit from telemedicine? Healthcare Law Insights, Husch Blackwell.

Telemedicine and population health management

Providing access to all

Population health management seeks to look at outcomes across a group and stratify them according to perceived risk and need for more aggressive medical intervention, whether such need is based on chronic illness or insufficient access to care. This meets one of the main principles behind the ACA – the right to "equitable access" to healthcare based on clinical need, regardless of social stratum or geographic disparity.

Telemedicine contributes to better population health management for both the chronically ill and the underserved. Telemedicine providers operate in a data-sharing culture, which, coupled with advanced analytics, allows greater insight into evidence-based treatments and populations that require proactive outreach and educational tools to better manage their conditions.

For example, using telemedicine to allow specialists to monitor ICU patients around the clock has been shown to have a significantly positive impact on mortality rates. According to a survey in the journal *CHEST* of 110,000 patients in 52 ICUs throughout the country, those being cared for in TeleICU programs were 26 percent more likely to survive and were discharged 20 percent faster.[6]

While economically advantaged patients are making demands for better care, some Americans get no care at all. With 19 percent of the nation living in remote, rural areas,[7] there is a sizeable portion of the population that receives substandard medical care. Rural hospitals may suffer from staff shortages, lack of certain sub-specialists, or obsolete diagnostic equipment. Telemedicine platforms in rural community hospitals will allow these patients to access a much higher level of care.

An illustrative example of the benefits of this telemedicine model is in stroke care. Particularly in rural areas, it is quite common for patients to present with symptoms of a stroke at emergency rooms only to find that there is no neurologist on staff. With telemedicine, such patients can be assessed and diagnosed via video feed without leaving their local hospital, thus saving time and brain function that can be critical to their survival.

Telemedicine allows specialists to monitor ICU patients and can significantly improve outcomes.

6 Gray, S. (2013). Telemedicine improves outcomes for critically ill patients, study finds. USA Today.
7 http://data.worldbank.org/indicator/SP.RUR.TOTL.ZS

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Telemedicine contributes to better population health management for both the chronically ill and the underserved.

Telemedicine and continuity of care

No more silos

Telemedicine is a natural extension of the industrywide evolution toward continuity of care exemplified by retail and mobile health models. Providers can use telemedicine for such use cases as medication management and renewal; chronic condition management; post-hospital discharge; post-surgery follow-up; and behavioral health sessions, all of which require consistent, long-term continuity of care.[8]

However, it is important to note that the direction of inquiry for telemedicine is currently changing from a traditional hub and spoke model to a spoke and hub model. With the former model, a centralized facility offering specialty services would control the telemedicine protocols and technology and refer patients to primary care providers at remote sites. In the new model, primary care physicians will use standardized protocols and technologies and choose among telemedicine specialists for assistance. However, they will retain clinical control of their patients accessing care from geographically remote sites, often using a hybrid model of specialty providers from both within and outside of the hospital network. Shifting control from the hub to the spokes is complex, as it requires integrated and standardized technology platforms to accommodate specialty providers from both within and outside the spoke facility network, as well as evolved clinical protocols and workflows.

By illustration, see the case study on page 11.

8 American Health (2015). Telehealth Index: 2015 Physician Survey.

Regional hospital system seeks telemedicine enterprise strategy

Problem

A large, 198-hospital provider system with a presence in over 20 states wanted an enterprise strategy for telemedicine across all of its hospitals. They were already using telemedicine for stroke care. However, the existing siloed, non-integrated approach was costly, inefficient and creating problems on both the regulatory and technology fronts, while also eroding the company's profits. Hospital administrators recognized that they needed to align their telemedicine plan with their broader strategic vision for the company. The problem was, this vision was gradually changing as the industry at large continued to evolve from a volume-centric, fee-for-service model to a value-based model focused on outcomes.

Solution

KPMG is assisting this hospital system in becoming a leading provider of telemedicine and telehealth services. First, KPMG's team of industry veterans, strategy leaders and information technology professionals spent a great deal of time examining and analyzing the company's current state and industry-leading practices. What they found was that they needed a hybrid telemedicine service model, wherein primary care physicians (PCPs) on staff could remotely access internal medical specialists when and where available and seamlessly access external specialists when they were not. This hybrid model required a central governance structure, integration of technology on one cloud-based platform, and standardized workflows to measure and optimize these enhanced care delivery models.

Next steps

KPMG's plan for this hospital system will progress in three stages: (1) stabilization: piloting centrally coordinated telemedicine projects; (2) scale up: building upon leading clinical, operational and financial practices from Stage One in order to expand the initiative to meet the needs of a larger population; and (3) optimization: incrementally improving local market implementations for the highest return on investment and enhanced patient outcomes.

The market for telemedicine

Whether reducing gaps in care, providing access to the underserved or lowering the cost of treating the chronically ill, telemedicine is meeting many of the tenets put forth by the ACA. In turn, patients and providers are embracing this means of care. Even retail health clinics are taking a serious look at adding telemedicine and consumer telehealth services to enhance customer loyalty and adoption. And payers are starting to pay attention to the undeniable impact on costs and long-term outcomes.

Patients

As patients become more adept at using technology and comfortable with self-management of their health, there should be increased acceptance of telemedicine, not only for direct treatment but for managing their own health data, learning from branded and personalized health education, and using tools for self-management of chronic conditions. Patients are already using physician health portals and integrating their own medical data into Personal Health Records. And 95 million Americans used their mobile phones as healthcare tools in 2013, according to healthcare marketing research firm Manhattan Research.[9]

Most important, a recent Harris Poll showed that 64 percent of patients surveyed would consider consulting with their doctor via video rather than in person.[10] And those already using telemedicine are showing high levels of customer satisfaction. For example, a survey of patients in the Veterans' Health Administration, one of the earliest adopters of telemedicine, shows a 94 percent satisfaction rate.[11]

Providers

As patients embrace telemedicine and come to rely on the convenience it provides (particularly in off hours or when travelling is difficult), providers will start to view it as a competitive advantage. In fact, according to a Harris Poll conducted by American Well, 84 percent of healthcare executives said that telemedicine was important to the future of their organizations, and 90 percent said they are developing at least one telemedicine solution.[12] With competition from retail and urgent care outlets, providers are finding that telemedicine is a key to their continued viability during the next phase of healthcare and payment reform.

Retail Health Clinics

In the FFS environment, patients' increasing acceptance of retail health clinics as a means of care could be seen as a threat to traditional providers. However, as all providers will eventually be compensated according to outcomes, the continuity of care these outlets facilitate will likely be beneficial to the entire healthcare system. With their central community locations, potential for off-hours service and the convenience of filling prescriptions on site, retail clinics may become one of the most important drivers toward consumer acceptance and adoption of telemedicine.

Payers

When it comes to payers, studies show that the transition to telemedicine is gaining ground. In 2014, Medicare reimbursements for telemedicine totaled $13.9 million, which reflects a steady increase since the sector was first measured in 2008.[13] And 71 percent of employers with more than 1,000 employees are expected to offer telemedicine services by 2017.[14] That said, reimbursement for telemedicine is currently in a state of flux. As most reimbursement policies are decided and managed on a state level, state governments are currently hashing out the intricacies of this issue. Medicare and Medicaid payments are a bit more straightforward; payment from private payers is still very much a work in progress. At present, there are four main models. (See Reimbursement sidebar on page 13.)

One important note: Monitoring the chronically ill remotely is expected to yield $36 billion in savings worldwide over the next five years.[15] In fact, the benefits of monitoring these patients in real time is widely recognized by the industry as critical to improving outcomes and fostering better population health. As such, it is expected to yield $5 billion+ by 2020, an estimate that represents 50 percent of the entire telemedicine market.[16]

$13.9 million
Amount of Medicare reimbursements for telemedicine in 2014

71%
Number of employers with over 1000 employees expected to offer telemedicine services by 2017.

9 Anonymous (2014). The evolving landscape of medical apps in healthcare. HIT Consultant.

10 Hall, S.D. (2015). Patients increasingly open to video doctor visits. FierceHealthIT.

11 Jacobson, S. (2015). How laws and policies are shaping telemedicine. http://rockhealth.com/how-laws-policies-shaping-telemedicine-market/

12 American Well (2015). Telehealth Index: 2015 Consumer Survey.

13 Sprang, R. (2015). CMS Medicare reimburses nearly $14 million for telemedicine in 2014. Ctel.org./2015/05/cms-medicare-reimburses-nearly-14-million-for-telemedicine-in-2014.

14 Frist, B. (2015). Telemedicine: A solution to address the problems of cost, access, and quality. Health Affairs Blog.

15 Javitt, J. (2014). Case study: Using mhealth to manage diabetes. mHealthNews.

16 Kern, C. (2015). Telehealth technology can improve patient outcomes. Insight On: Healthcare.

Whether used to meet the needs of discerning consumers, improve outcomes and population health management, or facilitate continuity of care, telemedicine has become an integral part of the new payment environment that can no longer be ignored.

4 Potential Reimbursement Models

1 "No fee for service": Although it may seem counterintuitive, many provider organizations are offering telemedicine services free of charge. These programs are seen to be of value because they drive patients to use a particular hospital. This represents volume that might be lost if telemedicine services were not offered. In some specialties, such as neurology, it is seen to be more cost effective to offer "no fee for service" than to have multiple neurologists on call.

2 Shared risk: For provider organizations following shared-risk models, such as ACOs and provider-led health plans, telemedicine is considered a good investment. Such organizations receive a flat monthly fee for each member and must meet specific outcome criteria, so investing in telemedicine can lead to the improved clinical outcomes on which they depend.

3 Medicare/Medicaid for targeted populations: Medicare and Medicaid will reimburse for services provided to chronic patients that are considered high cost and high risk. This applies to people suffering from chronic illnesses that need maintenance and to those that require mental health interventions.

4 Private insurers subject to commercial parity laws: New parity laws dictate that, if federal and state government programs offer reimbursement for telemedicine, private payers must offer equal reimbursement rates. This model is under the most scrutiny and will evolve in years to come as addendums to the ACA continue to unfold.

The path to transformation: How KPMG can help

The path to transformation from fee-for-service to value-based purchasing is a challenging one, with numerous moving parts. Each of these parts must transition in a purposeful, coordinated way to the new model, all while ensuring that the business continues to function under the current paradigm.

Clients that come to us for telemedicine projects are asking for services in the following areas:

- **Organizational alignment:** This can be related to business objectives, strategy and planning, and internal education/change management. The latter is particularly important, as getting project leaders to align on financial ROIs and clinical outcomes is critical to long-term success.
- **Program design and maturity assessment:** Our process comprises an organizational assessment of the current state, determination of business objectives, and establishment of a future-state strategy, target operating model and service line roadmap. It is essential that the systems that are implemented are standardized with scalable infrastructures, data flow and workflow designs.
- **Program governance and regulatory guidance:** It is imperative to have strategic planning and operational program support which include patient-centered governance protocols and policies in place across care settings. These should be coupled with an analysis of regulatory and reimbursement compliance issues, both as they stand in the present and with an eye to further developments in the near- and longer-term.
- **Integrated system platform selection and configuration:** Choosing and configuring telemedicine platforms, and ensuring network security and HIPAA compliance, represent the most challenging tasks reported by clients. These are critical decisions as they impact the success and efficacy of teleconsult clinical documentation and administration, video collaboration, patient engagement, and performance management reporting functions.
- **Performance management and reporting:** Measurement, analysis and reporting on quality and outcomes and quality are indispensable when maintaining and growing a telemedicine program. Financial, clinical and operational key performance indicators must all be measured and integrated.

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