Telehealth today: Evolving to meet health care demands in the 21st century

• On-demand medical advice
• No appointment necessary
• Closing the gap between patient demand and provider supply
• Improved health outcomes
• Increased provider reach, scope and touch points
• Lower out-of-pocket costs
• Simple care needs managed effectively and efficiently
• Preventive actions and follow-ups
• Focus on continuity of care
• Health data sharing

Optum is investing in a variety of technologies that support providers, consumers, payers and others to help improve the delivery of care, access from primary care to specialty care, and general population health management. NowClinic is one example of this approach.
A ready-made solution for a growing problem

Most health care industry leaders agree: Patient demand will exceed medical provider supply over the next several years. Indeed, an estimated 30 million more patients sought care in the U.S. health system with the implementation of the Affordable Care Act, or “Obamacare,” in 2014. At the same time, a well-regarded study indicates there will be 70,000 fewer doctors by 2020. And yet another study indicates a lack of primary care providers (PCPs) as medical school graduates specialize and current PCPs retire early to avoid expanded roles with more patients. The result? Anticipated patient appointment wait time averages of 2½ weeks to 3 months.

For more than 50 years, telemedicine has used basic technology to extend or enhance traditional medical care beyond the “bricks-and-mortar” doctor’s office. Today, telemedicine provides patient-initiated “virtual” clinical interactions with a provider. These can be done via video, chat, phone or mobile connection.

Telehealth is an array of technologies used in facilitating the same patient education and treatment that previously occurred only during an in-person appointment. With the help of dedicated software, high-speed broadband connections, a network of licensed medical providers, and supportive employers and health insurance companies, telehealth is moving forward at lightning speed. In particular those technologies are used to:

- Store and forward vital signs, photos or video
- Reinforce healthy behaviors
- Remotely monitor health

The nation’s health care supply-and-demand dilemma is just one challenge. Also consider:

- Fast-paced lifestyles for patients and providers alike
- A mobile service culture
- Skyrocketing health care costs (amid cost-cutting efforts by government- and employer-based plans)

The only bright spot seems to be growing consumer confidence in new health care options. In fact, many patients have already used — and benefited from — telehealth, which can be as simple as a phone consult or email exchange with a health care provider.

The expert view: An inevitable shift

**IMS Research (IHS):** Revenue from telecommunications-based health services will grow 300%+ by 2017.

**Towers Watson:** 9% of companies were expected to offer telemedicine in 2014; 27% will consider adding it in the next few years.

**Teladoc:** Every group with more than 1,000 employees will have a telehealth vendor in the next three years.

**Analysts:** 70% of people are without a primary care physician or not utilizing one. More than 30 million people were expected to gain insurance coverage in 2014. Telemedicine is well-positioned to fill the void.
NowClinic® virtual care: Closing the gap, extending total population health management

As the health care industry seeks to overcome its predicted shortage of providers, a 2013 customer experience report indicates 74% of U.S. patients are open to the concept of a “virtual,” or technology-facilitated, doctor visit. Additionally, research shows that 65% of emergency room, urgent care, office and retail health visits could have been handled via telemedicine.

A key component of enabling broad total population health management, NowClinic is a virtual telemedicine health care concept already at work. It fills an important gap for patients. Previously, they were forced to choose between managing a simple health issue via a nurse advice phone line, an urgent care or an emergency room visit, with the typical long wait times and increased costs. NowClinic is ideal for use when:

- A primary care physician is unavailable or inconvenient
- A specific diagnosis and prescription are needed, beyond the information and education that a nurse advice line can provide
- An urgent care or ER visit is considered unnecessary

Virtual care is further driven by a growing tech-savvy segment of consumers who are accustomed to virtual service in a variety of industries. This segment includes family health care decision-makers and individuals looking to access primary care on demand, outside of any pre-existing health system or provider relationship, and outside typical workday hours. Decision-making often hinges on time savings and convenience versus cost savings and relationships. In fact, people age 40 and under are almost 50% more likely to not have a documented primary care physician. Accordingly, there are approximately 200 telemedicine networks in the United States already involving nearly 3,500 medical and health care institutions.

Using NowClinic’s virtual visit capabilities, patients choose a medical doctor, nurse practitioner or physician assistant to diagnose, prescribe and provide education for both adults and children.

Why telehealth?

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<th>Payers: Employers, Medicaid, etc.</th>
<th>Patients</th>
<th>Providers</th>
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<td>• Provide appropriate care setting</td>
<td>• Easy, alternative access&lt;br&gt;• Cost- and time-efficient&lt;br&gt;• Lower out-of-pocket costs compared to ER/UC/primary visits</td>
<td>• Help with care continuity as all records are available to consumer and provider&lt;br&gt;• Improve efficiency of care for overworked medical staff</td>
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Sick? Just call or click.

A modern-day twist on the old-fashioned house call

NowClinic is a lower-cost, convenient, alternative care option for acute care. It is also timely and effective. NowClinic facilitates a patient’s real-time care from licensed physicians. At the same time, physicians are able to extend care to a wider range of people and locations. Patients pay an affordable rate to access the physician of their choice. No appointments are necessary for NowClinic; consultations happen when and where it's convenient for the consumer.

Quality care in 30 minutes or less
• Launch NowClinic using a smartphone, tablet or computer
• Enroll (first time only) in account, input health history insurance and credit card information
• Log in using unique username/password
• Select a provider
• Connect requesting immediate, on-demand (wait time typically less than 10 minutes), or by-appointment care
• Consult with provider to discuss symptoms and options for care
• Receive diagnosis, care, test plan, follow-up info and prescriptions*
• Review visit summary and cost, and confirm credit card transaction

NowClinic is available in all states that allow virtual health care visits as authorized by state medical boards.* NowClinic is five years young and growing steadily, along with consumer confidence in the service — 95% of users say they would “definitely” use again. NowClinic infrastructure is being scaled to meet growing demand. Its focus is on:
• Broadening the network of providers
• Overcoming administrative issues to facilitate ease of care during an appointment and regarding any follow up and billing
• Technology advancements that enhance and expand the scope of service available

* Prescriptions sent electronically to patient’s chosen pharmacy. Available prescriptions exclude controlled substances, appetite suppressants and lifestyle drugs. Video may be required for prescribing. Recent statistics support that a typical visit is under 30 minutes total time.

NowClinic by the numbers
• 96% of users chose online, 4% chose phone
• 95% would “definitely use again”
• 85%+ saved a trip to ER, UC, PCP or convenience care clinic
• 93% saved money
• 88% saved personal time
• 87% saved time away from work
• 15% are repeat users
• 64% of patients are female
• 53% of patients are 19–30 years old
• Average age: 38

NowClinic offers fast, effective help for the following:

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<th>Condition</th>
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<tr>
<td>Acne</td>
<td>Ear infection/swimmer’s ear</td>
<td>Ringworm</td>
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<tr>
<td>Allergies</td>
<td>Eye infections/pink eye/sty</td>
<td>Runny nose</td>
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<td>Asthma</td>
<td>Fever and chills</td>
<td>Sinus infection</td>
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<td>Athlete’s foot</td>
<td>Flu/flu-like illness</td>
<td>Skin inflammation</td>
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<td>Bladder infection/UTI</td>
<td>Gout</td>
<td>Skin rash</td>
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<td>Bronchitis</td>
<td>Insect bite/spider bite</td>
<td>Sore throat</td>
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<td>Cold sore</td>
<td>Laryngitis</td>
<td>Sunburn</td>
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<tr>
<td>Coughs/cold</td>
<td>Nausea</td>
<td>Viral illness</td>
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<td>Diarrhea</td>
<td>Poison ivy/poison oak</td>
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Some conditions require the use of video capability
NowClinic: Results demonstrated

NowClinic is the leading 24/7 model with medical doctors, nurse practitioners and physician assistants available by phone, HD video, chat and mobile. NowClinic is making a difference for patients and employers alike by:

- Driving more appropriate access to doctors for acute care
- Lowering costs for primary physicians, urgent care and emergency room visits
- Impacting quality and productivity for consumers

NowClinic is effective: One and done

Two years after NowClinic served its first patient, Optum™ set out to see what kind of difference the NowClinic virtual care option was making for its users. The key question was whether a NowClinic visit served its purpose in place of an office visit, or an urgent care or ER visit, or if users eventually ended up seeing a provider in person for the same illness or condition. Researchers assessed NowClinic’s in-person follow-up rate within 30 days of patients’ original visit. They benchmarked this rate against the same follow-up rate for non-NowClinic users who originally choose an in-person visit. Using claims data, the comparison groups had the same distribution of gender, age, health concerns and risks, diagnosis, and geographic location as NowClinic users.

Fewer than 2% of NowClinic users required a follow-up visit for the same illness and/or with the same diagnosis within 30 days following their NowClinic visit, while 4% of non-NowClinic users had follow-up visits.

The conclusion? NowClinic is an effective option for certain acute and sub-acute care treatments.

NowClinic is efficient: Cost savings for all

Optum research shows that the weighted average cost of urgent care and ER visits for conditions appropriate for NowClinic are approximately two times more expensive than using NowClinic. Users agree that they benefit from indirect savings by missing less work and reducing low productivity due to delayed medical care. Average indirect savings are estimated at 200% to 300% of direct medical savings. For employers, proper use of NowClinic translates into a positive return on investment: They save when at least 1.2 employees out of 100 use the NowClinic service once annually. And the higher the utilization rate, the higher the net per-member-per-month (pmpm) savings for an employer.

A look at what’s next for telehealth

With U.S. and world markets predicting only increased demand, telehealth stakeholders look to keep up by expanding their scope of services, integrating health care plans with electronic health records, dealing with licensing and regulatory issues, figuring out reimbursement policies and more.

Insurance organizations are concerned with the transitional costs of fully supporting telehealth. These include:

- Developing a new network and integrating it with existing ones
- Dealing with the impact on existing premiums and “bricks-and-mortar” health care providers
- Modifying existing claims coding systems
Yet, with proven benefits for employers and patients, insurance organizations are beginning to include telehealth as a covered benefit. Some payers have launched telemedicine services after hours and on weekends and for chronic care or readmission programs. With employer group clients providing the pressure, long-term value for payers includes not only satisfied clients but also:

- Reduced overall costs
- Fewer readmissions and unnecessary use of ER and urgent care facilities
- Reduced pressure on primary care providers and specialists
- Better managed chronic care patients

**Employers** view telehealth as a powerful, appropriate option for meeting simple care needs and as a health benefit to employees that reduces absenteeism and health care costs. Dramatic changes in health care are challenging traditional value propositions, moving employer discussions beyond medical savings to a new definition for their return on investment. This includes the impact of health benefits on an organization’s culture of health; a way to attract and retain top talent; and the probable connection between healthy employees, revenues and shareholder return. Increasingly requesting telemedicine options, employers ponder the possibilities, including:

- Integrating their broader health plan and telemedicine vendor beyond an in-network provider
- Using telemedicine in place of an on-site clinic
- Adjusted copays and care options
- In-office technology to ensure employees can be diagnosed and treated without leaving the office

Understanding employee behavior management is critical: some employees are paying all or a portion of medical consult fees while others tie incentives to telemedicine to further drive utilization and cost savings.

**Providers** are concerned with a lack of reciprocity in credentialing and licensing regulations between states as well as inconsistent reimbursement practices. Resolution of reimbursement issues has begun with public payers developing a larger menu of telemedicine codes and private payers required to reimburse. Already, 28 states have passed or have pending telemedicine parity legislation. Providers are interested in long-term benefits, including reduced overhead, yet are also challenged with current limitations in diagnosing and treating patients. However, patient education regarding appropriate care, along with improved diagnostic technology, is expected to lessen this concern.

Patients are more “mobile” than ever. Overall, patients are most likely to use telemedicine based on convenience and time-saving benefits. This includes patients of all ages, taking advantage of remote technologies to communicate with their provider regarding acute health conditions and concerns.

Despite its challenges, telehealth is expanding its customer base as technology advances and state-by-state regulations support it. A natural evolution for the next generation of patients, providers and business leaders who are growing up using smartphones, video conferencing and other technology as part of their daily routine, there is little doubt doctors and patients will continue to have appropriate, meaningful exchanges regardless of whether they have in-person office visits.
Telehealth is a tremendous opportunity to improve health care, as it relieves pressure on an increasingly overwhelmed health care system. It is evolving to address additional segments, to advance critical care applications, and to take advantage of new technology, such as medical devices enabling real-time risk assessments and lab results. Telehealth has seemingly endless opportunities to address provider shortages and increased consumer demand, while also making health care less costly and less time-consuming.

About Optum
Optum is focused on the development of telehealth to support providers, consumers, payers and other groups to improve the delivery of care, access from primary care to specialty and general population health management.

SOURCES
4. 2013 UnitedHealthcare claims analysis.
5. February 2015; NowClinic operates in 45 states plus the District of Columbia.