New Ways to Pay for Telemedicine

by Robert S. Rudin, Ph.D., and Ateev Mehrotra, M.D.

Telemedicine has the potential to increase access and improve health outcomes, while also reducing healthcare costs. But the adoption of telemedicine has been limited even though it could be as effective as an in-person visit and less costly for many conditions.

Proponents argue that the technology would get a much-needed shot in the arm if health plans provided adequate coverage for telemedicine services. Some states have passed legislation requiring equal payment for telemedicine and in-person care. Currently 21 states and the District of Columbia (Arizona and Colorado have enacted partial parity laws) have telemedicine parity laws for private insurance. On the federal side, the House Energy and Commerce Committee released a draft bill on Jan. 12, 2015, that would expand Medicare reimbursement for telehealth services.

Resisting Expansion

But providers and health plans are reluctant to expand the reach of telemedicine. Why are they resisting expansion given the technology’s potential to make care more widely available while lowering costs?

A major reason is the power of incentives embedded in the fee-for-service system, still the most common way to pay for healthcare in the United States. In this model, providers are reimbursed for each service that is on an associated insurer’s list of “covered” services; however, many telemedicine services are missing on the list or are covered at a lower rate so that providers lose money for every telemedicine “visit.”

In addition, increased use of telemedicine might reduce the overall need for in-person visits, further reducing revenue. Other barriers for providers include obtaining a license to practice telemedicine in multiple states.

On the insurer side, they resist expanding coverage because the increased access and convenience offered by telemedicine could encourage more inappropriate use, as well as generate higher costs.

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Information Decays Over Time; More Handoffs, More Fumbles

by Jordan Shlain, M.D.

This article has been adapted from the Dr. Jordan Shlain’s Continuity Coefficient essay series.

Chief information officers (CIOs) and chief medical information officers (CMIOs) have spent the better part of two decades on a quest for interoperability; yet, their Achilles heel lies in the “information” part of their titles. If information is the sole beacon of efficiency and value, the invaluable contours of human suffering, personal preferences and humanity itself are lost.

Information is the first step to developing knowledge and understanding, but what physicians and patients rely on in the real clinical setting, rife with changes, are knowledge, understanding and empathy. The cold, hard calculus of a=b does not always apply when dealing with people because they are much more complex and complicated than binary machines with screens. If it were so easy, there would be no problem reaching 100% compliance with medication or a plan of action.

The fundamental problem with today’s information architecture is that all data are not created equal. Data, information and knowledge degrade with each new doctor that becomes involved. In addition, systems design lacks an understanding of how the human computer works in the context of illness, anxiety or uncertainty. Healthcare is a people business in need of data, not a data business in need of people. Data are the means; people are the beginning and the end.

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Collaboration Is Key to Innovation

by Marsha Barwick Bushman, MBA, RTTP

“Every man must decide whether he will walk in the light of creative altruism or in the darkness of destructive selfishness.”

– Martin Luther King, Jr.

True innovation rarely occurs by using a singular, regimented pathway, but rather during times when testing the unknowns in a given situation. When the standard methods of solving a problem fail to produce the needed solution, curious people don’t give up; they seek out other experts attempting to solve a similar problem and together look at something familiar in a new way. This is the proverbial out-side-the-box thinking that can drive major change in any industry. Sequentially, successful collaboration occurs at the intersection of separate domains of knowledge. It’s at these crossroads that experts in diverse fields can reach out and together market a solution to a problem that was previously insoluble. Collaboration can drive innovation through a process—from bench to bedside—that cannot be done as well by just one person or institution in total isolation.

Healthcare systems embedded in medicine, research and scientific discovery are forming more collaborations than ever before. Cleveland Clinic Innovations (CCI), the commercialization arm of Cleveland Clinic, established the Global Healthcare Innovations Alliance on Jan. 11, 2011, to create opportunities that benefit patients everywhere through scalable technology development and commercialization.

Fostering invention and entrepreneurship, CCI’s comprehensive approach includes sophisticated deal teams, domain experts, investment funds, executives-in-residence, allied investors, seed and technology validation funds, incubation, preclinical and prototype facilities—all poised to create companies and commercially deploy new medical technology.1

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The value in partnering with the Alliance lies in its 360-degree perspective on patient care and innovation, established connections to resources throughout the healthcare and industry community and deep and wide-ranging commercialization capabilities and expertise.2 Each partner brings unique capabilities, contributing to a multilateral network, which contributes to innovation management and commercialization through acceleration of technologies that extend and improve human life.

Alliance members have recognized that in order to create an innovation connection between ideas and solutions, it is necessary to have a broad network of experts. With more worldly and cutting-edge advice, a physician inventor is more apt to transform an original idea into one with greater application and broader use potential. A larger number of ideas generate a greater number of perspectives that can bring partial ideas, or those which rely on a companion solution, to fruition, facilitating a pathway for longer term and more complex solutions to be followed.

Alliance members are:

Innovation Institute: The Innovation Institute describes itself as “a provider of innovation solutions, business process services and investment management services to hospitals and health systems.” It includes three business units: an innovation lab that will incubate "new disruptive breakthrough inventions," an investment fund and an enterprise development group that will create and sell shared services. Healthcare systems across the country are interested in commercializing their innovations to cut expenses in preparation for lower reimbursement under healthcare reform.3

Marshfield Clinic: For Marshfield Clinic Health System, this collaboration is the next step in the evolution of Marshfield Clinic Applied Sciences, which formed in 2006 to manage the intellectual property from scientists, clinicians and staff at Marshfield Clinic. The collaboration of clinical care, research, laboratory testing, education and public health services at the clinic differentiate it from other healthcare providers.

By combining these services, Marshfield Clinic offers patients and providers access to innovative technology, leading to comprehensive diagnosis and treatment of illness, disease and infection. These resources collectively lend themselves to discovery and technology development for Marshfield Clinic and offer opportunities for collaboration and expertise with the other Alliance members.4

MedStar Health: MedStar Institute for Innovation (MI2), the first partner in the Global Healthcare Innovation Alliance, was chartered in 2009, and serves as a catalyst and seed crystal for healthcare innovation across the entire MedStar organization. Its mantra is “think differently.” MI2’s scope includes initiatives in human factors engineering, education and simulation training, information infrastructure, technology development and commercialization and processes and systems of care delivery.5

North Shore-LIJ Health System: Over the past decade, breakthroughs originating at its Feinstein Institute have led to the creation of 11 start-up companies. The Institute now has more than 200 active patents that comprise 80 distinct technologies. Through this collaboration with CCI, Feinstein Institute hopes to pursue commercialization ventures focused on diseases, such as rheumatoid arthritis, lupus, cancer, sepsis, Alzheimer’s and schizophrenia. CCI will provide extensive support to the Institute to help bring medical technologies from the “bench to the bedside.” The two institutions will have a shared focus on developing new and innovative technologies that are commercially viable, while continually exploring additional collaborative opportunities that exist between the two organizations.6

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University of Notre Dame: As the first university to join the Alliance, Notre Dame has demonstrated its commitment to strengthening its research enterprise by increasing investments in state-of-the-art facilities and infrastructure. While Notre Dame does not have a medical school, the university has grown its funded research program significantly and now secures external funding totaling more than $100 million annually. Notre Dame sees the Healthcare Innovation Alliance network as an opportunity to create a commercialization pathway for innovative technologies in the biotechnology and health science space.

ProMedica: Innovation is increasingly becoming a critical institutional priority for ProMedica, which is looking for new ways to engage physicians and employees in offering them a pathway to turn their ideas into products and services that meet the needs of the local communities, as stated by Lee Hammerling, M.D., chief medical officer for ProMedica.

Collaboration Leads to More Potential
The vast amount of expertise shared among these partners can lead to discoveries requiring expedited review of technologies in a way that will accelerate the pathway by tapping into the clinical market space expertise of the inventor, the relationships of the inventor’s organization and the skill of developing Innovations. Reviews are done in a way that fully vet the technology in a timely enough manner as to not exhaust undue resources on a technology that could face multiple barriers to entry. A quick review must still lend all of the expertise necessary to make sure an opportunity is not being overlooked or a technology over or under evaluated. Collaboration could bring together like-minded physicians, technology transfer gurus and licensing experts, with a developed model for license negotiation and start-up initiation.

CCI’s Commercialization Process, which is being adopted by most of the Alliance partners, “ensures that each promising technology receives the critical mass required to proceed to market as effectively and efficiently as possible.” The ultimate goal through the process is to educate in a way that will engage and inspire inventors to see solutions that will have the greatest impact and the most clinical utility.

In addition to innovative medical devices, therapeutics and health information technology, CCI and the Alliance deliver enterprise solutions to market. This includes robust services around opportunity evaluation, transaction support, business planning and development. The Alliance aims to combine efforts in research, clinical investigation, technology development and commercialization. This unprecedented approach will ensure that patients benefit from a diverse and collaborative culture of innovation through idea sharing.

Breeding Ground for New Technologies
In an ever-changing healthcare climate, collaboration is not only key to improved patient care, but creates the best breeding ground for medical technologies. Innovation is only realized when a great idea is implemented in the form of a complete solution or idea. It is risky; you cannot be afraid to fail because you will—a lot. Curiosity, creativity and persistence are all needed to create innovation that can improve the world. Together, they could create a platform for the unknown.

Through the melding of great minds and the culmination of personal passion and expertise, inventors push through resistance and seek solutions to large-scale problems and build broader networks. These networks in turn lead to accelerated advancement of technology and licensing. As healthcare systems continue to tackle chronic diseases, collaborative systems could come together to apply knowledge in vast numbers through access to large patient populations nationally and globally. The opportunity for data sharing is immense and will help transform lives.

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