To Ensure Success, Assess Telemedicine Readiness

The promise of telemedicine networks can be realized only if all stakeholders collaborate in planning and implementing the system.

By Michael Spead / ICF International

Are you a health care provider looking to expand market share and revenues without making a significant investment in building additional health care sites? Perhaps you are a state or local official whose population is migrating (or worse – suffering) because of a lack of sufficient health care? Or are you a broadband provider looking to provide additional capacity and services for your health care customers? Have those health care customers asked how to get started with telemedicine? Though the needs and goals of each of these stakeholders may be different, the solution is the same – telemedicine.

In the 21st century, a competitive, sustainable broadband industry will drive innovation, community and economic development, education, health care, public safety and government services. Broadband technology is influencing the convergence of the services existing telecommunications, cable, and data providers offer, which promotes competition and innovation over both fixed and mobile platforms.

In few areas are the benefits as apparent as in the delivery of telemedicine. Numerous federal, state and privately funded initiatives are growing telemedicine ecosystems throughout the nation, benefitting patients, health care providers and insurers. Health care information exchanges support efficient data exchange and foster the creation of data and reporting standards. Existing software, applications and technology are being used to build a solid foundation upon which innovation continues to occur.

New and evolving technology, software and methodologies continue to drive health care providers to deliver services and procedures via broadband connections instead of in-person consultations. Further, a shift in strategic focus on medical outcomes rather than activities performed may also drive patients from traditional hospitals and doctors’ offices to in-home consultations.

With careful planning, telemedicine can help drive better health care outcomes, generate additional revenue and reduce costs. Patients can minimize travel expenses, reduce lost wages and incur less cost to obtain care. Telemedicine also allows greater access to health care, ensuring that patients receive necessary care that might be otherwise unavailable via traditional, in-person care. Health care providers benefit through reduced long-term costs and readmission penalties, additional patient visits and opportunities to increase market share by reaching a larger portion of the population (especially in rural markets). Technology tears down geographic barriers, enabling highly qualified specialists to serve areas with the greatest need (typically rural areas) with little concern for proximity or distance.

Why is this important? Take, for example, the state of Idaho, where 35 of 44 counties,
containing 29 percent of the population, are rural or frontier. Not surprisingly, numerous areas of the state are considered medically unserved, and even more have shortages of medical professionals. Consider also Wyoming, the ninth largest state by area and the state with the lowest population. In Wyoming, only two counties are not rural or frontier. Forty-seven percent of the population lives in areas with fewer than six people per square mile. Almost half the population lives in areas that have inadequate primary care and dental care. The entire state faces a shortage for mental health care. To top it off, many areas are impassable in winter, making travel to a primary care physician or specialist nearly impossible for a significant portion of the year.

**INVITE THE RIGHT STAKEHOLDERS TO THE TABLE**

As with most complex projects, the key to generating a sustainable telemedicine network is careful planning. To maximize opportunities and minimize potential threats, state health departments, publicly funded health care systems and privately managed health care providers should expend the time and energy necessary to thoughtfully assess and evaluate health care, technology and business needs. One major challenge is getting the right mix of experts to weigh in on each area. Another key issue is framing the process used to determine whether an organization is ready to provide telemedicine.

Whether an organization is just starting to explore the possibilities of telemedicine or is part of an existing telemedicine network, ICF recommends that organizations follow a multistep iterative process to implement or improve a telemedicine program and assess telemedicine readiness. This will help ensure the right stakeholders are at the table and that they evaluate population characteristics and community health needs that will drive demand, assess the right mix of profitable service offerings and develop a sustainable business model for long-term profitability and growth.

Stakeholder assessment includes identifying potential stakeholders and determining their needs and motivations. Careful evaluation in this area can help bring the right players to the table to form a telemedicine consortium that will contribute to a successful telemedicine program. Thoughtful stakeholder engagement also helps appease or avoid detractors. Inclusion or exclusion of various stakeholders can impact telemedicine offerings, operations, sustainability and funding options.

Some key stakeholders to consider include federal and state public health organizations, health care providers (private or public), payers and insurance companies, and education and training facilities (including colleges and universities).

Selecting the appropriate mix of stakeholders and partners is crucial to telemedicine program success. For example, including education and training facilities may allow all health care sites within a consortium to leverage the telemedicine network to access learning opportunities, training sessions and research that would be otherwise unavailable remotely.

Including education and training facilities in the telemedicine network may allow health care sites to leverage the network for learning opportunities, training sessions and research.
A gap analysis can show how market needs vary among areas of practice or specialties. This, in turn, helps identify the technology solutions best suited to meet those needs.

UNDERSTAND MARKET NEEDS
Understanding market needs – that is, the supply and demand of medical services – is a critical component of a successful telemedicine program. Ideally, a successful program is one that extends currently available services to a greater population by extending the reach of the medical service providers. Evaluating the medical needs of the state, region or community will help determine appropriate service offerings.

A simple gap analysis – comparing services needed versus services provided – can help you understand how market needs vary among areas of practice or specialties offered. This analysis will help ensure that a consortium understands the needs of the communities it serves and will identify staff shortages and surpluses.

Only after assessing market needs and profitable service offerings the consortium can deliver does it make sense to identify what technology solutions are best suited to meet those needs. This will include the applications to provide profitable service offerings but may also include electronic medical records, remote monitoring, and videoconferencing or video evaluation.

To properly evaluate broadband infrastructure options, it is important to understand both short-term and long-term market needs, the service offerings that will be leveraged to meet those needs and the technology that will be used to provide those services. The levels of capacity, speed and reliability necessary for electronic file sharing differ from those required for remote surgery or psychiatric evaluations. Critical to long-term sustainability is ensuring that infrastructure deployed today is scalable for increased demand, additional service offerings or new applications to provide services in the future. Determining broadband needs now with an eye toward long-term growth and evolution is the key to success.

Once you have assessed market needs, determined service offerings and technology and selected broadband infrastructure, consider how the provision or modification of a telemedicine program will impact existing operations. This requires evaluating operational requirements to determine whether new personnel, business processes or facilities are required to provide services remotely.

FORMULATE A BUSINESS CASE
Before making a go/no-go decision, provide proof of concept and ensure long-term sustainability. Deciding to invest in a new suite of services, develop business processes and serve a new market requires careful investigation of key financial indicators and overall profitability. It is necessary to develop a robust business case and sustainability plan that can be used to drive implementation. At this point, federal, state and private funding sources can be evaluated to identify possible offsets to the initial investment and ongoing operating costs of a telemedicine network. For example, the Federal Communications Commission recently reformed the underutilized Rural Health Care Program to support telemedicine networks. The new Healthcare Connect Fund supports both network deployment and ongoing costs. Applications are due by September 2013.

Finally, an often overlooked portion of planning for successful telemedicine projects and programs is the development of goals, benefits and a means to ensure results are achieved. Telemedicine programs need to determine success criteria, expected benefits and desired goals prior to implementation. This will allow for the development of program metrics as well as effective targeting and measurement to ensure program objectives are met. Without proper program evaluation techniques in place prior to implementation, a telemedicine program may not be able to identify whether it is on the right path to achieving important goals and objectives.

A successful telemedicine program can deliver numerous benefits. However, to reap these benefits and meet consortium goals, careful planning is essential. A flexible, multistep approach to planning includes a stakeholder assessment, an understanding of market needs, a portfolio of recommended service offerings, technology options, scalable broadband infrastructure needs, operational requirements, a business case to support a go/no-go decision, and appropriate program evaluation metrics and tools. A telemedicine readiness assessment should also include an evaluation of funding options to offset the costs of implementing a telemedicine program.

Telemedicine is here, and it will continue to grow exponentially. Now is the best time to seize the important competitive advantages and benefits telemedicine can deliver, including reduced costs, greater market share and higher quality care. Telemedicine both benefits health care providers and allows them to share the benefits with the communities and people they serve.

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