Bootstrapping Your Telehealth Program

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Abstract

Telehealth is a proven modality to better patient care, reduce health care cost, and increase provider efficiency. This article outlines the necessary steps for starting a telehealth program at a medical center or practice. A review of the current literature and health care-related laws was undertaken to identify the necessary steps and considerations for starting a telehealth program. Bootstrapping a telehealth program starts with the creation of concept and identification of need. Generation of a hotbed of support, from providers and patients, is key in gaining executive interest and idea investment. Development of a defined plan of implementation with the utilization of already available technologic assets facilitates ease of execution. Creation of a televisit platform, a patient portal for enrollment, and dedicated provider time for televisits to occur are the next steps in plan realization. Measuring results of patient satisfaction, number of visits, cost reduction, and scheduled procedures are powerful tools in support of the multifaceted expansion of a telehealth program. The authors believe that telehealth programs are critical to advancing patient care, reduction of costs, and increased productivity in the future of medicine.

Keywords

- telehealth
- telemedicine
- televisit
- teleconsultation
- teleservices

Rapid emergency room evaluation, postoperative visits, and burn wounds are currently managed in different venues by different physicians. We argue that this does not need to be the norm. Enhancing sole physician outreach would not only increase clinical productivity but also hurdle geographic barriers for both physicians and patients. Telemedicine is the medium by which one may accomplish this feat. Multiple studies have shown efficacy and efficiency of telehealth platforms for the fields of dermatology, plastic surgery, and radiology, which rely heavily on visualization for diagnosis.¹ Stood et al demonstrated that wound care and assessment was one such area that telehealth stands to benefit.² In their study, remote wound evaluation resulted in a 72% reduction in the number of hospitalizations and 56% reduction in hospital transfers. Another study demonstrated reduced time for emergency department consultation, with initial management quality on par with in-person evaluation.

³ In a recent meta-analysis of 23 articles in plastic surgery, 100% showed a benefit of telehealth, reporting better postoperative monitoring, specialty access in rural areas, and cost savings.⁴ The benefits are clear for both providers and patients. In this article, we attempt to outline the processes by which a motivated provider may bootstrap a telehealth program for their practice.

Leverage Technologies Available to Your Institution

Often the largest hurdle when bootstrapping a project is the first: the start-up. However, using what is already available to you is essential in the first step. Identify if any telehealth platforms exist within your system; if so, how are they being utilized and are they adaptable to your needs? Social media is a primary forum for information exchange for millions of

Americans. It can be used to create a hotbed of support when proposing the idea of telehealth to your community and your investors. Polls showing patient interest, increased likelihood of follow-up, and improved access and convenience, are powerful tools for backing telehealth programs.

Develop Your Plan

With plastic surgery-specific research demonstrating the clear-cut benefits to patients and surgeons, in addition to community support, identifying champion surgeons is the next step. Physicians who stand to see the greatest value added to their practice should invest in the amenities of teleservices. These may be surgeons whose patient population cover a wide geographic landscape, take calls at local trauma centers, evaluate burn and wound care patients, perform microsurgery, or repair cleft lip and palate regionally or internationally.⁵⁻⁹ With this group, begin to cultivate executive interest and leadership. If there is an existing telehealth platform, create a story around a high-value use-case and show how it benefits the patient and the providing organization. The storyline of the use-case must demonstrate clearly and concretely the concept for the telehealth intervention. If it leaves anything to the imagination, there is a risk that executive support and leadership will not be obtained. If the platform does not currently exist, then use lower fidelity options to reach out to the public, such as social media outlets and previously established health system websites. Established public support and interest in combination with the previously stated telehealth benefits is a powerful tool for the attraction of leadership interest in outcomes-driven executives when a formulated plan is presented by a group of physicians.

Interface the Information Technology Infrastructure

Take advantage of any web-based communication your health system offers. Information technology support may be necessary and available through your institution. Integrate website content to reflect and market the ability of telehealth visits for patients. Encourage patients to explore the health care website and provide personal feedback. Create a link between current online content and telehealth consultation. Develop a portal for receiving and reviewing requests for telehealth visits. Publish detailed instructions on how to schedule or request a visit. Finally, create clinician time dedicated to review and set up telehealth patient conferencing.

Executing Teleconsultation

After generation of public awareness, creating a portal for telehealth requests, and granting time for physicians to review the requests, the next step is assuring all medical-legal issues have been addressed. Verify that the state licensure under which the physician practices will be respected for out-of-state teleconsultations. The primary goal is to maintain the identical level of care in more convenient locations for both patient and provider, with no sacrifice in quality

while adopting increased capacity. Having a nursing aid/technician available during the visit to adjust the communication medium and help with physical examination may be necessary. For initial visits, billing may need to be sidelined until data about patient satisfaction, visit equality, and physician diagnostic ability can be collected and compared with in-person visits. The number of surgical cases before and after telehealth visit implementation should also be collected. For surgical case-use, access to more patients that are operative candidates justifies efforts for bootstrapping a telehealth program.

Measured Results

Multiple studies have demonstrated the added benefit of telehealth to both patients and providers. Previous research in conjunction with health system-specific results makes for a compelling argument of health system-wide implementation of telehealth programs.⁵⁻⁹ Even at a reduced initial visit cost for teleconsultation, the hypothesized rate of surgical completion will be increased by utilization of telehealth as a screening tool. These results make a powerful case and should be shared with executive leadership. Expansion of the telehealth program to include postoperative follow-up, consultation from outside telefacilities to reduce hospital readmissions, and business-to-business interactions with other doctors or consultants are only a few of the potential options for expansion.

Telehealth Regulation and Legislation

Telehealth regulation and legislation are rapidly evolving as technological advances enable practitioners and health care systems to establish telehealth programs with relative ease. Community interest and obvious benefit to regions of the country lacking access to specialty care are driving forces behind the legislation. Additionally, regulation is necessary to preserve care quality and to provide guidelines to practitioners.

Telehealth affords the ability of physician and patient to be geographically separated at the time of care. This brings up the issue of *licensure*. Current law defines the location of origin as the state where the patient is physically located. This is problematic if the caregiver is located in another state and is not licensed in the state of origin. The policies of state licensure vary on an individual basis. Some states require full licensure for legal medical practice. Others require that physicians be licensed in their state but expedite the process, while others allow for cross-border delivery of care.

Credentialing is another barrier encountered by specialists attempting to provide service to distant hospitals. In May of 2011, the Center for Medicare and Medicaid Services (CMS) released its ruling that if a telehealth provider is credentialed at one institution, and that credentialing processes meets or exceeds that of the site wishing to receive consultation, then only a signed agreement is necessary for the telehealth provider to be credentialed at the distant site.

Malpractice is another issue telehealth providers may face; however, at this time there have been limited cases of malpractice suits filed as a result of telehealth care. The

current standards of care apply to all telehealth visits, the same as in-person consultations. Consultations that require a physical exam for evaluation must not be performed via telehealth, as the lack of exam undermines the quality of care and visit. Physicians are finding that elective teleconsultations mimic an educational session for the patient as far as choice in procedure in addressing a medical issue. This may be beneficial in the current marketplace and as an integral part of the preoperative process that can be done up front. Depending on the goals of the physician, this can play as a useful tool in saving time and increasing efficiency and volume flow into the operating theater.

Legal prescribing of *medication* requires the patient and physician to have a doctor–patient relationship. How a doctor–patient relationship is established varies from state

to state. Some states require an in-person evaluation for the establishment of the relationship while others recognize telehealth visits as adequate. Identifying the standard of the state you are practicing in is essential before the prescribing of medication.

Reimbursement for services performed falls into three primary groups of payers: private insurance, Medicare, and Medicaid. Currently, 35 states have parity laws that govern *private payer telehealth reimbursement*. State legislation concerning telehealth reimbursement is quickly evolving; we see great value and cost savings in setting up a telehealth platform in the current market conditions (**►Fig. 1**).¹⁰

Fig. 1 States with Parity Laws for Private Insurance Coverage of Telemedicine.¹⁰

reimbursed. A list of eligible Current Procedural Terminology codes can be found online at www.cms.gov. The geographic location of origin must be in a Health Professional Shortage Area or outside of a metropolitan statistical area, as defined by the CMS. An up to date list of eligible locations can be found at <https://datawarehouse.hrsa.gov/tools/analyzers/geo/Telehealth.aspx>. In addition, patients receiving a telehealth consultation that is to be reimbursed by Medicare must be at one of the following locations of origin: provider office, hospital, rural health clinic, federally qualified health center, skilled nursing facility, community mental health center, or hospital-based dialysis center.¹¹

Medicaid reimbursement policies vary from state to state. Restriction of reimbursable telehealth services to underserved areas, similar to Medicare, is decreasing with new state legislation. Twenty-three states limit the encounter origin to a list of specific sites. Nearly all states do not consider the patient's domicile as a reimbursable site. Thirty-one states reimburse for a transmission fee similarly to Medicare. Informed consent is a Medicaid requirement of many states before patients receive care. This varies from state to state and is not required for Medicare (► Fig. 2).^{12,13}

This information has been drawn from the CMS website www.cms.gov and the Center for Connected Health Policy, The National Telehealth Policy Resource Center at <http://www.cchpca.org/>.

Conclusions

A telehealth program can be bootstrapped with limited resources relatively quickly. It adds value to both patients and physicians and increases productivity through the hospital chain of operations as well as outside venues. Telehealth enables surgeons to bring more patients to the operating room as well as maximizes efficiency in the clinic. One example of this is through prescreening televisits so that in-person clinics have a higher probability of scheduling for surgery. Postoperative follow-up may be performed via a televisit, freeing clinic appointments for new patients. Use in satellite clinics can result in a reduction in unnecessary emergency room visits and hospital readmissions after surgery. Finally, a telehealth program provides higher accessibility to consulting physicians with greater geographic variability.

Through these means, a bootstrapped telehealth program can be created by demonstrating value to organization leadership in the form of a larger, more efficient, and

productive health network. We expect to see increasing levels of clinical and surgical productivity similar to the introduction of the computer into the health care industry during the 1990s.

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