

IOM Report: the Role of Telehealth in an Evolving Healthcare Environment

December 2012

On August 8 and 9, 2012, the Institute of Medicine (IOM) conducted a workshop that examined how the use of telehealth technology could fit into the US health care system. The workshop was sponsored by the Health Resources and Services Administration (HRSA), and some of the leading telehealth experts in the country were either presenters or in attendance. The Workshop Report is a compilation of the opinions of the presenters, and is not a consensus report of the IOM. Specifically, HRSA was charged with the following tasks for this workshop:

- Discuss the evolution of telehealth since 1996;
- Discuss the current evidence base for telehealth;
- Discuss how technological advancements are changing the delivery of health care in rural and urban environments;
- Discuss actions that HHS can undertake to further the use of telehealth to improve health care outcomes while controlling costs in the future.

The following is a concise summary of the November 2012 IOM Telehealth Workshop Report prepared by the Center for Connected Health Policy (CCHP), the federally designated National Telehealth Policy Resource Center. CCHP is not affiliated with IOM.

The Evolution of Telehealth: Where Have We Been, and Where Are We Going?

Using technology to enhance the delivery of health services has a long history, stretching back to an 1879 article discussing using the telephone to reduce unnecessary office visits. Telehealth practices have grown considerably over the last twenty years, and have emerged as valuable tools to increase access to care and achieve quality improvements across the geographic and economic spectrum. Telehealth is now used in the home and community-based settings, as well as hospital-based. However, these technologies have been layered onto a health care system that doesn't have the necessary incentives to utilize these tools. As a result of the passage of the ACA and other federal policy changes, telehealth shows significant potential to facilitate the transformation of health care delivery, help reduce the disparities in access, as well as lower overall costs.

CENTER FOR CONNECTED HEALTH POLICY

The Center for Connected Health Policy (CCHP) is a public interest nonprofit organization that develops and advances telehealth policy solutions to promote improvements in health and health care systems.

Telehealth expands access, particularly among underserved communities, and improves the efficiency and cost effectiveness of health care systems. With these benefits in mind, CCHP:

- Promotes policies that expand telehealth program adoption;
- Conducts objective research and policy analysis;
- Develops nonpartisan policy recommendations;
- Serves as a state and national resource on telehealth policy issues.

In its work as the federally designated National Telehealth Policy Resource Center (NTRC-P), CCHP provides technical assistance to twelve regional telehealth resource centers (TRCs) nationwide. The NTRC-P project is made possible by Grant #G22RH24746 from the Office of the Advancement of Telehealth, Health Resources and Services Administration, Department of Health and Human Services.

CCHP was created in 2008 by the California HealthCare Foundation, who remains as lead funder. CCHP is a program of the Public Health Institute.



Challenges in Telehealth

Common challenges to the utilization of telehealth include licensure (particularly across states), definition of terms and standards, and how telehealth is operationalized programmatically and financially in today's evolving health care system. Certain policy barriers exist for telehealth in public programs that discourage providers from utilizing it as a tool. These include:

- (a) limitations on reimbursement (not all is reimbursed if provided via telehealth, as it would if provided in-person);
- (b) where a service could be provided (geographic and facility limitations);
- (c) who is qualified and licensed to provide a service (only certain providers are reimbursed); and
- (d) availability of high speed broadband connectivity, which continues to be an issue in many rural areas of the country.

A theme that emerged included an emphasis on the relationship between the patient and the provider. Telehealth should not be viewed as a barrier; rather, as a facilitator to expand access and enhance the relationship. A new paradigm for patient-centered "place of service" may help eliminate regulatory barriers.

Telehealth and Payment

Current public payment policies do not provide incentives for providers to utilize telehealth tools, and thus limit their full potential. Medicare reimbursement policies were highlighted in particular as significant barriers. One of the issues identified was the limited reimbursement for live video consultation for beneficiaries residing only in narrowly defined "rural" locations. Arguments were made that this geographic restriction should be eliminated, as it impedes the ability to reach all of the underserved with telehealth, and may prevent an area from having an adequate population base to maintain a telehealth network. Not surprisingly, the recent MedPAC Report reveals that telehealth is currently not used much in MediCare (\$6M annually). Tele-pharmacy was mentioned in the MedPAC report as a promising new telehealth use. Several participants called for expanded reimbursement for "store-and-forward" services by CMS and state Medicaid programs. Other key issues raised included who may provide telehealth care, and where, and malpractice liability concerns by providers. Traditional physician payment models that lack incentives for providers remain as one of the single most challenging issues. One solution offered was instead of restricting coverage in Medicare and Medicaid programs (as well as by private insurers), telehealth should be simply treated the same as in-person care.

There was some question as to whether expansion of telehealth reimbursement would lead to increased costs. Counter arguments were presented that demonstrated that there could be significant overall costs savings when telehealth is appropriately applied. The examples of use of remote patient monitoring for heart failure patients, and acute telestroke care were highlighted as having potentially significant cost savings in the Medicare and state Medicaid programs.

The Health Care Continuum

Telehealth technologies are increasingly being used across a variety of settings in the health care continuum. It is used in disease/injury prevention and monitoring, health promotion, acute care, and chronic disease management. Utilizing the full range of telehealth technologies can provide greater access, better care, and has potential for real cost savings. Chronic disease management accounts for the vast majority of health care expenditures. Use of telehealth can dramatically reduce costs by keeping individuals out of EDs and hospitals (83% of the cost of chronic care in Medicare population). With the growing shortage of intensivists, tele-ICU care has been shown to improve the quality of and efficiency of intensive care services. The ECHO Model based at the University of New Mexico was highlighted as a successful approach for the use of telehealth to help resolve specialty shortages. Telehealth can not only be used to provide access to specialists from rural and underserved urban areas, but offers training opportunities for primary care



physicians, particularly in the patient-centered medical home environment. Tele-dentistry was identified as a solution for reducing the large disparity in oral health care in the nation.

Current Evidence Base

A large and robust body of evidence documenting the benefits of telehealth exists in a wide range of peer-reviewed journals. However, part of the problem may be that not enough evidence exists to motivate its widespread adoption. Part of the issue is what type of study is conducted when examining a certain telehealth technology. Questions often arise on whether the study was rigorous enough or if the design of the study may have been flawed or contain the information policymakers need. Moving forward, there is a need for establishing standards for what kind of evidence is needed. More pilot studies involving telehealth should be funded by the CMS Innovation Center in order to test the best and most appropriate uses of telehealth.

Technological Developments

Recent technological developments not only increase the volume of actionable data of healthcare providers and consumers, but it also acts to engage them more actively in their care. Such developments include remote patient monitoring, social networking, game-based therapy, and wireless health, including mHealth. Remote patient monitoring is one of the fastest areas of telehealth growth; however, issues of shared cost and savings still remain that prevent its widespread adoption.

State-Based Perspectives

States are looking at telehealth to address the increasing costs to their health systems and shrinking revenues. Several states have adopted model policy statutes that can be shared with others. There is a need to educate state lawmakers regarding the value of telehealth, and to develop appropriate reimbursement policies and related standards in their respective Medicaid programs. Rather than a "top-down" approach to improving the policy and practice environment, states should be encouraged through waivers and other means to develop their own innovations, and adopt appropriate policies that are consistent with the maturity of the telehealth field today.

Experiences of the VA and IHS

Both the Veterans Administration (VA) and Indian Health Services (IHS) have utilized telehealth extensively. The VA is a recognized leader in telehealth, particularly in remote patient monitoring and mental health care. The VA's vision of telehealth is that it should be veteran-focused, forward-looking, and results-oriented. The VA has seen results in increased access, cost savings, and better care for their veterans. Breaking the "silos" among federal agencies, utilizing telehealth was identified as critically important in order to learn from each other's policies and gain the benefits.

Stakeholder Perspectives

The National Rural Health Association, American Telemedicine Association, and the American Public Health Association acknowledged the need for federal telehealth policy reform. With health care reform, opportunities have been created to expand the use of telehealth, but there was a consensus of agreement that federal and state policy barriers are impeding the expansion of telehealth to improve access, quality, and potentially reduce costs. There was also a consensus that more organizations needed to be brought into the discussion to further advance the use of this technology in the delivery of health services.