

**PUBLIC POLICY IMPLICATIONS FOR ACCESS TO REMOTE MONITORING
AND CONSULTATION IN HEALTHCARE**

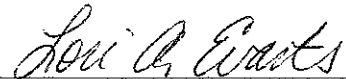
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ABSTRACT

JESSICA S. BARKER: Public Policy Implications for Access to Remote Monitoring and Consultation in Healthcare

Enrollees of Medicare and Medicaid are going to grow dramatically in the next ten years, due in part to the new health reform legislation and the aging baby boomer generation (UnitedHealth Center for Health Reform & Modernization, 2010). This growth, in concert with concerns about aggregate health care costs, calls for more efficient and effective delivery of long term supports and services (Stone & Weiner, 2001). One approach to address this specific healthcare demand is an effort to increase use of telehealth¹ (Field & Grigsby, 2002). The use of telehealth in the form of remote monitoring and consultation would increase accessibility to long term supports by leveraging technology to provide medical care when distance separates the participants (American Association of Telemedicine).

At this time, Medicare and Medicaid do not broadly reimburse for telehealth services (Neumann & Tunis, 2010). There are provisions in the Patient Protection and Affordable Care Act (HR 3590 2010) that would allow for greater use of technology to deliver long term services and supports and set the stage for greater public reimbursement for such services through Medicare and Medicaid. This paper will explore the policy issues related to telehealth included in the Patient Protection and Affordable Care Act (PPACA), and how it may increase accessibility to telehealth services for Medicaid and Medicare enrollees seeking long term monitoring and consultation services.

¹ Defined broadly, *telemedicine* is the use of electronic information and communications technologies to provide and support health care when distance separates the participants. The term is also applied more narrowly to medical applications that use interactive video, typically for specialty or subspecialty physician consultations. Sometimes the term *telehealth* is used to encompass educational, research, and administrative uses as well as clinical applications that involve nurses, psychologists, administrators, and other nonphysicians. (Field & Grigsby, 2002)

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LIST OF ABBREVIATIONS

ACOs	Accountable Care Organizations
ASPE	Assistant Secretary for Planning and Evaluation, United States Department of Health and Human Services
CLASS	Community Living Assistance Services and Supports
CMS	Centers for Medicare and Medicaid Services
DSP	Direct Support Professionals
EHR	Electronic Health Records
FY	Fiscal Year
FTE	Full-time equivalents
HCFA	Health Care Financing Administration
HHS	United States Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
HIT	Health Information Technology
HPSAs	Health Professional Shortage Areas
PPACA	Patient Protection and Affordable Care Act

Introduction

Due to the growing need for more efficient and effective delivery of long term supports and services², coupled with a growing population in need of support (Stone & Weiner, 2001, p. 4), telehealth has become a viable option for delivery of long term care services (Field & Grigsby, 2002, p. 423). Long term services and supports serve as an alternative to traditional nursing home care, and give individuals the option to receive services in their homes. This paper will explore the issues related to providing long term services and supports via remote technology, specifically remote monitoring and consultations. It will examine the provisions related to telehealth included in the Patient Protection and Affordable Care Act (herein referred to as PPACA), and how it may increase accessibility to reimbursed telehealth services, and particularly for Medicaid and Medicare enrollees.

The Need for Publicly Reimbursed Telehealth Services

The growing need for publicly reimbursed telehealth services, notably by Medicaid and Medicare, is due to the intersection of an increased population in need of long term services and supports, an impending workforce crisis (Stone & Weiner, 2001, p. 4) and an overburdened public health insurance system (Markwood & Roherty, 2010). There is a possibility that telehealth services assuage the workforce crisis, increase accessibility to services and reduce costs.

Workforce Crisis

In a 2006 report to Congress titled *The Supply of Direct Support Professionals Serving Individuals with Intellectual and Other Developmental Disabilities*, by the Office of Disability,

² The term “Long term supports and services,” refers to an alternative to traditional long term care such as a nursing home.

Aging, and Long-Term Care Policy (Assistant Secretary for Planning and Evaluation, 2006), the Assistant Secretary for Planning and Evaluation confirmed concerns expressed by researchers, advocates, and policy makers about the quality and stability of the direct support workforce for people in need of long term monitoring and consultation and their families. The Secretary's report found that the direct care workforce experiences a very high turnover rate and that by 2015, 741,000 new direct support workers will be needed to address all Americans in need of long term supports and services (Assistant Secretary for Planning and Evaluation, 2006, p. 17). The current problems faced by the long term service and support system in recruiting and retaining direct support staff will be exacerbated by demands from the growing population in the United States (Stone & Weiner, 2001, p. 4).

Table 1 Statistics on Direct Support Workers

Source: HHS/ASPE Supply of Direct Support Professionals Report, 2006

- *Turnover rates of direct support workers in residential, in-home, and day and vocational services are an estimated 50% per year.*
- *The current total of 874,000 full-time workers (or full-time equivalents, FTEs) assisting people with intellectual and developmental disabilities is expected to grow to 1.2 million by 2020 due to population increases, increases in life expectancy, aging caregivers, and an expansion of home and community-based services. This represents an increase in demand of approximately 37%. At the same time, the number of workers who typically perform direct support roles, adults aged 18-39 years, is only expected to grow by about 7%.*
- *At current turnover rates, by 2015, an estimated 741,000 new direct support workers will be needed simply to replace workers leaving their jobs. The need to replace workers while meeting the expanded demand for supports will tax an already over-burdened service system.*
- *The national vacancy rate for direct support workers is an estimated 10-11%.*
- *High turnover rates result in increased costs for staff recruitment, overtime pay, and training.*
- *High vacancy and turnover rates have negative effects on the quality of supports offered to people with disabilities and their families. High vacancy and turnover rates can cause gaps in service coverage, create discontinuities in care, and interfere with the development of positive relationships between support workers and those they support.*

Population Served

The consumer population of publicly funded long term services and supports are typically individuals with physical, intellectual and behavioral health issues, as well as aging Americans. This population will grow substantially within the next ten years due to the aging of the baby boomer population who will become Medicare eligible (Stone & Weiner, 2001, p. 15), coupled with the anticipated expansion of Medicaid by the PPACA beginning in 2014 (Patient Protection and Affordable Care Act, 2010, Section 2001); and thus challenging the current capacity of both programs (UnitedHealth Center for Health Reform & Modernization, 2010, p. 9). While Medicaid is often perceived as an insurance program for low income women and children, two thirds of enrollees are actually consumers of long term care (UnitedHealth Center for Health Reform & Modernization, 2010 p.2).

At the same time Medicaid enrollment is growing based on the PPACA, the aging of the Baby Boom generation will also boost the number of older people using privately paid long term care services, creating greater competition for resources, including direct care workers. The National Association of Area Agencies on Aging predicts there will be over 70 million Americans over the age of 65 by 2030 (Markwood & Roherty, 2010). If future disability rates follow the intermediate growth scenario proposed by Richard Johnson in 2007, the number of individuals receiving paid in-home services and supports will more than double between 2000 and 2040, increasing from 2.2 million to 5.3 million. Also, the number of older nursing home residents will more than double over the period, increasing from 1.2 million to 2.7 million (Richard W. Johnson, 2007, p. 21). As nursing home residency increases, individuals with less intense needs might become perfect candidates to receive telehealth services, such as remote consultation.

The Solution – Remote Monitoring and Consultation

What is Remote Monitoring and Consultation?

Telehealth is defined as the use of electronic information and communications technologies to provide and support health care when distance separates the participants. Broadly defined, this form of telehealth service involves a health care team that includes paraprofessionals such as nurses and direct support workers as well as physicians.³ Greater use of telehealth – and leveraging technology – could offer individuals and providers greater choice in receiving and offering long term supports. While new applications are increasingly found for utilizing telehealth, federal agencies such as the Health Resources and Services Administration remain committed to decreasing barriers to making these technologies an integral part of daily health care practice (U.S. Department of Health And Human Services, Health Resources and Services Administration Website, 2010 <http://www.hrsa.gov/ruralhealth/about/telehealth/>).

In this paper, special attention will be paid to the following services encompassed by the term “telehealth.” These include:

- **Remote consultations** using telecommunications to provide medical data, which may include audio, still or live images, between a patient and a caregiver for use in rendering a diagnosis, treatment plan or other needed supports. This might originate from a remote location like a person’s home to a caregiver’s office using a direct transmission link and/or may include communicating over the Web. The term ‘caregivers’ encompasses physicians as well as practical nurses and direct care workers (American Association of Telemedicine).

³ Separate from telemedicine, which refers specifically to physicians utilizing said technologies.

- **Remote monitoring** uses devices to remotely collect and send data to a monitoring station for interpretation. Such "home telehealth" applications might include a specific vital sign, such as blood glucose or heart ECG or a variety of indicators for homebound individuals.

Such services can be used to supplement the use of a visiting caregiver (American Association of Telemedicine <http://www.americantelemed.org/i4a/pages/index.cfm?pageid=3333>). Still while telehealth services are available and utilized in many settings across the United States, the Centers for Medicare and Medicaid Services require evidence of improved outcomes for Medicare to reimburse for these services. Further, many state Medicaid programs do not reimburse for such services.

Payers: Public Insurance Providers

Created by amendments to the Social Security Act in 1965, Medicaid and Medicare are the primary public insurance programs in the United States (HHS Historical Highlights, 2010). According to Herz, Medicaid is a means-tested entitlement program that finances the delivery of primary and acute medical services as well as long-term care to more than 68 million people in Fiscal Year 2010 (FY2010). It is a federal state partnership, meaning that the federal and state governments share the costs of providing insurance. The estimated annual cost to the federal and state governments was roughly \$381 billion in FY2009. In comparison, the Medicare program, which provided health care benefits to 46 million seniors and certain persons with disabilities, cost nearly \$511 billion in FY2009 (Herz, 2010). In 1998, state Medicaid programs were given the option of reimbursing for telemedicine. When, as stated by Brown,

“... the Health Care Financing Administration (HCFA) published final rules for Medicare payment for remote consultations in health professional shortage areas (HPSAs), and it was left to telemedicine practitioners in each state to negotiate the scope of the services covered with the state Medicaid office.” (Brown 2006, S2:32)

However, practitioners in every state did not seek reimbursement from their state Medicaid office.

According to the fiscal survey of the states by the National Governor's Association and the National Association of State Budget Officers, 39 states made mid-year budget cuts that included cuts to Medicaid programs in 2010 (NASBO/NGA, 2010, p. xviii). With states currently in a state of fiscal crisis, additional economic pressure will increase the difficulty of balancing state budgets. According to the CMS Telemedicine Reimbursement policy (see Table 2), telemedicine is not a distinct Medicaid service, and any add-on costs must be incorporated as an administrative cost by the state (CMS 2010). It is unlikely states will be eager to increase Medicaid reimbursement levels to implement telemedicine reimbursement while trying to contain costs and while it remains unclear if an increase in access to services would mean an increase in aggregate costs.

An example for other states to consider is the Minnesota Medicaid program that reimburses for some uses of telemedicine (Palsbo, 2004, p. 1189). Minnesota uses remote consultation to provide services when a local practitioner is not available. Palsbo concluded that telemedicine helps Medicaid programs deliver specialized care to locations with provider shortages. Further, Minnesota reimburses providers at the same rate for remote consultation as they do for in person consultation to incent provider participation. In 2004, she found that services reimbursable by Medicaid were not fully utilized by all eligible enrollees (Palsbo, 2004, p. 1189). Given the current fiscal climate, it is unlikely states will be eager to increase Medicaid reimbursement levels to implement telemedicine reimbursement while trying to contain costs, unless telemedicine can be shown to be a cost effective option – particularly for long term services and supports.

Table 2: CMS Telemedicine Reimbursement Policy

Reimbursement for Medicaid covered services, including those with telemedicine applications, must satisfy federal requirements of efficiency, economy and quality of care. With this in mind, States are encouraged to use the flexibility inherent in federal law to create innovative payment methodologies for services that incorporate telemedicine technology. For example, States may reimburse the physician or other licensed practitioner at the distant site and reimburse a facility fee to the originating site. States can also reimburse any additional costs such as technical support, transmission charges, and equipment. These add-on costs can be incorporated into the fee-for-service rates or separately reimbursed as an administrative cost by the state. If they are separately billed and reimbursed, the costs must be linked to a covered Medicaid service. While telemedicine is not considered a distinct Medicaid service, any State wishing to cover/reimburse for telemedicine services should submit a State Plan Amendment to the Centers for Medicare and Medicaid Services for approval. (CMS, 2010)

Policy Implications

Telehealth and remote monitoring have the potential to improve access to medical resources for consumers faced with geographical and economic barriers to long-term services and supports (Akalu et al 2006, p. 325). The Patient Protection and Affordable Care Act signed by President Barack Obama on March 23, 2010 includes several provisions that will allow the public health insurance programs Medicaid and Medicare to better utilize telehealth and remote monitoring (Patient Protection and Affordable Care Act, 2010, Sections 3021, 3025, 6114, 2401).

PPACA Health Reform Provisions

The Patient Protection and Affordable Care Act (PPACA) includes provisions that will allow for increased reimbursement for health technologies as well as opportunities to explore new methods of care delivery (Patient Protection and Affordable Care Act, 2010, Sections 3021, 3025, 6114, 2401). The advances for telehealth will be discussed in this section.

Federal Level Provisions

The PPACA establishes the Center for Medicare and Medicaid Innovation within the Centers for Medicare and Medicaid Services (CMS). One of the Center’s programs will be to develop new funding mechanisms that include costs savings by establishing accountable care organizations (ACOs) to better manage and organize services. ACOs will be encouraged to improve quality and reduce cost as stated in statute (Patient Protection and Affordable Care Act, 2010 Section 3021 (i)), and telehealth may be a patient care model that is considered to accomplish this task. By establishing a new Center for Innovation, the PPACA has opened the door to better employ telehealth.

The PPACA also amends the Public Health Service Act of 1944 by establishing a new national, voluntary self-funded public disability insurance program called the Community Living Assistance Services and Supports (CLASS) Act. The CLASS Act will enable a new model of funding for long-term services and supports that provides a cash benefit to enrollees. Should the enrollee become functionally limited, the benefit can be used to purchase services including the use of technologies to allow individuals to remain in their homes, as described in Section 3201. The CLASS Act officially became effective January 1, 2011 (Patient Protection and Affordable Care Act, 2010 Section 3201). This program created by the Act is designed to address the growing costs of long term care by allowing individuals to purchase approved services and supports from organizations and individuals of their choosing, including neighbors and family members by using their cash benefit. (Patient Protection and Affordable

<p>Table 3: Approved Services to be Covered by the CLASS Act:</p> <p>home modifications, assistive technology, accessible transportation, homemaker services, respite care, personal assistance services, home care aides, and nursing support</p> <p>(Patient Protection and Affordable Care Act, 2010 Section 3205: Benefits)</p>
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Care Act, 2010 Section 3205: Benefits) Allowing consumers a cash benefit that they can spend as they see fit (for approved expenditures) gives individuals in need of supports the autonomy to decide if telehealth is their preference and will reveal if consumers will choose telehealth in circumstances where it is available to choose.

The Act also requires the U.S. Department of Health and Human Services to conduct a demonstration project to develop best practices in nursing facilities on the use of information technology to improve resident care. One or more competitive grants are to be implemented by March 2011 for not more than three years. The Act authorizes an unspecified amount of funding needed to conduct the demonstrations (Patient Protection and Affordable Care Act, 2010) (Section 6114). These demonstration projects will begin to address the challenges and costs associated with implementation of electronic health records (EHRs) and compliance with the Health Insurance Portability and Accountability Act (HIPAA). It is possible that the grants may be used for telehealth purposes. The grants also allow states the flexibility to be creative in their proposals and style them to best serve their state.

State Level Provisions

The PPACA also provides states with new state plan options for providing long term services and supports, including a “community first” choice option for home- and community-based attendant care services. Under this option, states could utilize technologies to ensure continuity of services and supports. The exact types of technologies permissible will need to be clarified, as the language prohibits reimbursement for assistive technology devices and services but allows beepers and other electronic devices as well as expenditures that substitute for human assistance (Patient Protection and Affordable Care Act, 2010 Section 2401). This option allows states to decide if they would like to reimburse for some forms of the permissible technologies,

and gives them the flexibility to mold the appropriate policies for their state. For example, a rural state may be interested in having case managers employ telehealth to check in with consumers with geographical barriers to care.

What is Missing From the PPACA?

Quality

Quality in telehealth remains an important aspect to be considered when trying to lower costs. “Retaining quality care while lowering costs is of utmost importance” as stated by Singh & Wachter, “as few would support the growth of telehealth if the cost savings came at the expense of quality or safety” (Singh & Wachter, 2008, p. 1622). The challenge raised is that traditional measures of quality may not directly translate to telehealth. “How do we adapt traditional measures of quality to a new remote environment? Although remote monitoring changes the pathway to quality end points, it does not change the nature of the end points themselves” (Singh & Wachter, 2008, p. 1623).

There does currently exist a framework for evaluating the success of telehealth versus traditional delivery of care. As stated by Herbert:

“Evaluation efforts and frameworks have identified ‘success’ factors such as technical acceptability of the system, cost/benefit/effectiveness, organizational support, satisfaction, recruitment and retention, client outcomes such as quality of life, acceptance by consumers and providers. Less is known about the relationship among these variables and whether the findings around one variable are generalizable to other settings or applications.” (Herbert, 2007)

Risk management in the era of remote monitoring and consultations remains largely uncharted territory. Principal challenges and concerns include defining what constitutes telemedicine malpractice, determining where and against whom claims can be brought, and navigating diverse insurer policies regarding practices that are covered and those that are excluded (Singh &

Wachter, 2008, p. 1625). The PPACA does not include quality measures for telehealth, but does open the door to development of these measures with the new state plan option.

Privacy

Information privacy remains a great source of concern about telehealth. As Joanne Kumekawa wrote in her 2001 article:

“... the ability to electronically capture, store, transfer and distribute health information to one person or a billion recipients, with the touch of a fingertip on a computer keyboard, raises many troubling privacy security and confidentiality questions.”
(Kumekawa, 2001)

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) includes a Privacy Rule (Table 3) that sets standards for individuals to understand and control how their sensitive health information is handled (Summary of the HIPAA Privacy Rule, 2003). This becomes more complicated when the risk of a breach of privacy in any kind of outsourcing stems from both the manner of information transfer (i.e., through electronic channels vulnerable to hacking and other security breaches) and the reliance on third parties. It was found that many of these third parties (even domestic ones), although contractually bound to maintain confidentiality, operate beyond the scope of direct supervision (Singh & Wachter, 2008, pp. 1624-1626).

Table 4: Brief Summary of the Privacy Rule

Source: U.S. Department of Health and Human Services

“The Standards for Privacy of Individually Identifiable Health Information (“Privacy Rule”) establishes, for the first time, a set of national standards for the protection of certain health information. The U.S. Department of Health and Human Services (“HHS”) issued the Privacy Rule to implement the requirement of the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”). The Privacy Rule standards address the use and disclosure of individuals’ health information—called “protected health information” by organizations subject to the Privacy Rule — called “covered entities,” as well as standards for individuals’ privacy rights to understand and control how their health information is used. Within HHS, the Office for Civil Rights (“OCR”) has responsibility for implementing and enforcing the Privacy Rule with respect to voluntary compliance activities and civil money penalties. A major goal of the Privacy Rule is to assure that individuals’ health information is properly protected while allowing the flow of health information needed to provide and promote high quality health care and to protect the public’s health and well being.

Table 4: Brief Summary of the Privacy Rule

Source: U.S. Department of Health and Human Services

The Rule strikes a balance that permits important uses of information, while protecting the privacy of people who seek care and healing. Given that the health care marketplace is diverse, the Rule is designed to be flexible and comprehensive to cover the variety of uses and disclosures that need to be addressed.”

(Summary of the HIPAA Privacy Rule, 2003)

Further exacerbating the issue is that some states have even more stringent rules and regulations than those enacted at the federal level through HIPAA (Kumekawa, 2001). This complicates any exchange of information by third parties across state lines. It should be noted that the PPACA does take steps to address privacy concerns by requiring states to outline their plans for retaining privacy in their state plan option proposals (Patient Protection and Affordable Care Act, 2010 Section 2402).

Costs

The incentive to develop remote ways of delivering direct care to consumers is driven by the need to lower cost of delivery, serve a larger population and assuage the shortage of direct care workers. An initial challenge faced by providers is the cost to purchase the necessary equipment and finance the training and implementation. Payers (such as states) are interested in containing or lowering the cost of care. Public funding sources face the problem of purchasing and implementation costs. This remains an important barrier to telehealth implementation. The HITECH Act of 2009 offers incentives for providers to invest in health information technology (HIT) (HITECH Act, 2009). This does not, however, alleviate any of the cost to the states.

The PPACA takes the first steps by giving the states the opportunity to explore their technology options with the new state plan option (Patient Protection and Affordable Care Act, 2010 Section 2402). While this is a step in the right direction, it does not alleviate the financial

burden of implementation costs during a time of fiscal crisis in the states and nationally. In one notable example, the state of Georgia successfully implemented a telemedicine program to serve residents in their mostly rural state saving payers up to \$500 per day⁴ in 1995 (Bashshur & Shannon, 2009, p. 243). This was made possible by settlement with the local telephone carrier who had overcharged customers, leaving \$70 million dollars available to the state in the form of an economic development fund which was earmarked for distance education and telemedicine (Bashshur & Shannon, 2009, pp. 243-247). This illustrates the dramatic cost of implementation of a state wide telemedicine system, and it is difficult to justify these types of investments given the current budget predicament in the states.

Costs related to data security need to be factored into the implementation of telehealth. This is an added barrier for payers, as HIPAA compliance would incur additional ongoing costs to states. (Phyemark, 2002) It is also evident that meeting HIPAA's compliance cost will require state funds to be reallocated from budgeted items (Phyemark, 2002). Further, much of the implementation has been conducted by third parties, adding an additional layer of possibility for a breach of privacy (Phyemark, 2002). As stated by Singh and Wachter:

“The risk of a breach of privacy in any kind of outsourcing stems from both the manner of information transfer (i.e., through electronic channels vulnerable to hacking and other security breaches) and the reliance on third parties. Many of these third parties (even domestic ones), although contractually bound to maintain confidentiality, operate beyond the scope of direct supervision.” (Singh & Wachter, 2008)

The UnitedHealth Group estimates that “the application of new technology and modern administrative processes could save the Medicaid program \$37 billion in administrative costs between 2011 and 2019, with savings equally shared between states and the federal government. These initiatives would also affect Medicaid medical costs — with an estimated reduction of \$96

⁴ This figure is \$500 per-patient-per day for individuals who received rehabilitative care in their homes via telehealth rather than in a hospital. (Bashshur & Shannon 2009)

billion in medical spending over the 2011 – 2019 period, of which \$34 billion would accrue to the states and \$61 billion to the federal government” (UnitedHealth Center for Health Reform & Modernization, 2010, p. 45). This includes applying new health IT systems, including Medicaid in-state health information exchanges, encouraging electronic claims submission; and validating claims prior to payment. (UnitedHealth Center for Health Reform & Modernization, 2010).

Recommendations

The American Telemedicine Association has developed their own set of recommendations for the federal administration to improve access to telehealth services. (See Table 4) Their recommendation is to mandate all federal benefits programs to reimburse for telemedicine.⁵ Further, they recommend that telemedicine be federally regulated (American Association of Telemedicine). Although these recommendations are far from coming to fruition, the provisions in the PPACA do takes steps towards this possible goal.

Table 5: Recommendations from the American Association of Telemedicine

- 1. MANDATE TELEHEALTH AS A COVERED SERVICE UNDER FEDERAL HEALTH BENEFIT PLANS**
Federal health benefit plans should uniformly cover health services provided via telehealth, unless there is a specific contrary restriction. Otherwise, there is no reason to deny a telehealth-provided claim for a service that is covered when using a traditional delivery method. TRICARE, FEHPB and other federal health benefit plans should amend contract arrangements with plan providers and mandate uniform coverage for telehealth services. Additionally, CMS should notify states that Medicaid coverage needs to apply to telehealth-provided services, unless there is a contrary provision of state law.
- 2. INCREASE FEDERAL COORDINATION AND IMPACT ON TELEMEDICINE**
The Federal government has several different telemedicine missions, notably paying for services under health benefits plans, providing telemedicine services directly, regulating devices, services and related applications, and funding telemedicine projects and innovations. There are needs and opportunities to advance the Administration’s goals with White House-directed interagency coordination.
- 3. CLARIFY THAT MEDICARE “PHYSICIAN SERVICES” INCLUDE PROVEN TELEHEALTH SERVICES**
The Center for Medicare and Medicaid Services (CMS) has long covered physician services, such as teleradiology, where the physician is able to visualize the patient’s condition without a face-to-face interaction. The Medicare Manual should also make clear through reference the two other widely-used and accepted physician services that do not require such interaction, related to diabetic retinopathy and dermatologic conditions.
- 4. PILOT TELEHEALTH SERVICE AND PAYMENT MODELS MEDICARE AND MEDICAID PATIENTS**
We recommend Center for Medicare and Medicaid Innovation projects to incorporate telehealth services as part of the Congressionally-specified models: demonstrate video conferencing to deliver services to Medicare- Medicaid

⁵ Telemedicine is term that includes both telehealth and remote monitoring.

Table 5: Recommendations from the American Association of Telemedicine

beneficiaries in metropolitan areas; improve the delivery of Medicare-Medicaid services using forward technology for specialist consultations using medical images; create Medicare-Medicaid payment and service models for remote hospital ICU services; create Medicare-Medicaid payment and service models for telehealth outpatient services, notably telerehabilitation for stroke and telemental health counseling; and, create Medicare-Medicaid payment and service models supporting the use of telehealth to provide chronic care coordination for a broader range of conditions, such as Parkinson's, autism, muscular sclerosis, and epilepsy.

5. IMPROVE THE PROCESS FOR CMS TO ADD TELEHEALTH SERVICES UNDER MEDICARE

CMS can improve the process for adding a specific service to Medicare's telehealth coverage with two administrative changes: adopting a consistent policy for both adding and deleting services, one that allows services that are safe, effective, or medically beneficial when performed as a telehealth service; and broadening the factors used for consideration to include shortages of health professionals, speed of access to in-person services and other beneficiary barriers.

6. SUPPORT TELEHEALTH PROJECTS IN THE ADMINISTRATION'S FY2012 BUDGET PROPOSALS

For purposes of serving health care needs, implementing national health reform, deploying broadband services and other Administration objectives, an important consideration for the Administration is to include four telehealth initiatives in its upcoming budget proposals: use telemedicine in all federal programs providing direct health services; extend Medicare coverage of store and forward services in targeted facilities, support the development of interlinked, state-wide and regional networks, and support the development of telemedicine standards and guidelines.

Based on the research, my recommendations to improve Medicaid's reimbursement of telehealth are:

- CMS should be directed by Congress to determine Medicaid best practices from telehealth experienced states;
 - CMS should be directed by Congress to share best practices along with cost implications and models for reimbursement by Medicare and Medicaid including implementation costs and savings to Medicaid programs and consumers;
- Limited federal funding (through existing demonstration grant program) should be provided to support implementation of telehealth (based on one or several best practices) in other interested states (per proposal/application process).

For Medicare, I recommend further research and analysis on remote consultation and monitoring. The ACOs established in the PPACA are well poised to explore new methods of care delivery, including remote consultation and monitoring.

Conclusions

There is support for further exploration of publicly reimbursed telehealth and remote monitoring. The already overburdened public insurance providers Medicaid and Medicare will experience dramatic increases in enrollment in next decade, and it remains unclear if reimbursement of telehealth and remote monitoring would assuage the workforce crisis and increase access to services for individuals with economic and geographical obstacles. In fact, it is possible that an increase in access to telehealth services may increase costs. At this time, it seems that funding sources other than state resources are needed in support of the expansion of telehealth. The new health reform legislation has taken several steps in the right direction, but further action and financial analysis need to be undertaken.

REFERENCES

- Akalu, Rajen, Rossos, Peter G., and Chan, Christopher T. (2006). *The role of law and policy in telemonitoring*. Journal of Telemedicine and Telecare, 325-327.
- Assistant Secretary for Planning and Evaluation, U. D. (n.d.). ASPE, HHS *DSP Supply Report*. Retrieved September 26, 2010, from Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services:
<http://aspe.hhs.gov/daltcp/reports/2006/DSPsupply.pdf>
- Association, A. T. (n.d.). American Telehealth Association. Retrieved September 25, 2010, from American Telehealth Association: www.americantelemed.org
- Bashshur, Rashid L., and Shannon, Gary W., The History of Telemedicine. Mary Ann Liebert, April 15, 2009. New Rochelle NY. pp. 244-248.
- Brown, Nancy A. (2006) *State Medicaid and private payer reimbursement*. Journal of Telemedicine and Telecare Volume 12 Supplement 2.
- Centers for Medicare and Medicaid Services (CMS). Retrieved January 25, 2011.
www.cms.gov/telemedicine
- Field, M. J., & Grigsby, J. P. (2002). *Telemedicine and Remote Patient Monitoring*. JAMA , 288:423-425.
- Friedman, Thomas L. (2006). *The world is flat: a brief history of the twenty-first century*. New York: Farrar, Straus & Giroux.
- Hebert, M. Telehealth Success: Evaluation Framework Development Health Telematics Unit, Department of Community Health Sciences, University of Calgary, Calgary, Alberta, T2N 4N1, Canada.
- Herz, E. J. (2010). *Medicaid: A Primer*. Washington, DC: Congressional Research Service.
<http://healthlegislation.blogspot.com/2010/08/medicaid-primer.html>
- Historical Highlights. (n.d.). Retrieved January 4, 2011, from United States Department of Health and Human Services: <http://www.hhs.gov/about/hhshist.html>
- Health Information Technology for Economic and Clinical Health Act (HITECH Act) of 2009. Pub. L. No. 111-5. (2009).
- Johnson, Richard W., Toohey, Desmond and Wiener, Joshua (2007). *Meeting the Long-Term Care Needs of the Baby Boomers: How Changing Families Will Affect Paid Helpers and Institutions*. Urban Institute.
- Kumekawa, Joanne K. (2001). *Health Information Privacy Protection: Crisis or Common Sense?* The Online Journal of Issues in Nursing.

Leon, A., et al. (2011). *A New Multidisciplinary Home Care Telemedicine System to Monitor Stable Chronic Human Immunodeficiency Virus-Infected Patients: A Randomized Study*. PLoS ONE, January 2011, Volume 6, Issue 1, e14515. Retrieved March 16, 2011, from www.plosone.org

Markwood, Sandy & Roherty, Martha. (2010). *The Capacity of the Aging Services Network*. Washington, DC: NASUAD.

NASBO/ NGA. (2010). *Fiscal Survey of the States*. Washington DC: NASBO.

Neumann, P. J., & Tunis, S. R. (2010). *Medicare and Medical Technology — The Growing Demand for Relevant Outcomes*. New England Journal of Medicine , 377-379.

Palsbo, Susan E. (2004) *Medicaid Payment for Telerehabilitation*. Archives of Physical Medicine and Rehabilitation.

Patient Protection and Affordable Care Act of 2010. Pub. L. No. 111-148. (2010).

Physmark, Inc. *A Disaster Aspiring to be a Catastrophe: HIPAA IT Costs for State and Local Governments* (A White Paper). September 2002.

Singh, Sanjiv N. (2008). *Perspectives on Medical Outsourcing and Telemedicine — Rough Edges in a Flat World?* NEJM , 1622-27.

Stone, R. L., & Weiner, J. (2001). *Who Will Care For Us? Addressing the Long-Term Care Workforce Crisis*. New York, New York: Urban Institute.

Summary of the HIPAA Privacy Rule. (2003, 5). Retrieved September 25, 2010, from U.S. Department of Health and Human Services: <http://www.hhs.gov/libproxy.lib.unc.edu/ocr/privacy/hipaa/understanding/summary/privacysummary.pdf>

U.S. Department of Health And Human Services Health Resources and Services Administration. (n.d.). Retrieved September 25, 2010, from www.hrsa.gov

UnitedHealth Center for Health Reform & Modernization. (2010). *Coverage for Consumers, Savings for States: Options for Modernizing Medicaid*, Working Paper 3. Minnetonka, Minnesota: United Health Group.