



**Telemedicine Reimbursement:
A National Scan of Current Policies
and Emerging Initiatives**



*A Collaborative Policy Development Initiative
of the California Telemedicine and eHealth Center*

April 2009

Telemedicine Reimbursement: A National Scan of Current Policies and Emerging Initiatives

Prepared by:

**California Telemedicine and eHealth Center
Christine Martin, Executive Director**

Principal Authors:

*Mardell Hall, Catalysis Group, Inc.
Payson Hall, Catalysis Group, Inc.*

Key Contributors:

*Christine Martin, MBA, PMP, CTEC
Irene Alvarez, MPH, CTEC*

Through the generous support of:

California HealthCare Foundation

April 2009

© 2009 California Telemedicine and eHealth Center.

Permission to copy, disseminate, or otherwise use this work is generally granted as long as ownership is properly attributed to the California Telemedicine & eHealth Center.

Forward

In 2008, the California Telemedicine & eHealth Center (CTEC) began a year long initiative to consider the impact that reimbursement and other factors have on the full deployment of telemedicine and telehealth in California. This effort, funded by the Blue Shield of California Foundation, included collaborative policy development with major telemedicine stakeholder groups from healthcare, government, and industry. CTEC was also funded by the California HealthCare Foundation to conduct a policy scan to develop an understanding of how telemedicine reimbursement is currently approached across the United States. This scan included interviewing telemedicine leaders from a cross-section of states and conducting Internet research.

This report, *Telemedicine Reimbursement: A National Scan of Current Policies and Emerging Initiatives*, provides a broad overview of telemedicine reimbursement across the country. CTEC would like to thank Catalysis Group and Heidi Hill-Drum of the California State University, Sacramento Center for Collaborative Policy for their efforts in the development of this report. We believe that the information in this report will prove useful to many other organizations considering how to expand the use of telemedicine.

Christine Martin
Executive Director
California Telemedicine & eHealth Center

Table of Contents

| | |
|---|----|
| Executive Summary..... | 1 |
| Lessons from Scan Difficulty | 1 |
| No Single, Comprehensive Resource | 1 |
| The Gordian Knot of Reimbursement | 2 |
| Lessons from Interviews and Internet Scan..... | 2 |
| Number of Players and Rules Adds Complexity and Confusion | 2 |
| New Laws Do Not Ensure Practice | 2 |
| Limited Impetus to Change Status Quo | 2 |
| States Can Proactively Tackle the Challenges | 2 |
| Conclusions..... | 3 |
| I. Introduction | 4 |
| Overview & Approach..... | 4 |
| Scope | 4 |
| 1. Internet Research..... | 4 |
| 2. Interviews..... | 4 |
| Limitations..... | 5 |
| II. Key Findings | 5 |
| No Single, Comprehensive Resource | 5 |
| Number of Players and Rules Adds Complexity and Confusion | 5 |
| New Laws Do Not Ensure Practice | 5 |
| States Can Proactively Tackle the Challenges..... | 6 |
| Limited Impetus to Change Status Quo..... | 6 |
| The Gordian Knot of Reimbursement | 6 |
| III. Results of Scan..... | 6 |
| Status of Telemedicine Reimbursement | 7 |
| 1. Medicare | 7 |
| 2. Medicaid | 7 |
| 3. Private Insurers | 8 |
| Results of Policy Scan by Category | 8 |
| Hot Topics and Emerging Initiatives | 8 |
| Institutional Support and Incentives..... | 8 |
| Telemedicine Reimbursement Chart..... | 9 |
| Consumer Demand | 10 |
| Payer and Funder Support and Incentives..... | 10 |
| Provider Availability | 11 |
| Leadership, Expertise, and Coordination..... | 12 |
| Research and Evaluation..... | 12 |
| IV. Conclusions | 12 |
| End Notes | 13 |
| Appendix A: List of Interviewees..... | 14 |
| Appendix B: Interview Questions..... | 15 |
| Appendix C: Sources (referenced documents)..... | 16 |

Telemedicine Reimbursement: A National Scan of Current Policies and Emerging Initiatives

Executive Summary

Like the mythical Gordian Knot, the difficult and uncoordinated tangle of telemedicine reimbursement may be better addressed by a bold new action to reimburse all telehealth applications rather than continued attempts to unravel the details.



CTEC's policy scan sought to develop an understanding of how telemedicine reimbursement is currently approached across the United States through user interviews and Internet research. A policy maker might reasonably ask, "What was learned from the scan of other states that might help inform California's telemedicine policy?"

Lessons from the scan fall into two categories:

- Lessons about the state of telemedicine that emerged from the difficulty of conducting the scan.
- Lessons learned about telemedicine reimbursement policy and initiatives from the telemedicine practitioners and advocates interviewed and the Internet research conducted.

Lessons from Scan Difficulty

The scan involved interviews with practitioners and experts in 18 states. Challenges encountered included:

- No single, comprehensive resource within each state to respond to the scan.
- The Gordian Knot of reimbursement policies.

No Single, Comprehensive Resource

Few states have a single entity or organization able to speak with authority about all of the telemedicine activity occurring within the state or the reimbursement policies being applied by Medicaid or private payers. Telemedicine advocacy in most states is piecemeal and uncoordinated. Practitioners and experts demonstrated a keen understanding of the issues and achievements of their individual programs, but few could speak to the overall scope of their respective state's telemedicine programs.

The nature of telemedicine made it difficult to develop a comprehensive state-specific understanding of telemedicine for every state sponsored program and private insurer for the scan, and undoubtedly makes it difficult to coordinate state-level policy advocacy.

Finally, there are few reliable sources for state telemedicine service delivery statistics. Many programs have some data, but privacy requirements, security requirements, and the voluntary nature of most reporting make the data suspect.

The Gordian Knot of Reimbursement

CTEC's policy scan supports the findings of research and analysis conducted by others; determining the status of telemedicine reimbursement policy and practice throughout the U.S. is a daunting task. The puzzle of payers, providers, and different types of insurance coverage in the various states make it difficult to develop a comprehensive understanding of which telemedicine services are covered under what circumstances in different locales. The puzzle is further confounded by reports that some health care providers are not seeking reimbursement for things like facility fees in situations where they are authorized, having determined that the administrative overhead of seeking payment is not worth the small reimbursement fee available.

Reports from the field identified both frustration and progress in untangling the reimbursement knot. Interviewees noted apprehension at potential changes in the rural designation of existing telemedicine programs that might exclude them from future Medicare reimbursement. Some interviewees also noted discouragement at the paradox of trying to demonstrate economies of scale in the face of reimbursement restrictions and wide spread underreporting of telemedicine services provided that made it difficult to attain or demonstrate the necessary service volume. On a positive note, many interviewees were heartened by the recent (enacted in January 2009) expansion of sites where patients could receive Medicare reimbursable telemedicine services to include skilled nursing facilities, in-hospital dialysis centers, and community mental health centers.

Lessons from Interviews and Internet Scan

Scan findings corroborated basic themes previously identified by telemedicine proponents. Key findings include:

- Number of Players and Rules Adds Complexity and Confusion
- New Laws Do Not Ensure Practice
- Limited Impetus to Change Status Quo
- States Can Proactively Tackle the Challenges

Number of Players and Rules Adds Complexity and Confusion

The overlapping jurisdictions involved with Medicare, Medicaid and private insurers who establish reimbursement policy, can further complicate implementation of telemedicine. These include the entities at the Federal and State level that write regulations directly affecting the practice of telemedicine as well as the State Medical Boards that establish the regulatory environment for physician licensure.

Many states have a number of telemedicine programs that operate with varying degrees of cooperation and autonomy. In some cases, competing health providers have telemedicine programs that do not or cannot interconnect. Many states require a physician providing telemedicine services to be licensed in the state where the patient is located.

New Laws Do Not Ensure Practice

Simply authorizing a specific telemedicine service for reimbursement is not sufficient to ensure that providers are ultimately reimbursed for the service. Because of the complex and confusing waters providers must navigate to bill for reimbursement of telemedicine services, providers sometimes simply do not seek reimbursement even though they are authorized to do so. For instance, even though some states authorize billing and reimbursement for a telemedicine site fee, in practice many providers do not feel the benefit of receiving the modest fee (often \$20 or less per encounter) outweighs the challenges and complexities associated with billing for it, and forego reimbursement.

Several interviewees also noted that laws authorizing telemedicine reimbursement can be confounded by the regulation writing process that interprets and implements the law, reporting that delays in writing regulations or complexities, and restrictions introduced in regulations can sometimes undermine the intent of the original legislation.

Limited Impetus to Change Status Quo

Organizations and policies, like people, seldom change unless there is some reason for doing so. In the case of reimbursement of telemedicine services, there have been limited economic, social and political reasons for payers to change their rules, regulations and policies. Several stakeholders interviewed expressed a concern that, despite the potential for long-term savings, the short-term costs associated with telemedicine development and use may discourage the expansion of reimbursement for telemedicine services.

States Can Proactively Tackle the Challenges

The confusing and complex patchwork of rules and regulations related to telemedicine reimbursement significantly impede the expansion of telemedicine. Some states are making in-roads in simplifying telemedicine reimbursement. In Texas, for example, laws have been enacted specifying that insurance providers may not exclude reimbursement for a service just because it is provided via telemedicine.¹ Efforts such as these address the confusion and complexity introduced by conflicting and inconsistent rules and regulations.

The State of Utah empowered its insurance commissioner to establish a standardized form for health insurance claims and a data interchange standard for electronic claims that includes provisions for telehealth services.²

Conclusions

Policy experts and practitioners in states across the nation report a number of challenges with telemedicine reimbursement, challenges that are undoubtedly limiting the expansion of telemedicine. The experiences, concerns, frustrations and insights reported by those interviewed as part of this policy scan echoed those of the Telehealth Optimization Initiative collaborative members. The scan's Internet research and interview findings also align significantly with the results of the focus group and literature review study.

Fundamentally, telemedicine reimbursement does not yet appear to have reached the "tipping point" necessary to accelerate expansion. Nationally, reimbursement policy appears to be based largely upon the relatively restrictive model of Medicare, which has been slow to evolve. Although some states have sought to expand telemedicine service coverage in specific areas via Medicaid, private insurers generally seem to look to the restrictive Medicare guidelines as a basis for reasonable and customary practice.

CTEC's scan results suggest the most promising areas of focus to expand telemedicine reimbursement may be:

- Encouraging expansion in Medicare covered telemedicine services.
- Continued action at the state level - as California and several other states have done - to encourage insurance companies to reimburse telehealth encounters the same as in person encounters where applicable.³
- Continued education of the public, health care providers, insurers, and policy-makers of the potential cost savings and quality of service benefits that are available through expanded access to telemedicine.

When Alexander the Great was frustrated by the riddle of the Gordian Knot, he solved the puzzle with a bold stroke of his sword. The national reimbursement scan presents additional evidence that telehealth reimbursement needs bold new policies to achieve broad deployment of telehealth. The results of the national reimbursement scan clearly support the concerns and perspectives of the CTEC Telehealth Optimization Initiative collaborative members and the policies and action steps recommended in the final report, *Optimizing Telehealth in California: An Agenda for Today and Tomorrow – Major Findings and Recommendations of the California Telemedicine and eHealth Center Telehealth Optimization Initiative*.

Telemedicine Reimbursement: A National Scan of Current Policies and Emerging Initiatives

I. Introduction

The California Telemedicine & eHealth Center (CTEC) received grant funding from the California HealthCare Foundation (CHCF) to broaden its understanding of how telemedicine reimbursement is currently approached across the United States. This information supported CTEC's Telehealth Optimization Initiative launched in 2008 with the objective of identifying actions to facilitate telemedicine reimbursement and to optimize telemedicine services in California. The Telehealth Optimization Initiative, a project generously funded by the Blue Shield of California Foundation, sought to engage the many telemedicine stakeholders to collaboratively identify needs, concerns and options, and to develop a unified perspective on policy and strategies necessary to overcome barriers to widespread adoption. The scan was not intended to be a comprehensive analysis of all telemedicine policies across the nation, rather it was a broad overview of policies and emerging initiatives that complimented the work of the Telehealth Optimization Initiative and ensures development of the broadest and most inclusive policy recommendations.

Overview & Approach

To guide its research and individual interviews, CTEC crafted a handful of questions designed to provide insight into:

- Existing policies and practices impacting telemedicine; and,
- Innovative ideas, approaches, and telemedicine initiatives emerging at the state and regional level.

CTEC initially anticipated that answers to its reimbursement research questions might allow a state-by-state comparison of relevant telemedicine policies, practices and services coverage.

At a broad policy level comparisons can be made, however, because implemented reimbursement policy is subject to highly granular and detailed regulatory and procedural criteria, specific state by state comparison for allowable billing is not feasible. The patchwork nature of telemedicine reimbursement policies and practices not only impedes a state-by-state comparison of policies and practices, it is symptomatic of the challenges confronting broader telemedicine deployment in general.

CTEC's policy scan was successful in taking a broad look at telemedicine policy efforts and innovation. The policy scan of reimbursement poli-

cies and related telemedicine topics included two components, Internet research and interviews.

Through interviews, CTEC captured the reimbursement and other telemedicine perspectives of key telemedicine authorities in 16 states. Interviews probed for innovative telemedicine proposals among key telemedicine practice and policy stakeholders, and gathered stakeholder perspectives on the effectiveness of the existing telemedicine policies.

Through Internet research, CTEC gathered information on the status of telemedicine reimbursement policies and practices. The Internet research focused on locating and reporting objective and comprehensive information about the telemedicine reimbursement policies currently enacted within specific target states.

Scope

1. Internet Research

The objective of the internet research component for the national policy scan was to gather factual information to catalog and capture existing state policies on telemedicine. Internet research was conducted from November 2008 through February 2009.

2. Interviews

Between November 2008 and March 2009, CTEC interviewed telemedicine practice and policy stakeholders in 16 states. Prospective interviewees were established by identifying telemedicine contacts in states that had previously indicated existing telemedicine programs or an interest in telehealth reimbursement strategies in Medicare, Medicaid or private insurance. Eighteen interviewees, representing 16 different states, participated in individual interview sessions. Some interviewees are considered national authorities on telemedicine policy and were able to provide state, regional, and/or national perspectives.

These interviews were guided by a list of pre-established interview questions (Appendix B); however interviews were not, by design, rigidly structured and follow-up questions were encouraged. To solicit information on emerging issues and topics relevant to each stakeholder state, the interviewer posed open-ended questions and allowed interviewees to elaborate on related topics if they were so inclined. Due to the highly variable structure, staffing, and focus of telemedicine organizations across the country, few interviewees were able to provide comprehensive answers to all questions.

Interviews ranged from 30 minutes to 90 minutes and, with rare exceptions, each stakeholder interview was completed in a single telephone contact. In several instances, interviewees submitted supplemental information after the interview.

To minimize the risk that any of the stakeholders interviewed might self-censor out of concern that their candid responses might elicit controversy or misunderstanding, those interviewed were assured that their feedback would not be individually attributable.

Limitations

The policy scan was not intended to be a comprehensive analysis of telemedicine policies and practices across the nation. The scan's scope and the schedule were constrained.

Because the interviews were not tightly structured and because not all interviewees were able to completely answer all of the interview questions, interview results did not lend themselves to statistical tabulation or consistent state-by-state comparisons. Similarly, variations from state to state did not support complete state-by-state response to research questions.

Some of the information gathered through the interviews represents participant attitudes at a specific point in time. Changing conditions might result in variable results should the interviews be replicated.

II. Key Findings

CTEC's policy scan sought to develop an understanding of how telemedicine reimbursement is currently approached across the United States through user interviews and internet research. A policy maker might reasonably ask, "What was learned from the scan of other states that might help inform California's telemedicine policy?" The answer to that question is complex. The following six key findings provide insight into why it is difficult to understand and leverage telemedicine policies and practices in other states.

No Single, Comprehensive Resource

It is difficult to learn about telemedicine policies in the individual states because most states have no single, central organization responsible for telemedicine issues nor comprehensive data repository containing all relevant rules, regulations, and policies for all payers and programs. There are also no state-wide consolidated data repositories that track the number or type of telemedicine services delivered. These factors combine to make it difficult to get a clear picture of service delivery trends or allow analysis of comprehensive service data that might support business cases favorable to the expansion of telemedicine programs.

States generally do not have authoritative sources for gathering or disseminating telemedicine activity information or engaging in policy activism.

Number of Players and Rules Adds Complexity and Confusion

The diversity of regulations within a state, the ways in which regulations are implemented, and the many special criteria associated with billing for telemedicine reimbursement introduce complexity, confusion, and frustration for providers. Within a single state, multiple participants may be guided by myriad reimbursement rules and conditions. For example, Medicare rules for telemedicine reimbursement specify that a healthcare service delivered telemedically in a rural environment is reimbursable while the same service delivered in an urban environment is not.⁴ This patchwork of reimbursement policy—within a single payer organization and between the payer organizations in a state—poses a significant challenge to expanding telemedicine services.

Some states are making in-roads in simplifying telemedicine reimbursement. In Texas, for example, laws have been enacted specifying that insurance providers may not exclude reimbursement for a service just because it is provided via telemedicine.⁵ Oregon is currently pursuing similar legislation. Efforts such as these address the confusion and complexity introduced by conflicting and inconsistent rules and regulations.

New Laws Do Not Ensure Practice

Simply authorizing a specific telemedicine service for reimbursement is not sufficient to ensure that providers are ultimately reimbursed for the service. Because of the complex and confusing waters providers must navigate to bill for reimbursement of telemedicine services, providers sometimes simply do not seek reimbursement even though they are authorized to do so. For instance, even though some states authorize billing and reimbursement for a telemedicine site fee, in practice many providers do not feel the benefit of receiving the modest fee (often \$20 or less per encounter) outweighs the challenges and complexities associated with billing for it, and forego reimbursement.

Several interviewees also noted that laws authorizing telemedicine reimbursement can be confounded by the regulation writing process that interprets and implements the law, reporting that delays in writing regulations or complexities and restrictions introduced in regulations can sometimes undermine the intent of the original legislation.

States Can Proactively Tackle the Challenges

As noted above, the confusing and complex patchwork of rules and regulations related to telemedicine reimbursement significantly impede telemedicine's expansion. States like Oregon are demonstrating that it is possible to attempt to simplify the process and enact reasonable and consistent rules for telemedicine reimbursement. However, simplifying legislation does not emerge of its own accord; it requires proactive and deliberate action. Oregon's decision to involve key stakeholders from both payers and providers in the process of drafting legislation seems to have minimized resistance to a policy that will encourage expanded access to telehealth.

Limited Impetus to Change Status Quo

Organizations and policies, like people, seldom change unless there is some reason for doing so. In the case of reimbursement of telemedicine services, there have been limited economic, social and political reasons for payers to change their rules, regulations and policies. Some interviewees wondered whether the concern that expanding telemedicine—and potentially providing expanded access to healthcare services to patients who previously were unable to receive them due to accessibility problems—may actually create resistance to expanding telemedicine among payers concerned about the short term fiscal impact of increased demand for service.

This puzzle is further complicated by the fact that the modest equipment, infrastructure and facility costs incurred to build and launch telehealth initiatives must be borne by care providers in the near term, while the longer term financial beneficiaries are the payers who incur reduced costs due to improved outcomes because better patient access to care leads to earlier diagnosis, and shorter recovery times.

The economic downturn of 2008/2009 and pressure to deliver services in less expensive ways, on the other hand, may help to overcome resistance and provide the impetus to expand telemedicine.

The Gordian Knot of Reimbursement

Medicare reimbursement for telemedicine services is constrained in statute by several factors:⁶

- The care setting of the patient (approved clinic or health care center)
- The geography of the patient (generally must be rural)
- The clinician provider type (generally must be an MD)
- The service type (must be an approved service)

- The technology type used for service delivery (must be live video except for Alaska and Hawaii)

Some states have eased some of these constraints for their Medicaid programs in an effort to expand access to care. Some insurance companies have elected to reimburse for telemedicine in some situations despite Medicare's constraints. The result is a confusing patchwork of reimbursement rules that vary depending upon:

- The state in which the service is performed.
- The geographical location in which the service is performed.
- The status of the health care facility in which the patient is located.
- The type of service provided.
- The technology used (live video or transmission of data for later review).
- Which entity insures the patient (Medicare, Medicaid, one of the nearly 1,300 health insurance companies that offer coverage to American citizens)?
- The medical credentials of the presenter (MD, RN, LVN, PA, Medical Assistant).

Pity the administrative office staff of an individual physician or small clinic required to navigate this multi-dimensional reimbursement labyrinth seeking to provide quality patient care for which they will be compensated. Pity the researcher attempting to build a comprehensive state by state inventory of the telemedicine services and corresponding circumstances under which they are eligible for reimbursement.

It would be a daunting task to exhaustively catalog all of the telemedicine reimbursement policy variations in effect across the U.S. Even if it were possible, the results would likely be so complex that they would not provide a useful picture, and the picture would likely be made obsolete by change as soon as it was created. Awareness of the complexity of the reimbursement landscape helps to set realistic expectations for future endeavors and may provide clues for future action.

III. Results of Scan

The results of CTEC's policy scan of telemedicine reimbursement policies and practices across the nation are reviewed in three topic areas below:

- The status of reimbursement in general,
- Telemedicine reimbursement by state, and
- The scan's specific findings.

Status of Telemedicine Reimbursement

The absence of consistent, comprehensive reimbursement policies is often cited as one of the most serious obstacles to telemedicine's more complete integration into healthcare practice. Additionally, non-reimbursement for telemedicine services is viewed as an impediment for patient access to quality care in rural and under served areas. There is a growing interest at the national level in creating a universal policy for telemedicine reimbursement in order to promote the growth of telemedicine to sustainable levels.

The multiplicity of payment sources and policies within the current US healthcare system pose a significant challenge to establishing an overall telemedicine reimbursement policy. Private insurers, Medicare, and Medicaid pay the majority of healthcare costs. A brief overview of the history and status of these payment sources is introduced here to set the context for the policy scan's findings.

1. Medicare

Medicare is a federal health insurance program for people 65 or older, and those with have certain disabilities or end-stage renal disease. Medicare benefits are uniform across the country unless specific exceptions are made by the Centers for Medicare and Medicaid Services (CMS). Medicare generally reimburses for live interactive telemedicine if the originating site (patient site) is a qualifying rural facility or meets other specific conditions. Medicare only reimburses for store and forward telemedicine in Alaska and Hawaii.

In 1997, the Balanced Budget Act (BBA) authorized Medicare to reimburse for telehealth services, but with a very limited focus.⁸ Subsequently the Benefits Improvement and Protection Act of 2000 (BIPA) amended the Social Security Act to expand the scope, but serious limitations remained in terms of what services were covered (only live interactive consults), and where services could be provided (reimbursing only for services provided to patients residing in designated rural Health Professional Shortage Areas or HPSAs).

The most recent significant change occurred in July 2008, when Congress overrode a Presidential veto of H.R. 6331. This expanded the list of sites where patients could receive reimbursable telemedicine services to:

- Skilled nursing facilities,
- In-hospital dialysis centers, and
- Community mental health centers.

Medicare reimbursement policies have become the de facto standard for reimbursement for many Medicaid programs and private payers.

2. Medicaid

Medicaid is a state administered program available to certain low-income individuals and families who fit into an eligibility group that is recognized by state and federal law.

Many state Medicaid programs provide at least some reimbursement for telemedicine services. To date 35 states have established rules relating to the reimbursement of telemedicine services. Many states model their reimbursement policies on those of Medicare, but others have sought waivers to support remote diagnostics or remote monitoring for patients with chronic diseases. The biggest incentives for states to reimburse for telemedicine services were the promise of reduced health care-related transportation costs, improved access to service, and a corresponding improvement in patient outcomes. The hope for increased rate of telemedicine expansion has not yet been realized, in part because benefits have been difficult to demonstrate. This is likely due to low utilization rates and/or ineffective tracking of the telemedicine services delivered, resulting in limited hard costs and benefit data.

There is a great deal of variation among the 35 states that provide Medicaid reimbursement for telemedicine services. Whitten and Buis (2007) found that:

- Medical consultations or treatments were covered in 22 states;
- Psychological consultations or treatments were covered in 12 states;
- Home health was covered in 2 states;
- Case management was covered in 2 states; and;
- Patient education (diabetes) was covered in 1 state.

Further significant expansions of state Medicaid reimbursement policies will likely be impacted by the economic constraints facing most state agencies, and solid cost benefit data may needed before new or expanded coverage will be considered.

3. Private Insurers

Private insurers are often subject to reimbursement rules established by state insurance regulators. Currently five states have regulations regarding the reimbursement of telemedicine by private insurers. States with legislation regarding private insurer reimbursement include California, Louisiana, Texas, Oklahoma and Kentucky. Other states such as Oregon and Kansas expect to introduce legislation related to telemedicine in 2009. Even when mandates are not present, some private insurers reimburse for telemedicine services. In a study of 65 telemedicine programs regarding reimbursement from private payers, Whitten and Buis (2006) found that:

- 55% of the respondents reported receiving payment from private payers.
- Telemedicine programs were billing 130 private payers for 75 clinical specialties.
- 81% of the programs stated that there was no difference in reimbursement amount between telemedicine and in person services.
- 58% of telemedicine programs do not bill facility fees.
- 56% do not receive payment of any kind from managed care organizations.

Results of Policy Scan by Category

Results of the policy scan are reviewed below organized in seven key topic areas:

- Hot topics and emerging issues;
- Institutional support and incentives;
- Consumer demand;
- Payer and funder support and incentives;
- Provider availability;
- Leadership, expertise, and coordination; and,
- Research and evaluation.

Hot Topics and Emerging Initiatives

Those interviewed during the policy scan were asked about emerging as well as existing telemedicine policies and practices. Some of the key telemedicine stakeholders interviewed as part of this policy scan also identified telemedicine topics that are currently of keener interest within their states. Hot topics and emerging initiatives included:

- CMS is slowly relaxing the regulations related to reimbursement for services but is progressing cautiously.
- Health systems in South Dakota, Pennsylvania, California and other states have implemented

remote intensive care monitoring and centralizing ICU observation to obtain economies of scale. Benefits include, reductions in mortality, improving quality of care, decreasing complications, and reducing length of stays in the ICU and hospital.

- Presently, Medicare does not reimburse for telemedical speech therapy, occupational therapy, or physical therapy. Stakeholders observed that speech therapy for stroke patients in particular might lend itself to telemedicine and improved access and outcome.
- Two major scenarios support the business case for telemedicine: 1) when the payer must reimburse travel expenses necessary for patients to receive medical services; and, 2) when the country, state and federal government must absorb the cost for transporting a prison inmate or nursing home patient to receive medical services.
- Interviewees noted that telemedicine offers greater perceived cost saving opportunities when the payer and provider are the same entity, because the payer then gains the longer term financial benefit of improved patient outcomes and lower overall care costs. A “fee for service” model seems to discourage telemedicine expansion because the patient accrues the benefit through improved access but the provider and patient sites absorb additional expenses for equipment, program operation, and infrastructure.

Institutional Support and Incentives

Governmental agencies play central roles in providing healthcare services to federal and state prison inmates and to a significant percentage of US residents (e.g., Medicare, Medicaid, Department of Mental Health, etc.). Large employers who cover some or all of the cost of employee health premiums and who must cope with health-related absenteeism have a vested interest in reducing healthcare and insurance costs and in maintaining employee health as economically as possible. Some of these large-scale public and private sector groups have played important roles in expanding the utilization and acceptance of telemedicine. It is reasonable to expect that institutional interest in leveraging the benefits of telemedicine will continue to represent a significant factor in the growth of telemedicine. CTEC’s policy scan yielded the following findings concerning institutions and telemedicine.

- Several stakeholders interviewed expressed a concern that, despite the potential for long-term savings, the short-term costs associated with telemedicine development and use may

Telemedicine Reimbursement Chart

Table 1 summarizes the status of telemedicine reimbursement as of 2007 in the 50 United States and the District of Columbia.

| State | Medicaid reimbursement for telemedicine (by law or legislation) | Private insurance reimbursement for telemedicine (by law or legislation) | No Reimbursement in state statutes |
|----------------------|---|--|------------------------------------|
| Alabama | x | | |
| Alaska | x | | |
| Arizona | x | | |
| Arkansas | x | | |
| California | x | x | |
| Colorado | x | | |
| Connecticut | | | x |
| Delaware | | | x |
| District of Columbia | | | x |
| Florida | | | x |
| Georgia | x | | |
| Hawaii | x | | |
| Idaho | | | x |
| Illinois | x | | |
| Indiana | x | | |
| Iowa | x | | |
| Kansas | x | | |
| Kentucky | x | x | |
| Louisiana | x | x | |
| Maine | x | | |
| Maryland | | | x |
| Massachusetts | | | x |
| Michigan | x | | |
| Minnesota | x | | |
| Mississippi | | | x |
| Missouri | x | | |
| Montana | x | | |
| Nebraska | x | | |
| Nevada | x | | |
| New Hampshire | | | x |
| New Jersey | | | x |
| New Mexico | | | x |
| New York | | | x |
| North Carolina | x | | |
| North Dakota | x | | |
| Ohio | | | x |
| Oklahoma | x | x | |
| Oregon | x | | |
| Pennsylvania | | | x |
| Rhode Island | | | x |
| South Carolina | x | | |
| South Dakota | x | | |
| Tennessee | x | | |
| Texas | x | x | |
| Utah | x | | |
| Vermont | | | x |
| Virginia | x | | |
| Washington | x | | |
| West Virginia | x | | |
| Wisconsin | x | | |
| Wyoming | x | | |
| Total | 35 | 5 | 16 |

discourage the expansion of reimbursement for telemedicine services.

- New CMS rules that took effect in January 2009 expand telehealth availability in rural areas. However, as several of the stakeholders interviewed observed, most of the US population is not rural. Since payers in many areas have tended to follow Medicare reimbursement guidelines for telemedicine, the continued focus on rural settings challenges telemedicine expansion. As one interviewee noted, “If you are a stroke victim in an urban health center without access to a neurologist, you are just as medically disadvantaged as your counterpart in a rural clinic who doesn’t have access to a neurologist – but Medicare will reimburse the life saving telemedicine consult for the rural (not the urban) patient.”
- Legislation pending in Oregon proposes that telemedicine services be reimbursed independent of whether provided in a rural or an urban setting.

Consumer Demand

Extending and expanding telemedicine requires enhanced provider acceptance and increased consumer demand. In addition to increasing telemedicine demand among those who directly consume healthcare services (e.g., prospective patients), efforts to expand the practice of telemedicine must also consider increasing demand from the organizations and groups who purchase healthcare for their members and employees. CTEC’s policy scan obtained the following findings relevant to encouraging both providers and consumer to embrace telemedicine.

- Patients are unlikely to know new medical technology exists unless their doctors prescribe treatment involving the technology or they hear about it through the news media or medical industry advertising. Research identifies physician referral as the most potent of these three modes of patient education. Increasing the frequency with which healthcare providers recommend telemedicine services to patients would significantly increase consumer awareness and demand.⁹
- Several interviewees observed that lack of provider willingness to refer patients to telemedicine represents a major inhibitor to consumer demand. Stakeholders from several states asserted that telemedicine champions are needed at both the provider and the patient site to increase the use of telemedicine.
- Some interviews suggested that primary care

physicians (PCPs) might be reluctant to educate patients about and refer patients to telemedicine. Interviewees suggest that this may be out of concern if they are not fully involved with telemedicine remote providers. Other interviewees suggest that telemedicine programs need to have directed efforts to create relationships between remote clinicians and primary care clinicians. Feedback from several of the interviewees supported the conclusion emerging from research findings, overcoming PCP hesitancy is important to telemedicine’s fuller dissemination and will require cultural and educational changes for PCPs and their patients.

- Some interviewees observed that the asymmetry between who benefits most from telemedicine (the patient and the payer) and those who must invest the most in telemedicine infrastructure (the provider) must be addressed in order to increase provider acceptance of telemedicine. While some payers have initiated patient site fees, current reimbursement models often do not address the additional costs providers incur to deliver telemedicine (technology investments, learning curves and maintenance; reimbursement for services that do not always fit within existing workflow and business processes, etc.).
- Many interviewees reported that provider education is important, noting that many practitioners were unclear about how to bill for telemedicine services. Inconsistent methods among payers, confusion regarding how to obtain reimbursement, and the administrative overhead associated with determining which payers would pay reimbursement claims and which would not was reported as a significant barrier to billing for telemedicine services. As a consequence, telemedicine CPT codes are not consistently used and data regarding the number and type of telemedicine services provided in many states cannot reliably be determined by CPT code review.
- Several interviewees suggested that the current economic crisis might result in an increased interest in telemedicine as consumers become more interested in new ways to reduce costs and increase the quality or availability of healthcare.
- One interviewee suggested that patient demand will result in telehealth soon being recognized as a reasonable and customary practice.

Payer and Funder Support and Incentives

Because of their role in reimbursing for medical services, public and private sector payers play a crucial role in the current use and future growth of

telemedicine services. By specifying what direct and indirect telemedicine services are reimbursed (and how), at what rate and under which conditions, these payers can literally make or break telemedicine. The private and public granting agencies that provide start-up funds for new telemedicine programs help to determine where and when new telemedicine programs emerge. The conditions funders place on their grants can determine the types of telemedicine services provided and the settings in which services are provided. Payers and funders play important roles in determining telemedicine's future. CTEC's policy scan determined the following concerning these key players.

- A challenge faced by telemedicine advocates seeking to expand reimbursement is the fragmentation of the payer market. It is difficult to write laws/regulations that address more than small segments of the marketplace because of conflicting and overlapping jurisdictions. Some telemedicine reimbursement practices are dictated by Medicare and must be addressed at the Federal level. States may seek waivers and expand some coverage through Medicaid, requiring state and federal cooperation. Private insurance may be regulated at the State level.
- Interviewees also identified issues with having large payer populations (hundreds of different payers in some states) that included: billing complexities for providers (e.g., forms, processes, etc. vary from payer to payer); jurisdictional issues with regard to regulation (Federal guidelines, state Medicaid guidelines, private payer guidelines); and, concerns about providing different standards of care to patients depending up on their payer.
- One interviewee reported her state had 800 payers for healthcare service. While eight of these providers account for approximately 30 percent of total services provided, that means the other 70 percent is spread across 792 payers—each with its own forms, rules, etc.
- Interviewees report that some contracted managed care organizations providing reimbursement of telehealth services under Medicaid are looking at telehealth outcomes and considering extending telemedicine coverage to private pay clients.
- Stakeholders report that payers resist efforts to expand telemedicine reimbursement via legislation due to concerns that broadly worded legislation may have unintended consequences for payers. For instance, if legislation mandates that a particular telemedicine service be reimbursed by all payers but payers do not normally

cover that service for in person medical service delivery—payers worry the new legislation will require them to expand coverage. Oregon reported success involving large insurance companies in the drafting of an upcoming telehealth bill. Insurers were initially concerned that they would be required to provide reimbursement for services that were not historically covered, which could increase their costs. Insurers were pleased to participate in drafting the legislation and clarifying that healthcare services not currently covered by the payer (insurer) would not be covered telemedically either. Payers indicated that the resulting bill authorizes reimbursement for practices they as insurers would likely support anyway. By involving payers in the process, Oregon mitigated resistance and cultivated collaboration for its pending legislation.

- Interviewees familiar with organizations that are both payer and provider (insurance companies that are also health care providers) and health care organizations that provide service on a capitation basis have more obvious financial incentives and immediate rewards for implementing telehealth programs. Several interviewees observed that the cultural resistance to implementing telehealth seems to be lower in cases where the payer and provider are the same entity.

Provider Availability

Expanding and extending telemedicine services requires the availability of more providers capable of delivering those services. Any factors that make it difficult for a healthcare provider to learn how to provide telemedicine services or that pose challenges to service delivery (e.g., licensure) represent obstacles to telemedicine expansion. Conversely, any factors that make it easier for a provider to be qualified and prepared to operate within a telemedicine delivery model will increase the number of providers available to support a wider diffusion of telemedicine practice. CTEC's policy scan identified the following concerning provider availability.

- Interviews, literature review, and internet research all suggest that state licensing requirements can present obstacles for the practice of telehealth across state lines. Reciprocal licensing of care providers between states or development of multistate licensure for telehealth would reduce barriers to implementing telemedicine.
- Some interviewees reported success in expanding the definition of who may provide telehealth services for reimbursement. New Mexico has successfully expanded reimbursement to cover any licensed health professional. Oregon is working on legislation that covers

licensed/certified “physicians, nurse practitioners, physician assistant, nurse midwife, clinical nurse specialist, clinical psychologist, clinical social workers and dieticians.”

- When working with state legislatures to draft laws expanding access or simplifying the practice of telehealth, stakeholders emphasized it is important to recognize that the regulations that specify HOW the law will be enacted are as important or more important as the laws themselves. For example, a 2001 Oregon law allowed providers licensed in another state to provide a limited number of telehealth services without obtaining Oregon licensure. However, subsequent regulations required that the provider meet with the patient in person before providing telehealth services, limiting the benefit of reciprocal licensing and resulting in most physicians obtaining Oregon licensure after all.
- One interviewee working with a program that provides several dozen telemedicine specialty services noted that differences among the presenter skills required for various specialties has been a challenge to program development and expansion (some specialties require presenter to be an RN or a PA, others may find a medical assistant sufficient).
- Several interviewees suggested that the limited availability of specialists, shortage of trained staff, and workflow challenges represent bigger barriers to telemedicine expansion than do existing limitations in reimbursement policies.

Leadership, Expertise, and Coordination

Interviewees offered the following observations related to the leadership, expertise and coordination needed to optimize telemedicine:

- Many payer/providers and capitated care providers who provide services to both Medicaid and non-Medicaid patients are monitoring their experiences with reimbursed telemedicine services covered by Medicaid before expanding the availability of telemedicine services to their other patients. If the outcomes trend favorably, their experience providing Medicaid telemedicine services may encourage expansion of coverage to private patients.
- The Utah Health Information Network (UHIN) performs all claims processing and represents all the major payers and providers. Billing standards have been developed and all standards are unanimously approved, including an electronic standard for telehealth billing.

Research and Evaluation

Many of those interviewed as part of the policy scan underscored the importance of obtaining more complete quantitative data to demonstrate the value of telemedicine and to guide its policy development. Commentary and feedback received included:

- Initial surveys of telehealth effectiveness focused on patient and provider satisfaction. Those studies have been done and telehealth appears to be accepted by both communities when it is used. Several interviewees emphasized the need for good research designed to provide cost effectiveness data to payers to speed adoption of telemedicine where telemedicine’s benefits are clearly demonstrable.
- Demonstration of increased provider efficiency and improved patient outcomes is needed to encourage both expanded reimbursement (where appropriate) and to support increased use of telehealth as a cost saving alternative when episodic payment models are used.
- More than half of the telemedicine interviewees felt it would be very helpful to be able to collect and report data that objectively demonstrates the cost benefit of telemedicine to consumers, payers, and/or funders.
- Several interviewees reported their own state/ regional telemedicine efforts are probably under reported due to inconsistent, non-centralized and voluntary self-reporting of telemedicine services provided.
- One stakeholder observed that proprietary concerns (exposing a competitive advantage) might also contribute to difficulties obtaining accurate telemedicine usage data from some programs.
- Another stakeholder specifically noted the need for data to demonstrate that telehealth saves more than it costs in order to demonstrate to CMS and other payers the value of expanded telemedicine reimbursement coverage.

IV. Conclusions

Policy experts and practitioners in states across the nation report a number of challenges with telemedicine reimbursement, challenges that are undoubtedly limiting the expansion of telemedicine. The experiences, concerns, frustrations and insights reported by those interviewed as part of this policy scan echoed those of the Telehealth Optimization Initiative collaborative members. The scan’s Internet research and interview findings also align significantly with the results of the focus group and literature review study.

Fundamentally, telemedicine reimbursement does not yet appear to have reached the “tipping point” necessary to accelerate expansion. Nationally, reimbursement policy appears to be based largely upon the relatively restrictive model of Medicare, which has been slow to evolve. Although some states have sought to expand telemedicine service coverage in specific areas via Medicaid, private insurers generally seem to look to the restrictive Medicare guidelines as a basis for reasonable and customary practice.

CTEC’s scan results suggest the most promising areas of focus to expand telemedicine reimbursement may be:

- Encouraging expansion in Medicare covered telemedicine services.
- Continued action at the state level - as California and several other states have done - to encourage insurance companies to reimburse telehealth encounters the same as in person encounters where applicable.¹⁰

- Continued education of the public, health care providers, insurers, and policy-makers of the potential cost savings and quality of service benefits that are available through expanded access to telemedicine.

A number of exciting and innovative telemedicine applications are gaining traction nationwide in spite of reimbursement challenges, including:

- Regionally centralized electronic monitoring of Intensive Care Units.
- Telestroke programs that seek rapid neurology consults to support timely administration of tPA.
- Telemedicine programs in prisons to provide cost effective care to incarcerated patients without the cost or public safety implications of transport.
- Burn and trauma specialty consults in Emergency Rooms.
- In-home monitoring for chronically ill patients.

End Notes

- 1 Texas Insurance Code - Section 1455.004. Coverage For Telemedicine Medical Services And Telehealth Services available at law.onecle.com/texas/insurance/1455.004.00.html
- 2 See www.rules.utah.gov/publicat/code_rtf/r590-164.rtf.
- 3 See California Telehealth Legislation www.atasp.org/inc/HTML/pdf/CaliforniaTelehealthLegislation.pdf
- 4 See 42 CFR 410.78 available at law.justia.com/us/cfr/title42/42-2.0.1.2.10.2.35.53.html which applies to Medicare. Many of these restrictions also apply to Medicaid see <http://www.cms.hhs.gov/Telemedicine/>
- 5 Texas Insurance Code - Section 1455.004. Coverage For Telemedicine Medical Services And Telehealth Services available at law.onecle.com/texas/insurance/1455.004.00.html
- 6 Joseph Ternullo provided this excellent summary of the statutory constraints in his presentation “Medicare Payment for Telehealth” at the Connected Health Symposium October 28, 2008.
- 7 1,300 figure from AHIP (industry trade group) web site www.ahip.org/content/default.aspx?bc=31
- 8 For a discussion of the initial coverage and its evolution see www.hrsa.gov/telehealth/pubs/reimb.htm and tie.telemed.org/articles/article.asp?path=articles&article=medicareReimbursement01_gw_tie01.xml
- 9 See “If You Bill It, They Will Come” by William Leach (2009) page 18
- 10 See California Telehealth Legislation www.atasp.org/inc/HTML/pdf/CaliforniaTelehealthLegislation.pdf

Appendix A: List of Interviewees

CTEC would like to thank the following professionals who gave generously of their time and wisdom by participating in the interviews conducted for the scan from November 2008 through March 2009.

Dale Alverson, MD

Medical Director

Center for Telehealth and
Cybermedicine Research
University of New Mexico
Albuquerque, New Mexico

Nina M. Antoniotti RN, MBA, PhD

Program Manager

Marshfield Clinic TeleHealth Network
Marshfield, Wisconsin

Gail Barker, PhD

Co-Director

Arizona Telemedicine Program
Maricopa County
University of Arizona
Tucson, Arizona

Cathy Britain

Chairperson

Telehealth Alliance of Oregon
Portland, Oregon

Marilyn Dahler

Telemedicine Coordinator

Avera Telehealth
Sioux Falls, South Dakota

Michael Edwards, PhD

Director of Research/Evaluation

Northeast Telehealth Resource Center
Agusta, Maine

Stuart Ferguson, PhD

Director of Telehealth

Alaska Federal Healthcare Access Network
Anchorage, Alaska

Donna Hammack

Chief Development Officer

Saint Elizabeth Foundation
Lincoln, Nebraska

Zoi Hills

Telemedicine Coordinator

University of Minnesota Medical School
Wadena, Minnesota

Deb LaMarche

Program Manager

Utah Telehealth Network
Salt Lake City, Utah

Denny Lordan

Director

Northwest Telehealth Resource Center
Spokane, Washington

Christine Martin, MBA, PMP

Executive Director

California Telemedicine and eHealth Center
Sacramento, California

Chris Patricoski, MD

Clinical Director

Alaska Federal Healthcare Access Network
Anchorage, Alaska

Stuart Speedie, PhD

Professor and Fellow

Institute of Health Informatics
University of Minnesota
Minneapolis, Minnesota

Joseph Ternullo, JD, MPH

Associate Director

Center for Connected Health
Partners Health Care System
Boston, Massachusetts

Joe Tracy

Vice President, Telehealth Services

Lehigh Valley Health Network
Allentown, Pennsylvania

Alex Vo, PhD

Executive Director

AT&T Center for Telehealth Research and Policy
University of Texas Medical Branch
Galveston, Texas

Nancy Willis

Vice President

Government Relations & Marketing
St. Alexius Medical Center
North Dakota

Appendix B: Interview Questions

1. What are the current policies in your state (reimbursement or other) that incentivize telehealth? Are there any specific existing or pending laws or regulations that you are aware of?
2. How have existing policies (or lack thereof) promoted or hindered the use of telehealth in your state?
3. Are there reimbursement ideas or proposals that your organization, your state legislature, or others are discussing or advancing to further advance telehealth?
 - a. What are the obstacles facing these proposals?
 - b. What key factors are contributing to progress?
 - c. Do you think it's likely the proposal will be adopted?
 - d. What impact do you believe the proposal will have on telehealth?
4. Is there a single group coordinating statewide telehealth efforts?
5. Is there a statewide database or other information source with telehealth usage information? Is this database accessible for further research?

Appendix C: Sources (referenced documents)

Leach, WD, "If You Bill It, They Will Come, A Literature Review on Clinical Outcomes, Cost-Effectiveness, and Reimbursement for Telemedicine", 2009. www.cteconline.org/resources.php

Ternullo, J, "Medicare Payment for Telehealth: When will it happen and how will it work?" Presented at Connected Health Symposium", October 28, 2008.

Shimizu, Wayne and Chorneau, Charlotte, "Telehealth Optimization Initiative: Summary of Focus Group Methodology and Responses, California Telemedicine and eHealth Center", 2009. www.cteconline.org/resources.php

Whitten, PS and Buis, L., "Private Payer Reimbursement for Telemedicine Services in the United States", *Telemed J E Health* 2007; 13:15-23

Whitten, PS and Buis, "The Current State of Private Payer Reimbursement for Telemedicine", 2007. www.americantelemed.org/files/public/policy/Private_Payer_Report.pdf

United States Health Resources and Services Administration, "Telemedicine Reimbursement Report prepared by the Center for Telemedicine Law for the Office for the Advancement of Telehealth", October 2003. www.hrsa.gov/telehealth/pubs/reimbursement.htm

California Telemedicine and eHealth Center Telehealth Optimization Initiative

Companion Publications

The following publications were developed as part of the Telehealth Optimization Initiative and are available from the California Telemedicine and eHealth Center. These reports provide more detail on topics covered in the Major Findings and Recommendations Report. The full report and companion publication are available from CTEC at www.CTECOnline.org

**Optimizing Telehealth in California:
An Agenda for Today and Tomorrow
Full Report of Major Findings and Recommendations
January 2009**

**If You Bill It, They Will Come.
A Literature Review on Clinical Outcomes,
Cost-Effectiveness, and Reimbursement for Telemedicine
January 2009**

**Telehealth Optimization
Summary of Focus Group Methodology and Responses
January 2009**

**National Telemedicine Reimbursement Scan
April 2009**

The California Telemedicine and eHealth Center is a leading source of expertise and comprehensive knowledge on the development and operation of telemedicine and telehealth programs. CTEC has received national recognition as one of six federally designated Telehealth Resource Centers around the country.



California's
Leading Resource on
Telemedicine & Telehealth