

State Medicaid Best Practice Store-and-Forward Telemedicine July 2013

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<u>State Medicaid Best Practices</u> <u>Store-and-Forward Telemedicine</u>

Store-and-forward telemedicine refers to the use of asynchronous (not real-time) computer-based communication between a patient to a consulting provider (referred to as "Direct-to-Consumer"), or a referring healthcare provider and a medical specialist (referred to as "Provider-to-Provider") at a distant site for the purpose of diagnostic and therapeutic assistance in the care of patients who otherwise have no timely access to specialty care. The use of asynchronous transmissions is common for some specialties such as radiology and pathology. However, other medical specialties such as dermatology and ophthalmology that can effectively and economically utilize store and forward telemedicine to improve patient access and quality of care are often not covered for Medicaid reimbursement.

Medicaid Overview

Forty-four state Medicaid plans have telehealth initiatives aimed at controlling costs, improving health care outcomes, and increasing access to specialty care. However, except for radiology and pathology only seven states reimburse for the use of store-and-forward enabled services in their Medicaid programs: Alaska, Arizona, California, Illinois, Minnesota, Oklahoma, and South Dakota. Virginia Medicaid is finalizing regulations to add teledermatology and assessment of diabetic retinopathy as reimbursable services using store and forward telemedicine.

State Policy Best Practices

To improve patient access to healthcare through telehealth expansion, ATA has analyzed enacted state telehealth policies and highlighted those respective states with the best policy models for telehealth services. These best practice models can be used as benchmarks for other states considering new, or revising existing, telehealth policies.

In the area of store-and-forward telemedicine, ATA examined enacted laws, available fiscal notes and bill reports, published regulations, and Medicaid provider manual guides for the aforementioned 7 states with Medicaid coverage. ATA also reviewed state issued reports, clinical programs, and peer-reviewed articles demonstrating quality and cost-effective telehealth deployment and utilization. The criteria used to identify states with model policies regarding use of store-and-forward telemedicine include:

- Inclusive definitions of technology with little to no restrictions on the types of technology approved for use in a clinical service
- Geographic areas served
- Applicable health services and conditions
- Provider eligibility
- Reimbursement methodology
- Level of coverage and affected health care plans.

The following information identifies notable policies from three states: Arizona, California, and South Dakota.

Arizona

Store-and-forward services are reimbursed under Arizona's Medicaid program. Arizona Revised Statute §36-3601 defines telemedicine as "the practice of health care delivery, diagnosis, consultation and treatment and the transfer of medical data through interactive audio, video or data communications that occur in the physical presence of the patient, including audio or video communications sent to a health care provider for diagnostic or treatment consultation." The Arizona Medicaid provider manual defines store-and-forward as "transferring medical data from one site to another through the use of a camera or similar device that records (stores) an image that is sent (forwarded) via telecommunication to another site for consultation."

Arizona Medicaid covers the most extensive list of services for store-and-forward, including: cardiology, dermatology, endocrinology, hematology/oncology, home health, infectious diseases, neurology, obstetrics/gynecology, oncology/radiation, ophthalmology, orthopedics, pain clinic, pathology, radiology, pediatrics/pediatric subspecialties, rheumatology, and surgery follow-ups and consultations.

Reimbursement for store-and-forward exists under the fee-for-service model and consulting providers must use a "GQ" modifier when claiming reimbursement for telemedicine services. Informed consent is not required for "the transmission of diagnostic images to a health care provider serving as a consultant or the reporting of diagnostic test results by that consultant." (Arizona Rev. Stat. §36-3602 Subsection E-3)

California

Store-and-forward services have been reimbursable under the state's Medicaid program when used for dermatology and ophthalmology since 2007. In 2011, the Governor signed into law a comprehensive telemedicine bill that made these permanently reimbursable services.

California statute defines telehealth as:

Telehealth means the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health care while the patient is at the originating site and the health care provider is at a distant site. Telehealth facilitates patient self-management and caregiver support for patients and includes synchronous interactions and asynchronous store and forward transfers.

Further, there are explicit regulations for store-and-forward transmissions:

An asynchronous transmission of medical information to be reviewed at a later time by a physician at a distant site who is trained in dermatology... where the physician at the distant site reviews the medical information without the patient being present in real time. A patient

receiving teledermatology by store and forward shall be notified of the right to receive interactive communication with the distant specialist physician or optometrist, and shall receive an interactive communication with the distant specialist physician upon request. If requested, communication with the distant specialist physician may occur either at the time of the consultation, or within 30 days of the patient's notification of the results of the consultation.

According to the state's Medicaid Manual, the distant site provider should use a "GQ" modifier when claiming reimbursement for store-and-forward when used for an inpatient or office consultation, outpatient visit, or subsequent hospital care. California Medicaid will also pay for an originating site fee.

South Dakota

Store-and forward services are covered in South Dakota. Under regulations, the exchange of health information can occur in near real time (asynchronous) through store and forward applications such as electronic mail, fax, or phone-mail.

Covered services include physician consultations, follow-up visits, and pharmacological management, without limitation by medical specialty. These services are provided to eligible South Dakota Medical Assistance Program beneficiaries and are treated like in-person consultation services. However, "GT" modifier code denotations are needed for reimbursement.

South Dakota will reimburse eligible providers at both ends of the telemedicine service, as long as they include the appropriate billing modifier code.

Exception to the Trend

In May 2012, the Governor of Vermont signed into law a comprehensive telemedicine bill which allows for the coverage of teledermatology in all of the state's health insurance plans. Despite this gain, the most recent provider manual update (November 2012) notes that Vermont Medicaid and SCHIP programs will not reimburse for teledermatology or teleophthalmology by store and forward means.

Evidence-Based Outcomes for Store-and-Forward

Dermatology

Studies over the past decade have convincingly shown that appropriately performed store-and-forward teledermatology consultations:

- increase patient access to the specialty by shortening service delivery times especially in areas that are underserved by dermatology.¹
- provide equal diagnostic and therapeutic outcomes to in-person dermatology visits for most dermatologic conditions.²

- can provide faster time to diagnosis for skin cancers.³
- improve care by more accurate patient assessment and treatment than can be provided by nondermatologist providers.⁴

A 2011 literature review in the *Journal of the American Academy of Dermatology* showed that teledermatology consistently shortened service delivery times when compared to in-person dermatology consultations. ¹ This allows more time for diagnosis and treatment, which may ultimately lead to lower costs related to decreased clinical errors, and hospital and emergency room admissions.

A strong body of research exists regarding the diagnostic reliability of teledermatology. The evidence shows that teledermatology consultations, whether using store and forward or real-time interactive techniques, result in highly reliable diagnoses that compare favorably with conventional clinic-based care. ⁵⁻¹³ Most of the existing evidence shows that store and forward teledermatology results in comparable diagnostic accuracy when compared to conventional clinic-based care. ^{6,9,13-16} This is based primarily on studies that found comparable diagnostic accuracy between teledermatologists and clinic-based examiners using histopathologic review of biopsied tissue or other reference standard tests to make these assessments. ^{9, 17-19}

Ocular Health

Remote ocular imaging can provide a great value in identifying the clinical onset of ocular health conditions such as diabetic retinopathy and preventing vision loss. Less than half of patients with diabetes in the U.S. undergo the recommended annual evaluation for diabetic retinopathy. Diabetic retinopathy is the most common cause of blindness among working age adults in the US and other developed countries. ATA projects that this problem will worsen substantially, as the number of people with diabetes in the US is expected to increase from 25 million to 125 million by 2050.

Remote imaging provided through store-and-forward technology has been shown to be an effective and cost efficient method to identify, monitor and manage retinal disease. The Ocular Special Interest Group of the ATA has published the 2nd edition of the Telehealth Practice Recommendations for Diabetic Retinopathy.²⁰ The goal of these Telehealth Practice Recommendations is to support telehealth programs to improve clinical outcomes and promote reasonable and informed patient and care provider expectations. The recommendations were based on reviews of current evidence, medical literature and clinical practice. Multiple studies have demonstrated the value of ocular telemedicine programs for diabetic retinopathy in identifying diabetic eye disease, prescribing appropriate eye care and treatment, and monitoring progression of diabetic eye disease.²¹⁻³¹

Model Medicaid Policy Considerations

Based on state best practices, ATA suggests some basic provisions for policymakers and health care stakeholders to start from in developing store-and-forward policies to fit their needs.

Full parity option:

For a state with no or little Medicaid coverage for telehealth, the most concise and comprehensive way to cover store-and-forward applications would be a simple, generic statement for telehealth service parity that is not technology specific, such as the following:

Medicaid will provide coverage for telemedicine services to the same extent that the services would be covered if they were provided in-person.

The same effect can be accomplished in some states, that in their definition of telehealth, use the adjective "interactive" (or similar restrictive modifier) regarding the communications, by deleting the restriction.

S&F parity option:

For some states, it may be more appropriate and expeditious to provide parity specifically for services providing by store-and-forward, such as the following:

Medicaid will provide coverage for asynchronous telemedicine services to the same extent that the services would be covered if they were provided in-person.

Barriers option:

A more incremental approach would be to provide a narrower authorization, such as build off Medicare's definition of a physician service that includes "where the physician...is able to visualize some aspect of the patient's condition without the interposition of a third person's judgment."

Another incremental approach would be to authorize specific applications, such as dermatology and ophthalmology or wound management and diabetic retinopathy.

6. Zelickson BD, Homan L. Teledermatology in the nursing home. Arch Dermatol1997;133:171-4.

8. High WA, Houston MS, Calobrisi SD, Drage LA, McEvoy MT. Assessment of the accuracy of low-cost store-and-forward teledermatology consultation. JAm Acad Dermatol 2000;42:776-83.

9. Whited JD, Hall HP, Simel DL, Foy ME, Stechuchak KS, Drugge RJ, et al. Reliability and accuracy of dermatologists' clinic-based and digital image consultations. JAm Acad Dermatol1999;41:693-702.

10. Taylor P, Goldsmith P, Murray K, Harris D, Barkley A. Evaluating a telemedicine system to assist in the management of teledermatology referrals. Br J Dermatol 2001;144:328-33.

 Lim AC, Egerton IB, See A, Shu mack SP. Accuracy and reliability of store-and-forward teledermatology: preliminary results from the St. George Teledermatology Project. Austral as J Dermatol 2001;42:247-51.
Pak HS, Harden D, Cruess D, Welch ML, Poropatich R. Teledermatology: an intraobserver diagnostic correlation study, part 1. Cutis 2003;71:399-403.

13. Whited JD, Teledermatology Special Interest Group. Summary of the Status of Teledermatology Research. American Telemedicine Association; 2008 [serial online]. Available at

http://www.americantelemed.org/files/public/MemberGroups/Teledermatology/Teledermatology Re search 2010.pdf

14. Whited JD, Mills BJ, Drugge RJ, Grichnik JM, Simel DL. A pilot trial of digital imaging in skin cancer. J Telemed Telecare 1998;4:108-112.

15. Pak HS, Harden D, Cruess D, Welch ML, Propatich R. Teledermatology: an intraobserver diagnostic correlation study, part II. Cutis 2003;71:476-480.

16. Shaprio M, James WD, Kessler R, Lazorik FC, Katz KA, Tam J, et al. Comparison of skin biopsy triage decisions in 49 patients with pigmented lesions and skin neoplasms. Arch Dermatol 2004;140:525-528.

17. Krupinski EA, LeSueur B, Ellsworth L, Levine N, Hansen R, Silvis N, et. al. Diagnostic accuracy and image quality using a digital camera for teledermatology. Telemed J 1999;5:257-63.

18. Mareno-Ramirez D, Ferrandiz L, Bernal A, Carrasco D, Martin J, Camacho F. Teledermatology as a filtering system in pigmented lesion clinics. J Telemed Telecare 2005;11:298-303.

19. Oakley AMM, Reeves F, Bennett J, Holmes SH, Wickham H. Diagnostic value of written referral and/or images for skin lesions. J Telemed Telecare 2006;12:151-158.

20. Telehealth Practice Recommendations for Diabetic Retinopathy. American Telemedicine Association. February 2011.

21. Olafsdottir E, Andersson DK, Stefansson E. Visual acuity in a population with regular screening for type 2 diabetes mellitus and eye disease. Acta Ophthalmol Scand 2007;85:40-45.

22. Zoega GM, Gunnarsdottir T, Bjornsdottir S, Hreietharsson AB, Viggosson G, Stefansson E. Screening compliance and visual outcome in diabetes. Acta Ophthalmol Scand 2005;83:687-690.

23. Wilson C, Horton M, Cavallerano J, Aiello LM. Addition of primary care-based retinal imaging technology to an existing eye care professional referral program increased the rate of surveillance and treatment of diabetic retinopathy. Diabetes Care 2005;28:318-322.

24. Conlin PR, Fisch BM, Orcutt JC, Hetrick BJ, Darkins AW. Framework for a national teleretinal imaging program to screen for diabetic retinopathy in Veterans Health Administration patients. J Rehabil Res Dev 2006;43:741-748.

25. Javitt JC, Canner JK, Frank RG, Steinwachs DM, Sommer A. Detecting and treating retinopathy in patients with type I diabetes mellitus. A health policy model. Ophthalmology 1990;97:483-494.

¹ Erin M Warshaw et al., "Teledermatology for diagnosis and management of skin conditions: a systematic review," Journal of the American Academy of Dermatology 64, no. 4 (April 2011): 759-772.

² Pak H, Triplett CA, Lindquist JH, Grambow SC, Whited JD. Store-and-forward teledermatology results in similar clinical outcomes to conventional clinic-based care. J Telemed Telecare 2007;13;26- 30.

³ Hsaio J, Oh D. The impact of store-and-forward teledermatology on skin cancer diagnosis and treatment. Journal of the American Academy of Dermatology 59, no.2 (August 2008): 260.

⁴ Gerbert B, Maurer T, Berger T, Pantilat S, McPhee SJ, Wolff M, et al. Primary care physicians as gatekeepers in managed care. Arch Dermatology 132

^{5.} Kvedar JC, Edwards RA, Menn ER, Mofid M, Gonzalez E, Dover J, et al. The substitution of digital images for dermatologic physical examination. Arch Dermatol1997;133:161-7.

^{7.} Lyon CC, Harrison PV. A portable digital imaging system in dermatology: diagnostic and educational applications. J Telemed Telecare 1997;3(S1):81-3.

26. Javitt JC, Aiello LP. Cost-effectiveness of detecting and treating diabetic retinopathy. Ann Intern Med 1996;124:164-169.

27. The cost-effectiveness of screening for type 2 diabetes. CDC Diabetes Cost-Effectiveness Study Group, Centers for Disease Control and Prevention. JAMA 1998;280:1757-1763.

28. Rein DB, Wittenborn JS, Zhang X, Allaire BA, Song MS, Klein R, Saaddine JB, for the Vision Cost-Effectiveness Study Group. The Cost-Effectiveness of Three Screening Alternatives for People with Diabetes with No or Early Diabetic Retinopathy. Health Serv Res 2011.

29. Whited JD, Datta SK, Aiello LM, Aiello LP, Cavallerano JD, Conlin PR, Horton MB, Vigersky RA, Poropatich RK, Challa P, Darkins AW, Bursell SE. A modeled economic analysis of a digital tele-ophthalmology system as used by three federal health care agencies for detecting proliferative diabetic retinopathy. Telemed J E Health 2005;11:641-651.

30. Conlin PR, Fisch BM, Cavallerano AA, Cavallerano JD, Bursell SE, Aiello LM. Nonmydriatic teleretinal imaging improves adherence to annual eye examinations in patients with diabetes. J Rehabil Res Dev 2006;43:733-740.

31. Fonda SJ, Bursell SE, Lewis DG, Garren J, Hock K, Cavallerano J. The relationship of a diabetes telehealth eye care program to standard eye care and change in diabetes health outcomes. Telemed J E Health 2007;13:635-644.