California community health centers:
Financial analysis of telehealth programs

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EXECUTIVE SUMMARY

California community health centers and clinics (CCHCs), including federally qualified health centers (FQHCs), rural health centers (RHCs), and other facilities are a part of the state's healthcare delivery system and act as safety net providers for the underserved, indigent, uninsured and rural populations. With the passage of the Patient Protection and Affordable Care Act (ACA), CCHCs are facing demand for services from newly insured individuals enrolled through the Medi-Cal expansion and Covered California. While growing evidence shows that telehealth can be an effective tool for improving access to care and improving healthcare quality and outcomes, the financial sustainability of CCHC telehealth programs is a concern.

According to the CCHCs included in this study, the key drivers for making telehealth services available to their patient populations are their commitment to provide access to needed specialty care and to fulfill their overall missions. Despite the market pressures and impetus to continue to leverage telehealth technologies, there still exist barriers and challenges to adoption. Addressing financing and payment models for telehealth is necessary to promote telehealth as part of the "new normal" in how healthcare is delivered and to ensure access to necessary healthcare services. Reimbursement mechanisms and coverage policies for telehealth services at CCHCs will change as payers seek innovative strategies to align payment to drive improvements in population health, health outcomes, and efficiencies.

The Center for Connected Health Policy (CCHP) engaged Milliman, Inc. to conduct a financial analysis examining the costs and revenue of telehealth programs in five CCHCs. In doing so, we also examine the underlying reimbursement structure for telehealth in California and offer key considerations for the sustainability of telehealth as part of the evolving delivery system.

Telehealth financing at community health centers

California community health centers include FQHCs and RHCs that serve underserved and rural communities and a disproportionate share of low-income, indigent, and uninsured populations. CCHCs with the FQHC or RHC designation receive enhanced reimbursement from Medicare and Medi-Cal that is intended to support the essential services they provide their communities. CCHCs provide healthcare services but also serve as a space for the community to be connected to other social services. They also provide a host of other enabling services such as case management, patient education, and transportation.

FQHCs and RHCs are required to submit cost reports to the California Department of Health Care Services (DHCS) and the U.S. Health Resources and Services Administration. Cost reports are used to reconcile and verify payments for allowable costs and determine future reimbursement rates.

Medi-Cal is the predominant payer for CCHCs, followed by Medicare. Commercial payers represent a relatively small proportion of total payments to CCHCs. However, this proportion may grow, especially for those CCHCs that are part of the essential community provider networks offered by Covered California health plans.

Reimbursement policies for telehealth services vary by payment sources. Medicare provides coverage for interactive audio and video telecommunications systems that permit real-time communication between a physician or practitioner at the distant site, and the beneficiary at the originating site. Medi-Cal provides reimbursement for services provided via live video and for limited asynchronous "store and forward" technology. Commercial payment and coverage policies vary, because California law does not mandate coverage of telehealth services for privately purchased health insurance.

Participating CCHCs

Milliman, CCHP, and the California Telehealth Resource Center (CTRC) worked collaboratively to conduct a financial analysis of a sample of five CCHCs that currently have telehealth programs.

- Shasta Community Health Center (SCHC)
- Community Health Alliance of Pasadena (ChapCare)
- Barton Community Health Center (Barton)
- West County Health Centers (West County)
- Southern Inyo Healthcare District (Southern Inyo)

These CCHCs completed a two-part data collection tool for the purposes of capturing the claims experience and administrative and programmatic costs of providing telehealth services. The claims experience data included patient data, demographics, diagnoses, telehealth service, cost, dates, etc. The administrative and programmatic costs included costs for maintenance, staff salary, technical support, and inventory. Revenue sources were also collected during this process. Milliman checked the data for reasonableness by looking for missing, incomplete, or mislabeled/miscoded data.

Milliman used the collected data to complete a cost analysis of the five CCHCs' telehealth programs. This analysis included cost and reimbursement tables, potential cost savings, administrative and programmatic analysis, and recommendations for the five CCHCs.

Key observations, challenges, and recommendations

CCHCs have been pioneers in establishing telehealth capabilities and using telehealth to provide necessary specialty services for their populations. However, CCHCs can benefit by further leveraging existing telehealth capabilities and exploring innovative telehealth applications to provide integrated, coordinated primary and specialty care services. Here, we summarize key barriers and recommendations.

Billing and reimbursement for telehealth services can be very complex and change on a regular basis. Staff managing telehealth programs or telehealth-related billing expressed that training regarding payment policies and reimbursement rules for CCHC staff and plans would be beneficial.

- **Recommendation:** CCHCs may consider developing a "learning network" that meets on a regular basis as a way for billing staff, telehealth coordinators, and other interested operational staff to discuss problematic issues and share lessons learned.

Telehealth programs cannot be sustained as an isolated cost center because CCHCs typically experience a low volume of telehealth encounters. In addition, telehealth programs cannot be sustained without adequate and accurate billing and reimbursement for telehealth services.

- **Recommendation:** Continuing to seek grants from both public and private sources is a useful short-term strategy. Working with health plan partners to pilot nontraditional models of payment and delivery that incorporate telehealth should also be considered.

Provider contracting also poses many challenges. The shortage of specialists available in the area is compounded by the rates that CCHCs can afford to pay the distant provider. CCHCs report that most of the distant providers associated with their telehealth programs either do not have the ability to bill Medi-Cal directly or find Medi-Cal reimbursement rates too low. Because very few telehealth providers accept Medi-Cal payments as sufficient, many health centers pay their telehealth specialty providers directly at rates higher than Medi-Cal rates and sometimes above prospective payment system (PPS) reimbursement rates. For CCHCs that use telehealth to serve the uninsured population, it is especially challenging to afford specialist rates because they receive no revenue for the services.

Contracting specialists may require payment for a minimum number of telehealth patient encounters each month and will bill for that minimum volume even if it is not met. Some contracting specialists may require payment for a set-aside time period and will bill for this time period even if the patient doesn't show up, cancels, or the CCHC is experiencing a low volume of patients.

- **Recommendation:** CCHCs may want to consider coalescing their expected telehealth volume to negotiate with distant providers. While this may have some legal and governance hurdles (e.g., creation of a new entity), it may allow CCHCs to obtain reasonable rates while the distant providers can be guaranteed a more predictable workload.

CCHCs experience challenges with tracking telehealth-related services and costs through their data systems, electronic health records (EHR) transition, and managed care encounter data reporting. Typically, a CCHC's billing systems and EHR systems are separate, which creates administrative burdens for billing staff and telehealth staff interested in tracking the total charges, revenue, and payments to the distant provider associated with the same telehealth encounter.

- **Recommendation:** An interim solution would be to create routine reports of unique telehealth encounters through the EHR and through the claims system and then reconcile the two reports to get a full view of the patient demographics, relevant diagnoses, and procedures, along with the billed charges, paid amount, and total allowed amount (which is the plan paid amount plus the patient paid amount).

Inconsistent use of modifiers for coding telehealth-related claims and encounters can cause difficulties in identifying all relevant claims. In general, we found that most claims related to telehealth were not coded to include a modifier. "GT" or "GQ" modifiers are to be used when the service is performed by a distant provider. Our understanding is that CCHCs rarely use the modifiers because they are usually acting as an originating site. In cases when they are billing for a telehealth encounter provided by a distant provider, they are billing a PPS rate. CCHCs also report that use of the modifiers sometimes results in a rejected claim so they have been reluctant to use the telehealth modifier. While these are legitimate reasons for not using the modifiers, it is difficult to identify telehealth-related claims and encounters and track them over time without them.

- **Recommendation:** One solution could be to create an identifier in the EHR and billing systems that allows staff to readily identify telehealth-related encounters for tracking purposes.

Future of telehealth at community health centers

This analysis has highlighted future trends and opportunities for CCHCs in regards to telehealth implementation. Patients and providers have been becoming more comfortable using telehealth services. The demand for telehealth services will increase as telehealth technologies increase. Payment reform that transitions from volume-based to value-based and eventually to population-based payments have promise to create the appropriate incentives for telehealth adoption and sustainability. The Centers for Medicare and Medicaid Services (CMS) has proposed rules that are designed to encourage innovation and flexibility by Medicare accountable care organizations (ACOs). In early March, CMS provided the program details of the "next generation" ACOs, which will require program participants to take on more financial risk (with upside shared savings) than the Medicare Shared Savings Program (MSSP) or the Pioneer ACOs. Lastly, California submitted the "Medi-Cal 2020" waiver renewal promoting a payment reform strategy that includes an alternative payment methodology, which restructures the PPS rate into a flexible capitation payment with payments to promote care coordination and care management and a pay-for-performance/shared savings model.

- **Recommendation:** Payment reform initiatives under Medi-Cal and Medicare create opportunities for CCHCs to further leverage existing telehealth capabilities and explore

innovative telehealth applications to provide integrated, coordinated primary and specialty care services. CCHCs should consider whether increased use of existing telehealth capabilities can improve efficiencies, especially after payment policies become more flexible. One example is increased use of existing store and forward capabilities for dermatology, radiology, and ophthalmology. To the extent that telehealth can be used to reduce avoidable admissions, readmissions, or emergency room (ER) visits, then its application should be considered as part of care management and care coordination efforts. Examples include: using telehealth for home visits for patients who have complex and chronic conditions; online visits to nurse practitioners for short-term urgent care services; and remote monitoring of patients with congestive heart failure.

INTRODUCTION

California community health centers and clinics (CCHCs), including federally qualified health centers (FQHCs), rural health centers (RHCs), and other facilities are a part of the state's healthcare delivery system and act as safety net providers for the underserved, indigent, uninsured and rural populations. For these populations, they provide essential community health services, often integrating social services with behavioral and healthcare services. With the passage of the Patient Protection and Affordable Care Act (ACA), CCHCs are facing demand for services from newly insured individuals enrolled through the Medi-Cal expansion and Covered California. While growing evidence shows that telehealth can be an effective tool for improving access to care and improving healthcare quality and outcomes, the financial sustainability of CCHC telehealth programs is a concern.

The Center for Connected Health Policy (CCHP) engaged Milliman, Inc. to conduct a financial analysis examining the costs and revenue of telehealth programs in five CCHCs. In doing so, we also examine the underlying reimbursement structure for telehealth in California and offer key considerations for the sustainability of telehealth as part of the evolving delivery system. CCHP and the California Telehealth Resource Center (CTRC) provided input and expertise throughout this engagement.

This report provides:

- Background and context including:
  - An overview of how CCHCs are financed
  - Definitions of telehealth services
  - An overview of payment policies for telehealth services under traditional reimbursement models by Medi-Cal, Medicare, and commercial payers
- Our approach and methods for this analysis
- Key findings across all five CCHCs, including discussion of future trends, challenges, and opportunities under payment reform
- Discussion of important assumptions, caveats, and limitations

FINANCING OF CALIFORNIA COMMUNITY HEALTH CENTERS

California community health centers include FQHCs and RHCs that serve underserved and rural communities and a disproportionate share of low-income, indigent, and uninsured populations. CCHCs with FQHC or RHC designations are provided a cost-based enhanced reimbursement that is intended to support the essential community services they provide. CCHCs provide healthcare services but also serve as a space for the community to be connected to other social services. They also provide a host of other enabling services such as case management, patient education, and transportation.

FQHCs and RHCs are required to submit cost reports to the DHCS and the U.S. Health Resources and Services Administration. Cost reports are used to reconcile and verify payments for allowable costs and determine future reimbursement rates.

Medi-Cal is the predominant payer for CCHCs, followed by Medicare. Commercial payers represent a relatively small proportion of total payments to CCHCs. However, this proportion may grow, especially for those CCHCs that are part of the essential community provider networks offered by Covered California health plans.

Medi-Cal

The Medi-Cal program pays FQHCs and RHCs for physician and other primary care health services under a bundled rate established under a prospective payment system (PPS). The bundled rate covers

all services provided during an encounter. In addition to the physician's evaluation and management services, the PPS rate covers additional services that the FQHC or RHC provides during the encounter, such as mental health services, dental services, substance use disorders treatment, and language interpretation services. PPS rates vary by the FQHC or RHC. The rates are based on the center's costs to provide services and so are influenced by the types of services they are able to offer. Rates are developed based on annual cost reports submitted to the DHCS. FQHC and RHC PPS rates generally range from $85 to $280 per encounter.

Starting September 1, 2013, Medi-Cal managed care has expanded into non-urban counties that were previously fee-for-service (FFS). The goal of the expansion was to reduce Medi-Cal costs and to provide healthcare to Medi-Cal beneficiaries throughout the state through organized delivery systems.[1] FQHCs and RHCs, however, are still effectively paid the PPS rate under Medi-Cal managed care, because they are permitted to claim any difference between their contractual reimbursements from managed care plans and the PPS payments through the annual reconciliation process with Medi-Cal (also known as the "wraparound payment"). Going forward, Medi-Cal payments to FQHCs and RHCs may change under a new "alternative payment methodology," which would establish a per member per month (PMPM) capitated payment that is equivalent to the PPS rate.

Medicare

Medicare pays FQHCs a rate per beneficiary per day that is based on national encounter data, with adjustments. CMS revised payment rates effective October 1, 2014, to comply with Section 10501 of the ACA. Specifically, the payment is 80% of the lesser of the PPS rate ($158.85 in 2015) and the total charges for services furnished. FQHCs are able to bill for separate encounters when a mental health visit occurs on the same day as a medical visit. The FQHC PPS rate is adjusted for geographic differences in the cost of services. In addition, the rate is increased by 34% for a new Medicare patient.[2]

For RHCs, CMS establishes an all-inclusive rate (AIR), subject to a maximum payment per visit.[3] The RHC maximum payment per visit for CY 2015 is $80.44 and is updated annually based on the percentage change in the Medicare Economic Index.[4]

CCHCS AND THE NEED FOR TELEHEALTH

CCHC patient populations include low-income, at-risk, underserved, underinsured, and uninsured populations. Patients visiting CCHCs in need of care include those who are lacking access to adequate transportation; who are not accepted elsewhere because of HIV/AIDS, homelessness, mental illness, or

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[1] Medi-Cal (December 2013). Medi-Cal Update: Clinics and Hospitals. Bulletin 471. Retrieved June 11, 2015, from http://files.medi-cal.ca.gov/pubsdoco/bulletins/artfull/cah201312.asp. The expansion included the following counties: Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, El Dorado, Glenn, Humboldt, Imperial, Inyo, Lake, Lassen, Mariposa, Modoc, Mono, Nevada, Placer, Plumas, San Benito, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, and Yuba.

[2] CMS (2014). Federally Qualified Health Centers (FQHC) Center: CMS Finalizes a Medicare Prospective Payment System (PPS) for Federally Qualified Health Centers (FQHCs). Retrieved June 11, 2015, from http://www.cms.gov/Center/Provider-Type/Federally-Qualified-Health-Centers-FQHC-Center.html.
Note: A "new" Medicare patient means someone who is new to the FQHC or is a beneficiary receiving a comprehensive initial Medicare visit or an annual wellness visit.

[3] A visit is an encounter. Under Medicare, encounters with more than one RHC practitioner on the same day, regardless of the length or complexity of the visit, or multiple encounters with the same RHC practitioner on the same day, constitute a single visit, except for specific circumstances such as when the patient suffers an illness or injury requiring additional diagnosis or treatment subsequent to the first encounter (for example, he or she sees the practitioner in the morning for a medical condition and later in the day has a fall); or has a mental health visit and a medical visit on the same day.

[4] CMS (August 2014). Rural Health Clinic: Rural Health Fact Sheet Series. Retrieved June 11, 2015, from http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/RuralHlthClinfctsht.pdf.

addiction; who live below the federal poverty level (FPL); and/or who live in remote, rural areas with a shortage of specialists. According to the Specialty Care Safety Net Initiative (SCSNI), patients visiting a safety net provider for certain specialty consultations may experience wait times as long as six months to a year. In regards to financing, many CCHCs are committed to providing services even with insufficient reimbursement to sustain their programs. Services provided through telehealth decrease travel time, increase the number of patients seen by providers, and increase the amount and type of specialty services available to patients visiting CCHCs who would otherwise not have access. Providing telehealth specialty services allows CCHCs to provide accessible specialized healthcare to the surrounding communities.

California has a unique policy and regulatory environment to support the adoption of telehealth technologies. For example, in 1996 California enacted one of the first laws regarding telehealth reimbursement, the Telemedicine Development Act (TDA), which requires health plans and insurers to apply internal claims payment and appeal standards to telemedicine.[5] The purpose of the TDA is to reduce financial and geographic barriers prevalent in underserved areas by connecting patients and providers over great distances.[6] In 2006, California passed Proposition 1D, which provided the University of California (UC) with $200 million to establish and grow telehealth training and service delivery programs at the five UC medical centers and to supply telehealth equipment to hundreds of hospitals and clinics throughout the state. In addition to policy changes, the growth and sustainability of CCHC telehealth programs relied heavily on initial funding from grants. The following programs provided essential funding for CCHC telehealth programs.

Federal Communications Commission

In 2007, the California Telehealth Network (CTN) was funded by the Federal Communications Commission (FCC) to provide broadband access to over 800 hospitals and clinics statewide, delivering quality, cost-effective, reliable, and secure bandwidth for utilization and transmission of telehealth technologies. While the concept of telemedicine was gaining traction across the state, the reality of its widespread use still remained unfulfilled, especially in regards to access to specialty care consultation.

The FCC provides major funding opportunities to rural health care provider organizations.[7]

- The **Rural Health Care Pilot Program** provided broadband subsidies to nonprofit healthcare providers in rural and medically underserved communities. CTN received a $22.1 million award to serve as California's healthcare broadband consortia. This program is now closed but the sites previously covered under this funding opportunity are now covered by the successor program, called the Healthcare Connect Fund.
- The **Healthcare Connect Fund (HCF)** was launched in 2013 and provides broadband subsidies to eligible healthcare providers. Funds received from this program can be used to subsidize broadband connections to eligible healthcare providers in areas commercial providers decline to serve.

[5] CCHP (March 2010). Staying Connected—A Progress Report: Reimbursement Under the Telemedicine Development Act of 1996. Retrieved June 11, 2015, from http://cchpca.org/sites/default/files/resources/Staying_Connected_CA_Telemedicinc_Development_Act_Progress_Report_Summary.pdf.

[6] California Association of Marriage and Family Therapists (November/December 2011). A 2011 Recap of the 1996 Telemedicine Development Act. Retrieved June 11, 2015, from https://www.camft.org/COS/Resources/Attorney_Articles/Cathy/A_2011_Recap_of_the_1996_Telemedicine_Development_Act.aspx.

[7] California Telehealth Network (March 2014). FCC Funding Opportunities. Retrieved June 11, 2015, from http://www.caltelehealth.org/sites/main/files/file-attachments/fcc_funding_summary_3-2014.pdf.

Specialty Care Safety Net Initiative

SCSNI was created in early 2009 with the purpose of using telehealth to connect patients in rural and non-rural underserved communities with six high-need specialty services including dermatology, endocrinology, neurology, orthopedics, psychiatry, and hepatology, with hubs at five University of California medical centers. The SCSNI program ran from 2009 to 2012 and assisted 43 participating safety net clinic sites with the integration of telehealth consultation into their practices. SCSNI helped create a model in which telehealth technologies could expand access to specialty care services throughout the state.

The initiative received $2.1 million in funding for a duration of three years. Of the total amount, $1 million was distributed to the five UC medical centers, and an equal amount was allocated to community health centers selected through a solicited proposal process throughout the state. Four of the five CCHCs included in this report received essential funding from this initiative to help support their telehealth programs.[8]

TELEHEALTH SERVICES: DEFINITIONS

Telehealth is a modality of delivering healthcare services that includes live, two-way video (synchronous visits), store and forward (asynchronous visits) technology, and remote patient monitoring (RPM). Telehealth can span primary care, specialty care, inpatient, ambulatory, skilled nursing, long-term, and home-based services.[9] In California law, the definition of telehealth is fairly broad. The California Telehealth Advancement Act of 2011 defines telehealth as "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."[10]

PAYMENT POLICIES FOR TELEHEALTH SERVICES

Payment policies for telehealth services vary by payer. Medi-Cal pays for services provided via live video and, in limited situations, asynchronous store and forward technology. Telehealth services provided via live video services must use real-time, interactive audio-video communication to qualify for reimbursement. Medi-Cal qualifies reimbursable store and forward telehealth services as services that require the transmission of medical information to a physician at a distant site for the physician to review while the patient is not present in real time.

Medi-Cal payments for telehealth

Telehealth services that are eligible for reimbursement under Medi-Cal are subject to restrictions and rules. Telephone conversations, emails, and faxes are not considered synchronous or asynchronous forms of telehealth and are specifically excluded from the Medi-Cal definition of telehealth. In addition, dermatology and ophthalmology are the only two services covered when using store and forward. Lastly, patients are not required to give written consent when receiving telehealth services. However,

[8] Pittman, M. (May 2012). CHCF Narrative Report Cover Page. Public Health Institute.
[9] Center for Connected Health Policy (September 2014). Recommendations From the CCHP Telehealth and the Triple Aim Project: Advancing Telehealth Knowledge and Practice. Retrieved June 11, 2015, from http://cchpca.org/sites/default/files/resources/Telehealth%20%20Triple%20Aim%20Report%202.pdf.
[10] CA Business & Professions Code Sec. 2290.5 (2012).

the healthcare provider at the originating site is required to inform the patient of the option to use telehealth and must obtain verbal consent from the patient.[11]

The originating site is defined as the site where the patient is located at the time healthcare services are provided, or where the asynchronous store and forward service originates. There is no limitation to the type of setting where the patient receives services under Medi-Cal. The distant site is defined as where the healthcare provider is located while providing services via a telecommunication system. There are no restrictions on the location or type of distant site. However, the provider located at the distant site must be licensed in the State of California and must be enrolled as a Medi-Cal provider.

Originating site facility fees and originating and distant site transmission costs for live video services are reimbursed by Medi-Cal. Clinical fees associated with both synchronous and asynchronous services are reimbursed at the same rate as if the service was provided without telehealth technologies.[12]

It is important to note that for Medi-Cal managed care, rules may vary depending on the Medi-Cal managed care plan. For example, a Medi-Cal managed care plan may require that the member use in-network telehealth providers to be eligible for payment.

Medicare payments for telehealth

Medicare covers interactive audio and video telecommunications systems that permit real-time communication between a practitioner at a distant site and the beneficiary at an originating site.

Original Medicare, which includes Medicare Part A (hospital and facility benefits) and Part B (professional and doctor's office benefits), covers telehealth services in rural areas. Part B covers telehealth services provided through live interactive video between a beneficiary at an originating site, located in an eligible geographic area and a distant provider. An eligible geographic area includes rural health professional shortage areas (HPSAs) and areas not classified as a metropolitan statistical area (MSA).[13] To be eligible for coverage, the beneficiary must receive telehealth services at one of the following originating sites:

- Office of a physician or practitioner
- Hospital
- Critical access hospital (CAH)
- Rural health clinic (RHC)
- Federally qualified health center (FQHC)
- Hospital-based or critical access renal dialysis center
- Skilled nursing facility (SNF)
- Community mental health center[14]

Medicare does not cover asynchronous store and forward telehealth services in California.[15]

Medicare restricts distant providers to the following:

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[11] Center for Connected Health Policy (February 2015). State Telehealth Laws and Reimbursement Policies: A Comprehensive Scan of the 50 States and District of Columbia. Retrieved June 11, 2015, from http://cchpca.org/sites/default/files/resources/State%20Laws%20and%20Reimbursement%20Policies%20Report%20Feb%20%202015.pdf.

[12] California Telehealth Resource Center (January 2015). Telehealth Reimbursement Guide. Retrieved June 11, 2015, from http://www.caltrc.org/wp-content/uploads/2015/06/Reimbursement-Guide-January-2015.pdf.

[13] CMS (December 31, 2014). Medicare Benefit Policy Manual: Chapter 15 – Covered Medical and Other Health Services. Retrieved June 11, 2015, from http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/bp102c15.pdf.

[14] 42 CFR 410.78. and 414.65.

[15] 42 CFR § 410.78. Telehealth services

- Physicians
- Physician assistants
- Nurse practitioners
- Clinical nurse specialists
- Registered dietitians or nutrition professionals
- Nurse midwives
- Certified registered nurse anesthetists
- Clinical psychologists
- Clinical social workers[16]

Medicare Advantage (MA) plans are required to provide the same level of benefits as Medicare Parts A and B.[17] However, MA plans also have the flexibility to exceed the level of benefits provided under Medicare Parts A and B. MA plans typically pay a negotiated or FFS rate (e.g., based on a percentage of usual and customary charges or Medicare-allowed charges). Reimbursement to the originating site to cover costs, such as transmission or set-up fees, may be provided under the contract, but would depend on the plans' payment policies.

Commercial payments for telehealth

Commercial payment and coverage policies vary, because California law does not mandate coverage of telehealth services for privately purchased health insurance. However, if a health plan or insurer covers telehealth services, California law does not require in-person contact as a condition of payment. Commercial payers would typically pay a negotiated or FFS rate (e.g., based on a percentage of usual and customary charges or Medicare-allowed charges). Reimbursement to the originating site to cover costs, such as transmission or set-up fees, may be provided under the contract, but would depend on the plans' payment policies.

CCHP's State Telehealth Laws and Reimbursement Policies: A Comprehensive Scan of the 50 States and District of Columbia provides further detail on California's policies related to telehealth reimbursement.[18]

Summary of billing rules for telehealth services to CCHCs

The rules that govern telehealth billing and which CCHC telehealth services are eligible for reimbursement are complex and depend on several factors:

- **Patient insurance type:** Medi-Cal FFS, Medi-Cal managed care, Medicare FFS, Medicare Advantage, commercial, or uninsured.
- **Telehealth modalities used during encounter:** Reimbursable telehealth modalities vary by insurance type. For example, a commercial payer might not cover store and forward, while Medi-Cal does.

If the patient's insurance type is either Medi-Cal or Medicare, other pertinent factors include:

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[16] CMS (December 2014). Telehealth Services: Rural Health Fact Sheet Series. Retrieved June 11, 2015, from http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf.
Note: Clinical psychologists or clinical social workers may not bill or receive payment for Current Procedural Terminology (CPT) codes 90792, 90833, 90836, and 90838.
[17] CMS (October 28, 2005). Medicare Managed Care Manual: Chapter 17 – Subchapter F Benefits and Beneficiary Protections. Retrieved June 11, 2015, from http://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/Downloads/mc86c17f.pdf.
[18] State Telehealth Laws and Reimbursement Policies, ibid.

- **"Originating site":**[19] Where is the patient located when that person has the telehealth encounter—at an FQHC/RHC or "other" CCHC?
- **"Distant provider":**[20] Who is the distant provider, and where is that person located during the telehealth encounter? What will or will not meet the payer's requirements to be reimbursed for the service?
- **Contract with distant provider:** Does the originating site have a contract to pay the distant specialist directly for the telehealth encounter?
- **Provider colocated with patient:** Is another provider colocated with the patient who provided medically necessary services as part of the telehealth encounter?

The designation of the originating site is important from a payment perspective. If the patient is located at an FQHC during the telehealth encounter, the originating site would be eligible for the PPS rate. However, if the originating site is a doctor's office or other clinic that is not a designated FQHC or RHC, then payments would likely be made based on the FFS or negotiated rate. For instance, Barton Community Health Center is an RHC but Barton provided data for its other clinics and affiliated physician offices, which are not RHCs. Medi-Cal pays these clinics the Medi-Cal FFS rate or the contractual reimbursement rate from the managed care plan, depending on whether the patient is a Medi-Cal FFS beneficiary or a member of a Medi-Cal managed care plan.

CMS recently issued a clarification related to telehealth payment policies for distant providers that affects Medicare billing practices effective January 1, 2015. "RHCs and FQHCs are not authorized to serve as a distant site for telehealth consultations, which is the location of the practitioner at the time the telehealth service is furnished, and may not bill or include the cost of a visit on the cost report. This includes telehealth services that are furnished by a RHC or FQHC practitioner who is employed by or under contract with the RHC or FQHC, or a non-RHC or FQHC practitioner furnishing services through a direct or indirect contract."[21]

The CTRC produces a Telehealth Reimbursement Guide, which is a useful source for Medi-Cal reimbursement rules for FQHCs and RHCs.[22] Figure 1 draws on the information provided in that guide and provides a summary of reimbursement scenarios under Medi-Cal FFS and Medicare FFS.

[19] Also known as "Patient site."
[20] Also known as "Provider site."
[21] CMS (December 2014). 2015 Update of the Medicare Benefit Policy Manual, Chapter 13 – Rural Health Clinic (RHC) and Federally Qualified Health Center (FQHC) Services. MLN Matters. Retrieved June 11, 2015, from http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/MM8981.pdf.
[22] Telehealth Reimbursement Guide, ibid.

Figure 1: Reimbursement Scenarios for CCHC Under Medi-Cal FFS and Medicare FFS

Insurance Type	Medi-Cal FFS		
Originating site type?	FQHC/RHC		
Distant provider type? (1)	Medi-Cal Specialty (2)		Other Providers
Contract with distant provider to pay directly for services?	Y	N	Y (4)
What can originating site bill? (3)	PPS rate; then pays distant provider	Nothing	PPS rate; then pays distant provider
What can distant provider bill?	Nothing	Medi-Cal FFS rate for specialty visit	Nothing

Insurance Type	Medi-Cal FFS		
Originating site type?	Other CCHC		
Distant provider type? (1)	Medi-Cal Specialty (2)		Other Providers
Contract with distant provider to pay directly for services?	Y	N	Y (4)
What can originating site bill? (3)	Medi-Cal FFS rate for specialty visit, and pays distant provider	Originating site fee, including telehealth set-up/transmission fees	Medi-Cal FFS rate for specialty visit, and pays distant provider
What can distant provider bill?	Nothing	Medi-Cal FFS rate for specialty visit	Nothing

Insurance Type	Medicare FFS			
Originating site type?	FQHC/RHC		Other CCHCs	
Distant provider type?	Other Providers			
Contract with distant provider to pay directly for services?	Y	N	Y	N
What can originating site bill?(5)	PPS rate, then pays distant provider	Originating site fee, including telehealth set-up/transmission fees	Medicare FFS rate for specialty visit, then pay distant provider	Originating site fee, including telehealth set-up/transmission fees
What can distant provider bill?	Nothing	Medicare FFS rate for specialty visit	Nothing	Medicare FFS rate for specialty visit

Notes:
(1) A distant provider could also be located at an FQHC or RHC, in which case the distant provider would bill Medi-Cal the PPS rate directly to Medi-Cal and the originating site would bill the costs associated with the originating site visit, such as the telehealth set-up fee or the transmission fee.
(2) A Medi-Cal specialist is a Medi-Cal provider who is eligible by Medi-Cal to receive Medi-Cal payments.
(3) In some cases, if a provider is present with the patient at the originating site for medically necessary reasons, the originating site may also bill the PPS for the face-to-face visit.
(4) Other providers that do not have a contract with the FQHC, RHC, or "other" CCHC cannot bill Medi-Cal directly. To bill Medi-Cal directly, the provider must be a Medi-Cal eligible provider.
(5) As of January 1, 2015, RHCs and FQHCs are not authorized to serve as distant sites for telehealth consultations, under Medicare.

OUR APPROACH AND METHODS

To conduct this financial analysis, Milliman worked collaboratively with CCHP and CTRC to undertake the following activities:

- We established a sample of CCHCs interested in participation: After contacting several CCHCs that currently have telehealth programs, five decided to participate in this study:
    - Shasta Community Health Center (SCHC)
    - Community Health Alliance of Pasadena (ChapCare)
    - Barton Community Health Center (Barton)
    - West County Health Centers (West County)
    - Southern Inyo Healthcare District (Southern Inyo)

  These CCHCs indicated interest and willingness to participate throughout the project by providing necessary data, as available, and hosting a site visit for individuals from CCHP, CTRC, and Milliman.

- We developed a two-part data collection tool to collect data on each CCHC's telehealth program. The data collection tool was split into the following parts:
    - **Part I:** Claims experience from billing/encounter data. This included submitted claims data (patient data, demographics, diagnoses, telehealth service, cost, dates, etc.).
    - **Part II:** Administrative and programmatic costs of telehealth services. Milliman collected ongoing costs for the telehealth program, which included costs for maintenance, staff salary, technical support, and inventory. Additionally, Milliman collected data on revenue sources for each CCHC such as grants and donations.

  Upon receiving data from the participating CCHCs, Milliman reviewed it for reasonableness. We identified missing, incomplete, or mislabeled/miscoded data. This step revealed that data related to telehealth services are not systematically maintained or complete. Milliman worked closely with each of the five CCHCs to understand data challenges and receive data in various formats and states of completeness. These are discussed in further detail in the Data Challenges section below.

  We conducted community health center site visits with CCHP and CTRC representatives. The purpose of these site visits was to obtain an in-depth understanding of each CCHC's telehealth programs and services, and its current methods for collecting relevant data.

- We provided a financial analysis to each CCHC. Each participant reviewed and provided comments. The revised versions, based on their input, are reflected in this report.

FINDINGS, DISCUSSION, AND RECOMMENDATIONS

According to the CCHCs included in this study, the key drivers for making telehealth services available to their patient populations are their commitment to provide access to needed specialty care and to fulfill their overall mission. The five participating CCHCs combined use telehealth to provide a wide range of specialty services to their populations that would not otherwise be available locally. Figure 2 below shows the array of specialty telehealth services provided by the CCHCs included in this study, including endocrinology, dermatology, neurology, cardiology, dermatology, optometry, oncology, radiology, rheumatology, psychiatry, and subspecialties for pediatrics. These services are otherwise not available to patients without long or prohibitive travel time.

CCHCs in more competitive environments can leverage their telehealth services as a market positioning strategy. This is important because the passage of the ACA has created pressures for certain CCHCs to do more to retain their patient populations. For example, a formerly uninsured patient may now have other provider choices under Medi-Cal or under Covered California. Telehealth services can be a differentiator for CCHCs that wish to be included in plan networks and to be seen as the "provider of choice" within their communities. For CCHCs that are the only provider in their geographic locations, the ACA has revealed pent-up demand for services among the newly covered population. Telehealth services are a way to meet pent-up demand for specialty services.

Despite the market pressures and impetus to continue to leverage telehealth technologies, barriers and challenges to adoption still exist. Addressing financing and payment models for telehealth is necessary to promote telehealth as part of the "new normal" in how healthcare is delivered and to ensure access to necessary healthcare services. In this section we summarize our key findings and recommendations based on our analysis, site visits, and from follow-up discussions with the five participating CCHCs.

ONGOING CHALLENGES

Telehealth programs cannot be sustained as an isolated cost center. Instead, telehealth must be integrated into regular healthcare delivery and seen as a *modality* of delivering care. Core to the problem of sustainability is the low volume of telehealth encounters for a typical CCHC. Figure 2 shows that two participating CCHCs had less than 100 encounters per year. Telehealth programs—especially those with such low volume—cannot be sustained by traditional reimbursement models. Continuing to seek grants from both public and private sources is a useful short-term strategy. Working with health plan partners to pilot nontraditional models of payment and delivery that incorporate telehealth should also be considered. For example, West County is working with Partnership HealthPlan to address the care management needs of high-cost patients and has incorporated telehealth as part of that pilot.

Recommendation

Grants from public and private sources may provide essential financial assistance for the short-term sustainability of telehealth programs. However, piloting new models of payment and delivery that integrate telehealth as part of normal healthcare delivery should be considered for long-term sustainability.

The complexity of the billing and reimbursement rules presents ongoing challenges. As highlighted in the Introduction above, the rules related to telehealth billing and what telehealth services are eligible for reimbursement can be quite complex. It is not unusual for staff managing telehealth programs or telehealth-related billing to "feel like we are winging it." The myriad of rules and payment amounts also change on a regular basis. CCHCs report that some smaller health plans routinely reject claims. Based

on these anecdotes, it is difficult to ascertain whether the claims rejections are appropriate; however, it is clear that training regarding payment policies and reimbursement rules for CCHC staff and plans would be beneficial. In addition, CCHCs may consider developing a "learning network" that meets on a regular basis as a way for billing staff, telehealth coordinators, and other interested operational staff to discuss problematic issues and share lessons learned.

Recommendation

Developing a "learning network" with telehealth coordinators, billing staff, and telehealth staff who meet on a regular basis, may provide an opportunity to discuss and share common issues, approaches, and solutions. These can be convened by existing associations or coalitions.

Provider contracting has its own set of challenges. The shortage of specialists available in the area is compounded by the rates that CCHCs can afford to pay the distant provider. For Medi-Cal patients, the issue would be solved if the distant provider accepted Medi-Cal payments, but CCHCs report that most of the distant providers associated with their telehealth programs either do not have the ability to bill Medi-Cal directly or find Medi-Cal reimbursement rates too low. For CCHCs that use telehealth to serve the uninsured population, it is especially challenging to afford specialist rates because they receive no revenue for these services.

Contracting structures are also an issue. Contracts with specialists typically address the following questions related to payment: (1) How many hours per month are "reserved" for the clinic? (2) When will those hours occur (e.g., Monday, Tuesday, and Friday afternoons)? (3) What services are within scope? (4) What is the payment rate? (5) Who, technically, "owns" the patient (usually the originating site)? (6) How many patients per hour is the distant provider expected to see? (7) With regard to payment, how are "no-shows" or last-minute cancellations handled? (8) How are contacts by the patient handled; for example, is the patient referred to the originating site? A predictable volume of telehealth services cannot necessarily be guaranteed to contracted providers. Under typical contracting arrangements, patient no-shows, cancellations, or low monthly volume can lead to unnecessary program costs. The aforementioned "learning network" can be used to share best practices and options for contracting. A "learning network" can also be used as a mechanism for vetting potential vendors and provider networks. As a next step, CCHCs may want to consider pooling their expected telehealth volumes to negotiate with distant providers. Although this may have some legal and governance hurdles (e.g., creation of a new entity), it may allow CCHCs to obtain reasonable rates, while the distant providers can be guaranteed a more predictable workload.

Recommendation

CCHCs should consider pooling together their telehealth patient volumes to obtain reasonable rates from distant providers who seek a predictable workload.

CCHCs have found that navigating their data management issues, including lack of interoperability among various systems, transition to EHR systems, and moving to managed care encounter data reporting, can impede their tracking of telehealth-related services and costs. For example, one CCHC is currently working with two different EHR systems: one for mental health providers and one for medical providers. Certain contracted distant providers do not use either system. Therefore, to develop a complete picture of the telehealth program, the telehealth coordinator must manually track every encounter on a telehealth log.

Recommendation

It may be beneficial to produce routine reports that track telehealth encounters through the EHR and billing systems. These two reports can be used to reconcile patient demographics, clinical information, and financial information while interoperable systems are developed and implemented.

Another common issue is that typically a CCHC's billing system and EHR system are separate, with different user access points. This lack of interoperability between systems and user access points creates administrative burdens for billing staff and telehealth staff interested in tracking the total

charges, revenue, and payments to the distant provider associated with the same telehealth encounter. Interoperable systems cannot be developed or implemented overnight. An interim solution would be to create routine reports of unique telehealth encounters through the EHR and through the claims system and then reconcile the two reports to get a full view of the patient demographics, relevant diagnoses, and procedures, along with the billed charges, paid amount, and total allowed amount (which is the plan paid amount plus the patient paid amount). The payments made to the distant provider may still need to be incorporated manually if the information is not currently captured in the EHR or the claim. This can be done on a monthly basis if the volume of telehealth encounters justifies the effort.

Inconsistent use of modifiers for coding telehealth-related claims and encounters can cause difficulties. In general, we found that most claims related to telehealth were not coded to include a modifier. Modifiers are to be used when the service is performed by a distant provider.[23] [24]The telehealth modifiers are:

- GT, which indicates the service was provided via interactive audio and video telecommunications system
- GQ, which indicates the service was provided via asynchronous telecommunications system

Recommendation

In an effort to accurately track telehealth encounters, CCHCs should consider creating an identifier in the EHR and billing systems so telehealth-related encounters are easily tracked and identified.

Our understanding is that CCHCs rarely use the modifiers because they are usually acting as an originating site and because they are billing a PPS rate in cases when they are billing for the telehealth encounter provided by a distant provider. CCHCs also report that use of the modifiers sometimes results in a rejected claim. While these are legitimate reasons for not using the modifiers, it is difficult to identify telehealth-related claims and encounters, and track them over time, without these modifiers. One solution could be to create an identifier in the EHR and billing systems that allows staff to readily identify telehealth-related encounters for tracking purposes.

FUTURE TRENDS AND OPPORTUNITIES

CCHCs have been pioneers in establishing telehealth capabilities and using telehealth to provide necessary specialty services for their populations. However, CCHCs can benefit by further leveraging existing telehealth capabilities and exploring innovative telehealth applications to provide integrated, coordinated primary and specialty care services.

The current environment may be ripe for appropriate, measured adoption and experimentation with telehealth programs. First, the demand for telehealth services will increase as patient and provider comfort in using telehealth technologies increases and as consumer demand increases for more convenient access to healthcare services.

Second, payment reform initiatives that move the needle from volume-based to value-based and eventually to population-based payments have promise to create the appropriate incentives for telehealth adoption and sustainability.

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[23] For the telehealth set-up fee, the clinics bill HCPCS code, "Q3014, telehealth originating site facility fee"; short description "telehealth facility fee." Because Q3014 indicates that the service is a telehealth set up fee, a modifier is not required since it would be redundant with the procedure code. If the center is billing a procedure code for the distant provider, such as 92214 (which is 25-minute, office visit for an established patient), the GT/GQ modifier should be included in the claim to indicate the service was delivered through telehealth.

[24] American Telemedicine Association (January 2013). Telemedicine and Telehealth Services. Retrieved May 15, 2015, from http://www.americantelemed.org/docs/default-source/policy/medicare-payment-of-telemedicine-and-telehealth-services.pdf.

Recommendation

Payment reform initiatives under Medi-Cal and Medicare create opportunities for CCHCs to further leverage existing telehealth capabilities and explore innovative telehealth applications to provide integrated, coordinated primary and specialty care services. CCHCs should consider whether increased use of existing telehealth capabilities can improve efficiencies, especially after payment policies become more flexible. One example is increased use of existing store and forward capabilities for dermatology, radiology, and ophthalmology. To the extent that telehealth can be used to reduce avoidable admissions, readmissions, or ER visits, then its application should be considered as part of care management and care coordination efforts. Examples include: using telehealth for home visits for patients who have complex and chronic conditions; online visits to nurse practitioners for short-term urgent care services; and remote monitoring of patients with congestive heart failure.

For example, under Medicare, recent proposed rules by CMS are designed to encourage innovation and flexibility by Medicare accountable care organizations (ACOs). An ACO is an organization of healthcare providers that agrees to be accountable for the cost and quality of healthcare delivered to an assigned cohort of beneficiaries in Medicare Parts A and B. ACOs that meet quality and savings requirements will share a percentage of the achieved savings with Medicare. The recent rules allow ACOs to propose uses of telehealth services to more efficiently deliver care for beneficiaries. Specifically, the proposed rule states that CMS may waive certain provisions of the current telehealth requirements such as originating site requirements or limitation of payment to specific types of geographic areas if the ACO requests such a waiver. Waiving these requirements could encourage the use of enabling technologies, such as remote monitoring, and live interactive video visits in the home.[25]

In early March, CMS announced the program details of the "next generation" ACOs, which will require program participants to take on more financial risk (with upside shared savings) than the Medicare Shared Savings Program (MSSP) or the Pioneer ACOs. As part of the program requirements, applicants are required to demonstrate innovative ways for "Coordination of care and care transitions (e.g., sharing of electronic summary records across providers, telehealth, remote patient monitoring, other enabling technologies)."[26] In addition, these ACOs also have flexibility in terms of Medicare rules related to rural restrictions and originating sites restrictions.

California's Section 1115 Waiver Renewal, called "Medi-Cal 2020," was submitted on March 27, 2015. It promotes a Medi-Cal payment reform strategy that includes: (1) an alternative payment methodology, which restructures the PPS rate into a flexible capitation payment; (2) payments to promote care coordination and care management; and (3) a pay-for-performance/shared savings model. The waivers specifically state, "Under the Waiver, the state will expand access to specialty services by providing incentives for telehealth. Priority would first be given to geographic areas or certain specialists where access is more limited. Under the Waiver, the state will pilot-test incentive payments to encourage use of telehealth and require corresponding reporting of outcome data."[27]

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[25] Federal Register (December 8, 2014). Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations; Proposed Rule. Retrieved June 12, 2015, from http://www.gpo.gov/fdsys/pkg/FR-2014-12-08/pdf/2014-28388.pdf.

[26] Centers for Medicare and Medicaid Services. Next Generation ACO Model: Request for Applications. Retrieved June 12, 2015, from http://innovation.cms.gov/Files/x/nextgenacorfa.pdf.

[27] California Department of Health Care Services (March 27, 2015). Medi-Cal 2020: Key Concepts for Renewal. Retrieved June 12, 2015, from http://www.dhcs.ca.gov/provgovpart/Documents/Waiver%20Renewal/MC2020KCFR_032715.pdf.

Figure 2: Snapshot of Participating CCHC Telehealth Programs, 2013-2014

	CCHC	Barton (2)	ChapCare	SCHC	Southern Inyo	West County
Center Profile	Type	RHC (1)	FQHC	FQHC (1)	RHC	FQHC
	Location	South Lake Tahoe, Calif.	Pasadena, Calif.	Redding, Calif.	Lone Pine, Calif.	Guerneville, Calif.
	Population Served	South Tahoe area, population over 100,000	San Gabriel Valley, population over 2.0 million	Shasta and surrounding counties, population over 178,000	Inyo County, population over 18,500	West Sonoma County, population over 60,000
	Number of Sites	Nine sites, including one RHC site, five physician offices, and one hospital.	Five health center locations	Six sites including one community health center	One location	Six health center and clinic sites
	Patients Served Annually	152,200	14,200	36,700	Not available	13,800
Telehealth Program Overview	Telehealth Program Start Year	2009	2011	2001	2001	2011
	Modalities Offered Through Telehealth	Store and Forward Live Video Consults	Store and Forward	Store and Forward Live Video Consults	Store and Forward Live Video Consults	Store and Forward Live Video Consults
	Specialty Services Available Through Telehealth	Endocrinology Dermatology Cardiology Infectious Disease Internal Medicine Oncology Psychiatry Neurology Neuropsychology Nurse Practitioner	Dermatology Optometry Radiology	Neurology Pediatric - Endocrinology Pediatric - Neurology Pediatric - Other Psychiatry	Cardiology Dermatology Endocrinology Psychiatry Rheumatology	Dermatology Psychiatry Rheumatology Remote Care Management
Telehealth Financial Overview	Total Encounters	Over 2,000	Over 3,200	Over 1,300	Over 40	Over 50
	Total Expenses	($364,000)	($115,000)	($427,000)	($86,000)	($110,000)
	Total Revenue	$261,000	$59,000	$284,000	$11,000	$7,000
	Revenue From Paid Claims	$142,000	$0	$217,000	$6,000	$7,000
	Grants and Donations	$119,000	$59,000	$67,000	$6,000	0
	Net Revenue/Loss	($103,000)	($56,000)	($144,000)	($75,000)	($103,000)
Telehealth Claims Revenue by Payer Source (2)	Medi-Cal	44%	N/A	81%	29%	78%
	Medicare	35%	N/A	14%	12%	(3)
	Commercial	20%	N/A	3%	19%	(3)
	Self-Pay/Uninsured	1%	N/A	0%	0%	N/A
	Other Public Payers	0%	N/A	2%	40%	22% (3)

Source: Milliman analysis of utilization and program administrative data for Barton (2013), ChapCare (2013), SCHC (2014), Southern Inyo (2013), and West County (2014).

Notes:
(1) Clinic also has affiliated clinics without RHC or FQHC designations.
(2) Claim counts are a selection of claims. Claims with unusual values were omitted. Self-pay claims were also omitted.
(3) It is likely that most of these payments are from Medicare, commercial, and other public payers. We were unable to differentiate payments made from other sources other than Medi-Cal because the payer sources were not identified for all claims.

RESULTS FOR EACH PARTICIPATING CCHC

This section summarizes our analysis for each participating CCHC. We provide an overview of the health center and the community it serves. We walk through typical scenarios of telehealth encounters occurring at that CCHC and how they are billed and reimbursed. Finally, we provide a summary of the total revenues and expenses for the telehealth program.

Barton Community Health Center

Barton Health is a rural healthcare system that operates the Barton Community Health Center, Barton Memorial Hospital, and a 48-bed skilled nursing facility (SNF). The health system also includes a family birthing center, surgery center, urgent care centers, physician offices, and additional medical urgent care clinics during ski season. Analysis of the telehealth-related services for the hospital or for the SNF were considered outside of this project's scope. Therefore, any reference to "Barton" in this report is restricted to Barton Health outpatient offices and community health center, unless otherwise indicated. "Barton Health" refers to the health system as a whole, including the hospital.

Barton Health's mission is to deliver safe, high-quality care and engage the community in the improvement of health and wellness. The area served by Barton Health has approximately 100,000 residents and includes eastern El Dorado County, the south shore area of Lake Tahoe, the Stateline area joining El Dorado and Douglas counties, and down both western and eastern slopes of the Tahoe basin. These areas are predominantly rural, isolated from major urban centers in California and Nevada. Access to care can be especially challenging during six months of the year when severe winters further limit travel over high mountain passes on the few major roadways.[28]

The economy in the region is seasonal, driven by the ski industry. Many full-time residents (i.e., those that live in the area throughout the year) are primarily in low-income service jobs at the ski resorts and in tourism and construction. According to Barton Health, many of these low-income, full-time residents are underinsured or uninsured.[29] Figure 3 provides an overview of Barton's services and the population it serves.[30]

[28] Barton Health. Telemedicine: A Barton Health Initiative. Retrieved June 12, 2015, from http://www.bartonhealth.org/tahoe/telemedicine.aspx.
[29] A Barton Health Initiative, ibid.
[30] Barton Health. Community Health Needs Assessment: Results in Action. Retrieved June 12, 2015, from http://www.bartonhealth.org/Uploads/Public/Documents/BartonPDFs/community-health-needs-assessment-results-2-yr-highlights.pdf.

Figure 3: Profile of Barton Services and Population Served

Federal Designation (1)	■ Rural Health Center (RHC)
Location	■ South Lake Tahoe, Calif.
Population Served	■ South Tahoe area, approximately 100,000
Number of Sites	■ Nine sites, including one RHC site, five physician offices, and one hospital.
Services Offered by Center	■ Emergency ■ Family Medicine ■ Hospice ■ Sports Medicine ■ Urgent Care
Patients Served	■ 152,200
Patients by Ethnicity (2)	■ Latino: 22% ■ Caucasian: 66% ■ Black: 1% ■ Multi ethnic: 2%
Patients by Income Status (3)	■ Patients at or below 100% of FPL: 9% ■ Patients at or below 200% of FPL: 18%
Patients by Payer Type (3)	■ County programs/uninsured, self-pay: 16% ■ Medi-Cal: 22% ■ Medicare: 23% ■ Other: 39%
Revenue by Type	■ Not available

Sources:
Barton Health: Telemedicine. See http://www.bartonhealth.org/tahoe/telemedicine.aspx.
California Healthcare Atlas. See http://gis.oshpd.ca.gov/atlas/places/facility/106090793.

Notes:
(1) Barton Community Health Center (Barton) is a designated RHC. Affiliated clinics, where telehealth services are also provided, do not have an RHC designation.
(2) Data reflects 2013 demographics of Barton Memorial Hospital. Barton's demographics were not available.

Barton's telehealth program: Overview

A gap analysis conducted by the system in 2007 revealed lack of access to key specialty services for area residents. In response, Barton Community Health Center (Barton) launched its telehealth program in 2009.[31]

Grants enabled Barton to build necessary infrastructure and make investments in telehealth equipment, especially in the early years of the program. The Federal Communications Commission (FCC) established the Universal Service fund in 2009 and provided Barton Health with funds through its Rural Health Care Pilot Program. In 2011, the Access El Dorado Telehealth Network (ACCEL), made up of six agencies including Barton, received funds from the Model eHealth Community Awards to promote reliable and secure telehealth connections. The award provided the network with approximately $300,000 worth of telehealth equipment, which was distributed among its member agencies, including Barton.[32] Barton also received funding from CCHP's SCSNI three-year telehealth demonstration project.

In 2012, Barton Health's leadership commissioned a community health needs assessment, which found that lack of access to care for specific specialty services was a key barrier to the community's health

[31] Barton Health, Community Health Needs Assessment, ibid.
[32] California Telehealth Network. Model eHealth Community Awards Announced. Retrieved June 12, 2015, from http://www.caltelehealth.org/post/model-ehealth-community-awards-announced.

and well-being. In particular, Barton Health system's service area faced higher prevalence rates of substance abuse and mental health conditions (suicides, in particular) than the national average. This assessment motivated Barton Health to set clear goals to expand its telehealth specialty services.[33] By 2014, Barton Health met 100% of its goals related to "Access to Health," which included expanding telehealth services at multiple facilities to include eight different specialties and partnering with Tahoe Forest Oncology to offer follow-up telehealth visits and support services. Barton also met 77% of its goals related to "Mental Health", which included adding four psychiatrists who focus on diagnosis and medication management through telehealth. Using live video, Barton Health also completed a Critical Medical Education (CME) training series for its local mental health and primary care providers through UC Davis, allowing the system to meet 85% of its "Substance Abuse" goals.[34]

Barton's robust telehealth program offers access to numerous specialists. Telehealth consultations take place with licensed medical practitioners located at UC Davis or UC San Diego. Barton also has arrangements with smaller practice providers from Truckee, Roseville, and Bakersfield. Barton acts as the originating site for cardiology, dermatology, endocrinology, infectious diseases, neurology, oncology, and psychiatry telehealth services. Barton tailors billing procedures to meet the needs of each specialist and either conducts billing for specialists or allows specialists to conduct billing once they receive the proper training. Barton hosts between 150 and 200 telehealth visits each month.[35]

Billing and payments for telehealth encounters at Barton

Milliman analyzed the utilization and cost of telehealth encounters for Barton for 2013. Based on the data provided and information gathered from the site visit and follow-up discussion, we compiled a few scenarios illustrating how Barton bills for telehealth encounters. Figure 4 below provides a description of specific scenarios and the corresponding billing and reimbursement for that specific encounter. These scenarios are taken directly from Barton's claims and administrative data. In each scenario, Barton loses money for each encounter *except* when it is reimbursed what appears to be the Medi-Cal FQHC PPS rate and then pays the distant provider a lower amount for that visit.

Financial analysis of Barton's telehealth program

To understand the total utilization and cost of telehealth encounters for Barton over the 2013 calendar year as well as the total revenue and total expenses to support the telehealth program, Milliman analyzed the claims data and the program administrative information, including salaries, cost of equipment, and grants and donations. Figure 5 below provides a summary table of our findings.

Barton's program provides access to a variety of specialty services, which would otherwise not be readily available. Cardiology is the specialty associated with the highest number of encounters. Mental health visits, such as psychiatry and neuropsychology, make up a substantial portion of total telehealth encounters.

Our analysis shows that Barton's telehealth program operates at a loss and must be shored up by general funds from Barton Health's operating budget. This is typical among community health clinics, especially those that operate in a larger health system. The CCHC acts as first-stop, safety net provider for those who are uninsured or underinsured in the community.

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[33] Barton Health (February 19, 2012). South Lake Tahoe to undergo a complete physical. Press release. Retrieved June 12, 2015, from http://www.bartonhealth.org/tahoe/news/south-lake-tahoe-to-undergo-a-complete-physical-104.aspx.
[34] Barton Health, Community Health Needs Assessment, ibid.
[35] Barton Health (May 22, 2014). Telemedicine increases care at Lake Tahoe. Press release. Retrieved June 12, 2015, from http://www.bartonhealth.org/tahoe/news/telemedicine-increases-care-at-lake-tahoe-185.aspx.

While grants were instrumental in establishing and sustaining the program to date, Barton would likely benefit from exploring various options to improve the sustainability of the telehealth program going forward. For example, while Barton has a relatively high volume of telehealth services, it would benefit from additional telehealth encounters to generate revenue that offsets the fixed costs of the program.

Barton has made strides in selectively contracting with remote providers to minimize losses in the event of “no-shows” or canceled appointments. Despite this, Barton does incur losses for some providers when they have blocked off time for telehealth visits. Furthermore, Barton has been flexible on billing procedures for each remote provider. Barton conducts billing for some remote providers while other remote providers conduct their own billing. This flexibility has allowed Barton to increase the total volume and breadth of its telehealth program.

For those remote providers that conduct their own billing, Barton will bill for the “telehealth set-up” fee as an originating site to connect the patient with the remote provider. Because of the fixed costs of the telehealth program, the telehealth set-up fee alone would not provide sufficient income to generate sustainable funding.

As Barton continues to see its Medi-Cal population move to managed care, there may be opportunities to further expand the telehealth program with plan partners, Anthem Blue Cross and California Health & Wellness. For example, by making telemonitoring in the home available for patients with cardiac conditions, or allowing home-based telepsychiatry to avoid a clinic visit altogether, especially during harsh winter months. As Medicare continues to transition its payment systems from “volume” to “value,” Barton Health system can also explore ways to use telehealth technologies to support efficient care management.

Figure 4: Billing and Reimbursement Scenarios for Telehealth Encounters at Barton

	Scenario #1	Scenario #2	Scenario #3	Scenario #4
Scenario Description	■ A Medi-Cal FFS patient visits Barton's RHC in early 2014. ■ Barton's technician sets up live video visit and the patient has the visit with the distant psychiatrist. ■ There is no other provider present with the patient. ■ Barton bills Medi-Cal charges based on the charge master for the distant psychiatrist visit. ■ Medi-Cal reimburses Barton $270, the RHC PPS rate per encounter. (4) ■ The distant provider is paid the contracted, per visit rate of $125. ■ The net gain is: $145	■ A Medicare Advantage patient receives care at Barton's RHC in early 2014. ■ Barton's technician sets up live video visit and the patient has the visit with the distant psychiatrist. ■ There is no other provider present with the patient. ■ Barton bills the Medicare Advantage plan based on the charge master for the distant psychiatrist visit and the telehealth set-up fee. (1) ■ The Medicare Advantage plan reimburses Barton $60. ■ The distant provider is paid the contracted, per visit rate of $125. ■ The net loss is: $65	■ A Medi-Cal FFS patient visits Barton's non-RHC clinic in early 2013. ■ Barton's technician sets up live video visit and the patient has the visit with the distant endocrinologist. ■ There is no other provider present with the patient. ■ Barton bills Medi-Cal charges based on the charge master for the distant endocrinologist visit. It does not appear that Barton bills the telehealth set-up fee in this instance even though it is allowed. (1) ■ Medi-Cal reimburses Barton the Medi-Cal FFS allowed rate for the endocrinology visit, $80. ■ The distant provider is paid the contracted, per visit rate of $83. ■ The net loss is: $3	■ A Medicare FFS patient visits Barton's non-RHC clinic in early 2014. ■ Barton's technician works with the patient to take photos for a teledermatology store and forward session. ■ There is no other provider present with the patient. ■ Barton bills Medicare charges based on the charge master for the remote dermatologist. Barton does not bill the telehealth transmission fee for dermatology. ■ Medicare rejects the claims because Medicare does not reimburse for store and forward services. ■ The distant provider is paid the contracted, per visit rate of $85. ■ The net loss is: $85
Service Codes	992XX-- Unspecified	992XX-- Unspecified	99244	99212
Service Description	Office Visit	Office Visit	Moderate to High Physician Consult	Low Severity Office Visit
Quarter	Q2 CY2014	Q2 CY2014	Q2 CY2013	Q1 CY2014
Billed Amount for Claim (2)	$121	$121	$354	$73
Allowed Amount for Claim (3)	$270	$60	$80	$0
Distant Provider Payment (4)	$125	$125	$83	$85
Gain/(Loss)	$145	($65)	($3)	($85)

Source: Milliman analysis of Barton utilization and program administrative data, 2013.

Notes:
(1) A medical assistant or technician is present with patient.
(2) Billed Amount per Claim is the amount billed to a health insurer by the provider for services rendered by the provider to a patient.
(3) Allowed Amount per Claim is the amount paid by the patient and plan for services rendered by the provider to a patient.
(4) Distant Provider Payment is the payment made to the distant provider for services rendered by the distant provider to a patient.

Figure 5: Telehealth Program Financial Summary for Barton (January 2013-December 2013)

Total Patient Volume for Community Health Center:	Barton
Total Telehealth Encounters	Over 2,000

Specialty Services Offered, Total Encounters		
Service	**Modality**	**Number of Telehealth Encounters (1)**
Cardiology	Live Video	774
Psychiatry	Live Video	682
Endocrinology	Live Video	255
Internal Medicine	Live Video	87
Oncology	Live Video	76
Neurology	Live Video	73
Dermatology	Store and Forward	58
Nurse Practitioner	Live Video	10
Neuropsychology	Live Video	8
Telehealth Set-up Fee (2)	Various	399

Financial Summary of Telehealth Program		
Revenues		
Claims Payments	Payments From Insurance	$137,921
	Payments From Patients	$4,440
Grants and Donations	Financial Grants	$118,668
	In-Kind Donations	$0
	Total Revenues	**$261,029**
Expenses		
Operational and Administrative	Salaries, Wages, and Benefits	($85,000)
Clinical	Medical and Professional Fees (3)	($91,301)
	Salaries, Wages, and Benefits	($153,801)
Equipment and Infrastructure	Software and Hardware	($26,687)
	Facilities Cost	$0
	Broadband, Internet, and CTN Fees	($7,440)
	Total Expenses	**($364,395)**
	Net Revenue/(Loss)	**($103,365)**

Source: Milliman analysis of Barton utilization and program administrative data, 2013.

Notes:
(1) Based on recorded telehealth encounters in 2013. Many telehealth claims are not billed electronically.
(2) Includes only count of encounters for which telehealth set-up or transmission fee was billed. Counts of unbilled encounters were not available.
(3) Includes payments made to distant providers.

ChapCare

ChapCare is a federally qualified health center (FQHC) with five health center locations. It provides care for an area that covers 432 square miles and 34 independent cities in the San Gabriel Valley.[36] Barriers to access in non-rural communities such as the San Gabriel Valley include lack of reliable timely public transportation and a shortage of specialists. For populations that are uninsured or underinsured, these access barriers may be exacerbated, as providers who are willing to see uninsured patients are further limited. While the ACA, through Covered California and the Medicaid expansion, has reduced the number of total uninsured among ChapCare's patient population, ChapCare is still the safety net clinic for the remaining uninsured, including unauthorized immigrants who are not eligible for insurance coverage. Figure 6 provides a summary of ChapCare's healthcare services and the community it serves.

Figure 6: Profile of ChapCare Services and Population Served

Federal Designation	■ Federally qualified health center (FQHC)
Location	■ Pasadena, Calif.
Population Served	■ San Gabriel Valley, population over 2.0 million
Number of Sites	■ Five health center locations
Services Offered by Center	■ Medical ■ Dental ■ Optical ■ Outreach ■ Health education ■ Behavioral health services ■ Pharmacy
Patients Served	■ 14,200
Patients by Ethnicity	■ Latino: 58% ■ Caucasian: 19% ■ Black: 19% ■ Asian/Pacific Islander: 4%
Patients by Income Status	■ Patients at or below 100% of FPL: 99% ■ Patients at or below 200% of FPL: 82%
Patients by Payer Type	■ Adult uninsured: 39% ■ Children (0-17) uninsured: 17% ■ Medi-Cal/Healthy Families/other public programs: 57% ■ Medicare: 4% ■ Other third-party/private insurance: <1%
Revenue by Type	■ Patient services: 66% ■ Government: 29% ■ Foundations 4% ■ Other: 1%

Sources:
HRSA, 2013 Health Center Profile: Community Health Alliance of Pasadena: Pasadena, California. See http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&bid=0910140&state=CA&year=2013.
San Gabriel Valley Council of Governments, About Us. See http://www.sgvcog.org/#!about/cu4s.
ChapCare, 2013, Key Statistics. See http://www.chapcare.org/who-we-are/key-statistics/.
ChapCare Response to California Telehealth Needs and Organizational Assessment.

ChapCare's telehealth program: Overview

ChapCare's telehealth program was implemented in 2011 to help address problems of access to specialty care services for the uninsured population in the San Gabriel Valley. Obtaining funding for

[36] San Gabriel Valley Council of Governments. About Us. Retrieved June 12, 2015, from http://www.sgvcog.org/#!about/cu4s.

telehealth programs in non-rural settings has been and continues to be challenging as reimbursement from payers is often restricted to rural providers, for example under Medicare. In 2011, telehealth programs were primarily implemented in rural settings; therefore the lack of non-rural models was a challenge for initial implementation efforts.[37] However, ChapCare was able to receive initial funding from CCHP's three-year telehealth SCSNI demonstration project to help implement a telehealth program.

According to ChapCare historical logs of telehealth care utilization, in 2010 and 2011 ChapCare's telehealth program began with providing store and forward services for optometry, radiology, dermatology, and orthopedics. Radiology made up the majority of those services (about 86%), retinal scans made up about 10%, and the remaining services were for store and forward dermatology and orthopedics (about 4%).[38] There were also a handful of psychiatric and neurology visits (totaling less than 20) for patients in 2011.[39] Each of these services used specialists affiliated with University of California medical schools and were grant-funded.

Billing and payments for telehealth encounters at ChapCare

Milliman analyzed the utilization and cost of telehealth encounters for ChapCare for 2013 and 2014. At present, ChapCare uses the telehealth program to provide access to services for its remaining uninsured population and it does not bill a health plan or other payer for these services. The data provided were logs of telehealth encounters. Based on the data provided and information gathered from the site visit and follow-up discussion, we compiled a few scenarios illustrating telehealth encounters at ChapCare. Figure 7 below provides descriptions of specific scenarios, and the corresponding payments to the distant provider for each encounter. In each scenario ChapCare loses money as it does not currently bill for these services.

Financial analysis of ChapCare's telehealth program

ChapCare's telehealth program is not self-sustaining and is a loss center. However, the program is relatively young and, unlike other telehealth programs included in our review, ChapCare uses telehealth to extend services solely to its uninsured and self-pay patients. Therefore, by necessity, the program is funded through grants and the health center's general funds. Grants from the county to care for its indigent and uninsured patients are especially helpful to the program's viability. While these grants by themselves are not sufficient to support the telehealth program in its entirety, they are helpful to maintain operations for ChapCare's uninsured population.

[37] Martinez, M. (April 2014). The Urban Experience: A Road Less Traveled. Presentation at the Growing California's Connections 2014 Telehealth Summit. Retrieved June 12, 2015, from http://www.caltelehealth.org/sites/main/files/file-attachments/margaret_b__martinez_-_chap.pdf.
[38] Bautista, S. (June 26, 2014). "Radiology-PHD-Retinal-TeleOrtho-TeleDerm 04-16-14" file. Email communication.
[39] Martinez, M., ibid.

Figure 7: Billing and Reimbursement Scenarios for Telehealth Encounters at ChapCare

	Scenario #1	Scenario #2	Scenario #3
Scenario Description	■ An uninsured patient visits ChapCare's FQHC in early 2014. ■ ChapCare's clinical staff takes and transmits the retinal scan to the remote optometrist. ■ There is no other provider present with the patient. ■ ChapCare does not bill. ■ There is no reimbursement. ■ The distant provider is paid the contracted, per visit rate of $15. ■ The net gain / (loss) is: $15)	■ An uninsured patient visits ChapCare's FQHC in early 2014. ■ ChapCare's clinical staff takes picture of skin condition and transmits the images to the distant dermatologists. ■ There is no other provider present with the patient. ■ ChapCare does not bill. ■ There is no reimbursement. ■ The distant provider is paid the contracted, per visit rate of $23. ■ The net gain / (loss) is: ($23)	■ An uninsured patient visits ChapCare's FQHC in early 2014. ■ ChapCare's clinical staff takes an x-ray and transmits the image to the distant radiologists ■ There is no other provider present with the patient. ■ ChapCare does not bill. ■ There is no reimbursement. ■ The distant provider is paid the contracted, per visit rate of $0 (services are provided free of charge). ■ The net gain/(loss) is: ($0)
Service Codes	99250	992XX-- Unspecified	992XX-- Unspecified
Service Description	Retinal Scan	Office Visit	Office Visit
Quarter	Q1 2014	All	All
Billed Amount per Claim (1)	$0	$0	$0
Allowed Amount per Claim (2)	$0	$0	$0
Distant Provider Payment (3)	$15	$23	$0
Gain/(Loss)	($15)	($23)	$0

Source: Milliman analysis of ChapCare utilization data, 2013 and 2014.

Notes:
(1) Billed Amount per Claim is the amount billed to a health insurer by the provider for services rendered by the provider to a patient.
(2) Allowed Amount per Claim is the amount paid by the patient and plan for services rendered by the provider to a patient.
(3) Distant Provider Payment is the payment made to the distant provider for services rendered by the distant provider to a patient.

Figure 8: Telehealth Program Financial Summary for ChapCare (January 2013-December 2013)

Total Patient Volume for Community Health Center:	ChapCare
Total Telehealth Encounters	3,282

Specialty Services Offered, Total Encounters		
Service	**Modality**	**Number of Telehealth Encounters**
Optometry	Store and Forward	763
Radiology	Store and Forward	2,444
Dermatology	Store and Forward	75

Claims Payment By Payer Source per Service	
Service	**Average General Fund Payments for Uninsured to the Remote Providers**
Dermatology	(1)
Optometry	$15
Radiology	$23

Financial Summary of Telehealth Program		
Revenues		
Claims Payments	Payments From Insurance	$0
	Payments From Patients (2)	$0
Grants and Donations	Financial Grants	$58,500
	In-Kind Donations	$0
	Total Revenues	**$58,500**
Expenses		
Operational and Administrative	Salaries, Wages, and Benefits	($5,000)
Clinical	Medical and Professional Fees (3)	($77,200)
	Salaries, Wages, and Benefits	($15,000)
Equipment and Infrastructure	Software and Hardware	($5,000)
	Facilities Cost	($2,500)
	Broadband and CTN Fees	($10,200)
	Total Expenses	**($114,900)**
	Net Revenue/(Loss)	**($56,400)**

Source: Milliman analysis of ChapCare utilization data, 2013.

Notes:
(1) ChapCare program provides medical services to uninsured; no billing conducted.
(2) Total claims payments made by patients was not available.
(3) Includes payments made to distant providers.

Shasta Community Health Center

The Shasta Health system includes Shasta Community Health Center, Shasta Community Health Dental Center, Shasta Lake Family Health and Dental, Anderson Family Health and Dental Center, Happy Valley Family Health Center, and Primary Care Neuropsychiatry (PCN). Milliman's analysis of telehealth-related services pertains to Shasta Community Health Center only. Therefore, any reference to "SCHC" in this report is restricted to the Shasta Community Health Center, unless otherwise indicated. "Shasta Health" refers to the health system as a whole, including the health and dental centers and PCN.

Shasta Community Health Center (SCHC) is a nonprofit FQHC based in Redding, California. SCHC has served Shasta and surrounding counties and communities since 1988. SCHC's mission is to provide quality healthcare services to the medically underserved populations. Many of the patients served by SCHC live in remote, underserved areas.[40] SCHC serves a low-income population: 64% of SCHC's patients are at or below 100% of FPL and 95% are at or below 200% of FPL.[41] Transportation costs and travel time can be real barriers to regular healthcare services, especially for individuals with chronic conditions and/or mental health conditions. Figure 9 provides a summary of SCHC healthcare services and the community it serves.

Figure 9: Profile of Shasta Community Health Center's Services and Population Served

Federal Designation (1)	■ Federally qualified health center (FQHC)
Location	■ Redding, Calif.
Population Served	■ Shasta and surrounding counties, population of approximately 178,000
Number of Sites	■ Six community health centers, with SCHC as the main center
Services Offered by Center	■ Primary care services, including family practice and pediatrics ■ Specialty services, onsite and through referral ■ Dental ■ Early intervention services, HIV ■ Healthcare for the homeless ■ Urgent care services
Patients Served	■ 36,700
Patients by Ethnicity	■ Latino: 11% ■ Caucasian: 80% ■ Black: 3% ■ Asian: 1% ■ Multiethnic: 5%
Patients by Income Status	■ Patients at or below 100% of FPL: 64% ■ Patients at or below 200% of FPL: 95%
Patients by Payer Type	■ County programs/uninsured, self-pay: 22% ■ Medi-Cal: 53% ■ Medicare: 14% ■ Other: 11%
Revenue by Type	■ Not available

Sources:
Shasta Community Health Center: Services. See http://www.shastahealth.org/health-care.
Shasta Community Health Center (April 24, 2014): Response to California Telehealth Needs and Organizational Assessment,

Note:
(1) Shasta Community Health Center (SCHC) is a designated FQHC. Affiliated clinics, where telehealth services are also provided, do not have an FQHC designation.

[40] Shasta Community Health Center (2015). About SCHC. Retrieved June 12, 2015, from http://www.shastahealth.org/about-schc.
[41] Health Resources and Services Administration (2013). 2013 Health Center Profile; Shasta Community Health Center. Retrieved June 12, 2015, from http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&bid=092240&state=CA#fn1.

Shasta's telehealth program: Overview

To meet the community needs, SCHC launched its telehealth program in 2001. SCHC is the most mature CCHC included in this study, which is due to its early adoption of telehealth services and initiatives to address the holistic needs of its community.

SCHC implemented a videoconferencing system in 2001 to provide access to specialists at UC Davis and Cedars-Sinai Health System in Los Angeles. These specialty services included psychiatry for adults and children with developmental disabilities, adult endocrinology, and pediatric neurology.[42] Services were enabled through RADVISION, a provider of products and technology for real-time voice, video, and data communications enabled for Internet and Internet Protocol (IP) networks. Shasta Health implemented an IP network to connect its locations to a voice and videoconferencing system.[43] These technical abilities allowed SCHC to independently provide medical treatment, consulting, and training in addition to enhancing patient care and reducing travel time.

The growth and sustainability of SCHC's telehealth program relied on initial funding from grants and reimbursements on claims from payers. SCHC received funding from CCHP's three-year telehealth SCSNI demonstration project. In 2008, the California Healthcare Foundation (CHCF) awarded $350,000 in grants to seven provider coalitions operating in 16 rural counties. Of the total, $50,000 was granted to SCHC's provider coalition, which was made up of 10 facilities. The purpose of these grants was to help providers in rural areas identify ways to improve timely access to specialty care and use telehealth to connect patients with doctors in surrounding cities and counties.

Currently, SCHC bills for live video psychiatric and pediatric specialty services delivered via telehealth. Pediatric specialty telehealth services include endocrinology, neurology, and psychiatry. Live video psychiatric and pediatric specialty services are performed using a Global Video Cart and a Mobile Media Video Cart, which are located onsite. SCHC serves as a spoke site, which means patients receive services at SCHC and use the video carts to connect with a provider who is located at a distant site. SCHC contracts with providers at UC Davis, Clinicians Telemed Group, Kings View, Community Psychiatry, and Psychiatric Centers at San Diego, who provide specialty services and consultations via telehealth. SCHC depends on Medi-Cal reimbursement as a regular funding source for telehealth services.

Billing and payments for telehealth encounters at SCHC

Milliman analyzed the utilization and cost of telehealth encounters for Shasta for 2013 and 2014. Based on the data provided and information gathered from the site visit and follow-up discussion, we compiled a few scenarios illustrating how Shasta bills for telehealth encounters. Figure 10 below provides a description of specific scenarios and the corresponding billing and reimbursement for those specific encounters. These scenarios are taken directly from Shasta's claims and administrative data, but the specific dollar amounts are illustrative.

Financial analysis of SCHC's telehealth program

To understand the total utilization and cost of telehealth encounters for Shasta over the 2014 calendar year, as well as the total revenue and total expenses to support the telehealth program, Milliman

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[42] Shasta Community Health Center (January 25, 2006). Shasta Community Health Center Ambulatory Care Guidelines: Telemedicine. Retrieved June 12, 2015, from http://www.safetynetinstitute.org/wp-content/OldMedia/Site/programs/specialtycarematerials/roundtable3/AmbulatoryCareGuidelines2005Murphy.pdf.

[43] The Free Library (2001). RADVISION enables telemedicine at Shasta Community Health Center. Retrieved June 12, 2015, from http://www.thefreelibrary.com/RADVISION+Enables+Telemedicine+at+Shasta+Community+Health+Center.-a079849022.

analyzed the claims data and the program administrative information, including salaries, cost of equipment, grants, and donations. Figure 11 below provides a summary table of our findings.

SCHC's telehealth program provides access to a variety of specialty services that would otherwise not be readily available. Psychiatry is the specialty associated with the highest number of telehealth encounters. Pediatric endocrinology, pediatric neurology, and other pediatric specialty visits make up a substantial portion of total encounters.

SCHC has been able to recover a significant portion of telehealth expenses compared with the other CCHCs participating in this study. The telehealth program is primarily used by Medi-Cal beneficiaries, but all insurance types have access to these services. Despite SCHC's ability to recoup a significant portion of its expenses, it is not sufficient to fully fund the telehealth program. Because very few telehealth providers accept Medi-Cal payments as sufficient, SCHC pays its telehealth specialty providers directly at rates higher than Medi-Cal rates and sometimes above PPS reimbursement rates, like many health centers. Our analysis shows that SCHC's telehealth program operates at a loss and must be shored up by general funds from Shasta Health's operating budget. This is typical among CCHCs, especially those that operate in a larger health system. The CCHC acts as first-stop safety net provider for those who are uninsured or underinsured in the community.

While grants were instrumental in establishing and sustaining the program to date, SCHC would likely benefit from exploring various options to improve the sustainability of the telehealth program going forward. For example, while SCHC has relatively high volumes of telehealth encounters, it would benefit from additional telehealth encounters to generate revenue that offsets the fixed costs of the program.

As SCHC continues to see its Medi-Cal population move to managed care there may be opportunities to further expand the telehealth program with plan partner, Partnership HealthPlan. For example, making telemonitoring in the home available for patients with cardiac conditions, or allowing home-based telepsychiatry to avoid a clinic visit altogether. As Medicare continues to transition its payment systems from "volume" to "value," Shasta Health can also explore ways to use telehealth technologies to support efficient care management.

Figure 10: Billing and Reimbursement Scenarios for Telehealth Encounters at SCHC

	Scenario #1	Scenario #2	Scenario #3
Scenario Description	■ A Medi-Cal FFS patient visits Shasta's RHC in early 2014. ■ Shasta's technician sets up live video visit and the patient has the visit with the distant psychiatrist. ■ There is no other provider present with the patient. ■ Shasta bills charges based on the charge master for two line items: 1) Office Visit (CPT), and 2) Psychiatrist Visit (appears to be surcharge for the Medi-Cal RHC PPS) ■ Medi-Cal reimburses Shasta $190 ■ The distant provider is paid the contracted, per visit rate of $125 (4) ■ The net gain is: $65.	■ A Medicare FFS patient visits Shasta's RHC in early 2014. ■ Shasta's technician sets up live video visit and the patient has the visit with the distant psychiatrist. ■ There is no other provider present with the patient. ■ Shasta bills charges based on the charge master for two line items: 1) Office Visit (CPT), and 2) Medical Visit (appears to be surcharge for Medicare RHC AIR) ■ Medicare reimburses Shasta $240 ■ The distant provider is paid the contracted, per visit rate of $125. (4) ■ The net gain is: $115	■ A Medi-Cal Managed Care patient visits Shasta's RHC in early 2014. ■ Shasta's technician sets up live video visit and the patient has the visit with the distant psychiatrist. ■ There is no other provider present with the patient. ■ Shasta bills charges based on the charge master for two line items: 1) Office Visit (CPT), and 2) Managed Care Differential Rate. ■ Medi-Cal Managed Care Plan reimburses Shasta $150 ■ The distant provider is paid the contracted, per visit rate of $125. (4) ■ The net gain is: $25.
Service Codes	99213	99213	99213
Service Description	Moderate to Low Severity Office Visit	Moderate to Low Severity Office Visit	Moderate to Low Severity Office Visit
Quarter	Q1 2014	Q1 2014	Q3 2014
Billed Amount per Claim (1)	$360	$440	$270
Allowed Amount per Claim (2)	$190	$240	$150
Distant Provider Payment (3)	$125	$125	$125
Gain/(Loss)	$65	$115	$25

Source: Milliman analysis of SCHC utilization and program administrative data, 2014.

Notes:
(1) Billed Amount per Claim is the amount billed to a health insurer by the provider for services rendered by the provider to a patient.
(2) Allowed Amount per Claim is the amount paid by the patient and plan for services rendered by the provider to a patient.
(3) Distant Provider Payment is the payment made to the distant provider for services rendered by the distant provider to a patient.
(4) Dollar amount is illustrative in this case, because the payment to the distant provider is unknown.

Figure 11: Telehealth Program Financial Summary for SCHC (January 2014-December 2014)

Total Patient Volume for Community Health Center:	Shasta
Total Telehealth Encounters	Over 1,300

Specialty Services Offered, Total Encounters		
Service	**Modality**	**Number of Telehealth Encounters**
Psychiatry	Live Video	1,008
Neurology	Live Video	92
Pediatric - Unknown Specialty	Live Video	80
Pediatric - Endocrinology	Live Video	66
Pediatric - Neurology	Live Video	57
Unknown	Live Video	8
Telehealth Set-up (1)	N/A	N/A

Financial Summary of Telehealth Program		
Revenues		
Claims Payments	Payments From Insurance	$215,902
	Payments From Patients	$1,334
Grants and Donations	Financial Grants	$35,924
	In-Kind Donations	$30,600
	Total Revenues	**$283,760**
Expenses		
Operational and Administrative	Salaries, Wages, and Benefits	($115,872)
Clinical	Medical and Professional Fees	($233,000)
	Salaries, Wages, and Benefits	($26,000)
Equipment and Infrastructure	Software and Hardware	($30,600)
	Facilities Cost	($8,000)
	Broadband and CTN Fees	($14,000)
	Total Expenses	**($427,472)**
	Net Revenue/(Loss)	**($143,712)**

Source: Milliman analysis of SCHC utilization and program administrative data, 2014.

Note:
(1) SCHC does not bill for telehealth set-up or transmission fees.

Southern Inyo Community Clinic

Southern Inyo Healthcare District is a rural healthcare system that operates a hospital (including two-bed emergency services, four-bed acute care, and a 33-bed skilled nursing facility) and the Community Clinic, a rural health center (RHC) in Lone Pine, Inyo County. While Southern Inyo's hospital also provides telehealth services, analysis of those costs was considered outside of this project's scope. Therefore, any reference to "Southern Inyo" in this report is restricted to the Southern Inyo Community Clinic, unless otherwise indicated. The "Healthcare District" refers to the healthcare system as a whole.

The Healthcare District serves communities in Inyo County, which covers an area of over 10,000 square miles of diverse country, including low-lying deserts and mountainous terrain.[44] The area encompasses Death Valley National Park, Mount Whitney, and a large part of the Inyo National Forest and Alabama Hills Recreational Area. While the area has a small resident population, it has approximately 1.5 million visitors per year. Southern Inyo Healthcare District provides services to the county's residents and to its tourist population.[45] The closest medical centers are in Ridgecrest and Bishop, which are each about an hour drive away.[46] Figure 12 provides a summary of the Healthcare District's healthcare services and the community it serves.

Figure 12: Profile of Southern Inyo Services and Population Served

Federal Designation	■ Rural health center (RHC)
Location	■ Lone Pine, Calif.
Population Served	■ Inyo County, population over 18,500
Number of Sites	■ One location
Services Offered by Center	■ Emergency ■ Acute care ■ Radiology ■ Skilled nursing ■ Physical therapy ■ Hospice ■ Laboratory
Patients Served	■ Not available
Patients by Ethnicity (1) (2)	■ Latino: 17% ■ Caucasian: 64% ■ American Indian: 11% ■ Multi ethnic: 4%
Patients by Income Status (2)	■ Patients at or below 100% of FPL: 12% ■ Patients at or below 200% of FPL: 24%
Patients by Payer Type	■ County programs/uninsured, self-pay: 17% ■ Medi-Cal: 25% ■ Medicare: 30% ■ Other: 28%
Revenue by Type	■ Not available

Sources:
U.S. Census Bureau, Inyo County, California. See http://quickfacts.census.gov/qfd/states/06/06027.html.
Southern Inyo Healthcare District. Response to California Telehealth Needs and Organizational Assessment, April 4, 2014.
California Healthcare Atlas. See http://gis.oshpd.ca.gov/atlas/places/facility/106141338.
Notes:
(1) Patients by Ethnicity may not add up to 100%, which is due to zero or non-reliable values for multiethnic populations.
(2) Data reflects 2013 demographics of Southern Inyo Hospital. Southern Inyo Rural Health Clinic's demographics were not available.

[44] California Department of Health Services, State Office of Rural Health (2007). California Flex Program: Southern Inyo Hospital: Critical Access Hospital Case Study 2007. Retrieved June 12, 2015, from http://www.ccahn.org/sites/main/files/file-attachments/CA_LonePine_CaseStudy_Final_07.pdf.
[45] HRSA. Rural Health Network Development, Grantee Directory, FY 2009. California: Southern Inyo Hospital. Grant Number: D06RH09007.
[46] Southern Inyo Healthcare District (2015). About Southern Inyo Healthcare District. Retrieved June 12, 2015, from http://www.sihd.org/getpage.php?name=about.

Southern Inyo's telehealth program: Overview

The Southern Inyo Community Clinic began its telehealth program in 2001 to provide specialty access services to those who live and work in the community without having to travel long distances. It began with the installation of a videoconferencing system to provide specialty referral services to patients. At that time, the clinic also implemented store and forward services for dermatology and endocrinology services. According to Lee Barron, Southern Inyo's chief executive officer (CEO) and chief financial officer (CFO) during that time, implementation was challenging because primary care physicians (PCPs) were accustomed to making referrals and then handing patients off to specialists. However, care coordination and shared care management between the PCP and specialist became more feasible with the advent of telehealth. Because PCPs were involved in facilitating the virtual consultations and with helping patients make decisions, they became more involved with the treatment of complex cases. Eventually, the PCPs became more knowledgeable and better trained to handle care management of complex cases and now make referrals only when needed.[47]

Several grants helped jump-start the telehealth program and sustain it over the years. Southern Inyo received funding from CCHP's three-year telehealth SCSNI demonstration project. In 2011, the Southern Sierra Telehealth Network, which comprises 10 rural clinics and includes Southern Inyo, received funds from the Model eHealth Community Awards to promote reliable and secure telehealth connections. The award provided the network with approximately $300,000 worth of telehealth equipment, which was distributed among its member rural clinics, including Southern Inyo.[48] In 2014, the California Telehealth Network (CTN) received a grant award of $486,132 through the U.S. Department of Agriculture Rural Utility Services Distance Learning and Telemedicine Grant. CTN brought together five rural healthcare agencies under the California Rural Education and Clinical Telemedicine Solution project with the purpose of bringing new telemedicine services to the rural, frontier, and remote communities of an eight-county region of California. Southern Inyo Healthcare District was one of the five rural healthcare agencies that received funds to provide equipment and training necessary to link specialty services to their low-income underserved patients.[49] These grants have been instrumental in establishing the telehealth program and supporting its ongoing costs.

Anthem Blue Cross, which has a number of Medi-Cal members in rural areas, has invested in establishing a telehealth program. Over the years, Anthem Blue Cross has supported clinics, such as Southern Inyo, to develop and maintain telehealth programs with the primary goal of expanding access to specialty services. Southern Inyo is a participating spoke site in Anthem Blue Cross's telemedicine network.[50]

According to Southern Inyo's response to the California Telehealth Resource Center's survey, Southern Inyo currently offers rheumatology, cardiology, dermatology, psychiatry, and endocrinology telehealth services, and plans on including diabetics and chronic pain management as part of its telehealth offerings. Remote provider contracts include Loma Linda University and Dr. Earl Ferguson of Ridgecrest, Calif. Telehealth services are available via live videoconferencing using two mobile telehealth carts located in the facility. The carts have peripheral equipment including an otoscope, stethoscope, and a general exam camera. Southern Inyo was unable to sustain the store and forward telehealth services it initially provided because provider contractual requirements to guarantee a

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[47] Rudansky, A.K. (November 15, 2013). Telemedicine transforms rural care. InformationWeek Healthcare. Retrieved June 12, 2015, from http://www.informationweek.com/healthcare/clinical-information-systems/telemedicine-transforms-rural-care/d/d-id/898921.
[48] California Telehealth Network, Model eHealth Community Awards Announced, ibid.
[49] California Telehealth Network (November 26, 2014). California Telehealth Network Receives Grant from USDA. Retrieved June 12, 2015, from http://www.caltelehealth.org/press-release/california-telehealth-network-receives-grant-usda.
[50] Anthem Blue Cross (September 2014). Anthem Blue Cross Telehealth Program: Provider Manual. Retrieved June 12, 2015, from http://www.anthem.com/ca/provider/f3/s1/t0/pw_e225409.pdf?refer=employer.

minimum volume were not feasible. Southern Inyo implemented store and forward consultations when it participated in the SCSNI project. When the project was completed, however, the telederm program with UC Davis was discontinued. Southern Inyo did not have a sufficient volume of billable telederm encounters and Medicare does not reimburse store and forward. Also, the provider contracting structure, including specialists' costs, were not feasible when combined with the significant amount of time spent providing these services by Southern Inyo staff.

Billing and payments for telehealth encounters at Southern Inyo

Milliman analyzed the utilization and cost of telehealth encounters for Southern Inyo for 2013. Based on the data provided and information gathered from the site visit and follow-up discussion, we compiled two scenarios illustrating how Southern Inyo bills for telehealth encounters. Figure 13 below provides a description of a specific scenario and the corresponding billing and reimbursement for those specific encounters. These scenarios are taken directly from Southern Inyo's claims and administrative data. In the first scenario, Southern Inyo recoups $18 for the telehealth set-up fee. Because they were not responsible for paying the distant provider for the rheumatology live video visit, there is no additional billing or payments. In the second scenario, Southern Inyo bills Medicare for the distant cardiologist services and then pays the cardiologist according to their contractual agreements. Beginning January 1, 2015, an originating site may no longer bill Medicare for the distant provider, and therefore, for these services to continue, the remote cardiologist must bill Medicare directly and Southern Inyo may only bill Medicare for the telehealth set-up costs.

Financial analysis of Southern Inyo's telehealth program

Milliman analyzed the utilization and cost of telehealth encounters for the RHC Southern Inyo Community Clinic during calendar year 2013. Figure 14 provides a summary of our findings. Despite the low number of telehealth encounters in Southern Inyo, the specialty services made available through telehealth, such as rheumatology, psychiatry, endocrinology, dermatology, and cardiology, would simply not be available in the community.

As shown in Figure 14 below, Southern Inyo's telehealth program operates at a loss. While grants were instrumental in establishing and sustaining the program to date, Southern Inyo would likely benefit from exploring various options to improve the sustainability of the telehealth program going forward. Additional telehealth encounters would generate revenue to offset the fixed costs of the program. In addition, Southern Inyo should continue to explore contractual agreements with distant providers that allow for flexibility, such that it can limit the financial exposure of no-shows and patient cancellations. For example, Southern Inyo could refrain from contracting with providers that require "block time." It would also be beneficial, from a cost and quality perspective, to explore community-based interventions to improve the no-show/cancellation rate.

Recently, Southern Inyo Hospital began participation in the Medicare Shared Savings Program (MSSP) through the National Rural ACO. According to the National Rural ACO, "this is a unique opportunity to join a proven and successful rural ACO model that will position community health systems for the future; teaching them how to get paid more under the new value-based reimbursement models, while improving care for their community."[51] Southern Inyo Hospital has incentives to capture savings through decreasing avoidable ER visits and inpatient acute and SNF admissions, and potentially steering volume to the Southern Inyo Community Clinic. Some of that volume might be effectively met through telehealth services and in coordination with the RHC. For example, the hospital and the health clinic

[51] Barr, L. (April 16, 2015). Rural hospitals face May 1 deadline for ACO signup. National Rural ACO Blog. Retrieved June 12, 2015, from http://www.nationalruralaco.com/blog/aco-signup/.

can identify high-risk patients, such as those with chronic conditions, and furnish appropriate telehealth services to reduce avoidable high-cost care. Examples of such telehealth services included remote patient monitoring and live video visits with a remote specialist facilitated by a home healthcare professional.

Figure 13: Billing and Reimbursement Scenarios for Telehealth Encounters at Southern Inyo

	Scenario #1	Scenario #2
Scenario Description	■ A commercial patient visits Southern Inyo's RHC in early 2013. ■ Southern Inyo's technician sets up a live video visit and the patient has the visit with the distant specialist providing rheumatology-related services. ■ There is no other provider present with the patient. ■ Southern Inyo bills for a set-up fee only, $27. This fee is based upon charge master. ■ Carrier reimburses Southern Inyo $18. ■ The distant provider conducts its own billing ■ The net gain is: $18.	■ A Medicare FFS patient visits Southern Inyo's RHC in early 2013. ■ Southern Inyo's technician sets up a live video visit and the patient has the visit with the distant cardiologist. ■ There is no other provider present with the patient. ■ Southern Inyo bills for the office visit using its charge master fees of $120 ■ Medicare reimburses Southern Inyo $160 ■ The distant provider is reimbursed $160 by Southern Inyo. (4) ■ The net gain is: $0
Service Codes	Q3014	99214
Service Description	Telehealth Set-up Fee	Moderate to High Severity Office Visit
Quarter	Q1 CY2013	Q4 CY2013
Billed Amount per Claim (1)	$27	$120
Allowed Amount per Claim (2)	$18	$160
Distant Provider Payment (3)	$0	$160 (4)
Gain/(Loss)	$18	$0

Source: Milliman analysis of Southern Inyo utilization and program administrative data, 2013.

Notes:
(1) Billed Amount per Claim is the amount billed to a health insurer by the provider for services rendered by the provider to a patient.
(2) Allowed Amount per Claim is the amount paid by the patient and plan for services rendered by the provider to a patient.
(3) Distant Provider Payment is the payment made to the distant provider for services rendered by the distant provider to a patient.

Figure 14: Telehealth Program Financial Summary for Southern Inyo (January 2013-December 2013)

Total Patient Volume for Community Health Center:	Southern Inyo
Total Telehealth Encounters	46

Specialty Services Offered, Total Encounters		
Service	**Modality**	**Number of Telehealth Encounters**
Rheumatology	Live Video	9
Psychiatry	Live Video	23
Endocrinology	Live Video	2
Dermatology	Store and Forward	1
Cardiology	Live Video	6
Telehealth Set-up (1)	Various	8

Financial Summary of Telehealth Program		
Revenues		
Claims Payments	Payments From Insurance	$5,603
	Payments From Patients (2)	N/A
Grants and Donations	Financial Grants	$0
	In-Kind Donations	$5,703
	Total Revenues	**$11,306**
Expenses		
Operational and Administrative	Salaries, Wages, and Benefits	($55,565)
Clinical	Medical and Professional Fees	($16,748)
	Salaries, Wages, and Benefits	($5,043)
Equipment and Infrastructure	Software and Hardware	($5,703)
	Facilities Cost	$0
	Broadband and CTN Fees	($2,760)
	Total Expenses	**($85,819)**
	Net Revenue/(Loss)	**($74,513)**

Source: Milliman analysis of Southern Inyo utilization and program administrative data, 2013.

Notes:
(1) Includes only count of encounters for which telehealth set-up or transmission fee was billed. Counts of unbilled encounters were not available.
(2) Total claims payments made by patients was not available.

West County Health Centers

West County Health Centers (West County) is a designated FQHC that operates a network of health centers and clinics in West Sonoma County. West County provides services to an estimated population of 60,000 people living in an area that covers Fort Ross to Valley Ford and from the Pacific coastline into Sebastopol.[52]

West County's patient population consists of families and individuals who are low-income and at-risk, such as individuals who are not accepted elsewhere because of HIV/AIDS, homelessness, mental illness, or addiction. Approximately 41% of its total patients are living at or below FPL and the service area hosts a homeless population of approximately 300 individuals. Figure 15 provides a summary of West County's healthcare services and the community it serves.

Figure 15: Profile of West County Services and Population Served

Federal Designation	■ Federally qualified health center (FQHC)
Location	■ Guerneville, Calif.
Population Served	■ West Sonoma County, population of approximately 60,000
Number of Sites	■ Six health center and clinic sites
Services Offered by Center	■ Primary care: Newborns to elders ■ Obstetrics and prenatal care ■ Children's health ■ Chronic disease management ■ Reproductive healthcare ■ Immunizations (including weekly low-cost drop-in clinic) ■ Routine, annual, and employment physicals ■ Sports physicals ■ HIV/AIDS primary care ■ Health coaching ■ Behavior change support ■ Group health visits ■ Complementary and integrative healthcare services ■ Hospital transition support ■ Health system coordination and navigation ■ Health education ■ Nurse care management ■ Drug and alcohol addiction support services
Patients Served	■ 13,800
Patients by Ethnicity	■ Latino: 27% ■ Caucasian: 67% ■ Black: 1% ■ Asian: 1% ■ Multi ethnic: 4%
Patients by Income Status	■ Patients at or below 100% of FPL: 41% ■ Patients at or below 200% of FPL: 86%
Patients by Payer Type	■ Uninsured: 34% ■ Medi-Cal: 30% ■ Medicare: 13% ■ Other third party: 23%
Revenue by Type	■ Not available

Sources:
Milliman analysis of West County utilization and program administrative data, 2014.
HRSA, 2013 Health Center Profile: West County Health Centers, Inc.: Guerneville, California. See http://bphc.hrsa.gov/uds/datacenter.aspx?q=d&bid=090350&state=CA#fn2.
West County Health Centers, Response to California Telehealth Needs and Organizational Assessment, April 7, 2014.

[52] West County Health Centers (2013). History and Accomplishments. Retrieved June 12, 2015, from http://www.wchealth.org/about/mission.

In the last five years, West County has made substantial efforts to transform its delivery system by implementing patient-centered medical homes, and developing robust care management and coordination programs. In addition, leadership has made significant investments in technology, including moving to a new EHR system, developing a patient portal, and implementing both well-established and innovative forms of telehealth.

West County's telehealth program: Overview

West County launched its telehealth program in 2011 to address its community's needs for specialty services and to reduce access barriers that are due to travel time and distance. West County's health centers and clinics are dispersed throughout West Sonoma County: in Occidental, Guerneville, Sebastopol, and Forestville. West County has "traditional" telehealth programs for specialty services provided to a patient by a remote provider. West County is unique in that it is experimenting with innovative ways to leverage "nontraditional" telehealth technologies to improve care coordination and management.

Several grants helped jump-start the traditional telehealth program and sustain it over the years. In 2011, UC Davis provided West County with telehealth equipment through the California Proposition 1D Telemedicine Equipment Loan Program.[53] The traditional telehealth program includes dermatology, psychiatry, and rheumatology specialty services. Psychiatry and rheumatology are provided through live audio and video technologies between the patient and the remote psychiatrist or rheumatologist. Teledermatology is provided through asynchronous store and forward, which means high-resolution digital photographs are taken of the patients' skin and then sent to remote dermatologists for analysis.

The recent foray into nontraditional, innovative telehealth technologies was made possible by the Partnership HealthPlan Intensive Outpatient Care Management (IOPCM) Pilot Program grant, which provided $250,000 in funds to West County between 2012 and 2014. The pilot program was intended to create an intensive care management delivery model for high-cost patients ("super-utilizers") and to study the cost savings associated with using telehealth to reach those patients.[54] West County has reported that these grants were used to purchase tablet computers and to develop a robust care coordination and management program for approximately 100 high-cost individuals. Services are designed to be patient-centered. For example, several of the super-utilizers are homeless. Care managers, armed with their tablets, are able to meet patients offsite (e.g., in a park) to see how they are adhering to their care plans. Using the tablet, care managers can facilitate a real-time live video appointment with a physician or conduct other care management activities.

Billing and payments for telehealth encounters at West County

Milliman analyzed the utilization and cost of telehealth encounters for West County for 2014. In 2014, the only telehealth service for which West County billed was teledermatology. Telehealth services for psychiatry and rheumatology are not tracked in West County's EHRs or billing systems. Some of these services may be provided offsite, for example during home visits. While paper logs are maintained, West County was unable to provide volume counts or other data regarding any telehealth services besides teledermatology.

Billing for telehealth services varies between payer sources. Under Medicare, services are only eligible for reimbursement if patients are at a West County clinic site. West County can receive reimbursement

[53] In 2006, the University of California (UC) received $200 million, which was due to the passing of Proposition 1D to establish and grow telehealth training and service delivery programs at the five UC medical centers and to supply hospitals and clinics throughout the state with telehealth equipment.
[54] Partnership HealthPlan of California (November 3, 2014). Intensive Outpatient Care Management Program Data Review.

for Medicare services per-encounter at the FQHC PPS rate.[55] However, other originating sites, such as the patient's home, can also be eligible for reimbursement under Medi-Cal managed care. West County's Medi-Cal managed care plan, Partnership HealthPlan, allows reimbursement for asynchronous store and forward and live video telehealth services. Partnership's members can receive telehealth services if they receive care in a health facility, residential home, patient home, or other location.

Based on the data provided and information gathered from the site visit and follow-up discussion, we compiled two scenarios illustrating how West County bills for telehealth encounters. Figure 16 below provides a description of specific scenarios and the corresponding billing and reimbursement for those specific encounters. The scenarios are taken directly from West County's claims and administrative data. Scenarios reflected in Figure 16 below are for the teledermatology: one for a Medi-Cal FFS patient and one for a patient insured by a commercial payer. In the first scenario, because the patient is a Medi-Cal member receiving services at an FQHC, West County can bill the FQHC PPS rate. Even after payment to the remote dermatologist, residual revenue will result from the telehealth encounter. In the second scenario, West County bills the commercial payer based on the charge master. Our understanding is that CCHC charge masters are generally cost-based derived from annual cost report and adjusted based on resource-based relative value units (RBRVU). It is interesting that the billed charges for the encounter do not reflect the underlying contractual cost to the CCHC for the remote provider's services. Therefore, in the second scenario, West County faces a loss for that telehealth encounter.

Financial analysis of West County's telehealth program

Milliman analyzed the utilization and cost of telehealth encounters for West County during calendar year 2014. West County only provided claims data for teledermatology services and did not provide any data for its other telehealth services. Figure 17 below provides a summary of our findings. It should be noted that our analysis is a partial view of West County's telehealth program. Based on the claims information we have and based on the total budget (including West County's estimates of expenses and revenue), West County's telehealth program operates at a loss.

West County has a well-established traditional telehealth program, which is aligned with organizational goals to improve access to specialty services. However, to improve the financial performance of the program, West County should improve billing data capture and billing activity for telepsychiatry and rheumatology services. The financial data for West County's telehealth program show a high reimbursement rate of 98.2% on billed charges for teledermatology services. This also indicates revenue opportunities if all specialty services provided through telehealth were consistently billed. Greater encounter volume would also improve the total revenue and sustainability of the program.

West County is at the forefront of implementing nontraditional, innovative technologies and well-positioned to adapt to a changing payment landscape. Efforts underway to transform its delivery system to patient-centered care are enhanced by technologies, including telehealth, to support care management, care transitions, and population health improvement. To fund these efforts, West County has been resourceful in reaching out to partners and obtaining grants. However, the long-term sustainability of the telehealth program must be taken in context of the value it can add when payments are not volume-based but are based on total healthcare cost, outcomes, and quality for a given population.

[55] West County Health Centers. Enhancing Communication in Primary Care: Innovation Hub Prospectus.

Figure 16: Billing and Reimbursement Scenarios for Telehealth Encounters at West County

	Scenario #1	Scenario #2
Scenario Description	■ A Medi-Cal FFS patient visits one of West County's clinics in early 2014. ■ West County clinical staff completes imaging of skin condition and transmits to remote dermatologist. ■ There is no other provider present with the patient. ■ West County bills charges based on the charge master for the office visit. ■ Medi-Cal reimburses West County $160 ■ The distant provider is paid the contracted, per visit rate of $85. ■ The net gain is: $75	■ A commercial patient visits one of West County's clinics in early 2014. ■ West County clinical staff completes imaging of skin issue and transmits to remote dermatologist. ■ There is no other provider present with the patient. ■ West County bills charges based on the charge master for the office visit. ■ Commercial insurer reimburses West County $65 ■ The distant provider is paid the contracted per visit rate of $85. ■ The net gain/(loss) is: ($20)
Service Codes	992XX-- Unspecified	992XX-- Unspecified
Service Description	Office Visit	Office Visit
Quarter	Q2 CY2014	Q2 CY2014
Billed Amount per Claim (1)	$160	$65
Allowed Amount per Claim (2)	$160	$65
Distant Provider Payment (3)	$85	$85
Gain/(Loss)	$75	($20)

Source: Milliman analysis of West County utilization and program administrative data, 2014.

Notes:
(1) Billed Amount per Claim is the amount billed to a health insurer by the provider for services rendered by the provider to a patient.
(2) Allowed Amount per Claim is the amount paid by the patient and plan for services rendered by the provider to a patient.
(3) Distant Provider Payment is the payment made to the distant provider for services rendered by the distant provider to a patient.

Figure 17: Telehealth Program Financial Summary for West County (January 2014-December 2014)

Total Patient Volume for Community Health Center:	West County
Total Telehealth Encounters	Over 50

Specialty Services Offered, Total Encounters		
Service	**Modality**	**Number of Telehealth Encounters (1)**
Dermatology	Store and Forward	50
Psychiatry	Live Video	Not Available
Rheumatology	Live Video	Not Available
Remote Care Management	Live Video/Remote Monitoring	Not Available

Financial Summary of Telehealth Program		
Revenues		
Claims Payments	Payments From Insurance	$7,177
	Payments From Patients	$0
Grants and Donations	Financial Grants (2)	$0
	In-Kind Donations	$0
	Total Revenues	**$7,177**
Expenses		
Operational and Administrative	Salaries, Wages, and Benefits	($25,000)
Clinical	Medical and Professional Fees (3)	($50,000)
	Salaries, Wages, and Benefits	($5,950)
Equipment and Infrastructure	Software and Hardware	($12,430)
	Facilities Cost	($12,500)
	Broadband, Internet, and CTN Fees	($4,500)
	Total Expenses	**($110,380)**
	Net Revenue/(Loss)	**($103,203)**

Source: Milliman analysis of West County utilization and program administrative data, 2014.

Notes:
(1) Based on recorded telehealth encounters in 2013.
(2) West County informed us that Partnership HealthPlan, through the Intensive Outpatient Care Management (IOPCM) Pilot Program, provided $250,000 to West County between 2012 and 2014. Some of these funds are attributable to the remote care management program but we are unable to attribute the portion of that grant to the telehealth program's revenues and into our financial analysis.
(3) Includes payments made to distant providers.

ASSUMPTIONS, LIMITATION, AND CAVEATS

The services provided for this project were performed under the terms and conditions of the subcontract between Public Health Institute and Milliman, Inc. dated March 25, 2014.

The information contained in this correspondence, including any enclosures, is prepared solely for the internal business use of CCHP. Milliman's work may not be provided to third parties without Milliman's prior written consent. Milliman does not intend to benefit any third-party recipient of its work product, even if Milliman consents to the release of its work product to such third party.

Guidelines issued by the American Academy of Actuaries require actuaries to include their professional qualifications in all actuarial communications. The author of this report is a member of the American Academy of Actuaries and meets the qualification standards for performing the analyses in this report.

Milliman made a variety of assumptions in developing these analyses and preparing the estimates that are provided in this report. In addition, characteristics of the study could reduce the credibility of the results and must be considered by any user of this report. These points are discussed in this section.

- In performing this analysis, we relied on data and other information provided by the participating CCHCs and CCHP. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.
- Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.
- The information presented in this report may not be appropriate for other purposes, such as developing payment rates for telehealth providers.
- Telehealth-related coverage and financing rules, regulations, laws, and policies are changing rapidly. Our summaries are current as of this report’s research and drafting. However, they will become outdated as state and federal policies change and as commercial plan policies evolve.
- The results in this report are technical in nature and are dependent upon specific assumptions and methods. No party should rely upon this report without a thorough understanding of those assumptions and methods. Such an understanding may require consultation with qualified professionals.