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Financial Analysis of Southside Coalition of Community Health Centers' Telehealth Experience

Prepared for

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by

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About the Foundation

The **California HealthCare Foundation** works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit us online at www.chcf.org.

Contents

2 I. Executive Summary

3 II. Introduction

**4 III. About the Southside Coalition of
Community Health Centers**

Patients' Need for Specialty Care

Establishing Southside's Teledermatology Program

6 IV. Financial Analysis

Methodology and Scope

Financial Analysis of Ongoing Program Costs

Start-up Expenses

Financial Viability of the Southside Model

Value to Patients of the Telehealth Program

10 V. Conclusion

11 Endnotes

I. Executive Summary

THIS REPORT ANALYZES FINANCIAL ASPECTS of a new telehealth program implemented by the Southside Coalition of Community Health Centers (Southside) through funding from the California HealthCare Foundation's (CHCF) Telemedicine to Improve Access & Efficiency in California Clinic Networks project. The goal of this analysis is to provide guidance to other community health center (CHC) organizations that are considering implementing telehealth programs. This report offers one framework for the budgeting of a program through presentation of financial data from Southside's telehealth program. This is the third report in a series examining the financial aspects of telehealth programs at La Clínica de la Raza in Oakland, Open Door Community Health Centers in rural northern California, and Southside in Los Angeles.

The goal of Southside's telehealth project was to provide access to specialty dermatology care for its patients. To do so, Southside contracted with a local specialist to provide dermatology telemedicine services to its patients via a store-and-forward model. The dermatologist, who maintains his own practice location and reviews the teleconsultations in his office, receives the referral as an email and views the descriptions and photos through Southside's custom-developed referral software. The dermatologist directly bills Medi-Cal, and occasionally other payers; for uninsured patients, Southside reimburses him \$55 per consult.

The following analysis presents data from Southside's teledermatology (telederm) program from its inception in January 2009 through October 2010. The telederm program does not generate any patient

services revenue for either the Southside organization or any of its individual clinics, and three categories of operational expenses—in addition to start-up costs—are incurred to sustain the program. On an annual basis, using an average referral volume of ten per month, these ongoing expenses amounted to slightly over \$16,000: payment to the consulting dermatologist (\$6,138); salary (20 percent of FTE) for the specialty care coordinator (\$9,500); and proportional salary for a medical assistant (\$458) based on 15 minutes per consult. Of these costs, Southside paid for the dermatologist and the specialty care coordinator while the individual member clinics each paid the cost of the medical assistant.

Southside is pursuing a potential partnership with the Los Angeles County Department of Health Services to help offset these ongoing costs and sustain the program. Absent this or another, similar such partnership, Southside, together with each of its member clinics, will need to balance the costs of the program against the increased access it provides and decide if the program's value justifies its costs.

II. Introduction

WHILE TELEHEALTH PROGRAMS CAN INCREASE access to both primary and specialty care for patients of community clinics, their widespread adoption has been slowed by significant barriers, most notably implementation costs and low, inconsistent reimbursement for care. Many pilot programs were initiated throughout the country with support from private and government start-up funding but ceased operations once these grants ended. A major challenge to telehealth programs is building sustainability beyond the initial funding.

This report analyzes data from the Southside Coalition of Community Health Centers (Southside), based in Los Angeles, which was funded by the California HealthCare Foundation (CHCF) through the Telemedicine to Improve Access & Efficiency in California Clinic Networks project to add a teledermatology (telederm) program to offer specialty care to its mostly low-income patients. The report is a companion piece to a case study, *Telehealth in Community Clinics: Three Case Studies in Implementation* [www.chcf.org], which examines the process and structure of that telederm program. The goal of this analysis is to provide other community health centers that are considering implementing a telehealth program with a framework for considering initial and sustainable long-term budgeting for such a program, as well as to provide economic data from an existing telehealth program. This report is the third in a series of financial analyses of telehealth programs in community clinics, which also includes Open Door Community Health Centers, in rural northern California, and La Clínica de la Raza, based in Oakland.

III. About the Southside Coalition of Community Health Centers

SOUTHSIDE IS A NETWORK OF EIGHT autonomous nonprofit community clinics that have joined together to better sustain, coordinate, and improve health care for its poor and medically vulnerable patient population, most of whom are publicly insured, underinsured, or uninsured with limited access to care in the South Los Angeles area. A large portion of this area is federally designated as a Medically Underserved Area, a Health Professional Shortage Area, and/or a Medically Underserved Population. Initially established informally in May 2004, Southside incorporated in March 2007, attaining not-for-profit, 501(c)(3) status later the same year. Southside is staffed by one full-time executive director and one full-time specialty care coordinator.

The following eight clinic organizations are members of Southside:

- Central City Community Health Center;
- Eisner Pediatric & Family Medical Center;
- St. John’s Well Child and Family Center;
- South Bay Family Health Care (which joined Southside after this telehealth project was initiated and so did not participate in the project during this study period);
- South Central Family Health Center;
- To Help Everyone (T.H.E.) Clinic, Inc.;
- University Muslim Medical Association Community Clinic (UMMA); and
- Watts Healthcare Corporation.

Collectively, Southside members provided care to 134,569 unique patients with 498,480 patient encounters in 2009. Of these patients, 82 percent have incomes under 100 percent of the Federal Poverty Level (FPL) and another 11 percent have incomes between 100 and 200 percent of the FPL. The coalition’s members are all designated as federally qualified health centers (FQHC) or FQHC look-alikes. The Los Angeles County Department of Health Services (LA County) contracts with primary care clinics through the Public Private Partnership (PPP) program to provide primary care to the county’s qualifying uninsured residents. All Southside member organizations are contracted PPP providers, which provides them with a reimbursement stream for its care to these county residents. Table 1 outlines Southside’s combined payer mix for 2009:

Table 1. Southside Coalition Patients by Payer Source, 2009

| | |
|----------------------|-------------|
| Medi-Cal | 40% |
| Fee-for-Service: 16% | |
| Managed Care: 24% | |
| PPP | 28% |
| Self-pay | 19% |
| Medicare | 3% |
| Healthy Families | 1% |
| Private insurance | 1% |
| Free* | 1% |
| Other | 7% |
| Total | 100% |

*"Free" refers to those patients who were billed but for or from whom no payment was received.

Source: Southside Coalition of Community Health Centers, OSHPD data.

Patients' Need for Specialty Care

As with other underserved urban populations, access to specialty care is a significant issue for the patients at Southside's member clinics. One of Southside's primary objectives is to improve access to specialty care for its largely uninsured and underinsured patient population in the southern service planning areas of Los Angeles. In 2005, a feasibility study was conducted which included an analysis of wait times for specialty care appointments at LA County facilities. Most of Southside's patients referred for specialty care have only LA County facilities as options to receive that care, due to the limited number of specialists in the area participating in Medi-Cal or other low-income health programs, or willing to accept self-pay patients. The average wait time for specialty care outpatient appointments at an LA County facility during the 2005 study ranged from six months to one year; wait time for an in-person dermatology appointment was estimated at six months.¹

Establishing Southside's Tele dermatology Program

As one response to the problem of access to specialist care, Southside decided to implement a store-and-forward telederm program based upon a recommendation from the Medical Director Working Group established during the planning phase of this project. As part of this program, Southside contracted with a local specialist to provide telederm services to its patients. Southside modified the system it had already established for podiatry referrals—called Coalition Care Net (CCN)—for use with the telederm program. The dermatologist contracted by Southside maintains his own practice location and reviews the teleconsults in his office. He receives each referral as an email notification, logs into the CCN system, and views the descriptions and

photos through the CCN software. He then sends recommendations back to the referring clinic; a copy is also automatically sent to Southside's specialty care coordinator. Referrals are reviewed and sent back with consultation notes, usually within 14 days. The dermatologist bills Medi-Cal and other payers directly and Southside reimburses him \$55 per consult for each uninsured patient.

Southside began planning for the telederm program in fall 2007 and began joint training with all member clinics in November 2008, followed by individual sessions with each clinic. The first clinic went live in January 2009 and began sending referrals in February 2009; as of October 2010, five clinics were operating the program. One clinic opted not to participate because it has a volunteer dermatologist who sees the clinic's patients in person and provides sufficient coverage for its patients' needs.

IV. Financial Analysis

Methodology and Scope

The data in this analysis, provided by Southside, was collected from the beginning of Southside’s program in January 2009 through October 2010. (As previously noted, not all of the Southside clinics have implemented the telederm program.) The clinics do not charge patients a fee for participating in the telederm program and, as presently constituted, the telederm program generates no revenue for either Southside or the individual clinics. Consequently, only cost data are included and analyzed. The first section below analyzes costs pertaining to the program’s ongoing sustainability; separate start-up expenses, associated with implementation of the program, are outlined in a section that follows.

Financial Analysis of Ongoing Program Costs

From January 2009 through October 2010, Southside received 151 telederm referrals; of those, 141 (93 percent) were for uninsured patients, who have fewer other options for specialty dermatology care than do insured patients. Table 2 outlines the number of referrals by clinic:

Table 2. Number of Telederm Referrals by Clinic, February 2009–October 2010

| | |
|---------------|------------|
| Central City | 2 |
| Eisner | 19 |
| South Central | 55 |
| St. John’s | 20 |
| T.H.E. | 55 |
| Total | 151 |

Source: Southside Coalition of Community Health Centers.

Three categories of expenses—the first two of which are paid by the Southside organization and the third by the individual clinics—are incurred to sustain the program on an ongoing basis:

1. Dermatologist. Southside pays \$55 per uninsured consult to the consulting dermatologist. (For the small number of insured patients, Southside’s consulting dermatologist bills the appropriate payer directly). Since the program at Southside is not yet fully implemented, it is unclear at this point what the average monthly volume will be when all clinics that choose to participate have an operational program. Further, since some clinics send their referrals in batches, the overall volume varies from month to month. Given the pattern of referrals to date and the added patient volume of two other clinic organizations beginning to make referrals, a volume of ten referrals per month was estimated for the ongoing program in the near term. Assuming that the rate of uninsured patients continues at 93 percent, this volume would translate into an annual cost to Southside of approximately \$6,138. With an alternate assumption of five referrals per month this figure would be \$3,069; with an assumption of 20 referrals per month, it would be \$12,276.

2. Southside’s specialty care coordinator. Southside estimates that its specialty care coordinator currently spends about 25 percent of her time on the telederm program, although she estimates that the amount will drop to 15 to 20 percent once the program is fully operational. Assuming that 15 to 20 percent of her FTE salary is attributable to the telederm program, this translates to a telederm cost

for the coordinator of \$7,125 to \$9,500 annually (based on an hourly rate of \$18.72 per hour plus 22 percent in fringe benefits).

3. Medical assistants. Under the program, medical assistants (MA) take, review, and send pictures of the patient’s condition to the dermatologist. The time required for these tasks is estimated at 15 minutes per consult. Based upon a full-time salary of \$26,000 plus 22 percent in fringe benefits, this translates into approximately \$3.81 per consult. Using an average of ten referrals per month, this would equate to approximately \$458 annually for each MA.

Table 3 summarizes the above expenses.

Table 3. Ongoing Program Costs

| EXPENSE | ANNUAL AMOUNT* | WHO PAYS |
|---|----------------|----------------|
| Consulting dermatologist | \$6,138 | Southside |
| Specialty care coordinator [†] | \$9,500 | Southside |
| Medical assistant | \$458 | Member clinics |

*Based on a referral volume of ten referrals per month.

†Assumes 20 percent FTE.

Source: Southside Coalition of Community Health Centers.

Start-up Expenses

This section outlines the expenses associated with implementation of the telederm program at Southside. These expenses are divided into two categories: the equipment required for each clinic to implement the telederm program, and other expenses incurred by Southside to implement the overall program. Some expenses fall into both categories.

Table 4 details the equipment needed by each clinic to implement the telederm program. These expenses were paid by Southside and covered through grant funding.

Table 4. Individual Clinic Start-Up Equipment Costs

| EQUIPMENT | COST |
|-------------------------------|--------------|
| Camera—Canon Powershot A90-IS | \$130 |
| Two-year warranty (camera) | \$25 |
| Camera case | \$15 |
| 2 GB scan disk memory card | \$10 |
| Scan disk USB card reader | \$15 |
| Battery charger | \$30 |
| Laptop—HP 550 2GB | \$545 |
| Laptop case | \$28 |
| Total | \$798 |

Source: Southside Coalition of Community Health Centers.

Table 5 outlines expenses incurred by Southside to implement the overall program through October 2010. Of note, the following does not include staff time of Southside’s executive director or its specialty care coordinator.

Table 5. Overall Program Start-Up Expenses Through October 2010

| EXPENSE | COST |
|--|-----------------|
| Referral system customizations and user fees | \$34,000 |
| Cameras and supplies | \$3,595 |
| Computers | \$4,560 |
| Project consultants | \$5,946 |
| Training | \$5,045 |
| Telephone | \$614 |
| Total | \$53,760 |

Source: Southside Coalition of Community Health Centers.

Financial Viability of the Southside Model

Under its current structure, the telederm program generates no revenue for Southside. Therefore, in financial terms, the program is solely a cost center. To date, Southside has used grant funding to cover the cost of equipment and the specialist. If the program continues without generating revenue, however, it will be difficult for Southside to absorb the program's costs on an ongoing basis once the grant funding has ended. Given this situation, Southside is exploring other options to sustain the program.

Contract with LA County

The first, and most desirable, sustainability option would be to utilize LA County resources for the telederm program. In this scenario, Southside would continue to send referrals to its contract dermatologist for Medi-Cal managed care patients (LA County does not accept Medi-Cal managed care) but would send other telederm referrals (those patients who qualify for LA County services) to an LA County dermatologist. This would help reduce the cost of running the program because Southside would not have to directly reimburse its contract dermatologist for these uninsured patients. The advantage to LA County of such a program is that it would serve as a triage for patients needing an in-person referral, thereby potentially reducing the number of patients waiting to see an LA County specialist. In addition, since patients are seen by a specialist much earlier with the telederm program, it is likely that some severe cases would be treated sooner than if those patients had waited to be seen by a provider in the current LA County system. Southside is currently engaged with LA County to explore such partnership opportunities.

Support from Community Benefit Program

A second option would be to utilize the excess capacity of a specialist through another community benefit program supporting the South Los Angeles community, such as Kaiser Permanente. These community benefit programs may provide support to community health centers, public hospitals, and local health departments by donating clinical hours for the delivery of medical care.

Charge Uninsured Patients

Another sustainability option that has been considered is charging uninsured patients a fee to cover the cost of the telederm consult. However, under existing PPP contracts, clinics are not allowed to collect any fees from patients as part of the same visit for which clinics are receiving PPP payments.

Value to Patients of the Telehealth Program

Even if Southside were to adopt any of the financial support options discussed immediately above, its telederm program would continue to operate at a financial loss, at least as measured by Southside's direct revenues and expenses. However, a truer measure of the program's ongoing sustainability would also need to consider the value it generates for its patients.

Several examples of their value to patients can be found in the literature on telehealth programs. In a 2010 study designed to assess the impact of telehealth on absence from childcare due to illness (ADI), researchers found a 63 percent reduction in ADI attributable to the availability of telehealth services in five inner-city childcare centers in Rochester, New York. In the same study, parents reported that 91.2 percent of telehealth consults allowed them to stay at work.² In a separate study looking at the use of telehealth for pain management in a Department

of Veterans Affairs clinic, researchers found that, through telehealth, the average one-way travel distance saved per patient to obtain care was 65 miles (with a range of 14 to 89 miles), and the average time saved per patient was 126 minutes one way (with a range of 80 to 235 minutes).³

A recent paper reviewing the literature on the economic value of telehealth determined that few studies have looked at this question, and of those that have, even fewer have looked at the question of economic costs and benefits in a comprehensive way.⁴ The authors of this study outlined the three most common methods for conducting an economic evaluation: cost analysis, cost-effectiveness analysis, and cost-benefit analysis. Because cost-benefit

analysis is the most comprehensive method of the three, the researchers recommend using it and outline ways to think through the benefits and costs for each stakeholder in telehealth, including patients, providers, and others such as employers, taxpayers, and insurers. The researchers also offer a way to assign financial value to non-financial outcomes as part of an overall assessment of a telehealth program. In the context of value to patients, the researchers identified potential benefits, as displayed in Table 6:

Table 6. Types of Patient Benefits from Telehealth Programs

| | |
|---------------------------------|--|
| Medical effectiveness | <ul style="list-style-type: none"> • Reduced morbidity • Avoided mortality |
| Employment | <ul style="list-style-type: none"> • Increased earnings |
| Health care services and others | <ul style="list-style-type: none"> • Increased access to health care • Increased health knowledge/ability for self-care • Faster/accurate diagnosis and treatment • Reduced waiting and/or consultation time • Increased medication adherence |
| Decreased travel | <ul style="list-style-type: none"> • Increased employment/leisure/classroom time • Avoided travel expenditures: transportation, accommodation, and other expenses • Decreased risk of job loss: less time away from work for travel |

Source: Dávalos et al. 2009. "Economic Evaluation of Telemedicine: Review of the Literature and Research Guideline for Benefit-Cost Analysis." *Telemedicine and e-Health*.

V. Conclusion

A NEW PARTNERSHIP WITH LA COUNTY, or another arrangement that can reduce overall costs to Southside, will help to sustain the telederm program when current grant funding ends. However, even with new arrangements, the program is likely to continue operating at a loss for Southside and its member clinic organizations in purely financial terms. Thus, when considering the future viability of the program, Southside and its members need to bear in mind the potential benefits to their patients, and balance them against the program's direct financial costs. For Southside, such patient benefits would clearly apply, such as reduced wait time to receive specialty care, decreased travel time and expenditures, and decreased time away from work and childcare. One concrete example of increased access to care from Southside's telederm program is the ability to have a patient seen quickly by a specialist in person at a county facility after a suspected telederm diagnosis of melanoma. Reduced costs through a partnership with LA County would be a significant improvement in the financial picture for Southside. But with or without such a partnership, Southside and each member clinic will need to consider not only direct financial costs but also increased patient access and other patient benefits when deciding whether to continue the program.

Endnotes

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