



CALIFORNIA
HEALTHCARE
FOUNDATION

Financial Analysis of Open Door Community Health Centers' Telemedicine Experience

Prepared for

CALIFORNIA HEALTHCARE FOUNDATION

by

Lori Chelius, M.B.A., M.P.H.

Julie M. Hook, M.A., M.P.H.

Michael P. Rodriguez, M.A.

JSI Research and Training Institute, Inc.

About the Authors

Lori Chelius, M.B.A., M.P.H., is an independent health care consultant who has worked on a number of projects related to health IT in community clinic settings, including as project manager for the California HealthCare Foundation on the Telemedicine to Improve Access and Efficiency in Community Clinic Networks initiative with Open Door Community Health Centers, La Clínica de la Raza, and Southside Coalition of Community Health Centers. Julie M. Hook, M.A., M.P.H., and Michael P. Rodriguez, M.A., are researchers and consultants at **JSI Research and Training Institute (JSI)**. JSI is a not-for-profit, public and community health research, evaluation, and consulting organization dedicated to improving the health of individuals and communities throughout the world. Ms. Hook leads the domestic health information technology research efforts at JSI, while Mr. Rodriguez manages health information technology strategic planning, training, evaluation, and survey work in both the international and domestic realms.

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

4 II. Introduction

5 III. About Open Door

Patient Need and Open Door's Telehealth Programs

Structure of Open Door's Telehealth Programs

Financial Analysis Methodology and Scope

10 IV. Financial Analysis

Revenue

Expenses

Results for the 12-Month Period

Capital Expenses

16 V. Conclusion

**17 Appendix: Open Door's Telehealth Patient
Presentation and Billing Scenarios**

I. Executive Summary

THIS REPORT ARISES FROM IMPLEMENTATION of telehealth programs by Open Door Community Health Centers (Open Door) through funding from the California HealthCare Foundation's Telemedicine to Improve Access & Efficiency in California Clinic Networks project. It 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 those telehealth programs. The purpose of this financial analysis, which includes all of Open Door's extensive telehealth programs, is to provide guidance for other community health centers (CHC) that are considering implementing telehealth. This analysis offers a framework for the budgeting and sustainability of a telehealth program through presentation of real economic data from Open Door's existing programs. A parallel report, analyzing a single, newly constituted telehealth program at La Clínica de La Raza CHC, based in Oakland, is published simultaneously with this financial analysis.

Open Door's telehealth efforts are anchored by its Telehealth and Visiting Specialist Center (TVSC), which opened in 2006 as the central location not only for many of Open Door's telehealth programs but also for other specialty care services. The Federal Health Resources and Services Administration then granted Open Door the authority to expand the scope of its services and to establish a Federally Qualified Health Center reimbursement rate for the TVSC designed to support the costs associated with telehealth visits.

As part of its extensive telehealth programs, Open Door employs its own psychiatrist and diabetes educator to provide both face-to-face and telehealth

consultations at the TVSC, and contracts for telehealth visits through the TVSC with a number of outside specialty providers, including some at the University of California, Davis, the University of California, San Francisco, and other medical centers. Open Door configured the TVSC, and schedules the specialty encounters, to maximize the productivity of both the employed and contracted specialists who see patients in person at, or via telehealth through, the TVSC. Open Door also created extra telehealth specialist capacity for safety-net patients across the state.

This report examines the revenue and expenses associated with the operations of TVSC, using data from the 12-month period from December 2008 through November 2009 to determine the TVSC's net profit/loss. The inclusion of revenue and expenses from some in-person TVSC visits illustrates the uniqueness of the TVSC model and the critical role these in-person visits play in the sustainability of Open Door's telehealth programs.

During the 12-month period, Open Door's TVSC had a profit of \$220,734, as illustrated in Table 1.

Table 1. Overall Profit, December 2008 through November 2009, TVSC

Patient Services Revenue	\$1,027,625
Grant and Other Revenue	\$374,212
Operating Expense	– \$1,181,103
Profit	\$220,734

Source: Open Door Community Health Centers.

Based on TVSC patient volume of 6,609, this translates into an average profit per visit as summarized in Table 2.

Table 2. Average Profit/(Loss) per Visit, December 2008 through November 2009, TVSC

PATIENT SERVICES REVENUE (A)	COST (B)	PROFIT/(LOSS) (C = A - B)	GRANT AND OTHER REVENUE (D)	NET PROFIT (E = A + D - B)
\$155.49	\$178.71	-\$23.22	\$56.62	\$33.40

Source: Open Door Community Health Centers.

Thus, through the creative combination of employed specialists and outside contractors, in-person and telehealth visits, and the added revenue of telehealth service to safety-net patients from outside its own network, Open Door has crafted a financially viable approach to providing specialist services through the TVSC.

II. Introduction

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

This report analyzes data from Open Door Community Health Centers (Open Door), which was funded by the California HealthCare Foundation (CHCF) through the Telemedicine to Improve Access & Efficiency in California Clinic Networks project to add new elements to its existing telehealth programs. It is a companion report to a case study, *Telehealth in Community Clinics: Three Case Studies in Implementation* (www.chcf.org), which examines the process and structure of those telehealth programs. The goal of this analysis is to provide other community health centers (CHC) 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 providing real economic data from an existing telehealth program. Published simultaneously with this report is a similar financial analysis of a CHC start-up telehealth program at La Clínica de La Raza, based in Oakland, *Financial Analysis of La Clínica de La Raza's Telehealth Experience* (www.chcf.org).

III. About Open Door

OPEN DOOR IS A FEDERALLY QUALIFIED HEALTH Center (FQHC) that operates nine clinics and provides care for an area that covers 6,200 square miles of Del Norte and Humboldt Counties in Northern California. Open Door employs 37 full-time equivalent (FTE) medical providers, nine FTE dental staff, and nine FTE behavioral health practitioners. In 2008, Open Door provided 170,000 primary care visits to 39,500 unique individuals. About 60 percent of Open Door patients live on less than 100 percent of the Federal Poverty Level amount and 88 percent live on less than 200 percent of the Federal Poverty Level. Almost half of Open Door's patients rely on public insurance—32 percent on Medi-Cal, 10 percent on Medicare, and 7 percent on other publicly-funded programs—while 30 percent are uninsured. Both Humboldt and Del Norte counties are designated as Medically Underserved and Health Professional Shortage Areas for primary, dental, and mental health care.

Like many other rural areas, difficulty with access to specialty care is a significant issue for Open Door's patient population. One way Open Door has addressed this issue is to expand access to services through the use of telehealth. Open Door began implementing limited specialty care services through telehealth in 1999, and its program has since evolved into an extensive network of telehealth services, as described in this report. *Chronicling an Entry into Telehealth: Open Door Community Health Centers* (www.chcf.org), a comprehensive history of the development and growth of Open Door and its telehealth programs, is published simultaneously with this report.

This financial analysis of telehealth at Open Door uses revenue and expense data related to its Telehealth and Visiting Specialist Center (TVSC) from the 12-month period of December 2008 through November 2009. The start-up capital costs associated with opening the TVSC are also discussed to help readers understand the longer-term investment that has been required for implementation. It is hoped that this information can help other organizations planning the development of telehealth programs to think critically about financial considerations for implementing and sustaining their own programs.

Patient Need and Open Door's Telehealth Programs

The lack of specialty providers in rural areas like Humboldt and Del Norte counties can translate into lengthy patient and provider travel distances for specialty care, significant patient wait times for a visit, and in the worst cases, forgoing care altogether. A survey conducted by Open Door in 2005 found that average patient travel for an in-person specialty visit was 12 hours and 558 miles round trip. For management of a chronic condition that required frequent follow-up visits, such as diabetes or behavioral health, this translated into average annual costs of \$1,048 (diabetes) and \$4,190 (behavioral health) per patient, based on travel expenses alone. For many patients, these costs are prohibitive and translate into a lack of access. There are also broader community economic issues: When a patient travels outside the region to access a specialist, the health care dollars associated with those visits leave as well.

Structure of Open Door's Telehealth Programs

For over a decade, telehealth has been one of Open Door's tools for addressing its specialty care access issues. Open Door began using telehealth in 1999 to provide access to a variety of specialists, including some at the University of California, Davis and Cedars Sinai Medical Center in Los Angeles, as well as a private group of psychiatrists in Santa Rosa. Since then, Open Door's telehealth programs have grown significantly and now include both hub and spoke specialty consultations for both Open Door and non-Open Door patients. As a hub, both Open Door and non-Open Door sites can use the TVSC to connect with specialists either employed by or contracted with Open Door.

Telehealth Basics

Telehealth, also known as telemedicine, is the provision of health care, health information, and health education across a distance using telecommunications technology and specially-adapted equipment. It allows health care providers to assess, diagnose, and treat patients without requiring both patient and provider to be physically in the same location. Within telehealth, there are numerous technologies, including encrypted e-mail, video cameras, video conferencing, and digital imaging.

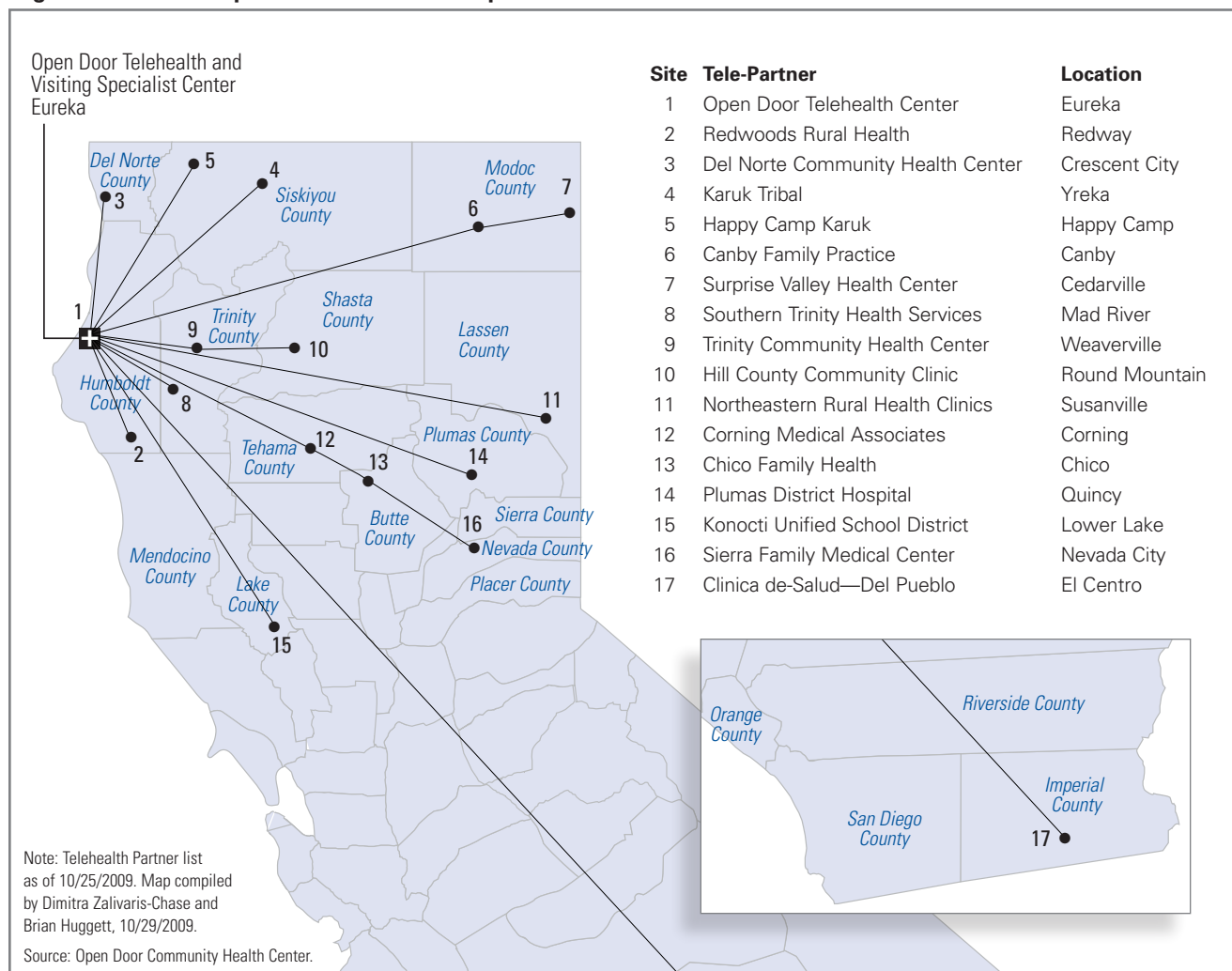
There are two main telehealth modalities: real-time and store-and-forward encounters. In real-time encounters, video-conferencing allows an interactive clinical encounter with a patient and clinical provider at either end of a live communications link. Store-and-forward encounters involve the collection and electronic storage of a patient's clinical information or digital images as captured in one location and forwarded to a separate location for later interpretation and evaluation. In both modalities, the physical location of the consulting provider is often referred to as the "hub" site while the location of the patient and the referring provider is the "spoke" site. The hub typically services more than one spoke site.

This financial analysis report focuses on Open Door's TVSC, which opened in 2006 as a centralized location for many of Open Door's telehealth programs and specialty care services. The federal Health Resources and Services Administration authorized Open Door to expand the scope of its services and to establish an FQHC reimbursement rate for the TVSC designed to support the costs associated with the telehealth visits. Open Door contracts with a number of outside specialty providers and employs its own psychiatrist and diabetes educator to provide both face-to-face and telehealth consultations at the TVSC. Open Door configured the TVSC and schedules the specialty encounters to allow Open Door to maximize the productivity of the employed and contracted specialists who see patients at the TVSC. Through telehealth visits at the TVSC, patients can also access outside specialty services from places such as the University of California, Davis, the University of California, San Francisco, and other medical centers. Open Door also created extra specialist capacity for safety-net patients across the state which, in addition to the benefits this accrues for patients, adds an extra revenue stream for Open Door. The TVSC allows Open Door to centralize many of the costs related to its telehealth programs and, through it, Open Door has provided specialist visits via telehealth from TVSC's north coast Eureka site to clinics as far away as Riverside and Imperial Counties in the southeastern parts of California.

Figure 1 on the following page depicts Open Door's network of telehealth services across Open Door and non-Open Door sites.

Open Door's specialty contracting model has the dual benefit of supporting local private practice physicians with whom Open Door contracts and providing increased specialty access to Open Door's and other safety-net patients. Under this model,

Figure 1. Relationship Between TVSC and Open Door-Affiliated and Non-Affiliated Clinics



Open Door purchases time from a specialist at an hourly rate, regardless of the number of patients seen by the specialist. This allows Open Door to provide specialty services that might not otherwise be warranted by its own patient demand. For example, Open Door and a local pulmonology group identified the need for the equivalent of an additional half-time pulmonologist in their service area, in particular to serve patients in remote areas. Rather than hiring a pulmonologist to practice part-time at a single remote site, or to ride a circuit of several sites, the TVSC contracted with the pulmonology group to

bring one specialist to the TVSC on a part-time basis to provide both in-person and telehealth visits.

By buying up a percentage of the time of an outside specialist who could provide services through the TVSC, Open Door was able to provide the level of service needed by its patients without having to take on the cost of a full-time provider. This also meant that the local private providers could see patients via telehealth without having to develop their own telehealth infrastructure. The arrangement both supported the practices of these local providers and helped keep health care dollars in the region.

Open Door contracts in this manner for the equivalent of an average of 0.6 FTE specialists each in a number of specialties, including allergy/asthma, cardiology, obstetrics/gynecology, ophthalmology, orthopedics, behavioral health, podiatry, and pulmonology.

The TVSC has also served Open Door by improving the retention rate of its employed clinicians, which can be particularly challenging in rural areas. For example, for many years Open Door had significant difficulty recruiting and keeping both pediatricians and psychiatrists for its clinics. In 2004, Open Door hired a psychiatrist to serve multiple clinic sites. The provider rotated among these several clinic locations, spending upwards of four hours per day driving between them. While this was a boon to patients, it took its toll on the provider, and after about a year, citing the stress and strain of this practice dynamic, the psychiatrist left Open Door to take a position that did not have such a punishing travel regimen. Open Door's current psychiatrist, on the other hand, can see patients at remote sites via telehealth, eliminating the need for this travel.

The following are the four distinct patient presentation scenarios in Open Door's telehealth programs, along with the way Open Door bills third parties for each. Note that these are Open Door's actual billing processes, not necessarily what might be allowable in each situation. For example, in Scenario One, where the patient and the provider are at two distinct Open Door sites, Open Door only bills for the consult even though it would be allowed to bill a presenting site fee for many payers (though not Medi-Cal).

1. Patient at a remote Open Door site connects with a specialist at the TVSC via telehealth. (Open Door bills Medi-Cal or other third party for the service. Open Door does not bill a separate

presentation fee to Medi-Cal or other third party.)

2. Patient sees an Open Door provider or a contracted specialty provider in person at the TVSC. (Open Door bills Medi-Cal or other third party for the service.)
3. Patient at a non-Open Door site connects with an Open Door provider or contracted specialty provider at the TVSC via telehealth. (Open Door bills Medi-Cal or other third party for the service. Open Door takes no part in the non-Open Door clinic's decision whether to bill a presentation fee.)
4. Patient at the TVSC connects with an outside specialist at a non-Open Door site via telehealth. (Open Door does not bill Medi-Cal or other third party for the service. Open Door does bill a presentation fee according to billing guidelines of each third-party payer.)

These four scenarios, and Open Door's third-party billing processes for each, are presented graphically in the Appendix to this report.

Financial Analysis Methodology and Scope

Assumptions

The TVSC is not just a telehealth center but also a place for visiting specialists to see patients in person. Therefore, the revenue and expenses of both in-person and telehealth encounters at the TVSC are included when considering the sustainability of Open Door's telehealth programs. This report examines TVSC revenue and expenses data from the 12-month period from December 2008 through November 2009 to calculate a breakeven analysis and to arrive at the TVSC's net profit (or loss). The inclusion of revenue and expenses from in-person visits illustrates

the TVSC's unique model and the critical role of these in-person visits in the sustainability of Open Door's telehealth programs.

The data are based upon revenue and expenses associated with the TVSC only. This excludes relatively minor telehealth revenue and expenses from other Open Door remote clinic locations. For example, the purchase of a camera at a remote site to connect with an outside provider or a provider at the TVSC would not be captured as an expense in this analysis. On the revenue side, since Open Door only bills third parties for hub but not spoke visits originating at the TVSC, and non-TVSC Open Door clinic locations serve only as spoke sites to either the TVSC or an outside specialist, the revenue impact of this approach is minimal, if any.

At Open Door as with almost all other CHCs, the average cost of providing a patient visit—whether in person or via telehealth—exceeds the average revenue per visit. Open Door has the federal designation of serving a Medically Underserved Area and Health Professionals Shortage Area, which is a central component of its eligibility for grant funds that cover services for uninsured and low-income patients. This grant funding is a regular, central revenue source for Open Door and so is included in this report in calculations of revenue per visit and the break-even point.

This report also includes a summary of capital expenses that were incurred to open the TVSC. Although many of these expenses were incurred prior to the 12-month period included in this report, they are instructive regarding the start-up costs that are associated with developing a new telehealth program.

Data Collection

This financial analysis was based on Open Door's financial and utilization data collected and extracted from the Department of Health and Human Services, Health Resources and Services Administration Budget Period Renewal (BPR) Forms and the Standard Form 424A that all FQHCs are required to submit as part of the renewal process for their federal grant application under Section 330 of the Public Health Service Act. The data was obtained from Open Door's chief financial officer, who populated a model often used by Open Door to analyze the financial viability of various programs. This model includes information on patient volume, payer mix, visit costs, and staff costs.

IV. Financial Analysis

MANY FOR-PROFIT ORGANIZATIONS MEASURE financial sustainability using a break-even analysis, which calculates the volume at which revenue covers costs. A traditional break-even analysis for clinic visits would display the point at which total patient services revenue equals fixed costs (e.g., rent, insurance, utilities) plus variable costs (e.g., consumable supplies associated with each visit) of seeing patients.

However, for Open Door as for many other CHCs, the expenses associated with some of its visits are often higher than the revenue generated from those visits. Thus, from an operational perspective, additional visits do not always translate into additional revenue. As a result, Open Door includes grants as a revenue source in its break-even calculation. The following section details the financial inputs for the TVSC and includes numbers related to revenue, expenses, profit/loss, and break-even volume.

Revenue

Table 3 details patient visit-generated revenue at the TVSC by payer for the 12-month period of December 2008 through November 2009.

The number of visits was calculated by multiplying the number of billable encounters, calculated in the Form 2 Staffing Report (part of the HRSA budget period renewal process), by the payer mix, which is extracted directly from Open Door's general ledger. A key driver in determining the number of encounters is provider productivity, also derived from the Form 2 Staffing Report. The average adjustment per visit reflects the difference between the average charge per visit and the amount actually billed. Of the total of 6,609 visits to the TVSC in the annual reporting period, approximately 735 (11 percent) were telehealth visits.

In addition to patient revenue, a percentage of total grant funding that is allocable to the TVSC is included in this analysis, including 330 BPHC funding, state and foundation grants, plus other funding such as cost settlements and year-end

Table 3. Patient-Generated Revenue, by Payer, December 2008 through November 2009, TVSC

	NUMBER OF VISITS*	AVERAGE CHARGE PER VISIT	TOTAL CHARGES	AVERAGE ADJUSTMENT PER VISIT	AMOUNT BILLED	COLLECTION RATE	INCOME
Medicaid	2,876	\$171.04	\$491,948	-\$67.61	\$686,409	98%	\$672,681
Medicare	1,389	\$170.60	\$236,988	-\$10.48	\$251,559	95%	\$238,981
Private Insurance	1,066	\$176.24	\$187,876	\$72.44	\$110,657	80%	\$88,525
Self Pay (sliding fee)	1,278	\$143.58	\$183,430	\$89.89	\$68,591	40%	\$27,436
Totals	6,609						\$1,027,625

*"Number of Visits" calculated, then rounded, so figures for "Total Charges" may vary slightly.

Source: Open Door BPR Form 3, Income Analysis.

adjustments related to reconciliation with Med-Cal. Table 4 details this additional funding that is allocable to TVSC, for a total of \$374,212 during the same 12-month period.

Table 4. Grant Funding, by Source, December 2008 through November 2009, TVSC

330 BPHC Grant	\$76,576
State Grants	\$561
Foundation Grants	\$28,995
Other*	\$268,080
Total Funding	\$374,212

*"Other" includes cost settlements and year-end adjustments.

Source: Open Door Community Health Centers.

This translates into total revenue of \$1,401,837.

Table 5. Total Revenue, December 2008 through November 2009, TVSC

Patient Visit Revenue	\$1,027,625
Grant and Other Revenue	\$374,212
Total Revenue	\$1,401,837

Source: Open Door Community Health Centers.

Expenses

The majority of expenses related to the TVSC are staffing costs. During the 12-month period included in this analysis, two billable clinicians were assigned to the TVSC: one psychiatrist (0.9 FTE) and one diabetes educator/nurse practitioner (0.25 FTE). The remaining staff assigned to the TVSC consisted of one registered nurse (0.37 FTE), two medical assistants (1.8 FTE), two office managers (1.1 FTE), and four receptionists (4.0 FTE). In addition to the staff directly assigned to the TVSC, Open Door utilized a rotation of staff from other Open Door sites to take advantage of the other sites'

excess capacity. This rotation of staff accounted for an additional 8.24 FTE of providers and support staff. Open Door also used the services of several community-based specialists on a contract basis. These specialists contracted with Open Door for approximately \$150,000 for the year. Through this arrangement, Open Door paid approximately the cost of one full-time primary care provider, but received care services for multiple specialties.

Table 6 outlines non-staffing expenses for the 12-month period, while Table 7 on the following page details staffing costs related to the TVSC for the time period.

Table 6. Non-Staffing Costs, December 2008 through November 2009, TVSC

Fringe Benefits	\$108,513
Travel	\$11,533
Equipment	\$43,163
Supplies	\$61,801
Contractual	\$19,308
Allocated Rent/Mortgage	\$7,806
Depreciation	\$92,382
Insurance	\$4,004
Overhead Allocation	\$9,167
Uncollectible Income	\$89,592
Indirect Charges	\$54,764
Total Non-Staffing Costs	\$502,033

Source: Open Door Community Health Centers.

Included in the above charges is an annual overhead allocation cost of \$9,167 that was spent on high-speed Internet charges for the TVSC. This represents a proportion of the \$9,000 per month that Open Door spent on high speed-Internet

Table 7. Staffing Costs, December 2008 through November 2009, TVSC

	FTE	ANNUAL SALARY	ALLOCABLE TO TVSC		
			PERCENTAGE	FTE	AMOUNT
Billable Providers					
Family Practitioners (other sites)	0.93	\$133,791	19.17%	0.18	\$25,648
Contract Specialists	0.60	\$150,000	100%	0.60	\$150,000
Psychiatrists	0.90	\$139,394	100%	0.90	\$139,394
Physician Assistants/Nurse Practitioners	0.60	\$84,094	40.86%	0.25	\$34,361
Physician Assistants (other sites)	1.8	\$78,374	9.67%	0.17	\$7,579
Nurse Practitioners (other sites)	2.20	\$84,094	10.29%	0.23	\$8,653
Subtotal: Billable Providers	7.03	\$669,747		2.32*	\$365,635
Non-Billable Support Staff					
RNs	0.60	\$64,709	62.10%	0.37	\$40,184
MAs	1.80	\$57,990	100%	1.80	\$57,990
Office Management	1.10	\$36,146	100%	1.10	\$36,146
Reception	4.00	\$57,114	100%	4.00	\$57,114
RNs (other sites)	2.80	\$60,798	68.22%	1.91	\$41,476
MAs (other sites)	7.50	\$25,429	46.35%	3.48	\$11,786
Reception (other sites)	4.00	\$23,858	31.79%	1.27	\$7,584
Site Development Coordinator (other sites)	1.00	\$61,154	100%	1.0	\$61,154
Subtotal: Non-Billable Support Staff	22.80	\$387,198		14.93	\$313,435*
Totals	29.83	\$1,056,945		17.25*	\$679,070*

*Figures may vary slightly due to rounding.

Note: "Other sites" refers to staff who rotate into the TVSC, but are not assigned there full time.

Source: Open Door Community Health Centers.

access for all of its sites. The supplies category consists of medical supplies and pharmaceuticals. Contractual expenses consist of outside consulting services (mostly information technology). Indirect charges include allocations to the TVSC, such as for administration. It should be noted that no allocation is made for the fringe benefits of staff who are assigned to other clinics within Open Door and who are rotated through the TVSC.

Table 8 summarizes the total expenses.

Table 8. Total Costs, December 2008 through November 2009, TVSC

Staffing (salary only)	\$679,070
Other	\$502,033
Total	\$1,181,103

Source: Open Door Community Health Centers.

Results for the 12-Month Period

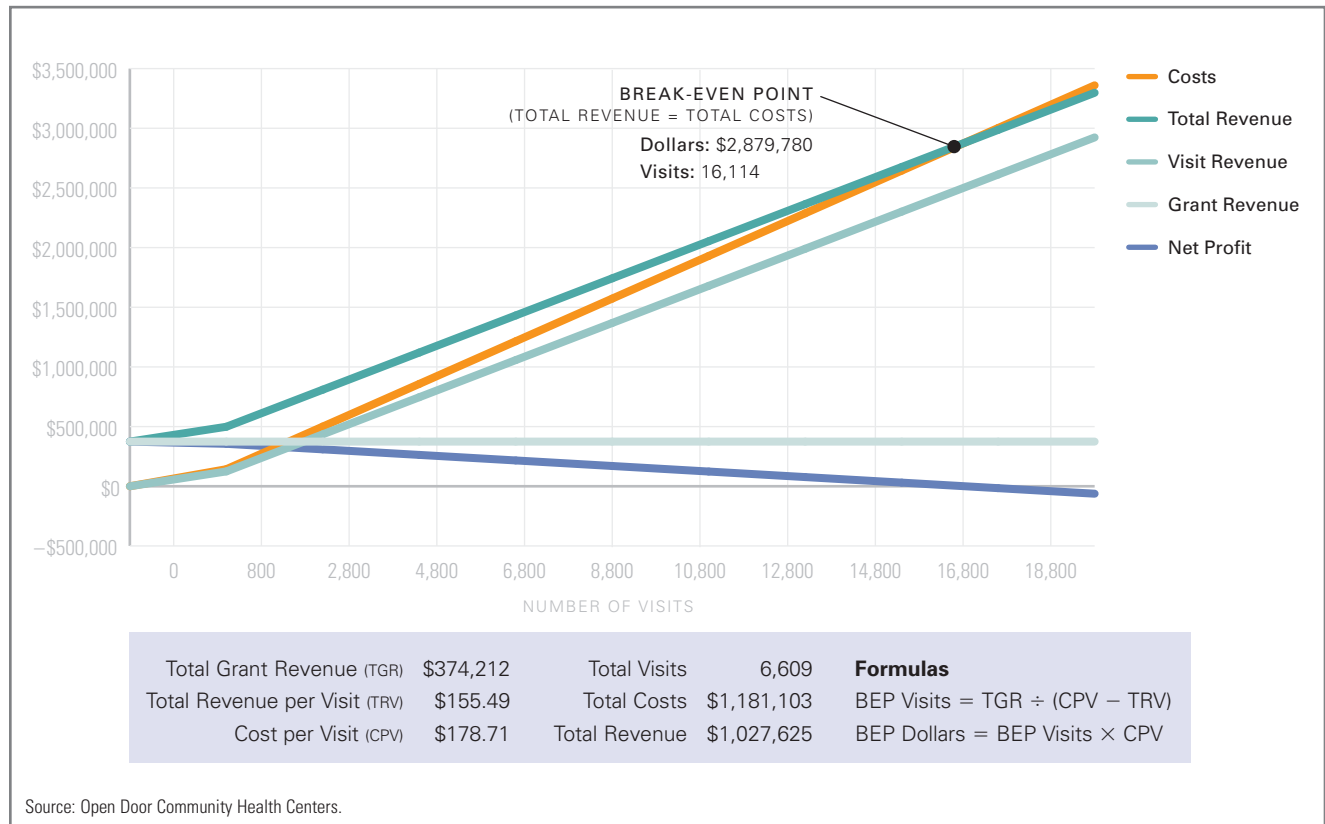
As noted above, a traditional break-even analysis looks at the point at which total revenue generated equals fixed costs (e.g., rent, insurance, utilities) plus variable costs (e.g., consumable supplies associated with each visit) of seeing patients. For Open Door, however, the equation is a bit different, as the organization has the equivalent of fixed revenue (Section 330 and other block grants), plus the average patient services revenue per visit, to be applied toward its costs. As the number of patient visits increases, the portion of the costs covered by grant revenue decreases. Based on patient services revenue only, and TVSC patient volume of 6,609 over a 12-month period, Open Door's average per patient visit revenue was \$155.49 (\$1.027 million divided by 6,609 visits) and the per patient visit

cost was \$178.71 (\$1.181 million divided by 6,609 visits), resulting in an average loss of \$23.22 per patient visit.

However, since grant funding is considered a revenue source, Open Door calculates break-even volume by dividing grant and other revenue (\$374,212) by the loss per visit (\$23.22), which equals the number of visits before grant and other revenue are totally consumed. Figure 2 shows the declining amount of grant revenue per visit, which eventually would lead to a net loss per visit for TVSC. Thus, during the period under review, the maximum number of visits that could have been supported by funding was 16,114.

With 6,609 visits during the time period, the TVSC volume was fully supported, when all sources of revenue are considered. Combining the total

Figure 2. Break-Even Analysis, December 2008 through November 2009, TVSC



revenue and expenses for the reported time period, the TVSC shows a profit of \$220,734, as illustrated in Table 9.

Table 9. Overall Profit, December 2008 through November 2009, TVSC

Patient Services Revenue	\$1,027,625
Grant and Other Revenue	\$374,212
Operating Expense	– \$1,181,103
Profit	\$220,734

Source: Open Door Community Health Centers.

Table 10 summarizes revenue and costs per visit, based on the TVSC volume of 6,609 visits during the time period.

Table 10. Per-Visit Revenue and Costs, December 2008 through November 2009, TVSC

PATIENT SERVICES REVENUE (A)	COST (B)	PROFIT/(LOSS) (C = A – B)	GRANT AND OTHER REVENUE (D)	NET PROFIT (E = A + D – B)
\$155.49	\$178.71	–\$23.22	\$56.62	\$33.40

Source: Open Door Community Health Centers.

Capital Expenses

Since the data in this report is for a 12-month period, it does not capture all of the historical costs associated with starting Open Door’s telehealth programs at TVSC. The following section discusses those costs, which Open Door incurred to open and to upgrade the TVSC, in order to give other CHCs an idea of the capital investment required to establish as ambitious a telehealth program as Open Door’s.

As a first step in 2004, Open Door acquired a facility adjacent to its existing Eureka Community Health Center. The costs associated with remodeling this facility to accommodate its use as a telehealth facility were approximately \$350,000 (planning, foundation, plumbing, etc). In addition to these remodeling expenses, over the next five years Open Door invested \$399,951 in capitalized equipment, as detailed in Table 11 on the following page. This includes an initial investment of \$195,695 on equipment, \$33,575 for a security system and furnishings, and another \$170,682 to enhance the TVSC with additional medical and telecommunication equipment, and an integrated electronic medical record and practice management system. Purchases of under \$5,000 are expensed in the year of purchase, so in addition to the capitalized expenses in Table 11, Open Door spent an additional \$40,000 on a variety of medical and office equipment that individually fell below this \$5,000 threshold.

Table 11. Capitalized Costs of Telehealth Equipment, TVSC

ITEM DESCRIPTION	CAPITAL COST	DATE ACQUIRED
Phase I		
Citrix Server	\$21,813	10/01/2004
Licenses for Network Upgrade	\$33,415	11/01/2004
Software Licenses for Upgrade	\$3,846	12/15/2004
Server Racks & Switches	\$14,397	12/15/2004
Dell Optiplex GX280	\$11,025	12/15/2004
Citrix Licenses for Network	\$26,851	12/22/2004
Server Interface Pods	\$635	12/30/2004
Telemedicine Computer Equipment	\$42,017	1/17/2005
Computers & Cabling	\$41,696	12/01/2005
Phase I Costs	\$195,695	
Phase II		
Security System	\$10,393	12/01/2005
Furniture	\$23,181	12/01/2005
Phase II Costs	\$33,575*	
Phase III		
Wire One Telecommunication Equipment	\$16,591	4/01/2006
Polycom VSX 9900 Video Units	\$66,620	7/24/2006
Polycom Teleconf Desktop System	\$26,667	2/27/2008
Practice Management System	\$20,580	2/05/2009
EPIC EMR TVSC	\$36,443	6/30/2009
OCHIN License for TVSC	\$3,780	9/01/2009
Phase III Costs	\$170,682*	
Total Capital Costs	\$399,951*	

*Figures may vary slightly due to rounding.

Source: Open Door Community Health Centers.

V. Conclusion

OPEN DOOR'S TVSC MODEL REPRESENTS A unique approach to funding a telehealth program. Based on revenue and expense data for the 12-month period studied, it appears that this model presents a financially viable approach for Open Door to provide telehealth services. TVSC has provided increased specialty access (both in-person and telehealth) to Open Door's own patient population as well as to the patients of other CHCs who access Open Door's services. As discussed in this report, only 11 percent of the 6,609 patient visits at the TVSC during this period were telehealth visits. But since the TVSC is supported through a combination of in-person and telehealth visits, the telehealth program, as part of the broader TVSC, is financially viable. This approach is key to the success of the Open Door telehealth program, in contrast to programs at so many other organizations that have failed to achieve financial sustainability. With its current structure and volume, Open Door's telehealth program would be much more challenging to sustain without the additional revenue generated from in-person visits. Other CHCs that are implementing telehealth programs may want to consider alternative approaches such as Open Door's when determining how best to support their own telehealth programs.

Appendix:
Open Door's Telehealth Patient Presentation
and Billing Scenarios

Patient at Remote Open Door Site Connects with Specialist at TVSC via Telehealth

CONSULT
SITE



Telehealth encounter with an Open Door provider or contracted specialty provider at the TVSC

PATIENT
SITE



Patient at remote Open Door clinic presents to TVSC for specialty care



Open Door bills Medi-Cal or other third party for service

Open Door does not bill Medi-Cal or other third party a presenting fee

Patient Sees Open Door Provider or Contracted Specialty
Provider In-Person at the TVSC

CONSULT SITE=PATIENT SITE



Telehealth encounter
with an Open Door provider
or contracted specialty
provider at the TVSC



Open Door bills Medi-Cal or
other third party for service

Patient at Non-Open Door Site Connects with Open Door Provider or Contracted Specialty Provider at TVSC via Telehealth

CONSULT
SITE



Telehealth encounter with an Open Door provider or contracted specialty provider at the TVSC



Open Door bills Medi-Cal or other third party for service

PATIENT
SITE



Patient at non-Open Door clinic presents to TVSC for specialty care

Open Door is not involved with non-Open Door clinic's decision to bill or not bill a presenting fee

Patient at TVSC Connects with Outside Specialist at a Non-Open Door Site via Telehealth

CONSULT SITE



Telehealth encounter with a non-Open Door specialty provider at a non-Open Door site

PATIENT SITE



Patient presenting at TVSC to connect to non-Open Door specialty provider at a non-Open Door site via telehealth

Open Door does not bill Medi-Cal or other third party for service



Open Door bills a presenting fee according to billing guidelines for each payor.



**CALIFORNIA
HEALTHCARE
FOUNDATION**

1438 Webster Street, Suite 400
Oakland, CA 94612
tel: 510.238.1040
fax: 510.238.1388
www.chcf.org