

**DAVIES AWARD OF EXCELLENCE
AMBULATORY CARE APPLICATION:
VALDEZ FAMILY CLINIC, PC**

SECTION A.

1. Name and Title of Submitter: Alicia V. Valdez, MD

2. Practice Name: Valdez Family Clinic

3. Address: 98 Briggs St., Suite 800

4. City: San Antonio **State:** TX **Zip Code:** 78224

5. Telephone: 210-927-9500 **Fax:** 210-927-2099

6. Email: agutierrez01@satx.rr.com **Website:** N/A

7. Number of Physicians in Practice: 1

8. Number of FTEs (list by staff category):

Doctor: 1

MAs: 2

Clinic Administrator: 1

Receptionist: 1

Scheduler/Referral Coordinator: 1

Biller: 1

9. Provide detailed information regarding any commercial/employment agreements with the vendor/s of EHR hardware/software:

No commercial/employment relationships with any vendor of our EHR system.

10. Annual Number of Patient Encounters:

Approximately 9,600

11. Please list the names of the members of the EHR Implementation Team (who will all be considered authors of the application):

Alicia V. Valdez, MD

Ambrosia Gutierrez, Clinic Administrator and CPA

SECTION B.

THE ORGANIZATION

Valdez Family Clinic is a single-location family practice serving South San Antonio, Texas — an economically disadvantaged and medically underserved community. The clinic is a professional corporation, owned and operated by Alicia V. Valdez, MD (University of Illinois 1997), who is a native of South San Antonio. Founded in 2006, the practice had its origin in 2001, when Dr. Valdez and a partner established the South San Antonio Family Practice. When her partner returned to full-time hospital employment, Dr. Valdez reorganized as a solo practice. Providing care in this community is of great personal and professional importance to her.

The Valdez Family Clinic’s patient population is 99% Hispanic, and the majority of patients are covered by Medicare and Medicaid. Approximately 65% of encounters are pediatric. Dr. Valdez’s oldest patient is 92, and she too is a champion of the EHR system (which she refers to as a “gizmo.”)

Patient population by age:

0-19	69%
20-40	13%
40-64	13%
64 +	5%

Despite the financial challenges common to family practices located in economically depressed areas, Valdez Family Practice has thrived since its inception and continues to grow. Dr. Valdez plans to bring a second physician on staff within the next year.

MANAGEMENT

a. Business Objectives

Medicine is Dr. Valdez’s third career. After raising a family, she worked as a chemist, running research labs in a variety of settings. When she opened her practice, she came to entrepreneurship with prior experience in managing businesses. Because of this background, Dr. Valdez understood the importance of investing in the clinic (a small business) in order to improve both process efficiency and the quality of service rendered to the patient. A single mother when she left residency to establish her practice, she is well aware that growth in business requires risk.

While in partnership, she did not have the authority to unilaterally implement an EHR, but when the opportunity presented itself to transform her clinic from a paper-based to a digital practice environment, she had a well-developed business case, specific to her organization.

Over the five years that preceded implementation of the EHR, Dr. Valdez's practice — like those of her primary care colleagues across the nation — felt the financial impact of declining reimbursements. In that environment, under-coding encounters — an all too common practice — is a threat to the viability of small practices. Finding a tool that would enable complete documentation and therefore proper coding of a clinical encounter was essential. This is especially so in South San Antonio, where the Medicare and Medicaid population is significant.

Declining reimbursement and undercoding were not the only threats facing the clinic. Their third party billing company, although very good at processing and posting initial billings, was not as aggressive in pursuing the clinic's accounts receivable (AR), or denied and rejected claims. From the billing company's perspective, the financial rewards of chasing down aging accounts are relatively small. From a small practice perspective, pursuing AR can be the difference between profit and loss.

Specific Business Goals

- Return to pre-implementation patient flow capacity within 90 days
- See the same number of patients in a 4-day rather than 4.5-day work week
- Improve office process efficiency. Metric for success: decreased overtime labor costs
- Increase the accuracy of coding. Metric for success: anticipated increase in billing
- Move billing in-house, without adding to staff: make coding, billing and posting efficient, freeing staff time to work AR, which for Dr. Valdez's practice is very important
- Submit claims electronically to The Health Information Network (THIN), a free, all-payer clearing house developed by Blue Cross Blue Shield of Texas

b. Project Organization

Valdez Family Clinic operates without the need for an extremely formal organizational structure. Open communication, collaboration, and mutual support are encouraged. The clinic is both a family practice and a family business.

While Dr. Valdez had ultimate authority for the selection of the EHR, to ensure support from the entire staff, she included them in the research process. Because of the close-knit working environment of the clinic, Dr. Valdez placed a premium on staff wishes in the selection process.

Dr. Valdez began researching EHRs by reading a variety of trade articles and system reviews on the American Academy of Family Practice website. This gave her a general understanding of how EHRs had evolved since her residency. However, the selection process began in earnest in March 2006, when an EHR show was held nearby. Many of the EHR vendors on Dr. Valdez's preliminary list were scheduled to attend the show, providing her an opportunity to see them in action.

Dr. Valdez and her entire staff attended the show. The staff was asked to separate and circulate the exhibition hall, evaluating each system from the perspective of their individual roles within the clinic. They were specifically asked to disregard whether Dr. Valdez might like a certain system; rather, evaluate whether it would help them do their jobs more efficiently. The staff at the time included a receptionist, an office manager, a nurse practitioner, a referral coordinator,

and two medical assistants. On the basis of what each saw, the clinic developed an “ideal” EHR profile.

After the show, staff members ranked their “top-three.” This resulted in an invitation to three vendors to demonstrate their EHRs at the clinic, where the staff could better evaluate each EHR against their individual “ideals.”

The selection of MedcomSoft Record was unanimous.

c. Clinical Objectives

The overarching goal for Valdez Family Clinic was to achieve the clinical benefits of having complete, up-to-the-moment patient data for every patient visit. From a clinical workflow perspective, Dr. Valdez’s goal was to capture complete medical information in real time, at the point of care.

Valdez Family Clinic experienced the range of problems inherent in a paper-based office. Take lab results as a case in point. As the practice grew, and the pace of work increased, labs occasionally fell through the cracks. In some cases the results would not come back, or the patients themselves would not comply, or results would be misfiled, never to be seen by Dr. Valdez. From a patient care and a liability perspective, that was unacceptable. Simply having the right labs in the right chart would result in better patient care.

Often, as has been well documented elsewhere, improving clinical care is simply a matter of the clinician having access to the complete patient chart. Missing charts are almost never lost; rather, only one person knows where they are at any given time. The effect on the doctor is the same. For example, in early 2006, while the clinic was still paper-based, auditors from the state visited Valdez Family Clinic to monitor childhood vaccination records. The clinic was asked to pull 300 charts for the examiners’ review. In the meantime, some of these patients came in for treatment, and those responsible for pulling their charts had no idea where they were. Even if the charts had been easily located, finding a specific chart amid the examiner’s work would have caused unacceptable delays.

d. Other Objectives

Prior to implementation, Dr. Valdez routinely worked in the evenings, either at home or the office, sometimes until 10 PM, finishing paper charts. From a work-life balance standpoint, her desire was to see the same number of patients (45-50 per day), but do it more efficiently, and be home at a reasonable hour in the evenings. As to charting with an EHR, her goal was to finish within an hour of seeing the day’s final patient.

IMPLEMENTATION

e. About the EHR System

Valdez Family Clinic selected MedcomSoft Record as their clinical automation tool. It is a feature-rich medical office software suite, built around an EHR. Unlike interfaced systems, MedcomSoft Record's full functionality is driven by a single database, using codified data, captured at the point of care. MedcomSoft Record uses the Medcin nomenclature, which, while not a significant factor in Dr. Valdez's decision making, has become one of the most impressive features of the system, as it enables true integration.

Medcin consists of more than 250,000 clinical data concepts compiled over 25 years, in collaboration with physicians from Cornell, Harvard, Johns Hopkins and other institutions. These clinical data concepts have more than 72 million SOAP links among them, providing integrated intelligence and clinical decision support.

Front and back office staff use desktop PCs and the keyboard for data entry. Dr. Valdez uses a wireless tablet PC and a stylus. The architecture is client server, and devices are wirelessly networked. The clinic has a broadband Internet connection, and the system can be accessed securely by any Internet connection.

Clinical Documentation

Dr. Valdez uses a stylus and protocols of her own design for the majority of patient encounters. Real-time capture of data, diagnosis, orders and plans at the point of care has decreased her average time spent per note from 10 to 2 minutes. She has a choice of a wide range of different documentation methods, including protocols, clinical forms, free text typing, voice recognition, previous encounters, flow sheets and patient-submitted information, among others.

Computerized Physician Order Entry (CPOE)

To reduce the possibility of medical errors or unintended interactions, MedcomSoft Record's prescription generator works through a comprehensive drug database that supports health plan formularies, generic drug names, ingredients, classes, or indications. The system features automatic, multi-level drug interaction, which compares drug-to-drug, drug-to-allergy, drug-to-condition, drug-to-pregnancy, and drug-to-lactation. Medications and dosages commonly ordered are pre-loaded into the system and can be prescribed with the click of a button, from the patient chart.

Similarly, integrated lab and imaging orders are available by clicking a single button, without navigating away from the patient chart. Results and images are returned to that patient chart electronically, and when Dr. Valdez's review is required, are automatically routed to the "home page" she uses as her primary work screen. After review, she attaches the results or images to the original order in the patient chart with the click of a button.

Integration with EKG

The clinic chose to replace its aging EKG machine with a Welch Allyn device that can be operated through the EHR. This functionality did not require a special integration, but was

offered as a feature on MedcomSoft Record. Now, with two clicks, clinical staff can control the EKG machine directly from the patient chart. While the EKG machine itself prints results on traditional paper rolls, Record automatically converts data from the test into the appropriate Medcin codes and stores it electronically in the patient chart. Dr. Valdez can view results in real-time, also from the patient chart.

Document and Image Management

MedcomSoft Record enables users to scan or attach documents and images, and then associate them with the relevant patient chart. Also, staff can attach comments to documents and assign documents to others for review.

Referrals and Authorizations

MedcomSoft Record enables the Valdez Family Clinic to capture, track and manage all relevant information pertaining to the referral and authorization process from the patient chart.

Billing

MedcomSoft Record's billing function allows a claim to be generated by the time a patient visit is completed. The system automatically determines the correct charges for the bill based on ICD and CPT codes and payer fee schedules. The bill can then be sent real-time or by batch electronic transmission. (Bills can also be printed.) The system includes internal claim scrubbing prior to electronic transmission, prompting the biller to address errors or omissions. A claim in MedcomSoft Record can be generated and sent in less than 10 seconds.

Also, Dr. Valdez's biller can immediately post and reconcile payments to ensure that all accounts balance properly.

Scheduling

MedcomSoft Record's integrated scheduler interfaces with Outlook and connects directly to the patient demographic information. It offers a variety of tools, including:

- Scheduling templates customized to the Valdez Family Clinic
- Automatic calculation of appointment length by procedure
- Customizable views based on specific search criteria
- No-show and cancelled appointment tracking

Clinical Decision Support

Because MedcomSoft Record captures all clinical information as codified data, including prescribed drugs and laboratory results, clinical decision support is completely automated and extends to every data element in the patient chart. Further, intelligent prompting provides differential diagnosis support based on documented clinical findings, serving as a clinical reference to accelerate care decisions and reduce medical errors.

The Medcin database provides access to the experience of thousands of physicians in all specialties, who have seen a far greater range of patient conditions than an individual provider will in an entire career.

Compliance Tools

With MedcomSoft Record, Dr. Valdez can verify medical necessity checking at the point of care. The system will identify what services Medicare or other insurances may deny based on other procedures performed that day, the appropriate diagnosis, age or gender discrepancies as well as various other rules.

The E&M coding engine determines the appropriate medical visit code instantaneously based on the actual documentation of the clinical encounter, giving Valdez Family Clinic certainty that the visit code is submitted and supported by the clinical notes.

Workflow Tools

Although the clinic uses the secure instant messaging feature most heavily, all of the following workflow tools are available with a single click from anywhere in the application:

- A secure inter-office instant messaging system
- A floating tasking system capable of tracking the progress of all tasks assigned to staff and co-workers
- An activity-related tasking system that maintains a HIPAA-compatible log of the progress
- A color-coded tracking system to track the progress of each encounter until completion
- A dynamic alert system that monitors patient waiting time related to any task or activity
- Secure email

Data Mining & Reports

Because of its use of codified data, MedcomSoft Record allows Dr. Valdez and her staff to perform both simple and complex queries, supporting unlimited combinations of data elements — including demographic data.

The system provides a number of reports, and data can be exported and manipulated however it is needed.

Patient Education

MedcomSoft has integrated patient education from wired.MD™. The materials available include over 2,000 items, many available in up to 8 languages, and range from health education videos, to text handouts, to peer-reviewed health websites. Dr. Valdez reads each handout prior to distributing it and has been pleased with their quality. The system provides a wide array of resources in Spanish, which is a benefit because at any given time, up to 30% of her patient population speaks only Spanish.

f. System Implementation

The clinic's goal for implementation was that the entire staff be able to use MedcomSoft Record for all aspects of clinical operations by the conclusion of on-site training. The objective of completely paperless operations was set for 90 days after go-live. This aggressive target setting was made possible by the work done in advance of on-site training, both by Valdez Family Clinic and by MedcomSoft.

Pre-implementation preparations

At the clinic, as with the system's selection, the implementation was also collaborative. The principal pre-implementation responsibilities, defined by role, follow:

Office Manager: Worked with local IT consultant to select, install, and test hardware and software to ensure the clinic was technologically ready for go-live.

MA's: Developed lists of immunizations, labs, and studies ordered most frequently so that order entry screens could be quickly customized.

Clinicians: Developed workflows for the most common visits. These workflows were integrated into forms and protocols, custom to Dr. Valdez's practice patterns, both by Dr. Valdez, the nurse practitioner then on staff, and by MedcomSoft's clinical training staff.

IT consultant: Provided a turnkey selection, installation, testing and support package for hardware. Dr. Valdez wanted the peace of mind that comes with a personal, ongoing relationship with a local IT resource. The consultant had prior experience in medical office technology, having been an IT director for a large medical group.

Because MedcomSoft Record is a suite of office tools, no integration with practice management or billing software was necessary.

From the very beginning of the EHR project, the culture at Valdez Family Clinic was supportive of the change. Each staff member shared a vision of the benefit: that once in place, MedcomSoft Record would make everyone's job easier. In the months preceding implementation, Dr. Valdez recalls overhearing comments such as, "This [task] will be so much better once we get the EHR on board," or "We won't have this problem once we have MedcomSoft. These labs will not get lost." At the same time, the staff knew implementation would change the way they worked, and that it would require a period of adjustment.

Training protocols

Dr. Valdez looked to MedcomSoft for their expertise in recommending a training protocol that would be minimally disruptive to her practice.

Training began with web-based classes, using a screen-sharing program that enabled the instructor to give control of the desktop to the person being trained. The classes started three weeks prior to trainers arriving on site, and were organized by functional areas, so only those users expected to perform a specific process were trained in that process. Prior to each session, the staff downloaded and read the relevant portions of MedcomSoft Record's user manual as pre-work.

The web-based training was particularly effective because the remote trainer used what would be the Valdez Family Clinic's software. Although hosted remotely, the clinic staff used their own workstations, maneuvering and clicking through the screens they would see, using their passwords and IDs to log in and log out, creating the pick lists and forms they would use in the

course of their work after implementation. A certain degree of customization of the system was a by-product of training.

Dr. Valdez also appreciated the ability to learn the software in her own office. Her sessions were scheduled between 12 and 2 PM. She saw patients in the morning, then attended training during and extended lunch hour, and returned to treating patients in the afternoon. During her web-based training sessions, she too created custom protocols and other forms specific to her practice style, using the forms generator.

MedcomSoft created forms for Dr. Valdez as well, and by the time the trainers arrived in San Antonio, many were finished and ready to be tested. The remaining protocols were developed with MedcomSoft's help the weekend prior to go-live. Due to the training, Dr. Valdez and the staff were familiar with maneuvering among the screens and entering data prior to the trainers' arrival.

Trainers arrived on a Saturday, giving the clinic two days of preparation prior to seeing the first patient. At no time during the web-based or on-site training was it necessary to close the office, or for Dr. Valdez or any of her staff to leave.

Go-live was set for Monday, September 25, 2006. MedcomSoft's training protocol was to schedule one patient per hour, per provider, on the first day of go-live, and increase the patient load as the week of training proceeded. On the second day of on-site training, the clinic went to two patients an hour, per provider. By the last day of training, the clinic was already approaching its usual patient capacity. As a result of this scaling, the week of training was not particularly hectic. Patient reaction was very positive, and many expressed excitement at being part of the training process.

The goal of the first few days of training was to test the custom protocols, forms, and orders. As a family practice, the clinic sees a wide range of problems each day. During each training encounter, the staff was careful to be thorough, making sure all the forms and protocols supported efficient work. If any problems presented themselves, the trainers fixed them on the spot, tweaking forms and protocols, which were tested on the next patient.

Data migration from paper charts

Clinic staff pulled the paper chart for established patients the week prior to their scheduled visit. The contents were scanned into the system and the resulting image files were attached to the electronic chart. Demographic information was entered at this time and confirmed at patient check in.

New patients are entered in to the system as they present for treatment.

Difficulties encountered

The sole difficulty encountered during implementation was related to billing. MedcomSoft Record is pre-configured to certain clearinghouses for the electronic processing of claims. Valdez Family Clinic uses THIN to processes as many as 1,000 patient claims a month. At implementation, against expectation, the system would not communicate with THIN.

MedcomSoft resolved the problem within a few weeks, but during that time, it was impossible to be truly paperless—which caused a delay in achieving the goals of the implementation.

Otherwise, the system performed as well or better than described.

g. Current State

All employees of Valdez Family Clinic use MedcomSoft Record to accomplish their work. Effectively, the clinic is paperless. Faxes received from other providers are sent via fax server directly into the system. All of the referrals are done using the system. All lab orders, prescriptions and refill requests are accomplished through the system. Correspondence is generated and faxed from the system. All coding, billing, scrubbing, transmission, and posting of claims are being done on the system. All in-person and telephone encounters are recorded on the electronic chart. When paper-based information is received from other providers, it is scanned in to the system.

Dr. Valdez’s patients are happier because they have more and better knowledge about their healthcare. The EHR actually empowers them, Dr. Valdez has learned. They will call a pharmacy, for instance, and be told that a prescription was not called in. Patients now respond, “No, it was not *called* in. I was right there when Dr. Valdez *emailed* it to you.” Or they’ll say, “My doctor does not fax them in anymore. Look in your computer. She sends them by e-mail.” It is common for patients to ask at the end of an encounter to watch the computer screen and see the prescription transmission read “OK.”

Much of Dr. Valdez’s new business is word-of-mouth, and already she has new patients in the clinic who say on their first visit, “Can you just email the prescription like you did my cousin’s? I use the same pharmacy.”

VALUE

h. Success in Meeting Objectives

Specific Business Objectives

- Return to pre-implementation patient flow capacity within 90 days
- See the same number of patients in a 4-day rather than 4.5-day work week
- Improve office processes efficiency. Metric for success: decreased overtime labor costs
- Increase the accuracy of coding. Metric for success: anticipated increase in billing
- Move billing in-house without adding to staff: make coding, billing and posting efficient, freeing staff time to work AR, which for Dr. Valdez’s practice is very important
- Submit claims electronically to THIN, a free, all-payer clearing house developed by Blue Cross Blue Shield of Texas

With the exception of billing through THIN, all success criteria were achieved or exceeded within four weeks of go-live. The patient flow metric was surpassed on October 16, two weeks after the conclusion of on-site training. On a per-provider basis, the clinical workload has not

dropped since then. Prior to implementation, Dr. Valdez would see 40-45 patients in a day. In the three months after implementation, her low day was 45 and her high 57 patients.

The chart below shows the six months prior to implementation and the six months following implementation. Note that Dr. Valdez saw over 730 patients on her own in February, after the clinic's nurse practitioner left employment.

Patient Visits: Six months prior to implementation		
Month	Visits	Provider(s)
Mar-06	719	Dr. Valdez & partner
Apr-06	586	Dr. Valdez
May-06	652	Dr. Valdez
Jun-06	632	Dr Valdez & Nurse Practitioner
Jul-06	691	Dr Valdez & NP
Aug-06	948	Dr Valdez & NP
Patient Visits: Six months after implementation		
Month	Visits	Provider(s)
Oct-06	721	Dr Valdez & NP
Nov-06	772	Dr Valdez & NP
Dec-06	532	Dr Valdez & NP
Jan-07	820	Dr Valdez & NP
Feb-07	732	Dr Valdez
Mar-07	579	Dr Valdez

General process efficiency has been improved by the EHR. Prior to implementation, the clinic operated 10 hours a day Monday to Thursday, and a half-day on Fridays. That half-day was paid at time-and-a-half for the hourly staff. After implementation, the clinic has gone to a 4-day work week, with Fridays reserved for Dr. Valdez's various administrative, business, or continuing education tasks. The clinic sees patients during the same 10 hours Monday to Thursday, and the number of patients has increased, all while cutting back overtime. The staff enjoys a long weekend every week, and that's good for morale.

The improvement in charge capture was staggering. The month prior to implementation, August 2006, was the clinic's busiest month. It received 948 patient visits, for which \$91,904 was billed. November 2006, two months after implementation, was its most lucrative month. The clinic had 772 visits, for which \$94,175 was billed. (See full financial details in Section i, "Costs and Benefits Offsetting Costs")

Billing has been moved in-house, netting a savings of \$31,000 a year, which was the average yearly cost of the third-party billing company. This savings alone offset the cost of software. In each succeeding year, this savings will be realized as increased revenue for the clinic. An existing staff member handles billing, resulting in no increased payroll expense.

Using the EHR, Dr. Valdez is done coding a patient encounter when the note is done. At the end of an encounter, she clicks two buttons on her tablet PC, “E&M” and “OK,” and the encounter is placed into the biller’s inbox. Before the EHR, coders had to read the entire note, counting for bullet points. If, in a certain instance, Dr. Valdez performed a certain review or history, but neglected to note it, the coder could not count that work for billing purposes.

The coding functionality was a significant factor in Dr. Valdez’s selection of the system. She credits it with giving her the flexibility to practice medicine the way she wants to. Because of the system’s ease of use, she can devote twice as much time to the patient during an encounter.

As of December 31, the clinic was fully transitioned, including billing through THIN. At that point, Dr. Valdez considered the implementation 100% successful.

Clinical Objectives

- Continuous access to up-to-date patient chart
- Eliminate problems related to lost, misfiled, or unreported labs
- Improve patient care with medical alerts

With MedcomSoft Record, all staff members can access and make modifications to the same chart at the same time. Further, they can all task each other items for particular charts. Telephone calls are logged in as they happen. No longer does communication depend on Post-It Notes that might fall off the wall, adhere to the wrong chart, or get buried under papers on Dr. Valdez’s desk.

The embedded CPOE system is used for all labs and prescriptions, which not only protects against medical errors, but also speeds order entry and organizes the results. Lab results are now delivered to Dr. Valdez’s primary work screen for her review. If a result is missing, the EHR provides a medical alert flag on the chart.

Medical alerts for health and disease management are another beneficial feature. These are configured for her patients based on age and condition, and are automatically applied to a specific chart by the system. In this version of the software, alerts present themselves as red diamonds on the patient’s cart. By clicking on the diamond, Dr. Valdez is alerted that this patient is due, for instance, for a mammogram or tetanus booster, or that a diabetic patient needs his A1C today. The same is true for immunizations.

Other Objectives

- Finish charting within an hour of seeing the final patient of the day
- Be home to enjoy evenings with her family

In this category as well, Dr. Valdez’s expectations have been exceeded. Using MedcomSoft Record, her charting is finished — labs and referrals are ordered, prescriptions are emailed, and the encounter is coded and ready for billing — before she leaves the patient.

As a result, Dr. Valdez is indeed home in the evenings — sometimes before her husband, a fact that continues to amaze and delight her family. The effect on her personal life has been more

dramatic than she had anticipated. Now she finds herself in need of a hobby to replace the time she'd grown accustomed to spending on charts in the evenings.

A final goal — small but significant — was to select a system that will be scalable as her practice grows. The system she selected is very user friendly, has a great deal of adaptability and allows for personalization quickly and easily. Because the system performs all these functions, she does not have to concern herself if practice management, billing, CPOE, or other software will remain compatible with one another after an upgrade or if the vendors will stay in business to support her as she grows.

i. Costs and Benefits Offsetting Costs

Overview

As a result of implementing the EHR, Valdez Family Clinic anticipates a net revenue increase in the first year of \$187,118.

- The total cost of implementation, including hardware and training, was \$56,810. (Details below)
- The return on investment has been better than anticipated. Valdez Family Clinic has seen an average billing increase of \$21.93 per patient visit. Based on 9,600 yearly visits, this will increase 2007 billing by \$210,528. Further, cost avoidance of \$33,400 will bring total financial improvement to \$243,928. (Details below)

Costs

Hardware:

\$22,000 7 computers (CPUs), 3 IBM ThinkPad tablets, wireless equipment, the server, 2 scanners, and a backup system and installation.

\$7,100 Non-EHR software: Windows software for the computers and server and Sonic Wall software, etc.

EHR:

\$10,813 MedcomSoft license fee

\$8,950 Training

\$3,352 Travel and expense for trainers

\$3,135 Year 1 maintenance and royalty fee

\$1,460 Year 1 support fee

Total Cost Year 1:

\$56,810

Return on Investment

The chart below illustrates billing averages for 6 months on either side of the September 2006 implementation.

	Billing	Patient visits	Average
6 months prior to implementation			
Mar-06	64,190	719	\$89.28
Apr-06	55,150	586	\$94.11
May-06	39,809	652	\$61.06
Jun-06	41,985	632	\$66.43
Jul-06	64,959	691	\$94.01
Aug-06	91,904	948	\$96.95
	\$357,997	4228	\$84.67
6 months after implementation			
Oct-06	72,332	721	\$100.32
Nov-06	94,175	772	\$121.99
Dec-06	54,004	532	\$101.51
Jan-07	56,348	820	\$ 68.72
Feb-07	84,205	732	\$ 115.03
Mar-07	81,984	579	\$141.60
	\$443,048	4156	\$106.60

Average increase per patient visit: $106.60 - 84.67 = 21.93$

Average increase per visit, multiplied by annual visits: $21.93 \times 9600 = \$210,528$

Cost avoidance: \$31,000 Outside billing company
 \$ 2,400 Decreased overtime

Total Year 1 increase in billing (estimated): \$210,528

Total Year 1 cost avoidance: \$33,400

Summary

Total improvement: \$ 243,928.00

Total costs: \$56,810.00

Net ROI after Year 1: \$187,118.00, for a return of more than 325%

LESSONS LEARNED

j. Critical Success Factors

Attitude made the difference for the Valdez Family Clinic. The organization made a group commitment to transition to an EHR. Everyone in the clinic was made part of the selection process, so the specific EHR was not something imposed on the staff. Dr. Valdez believes that

people tend to support their own decisions — and as they had committed to the transformation as a team, they never looked back. None of the staff exhibited a “let’s see if it works” attitude.

Certainly selecting the appropriate tool was another critical success factor. Dr. Valdez’s advice to clinics considering an EHR is to find a program that has a good fit with physician and staff personality. The system must complement the physician’s practice style, and the mode data entry must be comfortable.

She suggests before spending much time evaluating systems, develop an “ideal” EHR. Ask, “What would an ideal EHR do?” Then find the product that comes closest to it. You may never find a system that meets all of your criteria, but you will find one that meets the major ones.

Moving a practice from paper to EHR is easy to do with the right tool, but impossible without the right attitude. In the clash between culture and technology, culture wins.