A REPORT ON THE FIRST YEAR OF THE SAN MATEO COUNTY ADULT COVERAGE INITIATIVE AND SYSTEMS REDESIGN FOR ADULT MEDICINE CLINIC CARE

Submitted to:

The San Mateo County Health Department

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Introduction

In early 2008, San Mateo County embarked on a comprehensive "Health System Redesign and Adult Coverage Initiative." This effort aims to address the financial sustainability of the San Mateo Medical Center (SMMC) system through improved effectiveness, efficiency, and care coordination of the uninsured and underserved. While the redesign has been officially underway for only one year, leaders within the SMMC have been working (in a less coordinated manner) to achieve many of these goals for many years.

This report summarizes the findings from the first six months of the Urban Institute's three and a half year evaluation of San Mateo County's Health System Redesign and Adult Coverage Initiative. This overall evaluation is designed to

- Evaluate the impact of the ACE (Access and Care for Everyone) coverage initiative, and the WELL program
- Assess the activities related to the county's efforts to redesign the health system; and
- Measure the impact of these innovations.[1]

The preliminary findings presented here draw on the first site visit conducted in August 2008, which included in-depth interviews with 43 key stakeholders and clinic managers and staff[2] as well as waiting room observations at three clinics. Findings from the site visit offer insight into clinic operations, efficiency innovations, and disease management efforts. We also present data on demographic characteristics and health service use for the initial group of ACE (the Adult Coverage Initiative) enrollees. And finally, we present baseline clinic-level data, collected in 2007–2008 before many of the system design activities began, in order to illustrate some of the challenges facing the SMMC system and Ravenswood Family Health Center and highlight some of the county clinics' achievements.

[1] See Appendix A for a list of research questions and data sources for the evaluation.
[2] See Appendix B for a list of those interviewed.

The purpose of this report is to provide the context in which the system redesign and ACE coverage initiative are taking place; to describe initial implementation of the program; to update the Board of Supervisors on the current status of the evaluation; and to present a synopsis of the next steps planned for the evaluation.

Background and Context: San Mateo County

San Mateo County is among the wealthiest counties in the nation, with a median household income of approximately $83,000 in 2007 (U.S. Census Bureau 2009). It is also one of the most costly places to live, however, and a substantial number of the county's residents struggle economically. While the costs of housing are not rising, they remain high, with the median price for a single family home in San Mateo County at $777,777 in 2008 (San Mateo County Housing Authority 2008). The county has historically benefited from jobs generated by the technology industry, San Francisco International Airport, and the Port of Redwood City, but the current economic recession is taking its toll as in other parts of the country.

Demographic trends are affecting the demand for county health and social services. San Mateo County is ethnically diverse, and becoming increasingly so, with continued immigration of Latino and Asian minorities. The population of the county is also aging (San Mateo County 2008).

In spite of the relative prosperity of the county, many residents lack health insurance coverage. Approximately 11 percent of nonelderly adults (ages 19–65) in San Mateo County have no insurance coverage (California Health Interview Survey 2007), with fully 31 percent of adults in the county below 200 percent of the federal poverty level (FPL) being uninsured. We also heard from both patient advocates and private providers that comprehensive employer-sponsored insurance is eroding, requiring increased patient cost sharing (premiums, deductibles, and copayments). The 2008 San Mateo Health/Quality of Life Survey found that 23.7 percent of

employed residents report that their job does not offer health benefits to employees, a significant increase from 2001 (San Mateo County 2008).

The San Mateo County Health Care Safety Net

The primary sources of care for uninsured and some underinsured individuals in the county are safety net clinics including the San Mateo Medical Center (SMMC) clinics, Ravenswood Family Health Center, two free clinics, and some private providers.

The SMMC operates 11 community clinics, with approximately 250,000 patient visits annually. Six of these clinics are dedicated to adult medicine. There are two north county sites (the Daly City Clinic and South San Francisco Clinic); one mid-county site (the Main Campus/Innovative Care Clinic[3]); the Coastside Clinic; and two clinics serving the south county (Fair Oaks and Willow). In addition, the SMMC operates a small public hospital with both medical and psychiatric emergency rooms, 40 inpatient acute beds, 7 intensive care beds, 34 acute psychiatric beds, and 30 long-term care beds (all in San Mateo), and a 270-bed long-term care facility (in Burlingame).

The county medical services are heavily used, and demand for services is greater than can be met. There are approximately 1800 monthly patient visits at the Main Campus/Innovative Care Clinic, with somewhat smaller volumes at the Willow Clinic (approximately 1,700), and Daly City, Fair Oaks with 1,000 to 1,500 monthly visits each; followed by the much smaller South San Francisco and Coastside clinics (see Figure 1)[4]. In addition to the county clinic system, some uninsured and underinsured patients in San Mateo County are served by the Ravenswood Family Health Center, a federally funded Section 330 Community Health Center (FQHC). Ravenswood registers approximately 30,000 patient visits annually at its two sites.

[3] The Main Campus Adult Clinic recently changed its name to the Innovative Care Clinic.
[4] In addition to these clinics, the county operates four pediatric clinics, two teen/youth clinics, the Ron Robinson senior care center, four dental clinics, and obstetrics and several other specialty clinics at the main campus site.

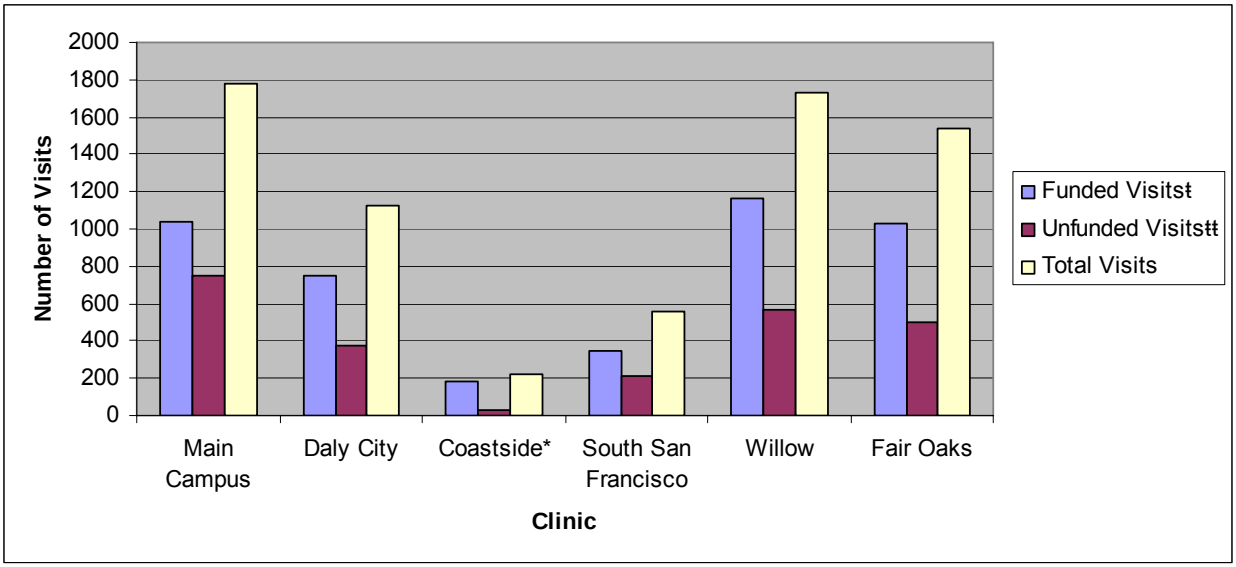
Ravenswood has one clinic in East Palo Alto, and another in Menlo Park, where it took over the former SMMC Belle Haven Clinic facility. Ravenswood provides adult medical care, obstetric and gynecological care, and pediatric care. The monthly volume at Ravenswood is similar to that experienced at the larger SMMC adult medicine clinics.

In addition, two free clinics operated by Samaritan House supplement the county services and Ravenswood Family Health Center. Samaritan House is a not-for-profit clinic that provides primary care services, as well as dental services, eye exams, and a pharmacy supplied with donated medicines. Samaritan House manages 3,000 to 4,000 primary care visits a year. Care is completely free and the clinic operates with volunteer physicians, nurses, and dentists. A few area hospitals will see referred patients free of charge; though obtaining hospital care for this population remains a challenge for Samaritan House.

Given the heavy demand on the safety net, a great challenge for the San Mateo County safety net system is to provide preventive and primary care, rather than episodic care. In addition, many of the uninsured and underinsured individuals served by the county system have chronic medical conditions, and providing continuing chronic care management poses an increasing strain on the safety net.

As shown in **figure 1**, a substantial portion of visits at SMMC are "unfunded" (no source of funding other than county general revenues). Medi-Cal is the single largest source of reimbursement for SMMC clinics. Since county clinics are designated as Federally Qualified Health Centers (FQHCs) by virtue of the county's receiving a Section 330 Healthcare for the Homeless grant, the county can bill Medi-Cal at cost. Ravenswood is also an FQHC and receives cost-based Medi-Cal reimbursement, but treats a higher proportion of uninsured ("unfunded") individuals. As a result, seeing Medi-Cal patients is relatively profitable for the county safety net clinics, in stark contrast to private providers who are reimbursed at very low rates, and who experience a greater loss when seeing Medi-Cal patients.

Figure 1. Monthly Average Number of Visits at SMMC Adult Medicine Clinics, July through September, 2008



Source: SMMC clinic statistics

* Coastside data shown are for all visits, not exclusively adult medicine visits
t Funded visits include Medicare, Medi-Cal, CHDP, private insurance, Healthy Families, Healthy Kids, ACE, and all other public programs for which the county receives outside funding.
tt Unfunded visits include WELL, full or partial payment from the patient, no pay, Medi-Cal pending, and undetermined.

While patient care in the county safety net is perceived by the stakeholders we interviewed to be of generally high quality, patients, particularly new patients, regularly experience access difficulties. We were told that a new patient may wait for weeks (or even months) to schedule a primary care visit at SMMC clinics.

Access to specialty care can be even more challenging. A 2008 Health Management Associates (HMA) assessment of SMMC's health services found such access difficulties. For example, in the SMMC clinics, the mix of services is 75 percent primary care vs. 25 percent specialty care, while in some other large public hospital systems this proportion is reversed (HMA 2008). The county is oriented toward achieving a more balanced mix, and is working to establish more stable and broader arrangements with private delivery systems for specialty care.

At present, patients who require specialty care that SMMC does not provide are referred to other providers, such as the Mills-Peninsula Health System and Sequoia Hospital.

The increasing demand for health services at the SMMC, and the increasing health problems of those served by the clinics, have led to growing financial burdens for the county. California's "Section 17000" law places responsibility for caring for the medically indigent on the county. This financial obligation, which is increasing more rapidly than county revenues, contributes to a "structural deficit" of $41 million in the county budget (costs which must be covered by the general fund). HMA (2008) projects that, absent substantial changes, the county subsidy for healthcare alone could reach or exceed $80 million by FY 2011.

There are also a handful of private providers in the area that provide primarily inpatient services to the county's publicly insured and underinsured/uninsured population. In particular, Seton Hospital (a Daughters of Charity hospital) provides a substantial amount of Medi-Cal services to residents in the northern part of the county, and Lucile Packard Children's Hospital (a Stanford affiliate) provides a sizable amount of Medi-Cal services to south county residents.

Blue Ribbon Task Force on Adult Health Care Coverage Expansion

These critical issues—the growing number of uninsured and underinsured individuals in the county; the limited capacity of the health care safety net; the structural deficit in the county budget due to the need to finance services for the uninsured at the SMMC; and the limited role of the private sector in meeting that need—led the Board of Supervisors to form a Blue Ribbon Task Force in 2006. The mission of the task force was to "explore options for providing comprehensive health access and/or insurance to uninsured adults in San Mateo County living at or below 400 percent [of the] Federal Poverty Level." The task force was made up of 34 members representing county and city government, health providers, community advocates, and employers. (See **table 1** for a list of members, their affiliations, and their workgroup

assignments). The task force held its first meeting on September 23, 2006, and established three sub-committees, with distinct goals:

- **Population Definition Workgroup**—to identify the size and characteristics of the uninsured adult population by income group.
- **Health Care Model Development Workgroup**—to establish a model delivery system for uninsured adults
- **Financing Workgroup**—to define options for covering the cost of uninsured adults.

The final recommendations of the task force, preliminarily approved in July 2007, include the following:

- To expand coverage to all uninsured adults ages 18-64 below 400 percent of the FPL;
- To establish a unified administration for publicly-funded coverage programs;
- To emphasize coordinated care management with a focus on prevention, primary care, and chronic care management;
- To establish a community health network for the underserved, with a strengthened publicly-funded safety net (SMMC and Ravenswood) playing a key role, and the private sector playing an enhanced role;
- To finance the proposed adult coverage expansion through shared responsibility of individuals, employers, and the community at large.

Table 1. Blue Ribbon Task Force Members with Workgroup Assignments

ORGANIZATION	TASK FORCE REPRESENTATIVE	ORGANIZATION WORKGROUP REPRESENTATIVE		
		Population Definition	Healthcare Model	Financing
Board of Supervisors	Supervisor Adrienne Tissier, Chair			
Board of Supervisors	Supervisor Jerry Hill, Chair			
Burlingame City Council	Ann Keighran		√	
Central Labor Council	Shelley Kessler	√	√	√
Community Member	Gordon Russell			
County Manager's Office	John Maltbie			
Health Department	Srija Srinivasan	√	√	
Health Department	Louise Rodgers	√	√	
HPSM	Ron Robinson			√
HPSM	Maya Altman			√
Human Services Agency	Beverly Beasley-Johnson	√		
Kaiser Permanente	Linda Jensen		√	
Legal Aid Society of San Mateo County	M. Stacey Hawver	√	√	√
Medical Society	Gregory Lukaszewics		√	
Medical Society	John Hoff			
Mills-Peninsula Health Services	Bob Merwin	√	√	√
Palo Alto Medical Foundation	Cecilia Montalvo		√	√
Peninsula Healthcare District	Susan Smith			
Peninsula Interfaith Action	Barbara Keefer	√	√	√
Peninsula Interfaith Action	Tom Quinn/Alvin Spencer	√	√	√
Ravenswood Family Health Center	Luisa Buada		√	
Redwood City Chamber of Commerce	Keith Bautista			√
Redwood City Council Member/Mayor	Barbara Pierce		√	
Samaritan House	Kitty Lopez		√	√
SAMCEDA	Dan Cruey			√
San Mateo Chamber of Commerce	Linda Asbury			√
San Mateo Council Member/Mayor	Carole Groom			
SMMC	Sang-Ick Chang	√	√	√
SMMC	Susan Ehrlich	√	√	√
Sequoia Healthcare District	Stephani Scott			√
Sequoia Hospital	Glenna Vaskelis		√	
Seton Medical Center	Bernadette Smith	√	√	√
Silicon Valley Community Foundation	Frank Lalle			√
Stanford University Medical Center	Gerald Shefren			

Sustainable financing options were still being considered by an offshoot of the financing workgroup at the time of our site visit in August 2008.

We spoke with numerous members of the Blue Ribbon Task Force during our site visit. These members were unanimously supportive of the mission of the task force, and commented on the value of the effort. Specifically, task force members expressed appreciation for the broad task force membership, and cited it as essential to achieving buy-in on some of the hardest issues discussed. Individuals that often meet on very different terms came to a better understanding of

each other's priorities and constraints. In addition, members were very appreciative of the support provided by county employees in gathering data and information and keeping the group "on task."

Despite generally congenial feelings, the issue of how to finance the coverage expansion in a sustainable manner persisted at the time the Blue Ribbon Task Force recommendations were made. At the time of our visit, two prominent financing options were being considered—(1) an employer "spending requirement" and (2) a sales tax—and both faced considerable opposition. Labor advocates are strongly in favor of an employer spending requirement, but passage would require action by the 20 different city councils in the county, as well as the county supervisors for unincorporated areas. A sales tax, on the other hand, would require a ballot initiative and a two-thirds majority for approval, yet there is strong anti-tax sentiment in the county, and a recent initiative for a tax to improve county parks failed.

Part of the financing problem has been solved for the near term with a state waiver as described below, which has allowed San Mateo County to expand coverage for uninsured adults up to 200 percent of poverty for three years. As a result, ongoing financing discussions are focused on whether and how to cover the group between 200 and 400 percent of the FPL, and how to sustain financing for the existing coverage program beyond the three year pilot.

The San Mateo County Adult Coverage Initiative

San Mateo is one of ten California counties to receive a Health Coverage Initiative grant from the state's Hospital Financing Waiver. This grant, awarded in September 2007, provides the county with up to $7.5 million annually for three years, enabling coverage for low-income adults who would not otherwise qualify for public insurance. This new program is named the San Mateo Access and Care for Everyone Program, or ACE. ACE helps to finance the county's adult coverage initiative, and has been enrolling patients since September 2007.

ACE resembles an existing county coverage initiative, the WELL program, which has been in place for nearly two decades. From its inception, the purpose of WELL has been to co-ordinate care for patients served by the SMMC, and thus all individuals who enroll must receive care from the SMMC clinics and other providers. The county has always financed WELL through discretionary general fund dollars. Funding for ACE is expected to relieve some of the financial burden resting on the county.

ACE and WELL offer nearly identical benefits, but the eligibility criteria differ. Low-income (<200 percent of the FPL) uninsured adults (19-64) who reside in San Mateo County, and are legal permanent residents or U.S. citizens, are eligible to enroll in ACE. ACE applicants must formally submit to the DRA (Deficit Reduction Act) test of citizenship that is applied to Medi-Cal applicants, because the program is funded through a state Medicaid waiver.[5] Some perceive this as a barrier to enrollment because of the burden of locating and producing the required documentation. ACE enrollees cannot be eligible for Medi-Cal (with or without a share of cost) and must not be enrolled in private or employer-sponsored health coverage. Currently there is a three month waiting period required between having employer-sponsored coverage and becoming eligible for ACE.

WELL does not require citizenship or permanent residence for enrollment, and is open to a broader age range (e.g., the elderly), but it does impose an asset test, which ACE does not[6]. Now that ACE is in place, the WELL program will become smaller and cover only those individuals who do not quality for ACE, primarily undocumented individuals. To date, approximately 40 percent of ACE enrollees were previously enrolled in WELL and 60 percent are new applicants.

[5] The 2005 Deficit Reduction Act imposes citizenship documentation requirements on applications and recipients, including children.
[6] The county is considering eliminating the asset test for WELL.

Covered services for WELL and ACE enrollees are similar and quite comprehensive, including primary care, chronic care management, emergency room (ER) use, and prescription drugs. Enrollees are required to make co-payments for visits ($40 for an ER visit, $10 for an outpatient visit—if paid at the time of the visit, $20 if billed for an outpatient visit—and $7 for a prescription), and there is an annual fee of $240 per year. Enrollees are given the option of making these payments in installments or paying the annual fee in full and receiving three $10 vouchers to offset copayments. ACE and WELL enrollees who are below 100 percent of the FPL (about half of the ACE population) are exempt from annual fees and co-payments. In addition, if WELL enrollees do not use any services for a year they are entitled to a full refund of the annual fee they have paid. If ACE enrollees transfer to Medi-Cal during the year they will receive a prorated refund of the annual fee paid. Key informants do not perceive these fees as barriers to enrollment in either program.

ACE and WELL enrollees are required to establish a primary care provider at one of the SMMC clinics or at Ravenswood Family Health Center. (Receiving care at Ravenswood became an option for WELL enrollees at the beginning of 2009.[7]) Each clinic is linked to a specific pharmacy from which their patients can fill prescriptions.[8] ACE and WELL patients can use the ER at the SMMC, but if they go to the ER at other hospitals it is not reimbursed by either program. In addition, ACE patients are entitled to acupuncture and home health services, though at the time of the site visit there were no providers yet contracted to provide these services.

Eligibility Determination & Enrollment: The County's adult coverage initiative seeks to enroll every patient seen at SMMC in an appropriate program through which their care and service costs can be managed and financed. The first priority is to enroll eligible individuals in Medi-

[7] RFHC became a primary care provider for WELL on January 1, 2009.
[8] This arrangement ensures 340B pricing, which allows qualifying providers to purchase drugs for outpatient use at substantially reduced rates--approximately 20 percent below the Medi-Cal price.

Cal, and if the patient does not qualify for Medi-Cal he or she will be enrolled in ACE, WELL, or a discounted care program. Community Health Advocates (CHAs), Certified Application Assistors (CAAs), or Benefits Assistors (BAs) help to determine what coverage programs individuals are eligible for, and educate them on how to use the program in which they are enrolled.[9] At the clinic sites, enrollment often occurs just prior to or after a patient is seen.

CHAs and CAAs are employed by the county health department or by community-based organizations and located at the main campus of SMMC, other SMMC clinics, Ravenswood Family Health Center, Samaritan House, and several community based settings (i.e., schools and family service agencies). BAs are employed by the county Human Services Agency (HSA) and are located either at HSA offices, or out-stationed in clinics or other locations. CAAs, CHAs, and out-stationed BAs use a web-based tool, called **One-e-App,** to screen and enroll patients in appropriate health coverage programs. The application uses an interactive, interview approach to help simplify data collection and entry. One-e-App helps to improve the quality and completeness of applications, providing notification if data are entered incorrectly or a required field is incomplete. English and Spanish versions of the application are available, and patients can also select their provider at the time of enrollment using One-e-App.

BAs at HSA rely on a different automated system called **Cal-WIN**, which is used to determine eligibility for welfare and related benefits (including Medi-Cal). Automated data from One-e-App can be transmitted directly to Cal-WIN, but not the reverse. Most BAs at HSA sites enroll only in Medi-Cal, but out-stationed BAs, CHAs, and CAAs enroll in all available coverage/insurance programs. For ACE and Medi-Cal, CHAs and CAAs do the initial screening through One-e-App, and then send along the application to a BA who determines eligibility. While there are inefficiencies that result from using two separate enrollment systems which do

[9] CAAs are state certified, while CHAs are not.

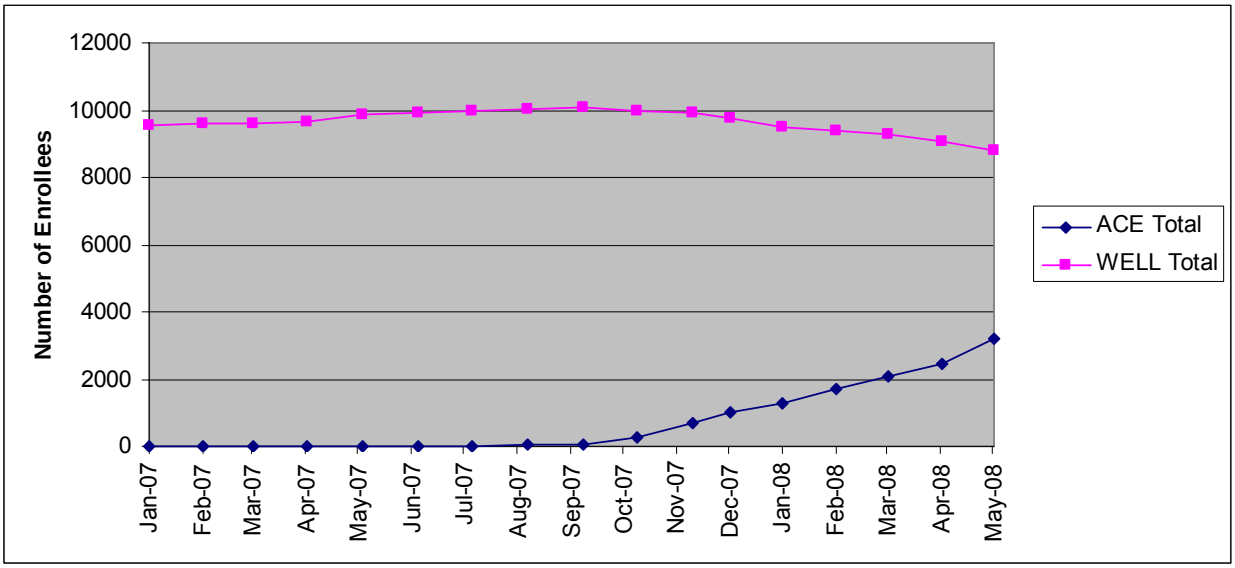
not communicate directly, there is no definite plan to move to a single enrollment system in the near future.

In spite of its goal to provide coordinated care to those using the county health system, there has never been an organized managed care approach to managing the care of WELL enrollees. To avoid some of the uncoordinated care and other management challenges encountered with WELL, the county decided to contract with the Health Plan of San Mateo (HPSM) to manage the ACE program from its inception, and HPSM assumed the same responsibilities for WELL in early 2009. HPSM is well-respected in the county for its success at managing the care of all county Medi-Cal enrollees as well as other public programs such as Healthy Kids.

Early Demographic and Utilization Findings: Enrollment in ACE grew rapidly in the early months of the ACE program, with a concomitant decline in WELL program enrollment (see **figure 2**). By October 2008 about 5100 individuals had enrolled in ACE, more than twice as many enrollees as originally planned.

The Health Plan of San Mateo provided the evaluation team with tables that summarize enrollment and claims/encounter data for an initial cohort of ACE enrollees. These data describe demographic characteristics of enrollees, their clinical diagnoses, their health service use, and the cost of services. The cohort includes adults who enrolled in ACE during the six-month period between September, 2007 and February, 2008, and who remained enrolled for six full months continuously thereafter (N=1,981).

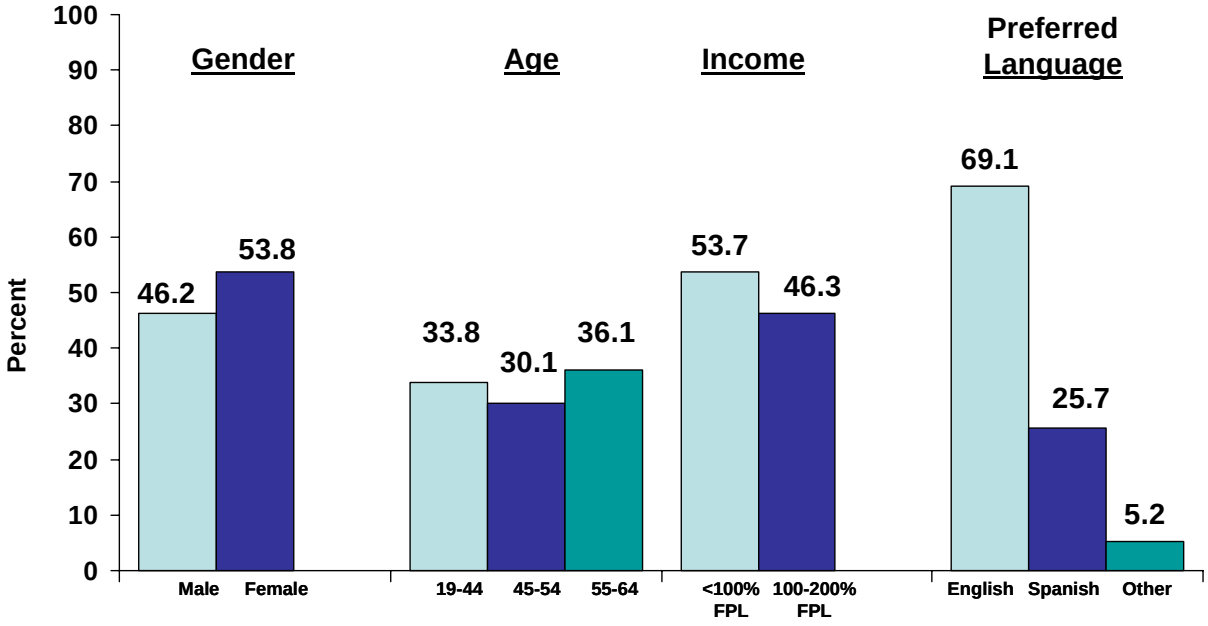
Figure 2. ACE and WELL Enrollment Trends 2007–2008



Source: San Mateo County One-e-App

Figure 3 shows the demographic profile of these early enrollees. The majority (53.8 percent) is female, and the largest age group is 55- to 64-year-olds (36.1 percent). ACE enrollees are very poor, with a slight majority (53.7 percent) having incomes below 100 percent of the federally poverty level. The remaining 46 percent have incomes between 100 and 200 percent of poverty. More than two-thirds of ACE enrollees list English as their preferred language, with most of the remainder preferring Spanish. We know from data collected through the One-e-App enrollment tool that half of ACE enrollees are Asian.

Figure 3. Demographic Characteristics of ACE Enrollees



Note: Based on enrollees who initiated coverage between September 2007 and February 2008, and remained enrolled for at least six months.

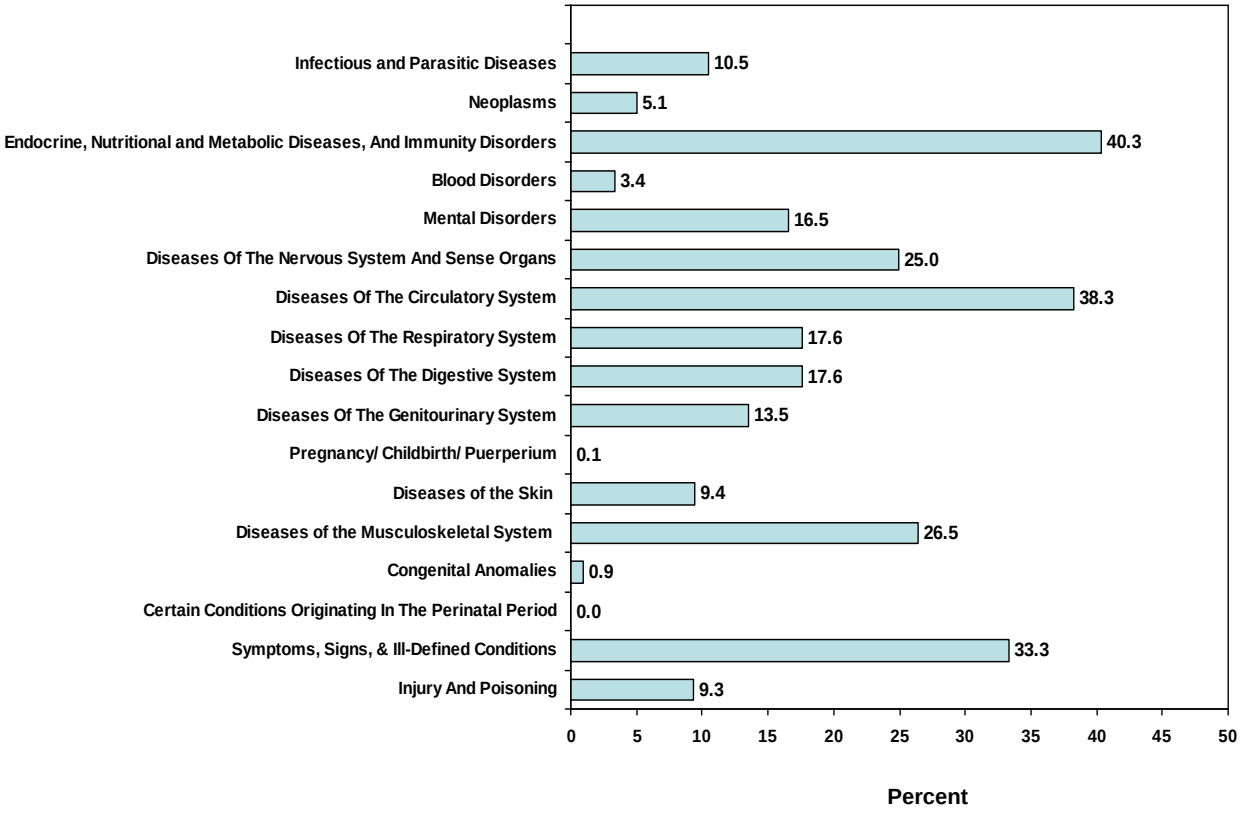
Appendix C table 1 shows these demographic data arranged by primary care provider (i.e., clinic). There is substantial variation by clinic in demographic characteristics of these early ACE enrollees. At the Main Campus/Innovative Care Clinic (N=1,098), the initial wave of ACE enrollees is more often male and younger than at the other clinics. For example, at most of the adult medicine clinics, close to half of enrollees are between the ages of 55 and 64, while only 30 percent are in that age group at the Main Campus/Innovative Care Clinic. In contrast, the age and gender pattern at the main campus is similar to that in the "unassigned PCP" group (N=137). Furthermore, we observe that younger ACE enrollees are more often male, and have higher incomes (between 100 and 200 percent of the FPL). While speculative, it appears that there are two primary types of ACE enrollees: younger males who are not closely attached to a primary

care provider and older females[10] more often attached to the smaller community clinics. These two groups are likely to have very different health care needs.

ACE enrollees have a high prevalence of health conditions. The broad diagnostic categories for early ACE enrollees are shown in **figure 4** and **appendix C table 2**.

For example, 40 percent of ACE enrollees have a diagnosis within the broad category of "Endocrine, Nutritional, Metabolic, and Immunity Disorders." The appendix table shows over 60 percent of enrollees ages 55-64 have a diagnosis in this category. The prevalence of conditions in almost all other diagnostic categories also increases with age.

Figure 4. Diagnostic Profile of ACE Enrollees[11]



Source: Health Plan of San Mateo

Note: Based on enrollees who initiated coverage between September 2007 and February 2008, and remained enrolled for at least six months.

[10] Perhaps these are individuals whose children are grown, and who therefore do not have access to Medicaid coverage.

[11] Percentages do not add to 100, as patients may have co-occurring conditions.

Table 2 illustrates the prevalence of some important specific conditions. A very high proportion of ACE enrollees have hypertension, diabetes, or both (40.7 percent). These patterns show the high need among ACE enrollees for integrated, coordinated services in this population.

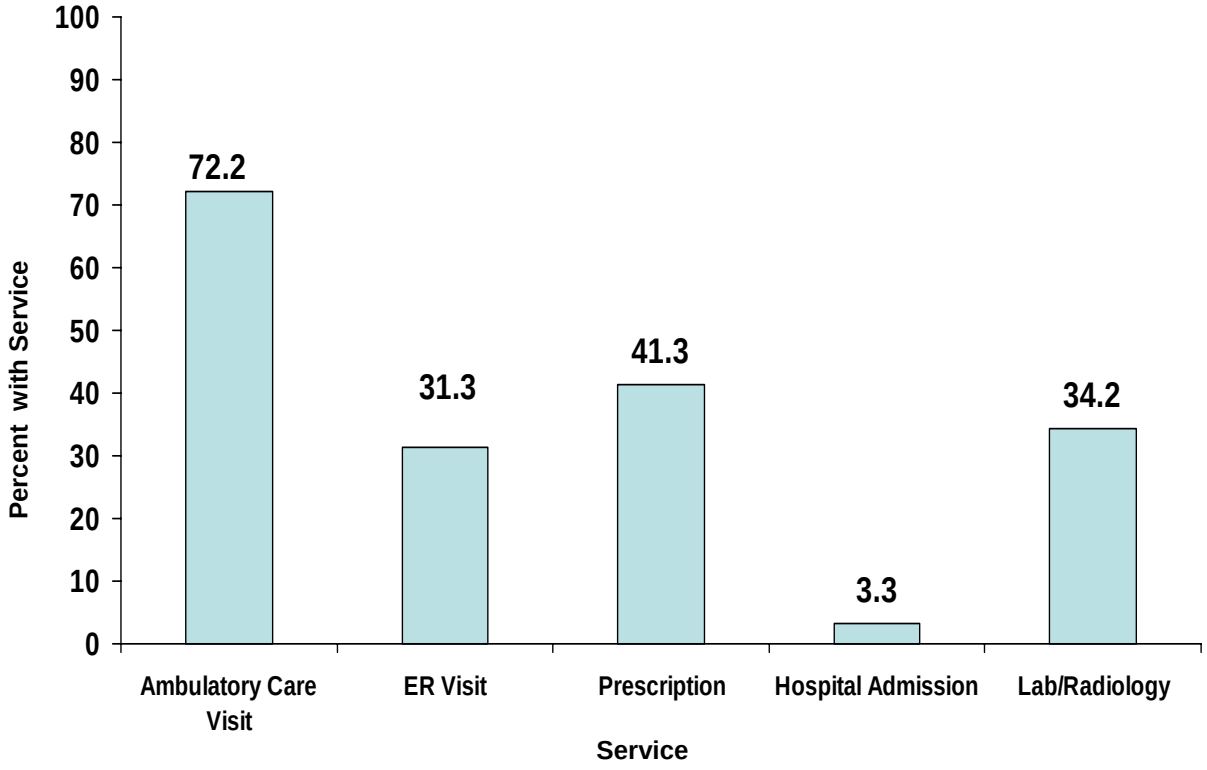
Table 2. Prevalence of Specific Conditions among ACE Enrollees

Condition	N	Percent
Hypertension, without diabetes	413	20.8
Diabetes, without hypertension	121	6.1
Co-occuing Diabetes and hypertension	272	13.7
Total Hypertension and/or Diabetes	**806**	**40.6**
Total N	**1981**	**100**

Note: Based on enrollees who initiated coverage between September 2007 and February 2008, and remained enrolled for at least six months.

Figure 5 shows the use of some critical health care services during the first six months of ACE enrollment that were paid for by the Health Plan of San Mateo. Almost three-quarters had at least one ambulatory encounter, a third had an emergency room visit, 40 percent had a covered prescription, 3 percent had a hospital admission, and a third had a laboratory/radiology service. **Appendix C table 3** shows general consistency across clinics in this pattern for health care services, although some rates vary across clinics especially for ER visits and hospital admissions. Though ACE does not cover charges for ER use outside of the SMMC system, some patients do use ER services at other hospitals. This is an unaccounted for patient cost. In addition, it is possible that reporting of claims/encounter records to HPSM was incomplete for some or all clinics during this period. It will be important to track these patterns over time as data for more enrollees become available.

Figure 5. Utilization of ACE Enrollees Covered by HPSM in the First Six Months Following Enrollment



Source: Health Plan of San Mateo
Note: Based on enrollees who initiated coverage between September 2007 and February 2008, and remained enrolled for at least six months.

Utilization rates for ACE enrollees are relatively high for a six month period. For example, while almost a third of ACE enrollees had an emergency room visit in six months, in 2003 only 18.1 percent of uninsured adults in the U.S. and 17.4 percent of privately insured adults ages 18-64 had an emergency room visit in a full year. Annual use rates for Medicaid enrollees, however, were much higher (39.7 percent) (Health U.S. 2005). This high use of services translates into high expenses for ACE enrollees (see **table 3**). During the first six months of enrollment, the HPSM processed charges of an average of $3,178 per ACE enrollee. This compares to an average annual expenditure of $6,714 per person in the United States in 2006 (World Health Organization 2008). Over half the cost was for ambulatory care ($1,718), with the largest other cost categories being emergency room care ($646) and other hospital care ($648). In contrast, the average charge for prescriptions reimbursed by HPSM is very low ($31—compared to an average of $674 per person nationwide in 2005). ACE clients do, however,

receive substantially discounted prescriptions at assigned pharmacies (340B pricing), and contribute to the cost of the prescription with a $7 patient co-pay.

The service use among this initial group of ACE enrollees is generally quite high. It remains to be seen whether these patterns will persist over time, or if these data reflect an initial burst in usage. It is conceivable that these figures of early enrollee use and charges are particularly high either because they are more likely to have chronic diseases and have been enrolled in clinic settings, or because they have a high pent up demand for services. The utilization experience for this group of adults is quite different than for the early Healthy Kids enrollees studied under the San Mateo CHI evaluation (Howell et al. 2004). The early Healthy Kids enrollees had relatively low use of services when compared to Medi-Cal or Healthy Families enrollees.

Table 3. Average Charges per ACE Enrollee in Six Months Following Enrollment

	Age					
	19-24	**25-34**	**35-44**	**45-54**	**55-64**	**Overall Average**
Outpatient Clinic	$572	$684	$868	$1,121	$1,344	$1,073
Other Physician	$398	$455	$620	$646	$764	$645
ER						
SMMC	$671	$877	$847	$617	$511	$646
Other	$0	$0	$0	$0	$0	$0
Hospital						
SMMC	$0	$590	$349	$644	$933	$648
Other	$0	$0	$0	$0	$12	$4
Prescriptions	$10	$5	$18	$42	$39	$31
Lab and Radiology	$48	$64	$54	$66	$70	$64
Other	$16	$78	$52	$70	$77	$67
Total	$1,715	$2,753	$2,808	$3,206	$3,750	$3,178

Source: Health Plan of San Mateo

Note: Based on enrollees who initiated coverage between September 2007 and February 2008, and remained enrolled for at least six months.

Systems Redesign of Adult Medicine in San Mateo County

In response to problems with access to care and the need for better management of chronic conditions among adults served by safety net providers in the county, in conjunction with the ACE coverage initiative the county has embarked on a comprehensive "system redesign." The redesign is focused on improving efficiency within the clinics so that more patients can be accommodated; establishing patient medical homes in which preventive and primary care can be emphasized; and managing care of those with chronic conditions. The rollout of this effort is ongoing, and the type and level of redesign activities vary from clinic to clinic. We visited three clinics during the August, 2008 site visit—the Main-Campus/Innovative Care Clinic, the Daly City adult medicine clinic, and the Ravenswood Family Health Center. Thus, the following description of redesign activities emphasizes care at those clinics, and cannot necessarily be generalized to all others. It also describes plans at the time of the visit, many of which are currently underway.

Initiated in 2004, the county began piloting certain aspects of adult medicine systems redesign at the Daly City Clinic, the Fair Oaks Adult Clinic, and the Willow Clinic. Three types of pilot initiatives have been implemented: efforts to reduce cycle times (the time between when the patient arrives and leaves the clinic); developing team-based approaches to care (assigning patients to a team of a physician, nurse, and clerical staff who see them each time they visit the clinic); and implementing disease registries for diabetes patients. The county based these efforts on precursor efforts in other parts of the country. For example, the SMMC hired Coleman Associates to help improve clinic efficiency (e.g., efforts to reduce cycle times) and has been involved in a number of efforts with entities such as the Safety Net Institute, the California Health Care Foundation, the Study of Effective and Efficient Diabetic Care, and the McColl Institute to pilot chronic care management innovations (see Wagner et al. 2001; Coleman at http://www.patientvisitredesign.com).

In addition, as part of the effort to improve quality and boost efficiency, the county is implementing the use of an electronic medical record (EMR). SMMC clinics will be using "E-Clinical-Works," a well-regarded software product used in many other similar settings. The county has raised $2 million from 10 foundations to finance the software implementation and training. The Main Campus/Innovative Care Clinic will be the first of the county clinics to roll out the EMR in April 2009, with an expectation that roll-out will be complete in the early fall of 2009.

As mentioned, these activities have only been implemented in a few SMMC clinics, and no clinic had implemented all of them at the time of our visit. Ravenswood Family Health Center has also adopted some similar activities, but with variations in type and degree from the SMMC clinics. Activities at the three clinics we visited are described in more detail below.

Main Campus/Innovative Care Clinic: The County is receiving new federal/state funding from the Medi-Cal waiver (ACE) and is using a substantial portion of it to redesign clinic operations at the Main Campus/Innovative Care Clinic.

The Main Campus/Innovative Care Clinic is the largest of the county's adult medicine clinics. It is centrally located in the county and is housed in the same facility as the county's specialty clinics (i.e., ophthalmology, surgical, pain, dental, and podiatry), making it a very important place for systems redesign. The new name for the Main Campus clinic—The Innovative Care Clinic—reflects plans to restructure care with an eye toward integrating innovative practices for managing the care of adults with chronic conditions. The goals of the planned changes are to provide improved access to providers, high quality evidence-based medicine, and patient-centered care.

Efforts to improve management of chronic conditions at the Main Campus/Innovative Care Clinic are viewed as especially important, given that an estimated 90 percent of patients

seen at this location have at least one chronic condition. As shown previously in table 2, a large proportion has diabetes and co-occurring conditions such as hypertension.

The Main Campus/Innovative Care Clinic has both a clinic manager and a medical director, as do all SMMC clinics. Using funding from the new Medi-Cal (ACE) waiver, this clinic is expanding its staff by nine new positions. According to the terms of the waiver, these new positions should be used to increase coverage and improve care coordination. The new positions include a social worker, a community health worker, a pharmacist, a registered nurse, a medical assistant, two clerical staff, one supervisor, and an additional physician (internist or family practitioner). There have been some delays in hiring the new staff, since hiring must follow the County's specified human resources and civil service guidelines.

The additional staff will be used to help to create three patient teams. Each patient at the clinic will be assigned to one of these teams, which will then handle scheduling, advice by telephone, and care during visits. ICC leadership intends to promote flexibility in role definitions of the members of each team, in order to improve efficiency and to encourage staff to challenge themselves and grow. For example, they hope that the medical assistant in the team can take responsibility for tasks that have been traditionally considered nursing tasks. Despite plans to add staff and increase the number of teams, leadership at the clinic note that the number of patients seen by each team (an important measure of "efficiency") may not grow while they implement the electronic medical record (EMR) in the first half of 2009.

Along with other clinics in the San Mateo system, the Main Campus/Innovative Care Clinic has also undertaken a diabetes disease management program. At each visit for a patient with diabetes, staff collect clinical measures and enter them into the diabetes registry, and provide patient education. The clinic waiting room also has signs providing information on diabetes disease management, flyers with information about diabetes, and invitations to attend diabetes group classes.

In another effort to improve efficiency at the Main Campus/Innovative Care Clinic, plans are in place to transition to "Advanced Access" scheduling in 2009. This is designed to address ongoing concerns about wait times for appointments. At the time of our site visit in August 2008, appointments could only be scheduled by telephone between 9AM and 11 AM Monday to Friday, and long wait times for the next available appointments were common.

Our clinic observations confirmed that patients who walk in seeking an appointment are sometimes sent away without being seen and told to call back for an appointment, even when the waiting room was not full and there appeared to be capacity to see the patient. During the two-hour waiting room observation, evaluators observed two patients who walked in to request either an appointment that day or to make an appointment in the future. Though both patients arrived at the clinic between 9 AM and 11 AM, they were not able to make an appointment in person and were told that they had to leave and call back by telephone. Another patient who needed to be seen for follow-up was unable to schedule an appointment because he did not have a phone number at which he could be reached.

Advanced Access would eliminate such situations by matching provider supply with patient demand on a daily basis. Under Advanced Access, all patients will be seen whether they call ahead for an appointment or walk in. To accomplish this, a portion of each team's appointment time is kept open for unscheduled patients, making it unnecessary to shuffle schedules to fit in patients who need to be seen urgently (Murray and Berwick 2003). Advanced Access also reduces the problem of "no-shows" (patients who schedule appointments but do not come). Advanced Access is designed to facilitate consistent care with the same provider, again by keeping provider schedules mostly open at the beginning of the day.

Implementing Advanced Access effectively requires data on the number of unscheduled patients and the number of no shows for each team, in order to plan for the right amount of unscheduled time per team. Clinic staff expressed concern that they may not have enough data to

do this well, at least initially. Delayed implementation of the EMR has posed challenges in collecting this data.

***Daly City Adult Medicine Clinic*:** The Daly City Clinic (part of the SMMC system) is located in the northern part of San Mateo County. In addition to adult medicine, the Daly City Clinic also offers pediatric care, dental care, family planning and other women' health services, optometry, laboratory services, and podiatry services. Formerly a public health clinic, this location also houses a tuberculosis clinic, HIV services, and a Health Department-sponsored communicable disease investigator.

The clinic has undertaken several systems redesign pilot initiatives over the past two years, under the leadership of the clinic manager and medical director. For example, The Daly City Clinic, along with Fair Oaks, was a pilot clinic for team-based care using the "Coleman Approach." Patients are assigned to teams, as described for the Main Campus/Innovative Care Clinic, made up of a physician, a nurse, and clerical staff. From the time that the patient arrives at the clinic, they are triaged to their team (using walkie-talkies issued to each team member). The team clerical staff greets the patient in the waiting room and takes them to their provider team where any paperwork is completed, and where a medical provider sees them. Follow-up patients can call directly to their team for an appointment, rather than the central appointment line. The Daly City Clinic patient population is linguistically diverse, and the teams often use a telephone interpreter line in one of 20 languages.

The team-based care model encourages patients to call their assigned team for medical advice or other concerns. However, we heard that this is not working as well as other aspects of the initiative, as many provider teams are overwhelmed and unable to field patient calls.

As with other clinics in the SMMC system, long waits for appointments are common, especially for new patients. We were told that the team-based care innovation has reduced wait

times some, but that a new patient must still wait 4-6 weeks for an appointment. During observations of the Daly City Clinic waiting room, evaluators noted that—as with the Main Campus/Innovative Care Clinic—the clinic was fairly busy, but not excessively so. In fact there were times during our observations that no one was waiting for an appointment, and those who had been waiting has been seen and checked out.

To address persistent long wait times to obtain an appointment, the clinic has adopted a modified approach to Advanced Access whereby each team reserves appointments for urgent visits. However, these spots are often filled ahead of time due to strained capacity. As a result of these gaps, we learned that patients in nonemergent situations are often referred to the emergency room because of an inability to schedule them for an urgent care visit. The clinic plans to adopt a more comprehensive approach to Advanced Access, similar to the Main Campus/Innovative Care Clinic, in the near future.

The Daly City Clinic has also addressed the need for improved care co-ordination for patients with diabetes, through the Study of Effective and Efficient Diabetic Care Project (SEED). The SEED project is collaboration between public hospitals in California, sponsored by the Safety Net Institute, an organization affiliated with the California Association of Public Hospitals that sponsors innovations in public hospital and health care systems which began in 2004. Daly City and Fair Oaks are the clinics in San Mateo County that participate in this program. All diabetic patients at the Daly City Clinic are seen by the same team, consisting of a physician, an RN, a medical assistant, and a clerk. As at the Main Campus/Innovative Care Clinic, clinical measures are being carefully tracked through use of a registry. Patient education is provided at monthly group visits of 5-8 patients, where clinical measures are also collected. Staff at the Daly City Clinic noted that these group visits are a cost-effective approach to patient care, and that patient education can be provided more effectively in a group setting where patients share experiences. Group visits are held in English, Tagalog, and Spanish, the primary

languages spoken by the Daly City Clinic patient community. The Daly City Clinic hopes to replicate this team-based disease management model for patients with high cholesterol and hypertension.

***Ravenswood Family Health Center*:** The Ravenswood Family Health Center (RFHC) is a federally-funded primary care clinic located in the southern part of the county. The clinic is funded through the Health Resources and Services Administration (HRSA) 330 Community Health Center program, which was first granted six years ago.[12] Approximately one quarter of the scheduled visits are for pediatric patients, and the remainder are adult visits (including obstetrics).

In 2006, Ravenswood took over the Belle Haven clinic, which was formerly part of the SMMC system, and now operates it as a second site. In spite of this additional space, the RFHC continues to operate over capacity. Part of the reason for this is that the clinic is operating in an outdated facility without space to add needed staff. To address their space constraints, Ravenswood is launching a $10 million capital campaign with the help of the David and Lucile Packard foundation to renovate the main facility. They have also obtained a large grant from Packard to buy the land across the street and build a new dental clinic.

The payer mix at Ravenswood is not as favorable as it is in the county system, with fewer Medi-Cal patients. Fully 59 percent of patients (primarily adult) are uninsured. This has created a major funding gap, since their HRSA grant does not cover all the cost for the uninsured, and consequently they have imposed a cap on the number of new uninsured patients they can see. Ravenswood is participating as a primary care provider under ACE, and this should help to cover the cost of documented uninsured adults at the clinic. At the time of our visit, the clinic was beginning to enroll patients in ACE. Undocumented patients are not covered under ACE.

[12] Ravenswood replaced a previous 330-funded clinic, Drew, which closed.

Ravenswood became a primary care provider for the former WELL program on January 1, 2009, which means that undocumented patients enrolled in the WELL program will now be covered if seeking primary care services at Ravenswood.

Specialty care is not provided at Ravenswood, so patients rely on the SMMC specialty clinics or private providers for specialty care. Staff report satisfaction with the quality of care provided at the SMMC specialty clinics, but are frustrated by barriers to access for specialty care. There is someone on staff who helps adult medicine patients access specialty care, and apply for programs that could cover the costs of this care within the SMMC system, including filling out WELL applications. Specialty appointments are very difficult to schedule, and we were told that the records that they fax over are regularly misplaced. As a result, Ravenswood has started hand delivering paper work to the SMMC specialty clinics.

Over the past two years, Ravenswood has adopted some of the same system reform initiatives as are being adopted for the SMMC clinics. For example, similar to the team based model implemented by the Main Campus/Innovative Care Clinic and the Daly City Clinic, Ravenswood has teams (called "pods") of individuals that know the patient, including a physician, an RN, and a member of the clerical staff. In the Ravenswood model, the patient is considered "part of the team" as well.

Another systems redesign initiative is the "Optimizing Primary Care" initiative, which began in June 2007. The Main Campus/Innovative Care Clinic is also part of this collaborative. "Optimizing Primary Care" emphasizes reducing cycle times and waiting times for appointments. The initiative is sponsored by HRSA through a grant to the California Primary Care Association (CPCA). The association provides all federally funded Community Health Centers in the state with technical assistance in order to help them implement Advanced Access scheduling. At Ravenswood, only 30 percent of appointment time slots are scheduled for a given day, leaving all the other time open with the goal of "seeing patients when they want to be seen."

Since not all patients can be seen on the day they want to be, an attempt is made to schedule any deferred appointments within at most 30 days of when the patient calls, preferably within two weeks. The efforts appear to have had a positive effect on cycle times. Our observations in the waiting room at Ravenswood showed that, while the volume in the clinic was very high, few patients during the time we were there waited for more than 30 minutes.

As at the Main Campus/Innovative Care Clinic and the Daly City Clinic, Ravenswood has implemented a diabetes disease registry in order to improve diabetes care coordination. Clinical measures are entered in the registry for all patients, including indicators such as the use of statins and other cholesterol measures. They hope to expand the registry to include other chronic diseases such as asthma. In addition, they would like to begin using it to track receipt and results of mammograms, pap smears, and colon screenings.

The clinic is planning to move to using an Electronic Medical Record by June 2009. This system will replace the existing data management system. They plan to use EPIC, which is the product used by the Palo Alto Medical Foundation and Stanford. EPIC is also used and supported by their network of 26 CHCs, and has capabilities for HRSA reporting and billing.

The software adopted by Ravenswood for its disease registry and for its EMR differ, in both cases, from that adopted by the SMMC clinics. SMMC will provide read-only access of the EMR to providers at Ravenswood.

Baseline Clinic Monitoring Data

There are existing data for all SMMC clinics and the RFHC that can be used to track clinic performance as these new systems redesign initiatives are taking hold. Among the measures already being collected across clinics are waiting times for first appointments (through HPSM

"Secret Shopper" data), cycle times, and patient satisfaction.[13] In some cases, these data can be examined for the adult patient population separately from other age groups; in other cases, the data are available for the entire clinic and therefore do not allow us to look at the specific impact for adults or for ACE enrollees specifically. An additional limitation is that the methods of collecting and tabulating data differ across clinics, and definitions of some measures are not entirely uniform. The evaluation team is working with the clinics to develop a uniform set of measures that can be used to track clinic performance, allowing us to compare across clinics and over time.

Wait Times for Primary Care Appointments: The Health Plan of San Mateo (HPSM) instituted a "Secret Shopper" calling program in 2007, whereby health plan staff made calls to primary care providers, including SMMC clinics, to seek a first time appointment. The goal of this effort was to determine how long it would take for a Medi-Cal or CareAdvantage patient to be seen as a new patient. While this was not done for ACE patients specifically, it can be considered as a baseline measure of time to new appointment for adult medicine in these clinics, prior to systems redesign. The 2007 effort was repeated during a two month period in 2008.

HPSM secret shoppers were unable to reach any SMMC clinics during the 2007 effort. In 2008, all but one clinic was reached. In some cases, though they were able to reach someone, "shoppers" were told to call back at another time to schedule an appointment. When callers were able to schedule an appointment, appointments were often not available within the recommended time of four weeks or less for a routine physical exam. These findings support anecdotal data indicating access difficulties for new patients at SMMC clinics. However, the secret shopper

[13] Standardized data from the SMMC clinics are presented here. Similar data exist from Ravenswood, and are also discussed. However, the Ravenswood data are not directly comparable with SMMC data due to methodological differences.

findings may overstate the situation. Calls were not made at any specific time, but throughout the day, even though the clinic may have a designated time for scheduling appointments.

Ravenswood was not included among the clinics called in the HPSM "Secret Shopper" project, but included in the clinic's patient satisfaction survey patients are related questions such as: (1) "How long did it take you to get an appointment for a physical exam with a doctor?", and (2) "How long did it take you to get a routine/nonurgent appointment with the your doctor?" Results indicate that around half were able to get an appointment for a physical exam the same day, and 15-20 percent scheduled an appointment in less than seven days. A similar proportion of respondents reported that they were able to make appointments for routine non/urgent visits within seven days. While this is in stark contrast to the long wait times (4-6 weeks) reported anecdotally for the SMMC clinics, the results are not directly comparable since Ravenswood is reporting data for people who got in to see a doctor, and did not capture those who may have been discouraged or unable to schedule an appointment.

Still the data suggest that, consistent with our clinic observations, the Advanced Access approach that has been in place for some time at Ravenswood has had an impact by reducing waiting times for appointments, and thus has improved access to primary care, particularly preventive care. This suggests the promise of improved access at the Main Campus/Innovative Care Clinic and the Daly City Clinic as they move to Advanced Access.

Cycle Times: "Cycle time" refers to the lapsed time between when the patient checks into the clinic, and when the patient checks out. For at least the past two years, all clinics in the SMMC have been collecting cycle time information (although using somewhat different methods), and regularly reporting the data to the central quality of care committee comprised of clinic and SMMC leadership. We requested and obtained baseline cycle time data for each of the clinics in

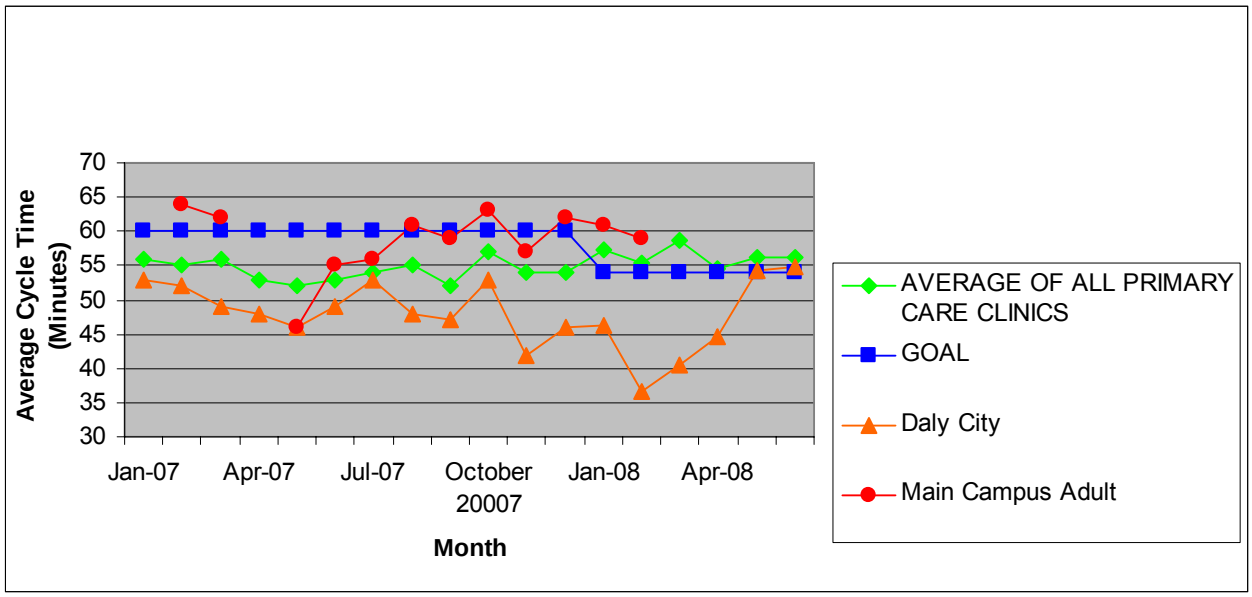
order to track how these indicators change over time as team-based care and Advanced Access are being implemented. Figure 6 shows these data.

The graph compares cycle times at the Main Campus/Innovative Care and Daly City Clinics to the average for the SMMC clinic system as a whole from January 2007 to June 2008 and to SMMC's target for cycle time, which during this period was 60 minutes in 2007 and 54 minutes in 2008. For most of this reporting period, average cycle time at both clinics fell within this target, as did the average across all SMMC clinics.

Figure 6 shows that cycle times at the Main Campus/Innovative Care Clinic are generally above the average of other primary care clinics in the system, though they are approximately at or below the county's target. At the Main Campus/Innovative Care Clinic, data are collected manually by front desk staff during one or two clinic sessions a month. The infrequency with which these data are collected may also contribute to the fairly large variability in cycle times by month.

Cycle times at the Daly City Clinic were consistently lower than both the average of all SMMC clinics, and the goal targeted by the county, averaging 47 minutes during the period. In addition, cycle times declined during this time period at the Daly City Clinic. Clinic staff believe that implementation of team-based care has contributed to this reduction in cycle times. Cycle times based on our clinic observations were consistent with this estimate, varying between 20 and 60 minutes during the time period we observed.

Figure 6. San Mateo Medical Center Cycle Times (Daly City Adult and Main Campus Adult)—2007 and First Half of 2008



Source: SMMC Quality of Care Committee

There are no consistent data on cycle times at RFHC during this period that can be compared to the data for the SMMC clinics.

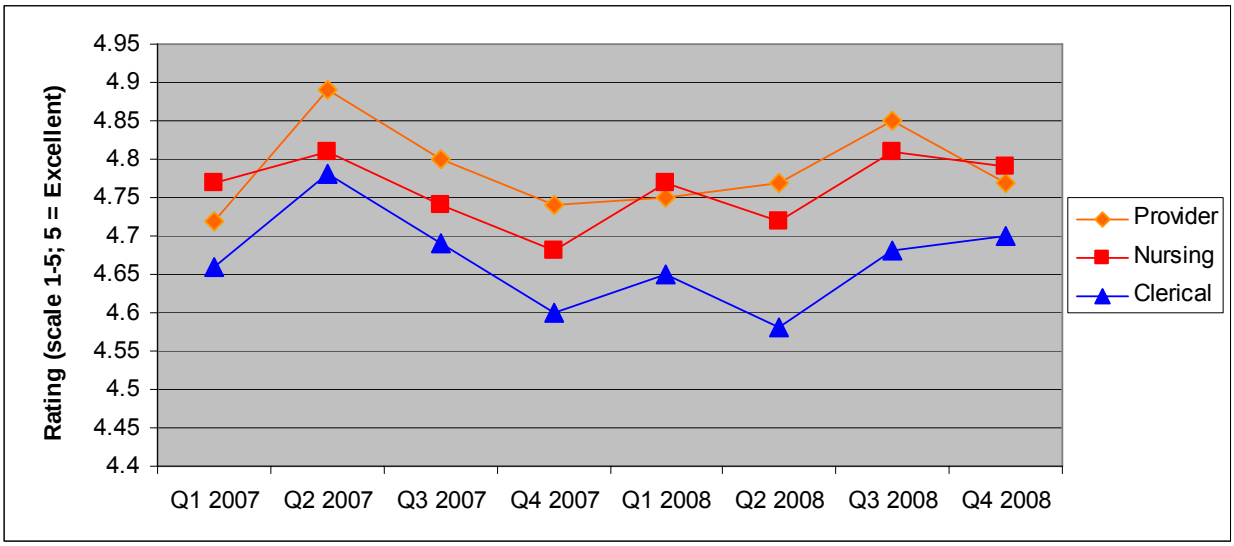
***Patient Satisfaction*:** Data on patient satisfaction are collected at all SMMC clinics through a brief uniform survey with four questions that a sample of patients are requested to complete before they leave the clinic.[14] Patient satisfaction measures focus on the extent to which the patient found the nursing, clerical and provider (doctor or nurse practitioner) services individually courteous. The survey also asks for an overall rating of the clinic (excellent, good, OK, poor, and unacceptable). Data are collected on a sample of patients. Varying methods for sampling patients are used across clinics. For example, the clinics differ in who hands the survey to the patient and who collects it; how they sample patients; and how many surveys are collected

[14] The Main Campus/Innovative Care Clinic implemented a new patient satisfaction survey in January 2009, which captures the same basic measures as the original survey, but is more expansive. Whether it will be feasible to compare the Main Campus/Innovative Care Clinic patient satisfaction survey results to past patient satisfaction findings, from the same or other SMMC clinics going forward, remains to be seen.

each month. The data are also centralized for review by the quality of care committee, which provided the data to us.

Figure 7 shows patient satisfaction with staff courtesy for the county as a whole. Ratings are consistently high, ranging from 4.55 to 4.9 on a scale of 1 to 5. Typically, physicians, nursing, and clerical staff were all considered courteous, although the clerical staff somewhat less so.

Figure 7. Outpatient Courtesy Ratings (All SMMC Clinics)

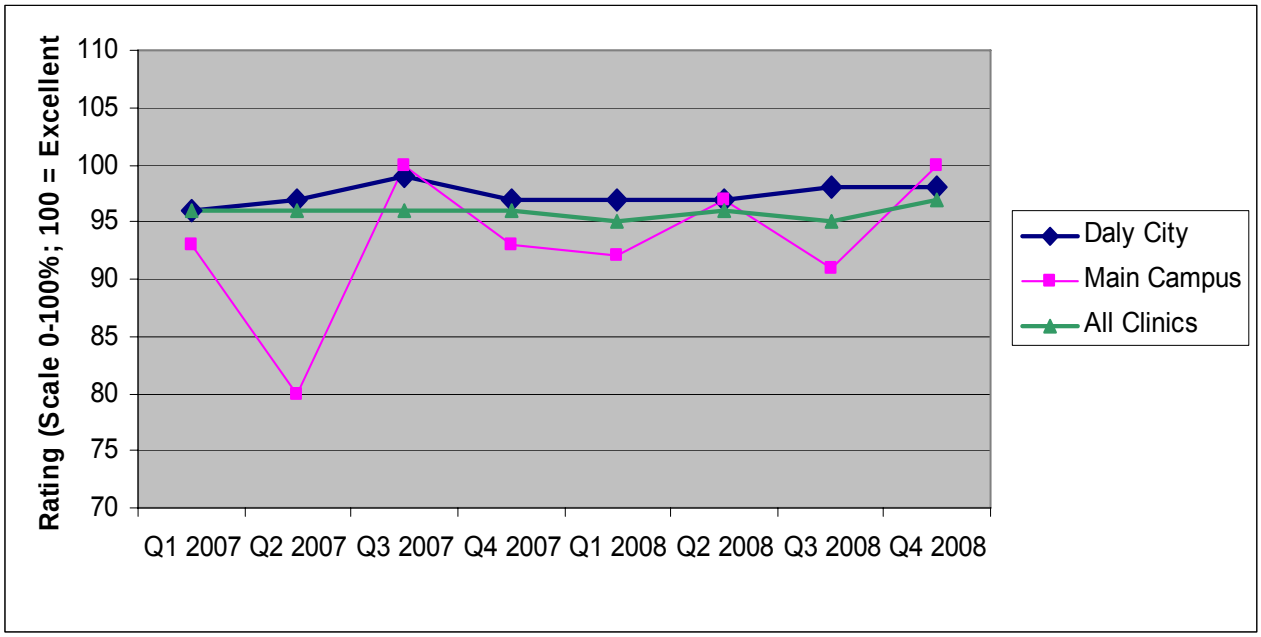


While it is positive that the satisfaction for existing patients is generally very high, it is important to be cautions when interpreting these data, since in general, patient satisfaction data such as these tend to be highly favorable and because the methods were so variable. Moreover, patients provided the data voluntarily, and there was no effort to follow-up with patients who did not turn in surveys they were offered. These data may also be skewed toward positive responses, since patients may feel that their provider will know how they have answered the questions. Finally, the data are not collected from patients who came to the clinic but could not see a provider.

The overall clinic rating for all clinics, and separately for the Main Campus/Innovative Care Clinic and Daly City Clinic, are shown in **figure 8**. Ratings were very high across all

clinics. The overall clinic rating is also high at the two clinics, but the sample sizes were low at the Main Campus/Innovative Care Clinic (N=107). The rating was uniformly high at the Daly City Clinic, based on a larger number of surveys (N=506).

Figure 8. Overall Clinic Rating



Although the data derive from a different patient satisfaction survey using different measures, patient satisfaction at Ravenswood also is quite high. Patients are asked if the provider/nursing staff/clerical staff were doing great or good with respect to being courteous/helpful/respectful. Data for the third and fourth quarter of 2008 show ratings for provider care satisfaction in the mid 90's (on a scale of 1-100).

In summary, it appears that satisfaction with their primary care providers and other staff is generally high in all the safety net providers in San Mateo County, for the patients who are able to obtain appointments and be seen. Again, this suggests that access to care is a central problem with the system, so it is appropriate that it is an important focus of the health system redesign effort. At the same time, it will be important to continue to monitor patient satisfaction

to assure that it remains high as changes are made. It will also be helpful to achieve more uniformity in methods of collecting the data, including attempts to achieve high response rates to the surveys.

Summary and Conclusions

This report—based on data gathered during the initial six months of the evaluation—provides several clear findings about the county's safety net for uninsured adults in fall, 2008 just prior to the implementation of intensive systems redesign at the Main Campus/Innovative Care Clinic. The key findings are described separately for the systems redesign and adult coverage components.

The Adult Coverage Initiative: There has been strong growth in ACE program enrollment (and an associated decline in WELL program enrollment), which suggests positive results for county finances, since these individuals' health expenses are now covered by state and federal financing rather than the county general fund. Other key findings include the following:

- The initial group of ACE patients has high morbidity and is very costly.
- Since there has not been intensified outreach to bring in new individuals into ACE who have less severe health problems (or no health problems), the current system (in place and as planned) does not have a strong emphasis on health prevention and promotion. Most enrollment is done in clinic settings where patients come with health problems, and not in non-health community-based sites. This undoubtedly contributes to the high morbidity of the average ACE enrollee at this time.
- Sustained financing for the ACE program, beyond the three year pilot, has not yet been identified, nor has financing for adults from 200 percent to 400 percent of the federal poverty level. This will be a critical task for the county and the broader community in the coming year and beyond.

Systems Redesign: We learned that, at the time of the site visit, several pilot initiatives were underway and others were planned for the very near term. These include the following four types of initiatives:

- Team-based care
- Special initiatives for patients with diabetes, including patient registries (to be expanded to other conditions in the future)
- Advanced Access scheduling for appointments
- Electronic Medical Records (not yet implemented in any site at the time of the visit).

There is evidence that, in the places where these initiatives have been underway the longest, they have led to improvements in patient satisfaction and reduced waiting times in clinics. However, those conclusions are based on the opinions of key informants and on data that are not collected in a uniform manner across clinics and across time.

At the time of this writing, system reform initiatives are intensifying, particularly at the Main Campus/Innovative Care Clinic. At that site, the largest adult medicine clinic in the San Mateo County safety-net, new staff have been hired, Advanced Access scheduling is being piloted, and implementation of an Electronic Medical Record will soon be underway. Because other smaller pilot initiatives have already apparently yielded improved efficiencies, these substantial changes at the Main Campus/Innovated Care Clinic should soon begin to lead to similar improvements at that site.

At the other two clinics that we visited—the Daly City Clinic and Ravenswood—pilot systems redesign efforts have been underway for some time. Both the Daly City and Ravenswood clinics are gearing up for the next phase of their redesign, including expanding disease registries and implementation of the EMR.

Other key findings from the evaluation concerning the systems redesign include the following:

- With improved efficiency, the San Mateo safety net shows promise of being an excellent source of medical care for uninsured and underinsured low income adults. From a wide

range of key informants, we heard that quality of care in the San Mateo safety net clinics is good, and according to patient satisfaction data collected in the clinics those patients that are in the system are very satisfied with their care.

- In spite of this very positive finding, there are serious access problems for new patients entering the system, and for specialty care. This is due to resource constraints, but also due to difficult administrative procedures for patients seeking appointments. This means that patients with severe health problems may obtain care through the emergency room or pay out of pocket with private providers, rather than with their primary care provider. Attempts are being made to establish specialty contracts with private health care delivery systems in the area that will supplement the specialty services currently available at SMMC specialty clinics.

Next Steps for the Evaluation

Over the next year we will continue and augment evaluation activities as follows:

Case Study: In a second week-long site visit, planned for July 2009, we will conduct additional interviews with key informants. We will revisit the three clinics we visited during the initial site visit, and also spend time speaking with staff and observing in the waiting rooms at two additional clinics: Fair Oaks and Willow. The goals of this site visit will be to 1) assess any changes in clinic operations that have occurred in the past year; 2) understand the impact of ACE and systems redesign activities on clinic operations and solvency; and 3) gain insight regarding successes and barriers to redesign implementation.

Clinic Indicators: As part of the overall evaluation of the implementation of ACE and the health system redesign in San Mateo County, the evaluation team is collecting, tracking, and analyzing clinic-specific data on measures of "customer service." We are examining patient satisfaction with clinic personnel and services, wait times for a new appointment, cycle times (time lapsed from registration to completion of the visit), and no show rates. We hope to be able to determine if any changes in these measures occurred following the implementation of clinic policies and procedures designed to improve patient care.

Given the short duration of the evaluation, as well as the staggered nature of the implementation of these innovations, the evaluators do not anticipate finding dramatic, or even modest changes. Nonetheless, we are laying the ground work for such an analysis for this evaluation and for future assessments in the following ways:

- Inventorying data already collected by clinics in these domains;
- Clarifying and documenting the definitions used, collection methods, and frequency of collection by clinic;
- Documenting and monitoring over time systems changes that could affect these outcome measures; and
- Following trends in the measures, by clinic, prior to and after implementation of systems redesign and mapping to these trends implementation dates of major innovations in each clinic.

One-e-App Survey: In an effort to gauge the impact of the systems redesign and ACE, the evaluation team designed 16 survey questions that have been added to the county's One-e-App enrollment tool (see Appendix D for a list of the questions). These questions measure changes in usual source of care, ER use, and health outcomes, before and after enrollment in ACE or WELL. The amended tool takes between 7-10 minutes to administer, and is also available in Spanish. The tool has been piloted by select CHAs/CAAs in the county. All CHAs, CAAs, and BAs who use One-e-App, will receive training for administering this instrument in early March, 2009, in preparation for full implementation at end of March.

HPSM Utilization Data: We will continue to use data from the HPSM to study the characteristics of ACE (and eventually WELL) enrollees, including their demographic characteristics, diagnostic mix, use of services, and cost.

Clinic Data: A final evaluation component is to obtain data for a cohort of patients served at the Main Campus/Innovative Care Clinic prior to systems redesign activities there (in 2006) and

similar data after the redesign has been implemented. We will obtain One-e-App data for demographic characteristics and income, and linked claims/encounter data from the clinic data base. These data will be used to measure changes in utilization, continuity of care, health outcomes (with limited data on the latter), and cost for WELL/ACE adult medicine patients at the clinic. The baseline 2006 cohort is being provided to the evaluation team at the time of writing this report.

In the coming year we look forward to tracking the developments of the SMMC systems redesign and the ACE coverage initiative. Additional data collection, the implementation of the One-e-App survey questions, and qualitative data gathered from the second site visit will help us to more fully assess the impact of these changes in 2009.

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Appendix A
Evaluation Questions & Data Sources[15]

	Case Study	Main Campus/ICC Data	Cross-Clinic Data	HPSM Encounter Data	One-e-App Data
Research Questions					
What is being done under the system redesign? What changes have been made to the enrollment and service delivery system for low income adults?	**P**				
Who is served by the system redesign? How has the composition of enrollees changed over time?		**P**		**P**	**S**
What services do clients receive? What are the trends over time?	**S**	**P**		**P**	**S**
What is the quality of care in redesigned clinics?	**S**	**P**	**P**		
Are clients satisfied with the redesigned program and its services?	**S**		**P**		
Are providers and other key stakeholders satisfied with the systems redesign?	**P**				
What is the impact of the systems redesign on access to care and use of medical services?	**S**	**P**	**S**	**S**	**P**
Does the system redesign have an impact on the health status of clients?		**P**			**P**

[15] Data from the Main Campus/Innovative Care Clinic are individual-level data. Cross-Clinic data are aggregate.

Appendix B
Key Informants Interviewed During August 2008 Site Visit

Name	Title	Agency
Maya Altman	Executive Director of Health Plan of San Mateo	Health Plan of San Mateo
David Amann	Financial Advisor	Redwood City Chambers of Commerce
Jeanette Aviles	Medical Director of Ambulatory Service/Medical Director of Fair Oaks Clinic	San Mateo Medical Center
Laurie Bauer, RN, MPH	Compliance, Quality and Risk Management Officer	Ravenswood Family Health Center
Irais Bazan	Meber benefits coordinator	Ravenswood Family Health Center
Marmi Bermudez	Program Manager	SMMC/Child Health Initiative
Nadia Bledsoe	Business Representative	AFSCME (Local 829)
Luisa Buada	Chief Executive Officer	Ravenswood Family Health Center
Athena Cabezas	Community Health Advocate	San Mateo Medical Center
Jaime Chavarria, MD	Associate Medical Director, Family Practice, Adult Clinic	Ravenswood Family Health Center
Sang-ick Chang, MD	Chief Executive Officer	San Mateo Medical Center
Susan Ehrlich, MD	Chief Medical Officer	San Mateo Medical Center
Rob Fleming	Clinic Manager	San Mateo Medical Center
Rob Fucilla	Community Partner Liaison	Health Plan of San Mateo
Linda Franco	Program Manager for the Senior Care Center/Deputy Director of Ambulatory Service	San Mateo Medical Center
Anita Galang	Interim Director of Financial planning and analysis	San Mateo Medical Center
Mary Giammona, MD	Medical Director	Health Plan of San Mateo
Carol Groom	Vice President Mills-Peninsula Health Services	Mills Peninsula Health Services:
Shelley Kessler	Executive Secretary Treasurer	San Mateo County Central Labor Council
Noris Larkin	Charge Nurse for Adult Primary Care	San Mateo Medical Center
Jonathan Lee	Medical Director	SMMC: Daly City Clinic
Cathy Lemkuhl	Clinic Manager	SMMC: Daly City Clinic
Kitty Lopez	Executive Director	Samaritan House
Gregory Lucaszewicz, MD	Physician	Kaiser Permanente
Judy Manuel	Triage Nurse	SMMC: Daly City Clinic
Christina Meacham	Front Desk Supervisor	Ravenswood Family Health Center
Jean Merwin	Principle	Jean Merwin & Associates
Cecilia Montalvo	VP of Strategic Planning and Buisness Development: Peninsula Coastal Region	Palo Alto Medical Foundation
Isela Montenegro	Patient Access Manager	SMMC/Child Health Initiative
John Ngo	Clinic Operations Director	Ravenswood Family Health Center
Sharon Petersen	Director of Program Operations	Samaritan House
Sosefina Pita	Community Health Advocate	SMMC/Child Health Initiative
Audrey Ramberg	Consultant	County Manager Office
Diana Reddy	Co-Chair of Peninsula Interfaith Action (PIA).	Peninsula Interfaith Action (PIA)
Debbie Rivera	Clerical Supervisor	SMMC: Daly City Clinic
Ron Robinson	Director of Finance and Administrative Services	Health Plan of San Mateo
Maria Rueda	Community Health Advocate	SMMC: Daly CityClinic
Jagruti Shukla, MD	Medical Director	San Mateo Medical Center
Charlene Silva	Director	San Mateo County Health Department
Tammi Siu	Social Worker Supervisor	Aging and Adult Servieces
Srija Srinivasan	Special Assistant to the County Manager	County Manager Office
Glena Vaskelis	Hospital Preseident and Administratior	Sequoia Foundation
Wayne Yost	CPA, CFE, Chief Financial Officer	Ravenswood Family Health Center

Appendix C

Appendix Table 1
Demographic Characteristics of ACE Enrollees by Clinic
(%)

	Main Campus/ ICC	Coast Side	Daly City	Fair Oaks	Ravenswood	S. San Francisco	Willow	Unassigned	Total
Gender									
Female	49.8	58.6	61.4	66.2	64.0	55.6	59.6	46.0	53.8
Age									
19-24	10.6	6.9	4.4	4.1	4.0	0.8	2.6	6.6	7.6
25-34	12.4	3.4	9.2	3.4	10.0	6.8	8.8	16.1	10.8
35-44	16.7	17.2	11.0	14.9	12.0	16.5	10.5	18.2	15.4
45-54	30.2	17.2	27.2	29.1	54.0	30.1	34.2	27.0	30.1
55-64	30.1	55.2	48.2	48.5	20.0	45.8	43.9	32.1	36.1
Preferred Language is English	75.7	62.7	67.7	62.2	56.0	63.9	65.8	73.0	69.1
Income Below 100% of Federal Poverty Level	58.7	48.3	54.4	52.0	56.0	54.9	67.5	1.5	53.7
Total ACE Enrollees	1098	29	272	148	50	133	114	137	1981

Appendix Table 2
Diagnostic Profile of ACE Enrollees by Age
(% with Diagnosis)

Diagnostic Profile		Age											
		19-24		25-36		35-44		45-54		55-64		Total	
	DX Codes	#	%	#	%	#	%	#	%	#	%	#	%
Infectious And Parasitic Diseases	001-139	16	10.6%	15	7.0%	23	7.5%	83	13.9%	70	9.8%	207	10.5%
Neoplasms	140-239	1	0.7	6	2.8	7	2.3	37	6.2	49	6.9	100	5.1
Endocrine, Nutritional And Metabolic Diseases, And Immunity Disorders	240-279	17	11.3	34	16.0	79	25.9	228	38.2	441	61.7	799	4.0
Blood Disorders	280-289	4	2.7	5	2.4	7	2.3	28	4.7	23	3.2	67	3.4
Mental Disorders	290-319	18	11.9	33	15.5	65	21.3	112	18.8	99	13.9	327	16.5
Diseases Of The Nervous System And Sense Organs	320-389	18	11.9	38	17.8	59	19.3	164	27.5	216	30.2	495	25.0
Diseases Of The Circulatory System	390-459	11	7.3	29	13.6	68	22.3	226	37.9	425	59.4	759	38.3
Diseases Of The Respiratory System	460-519	26	17.2	51	23.9	53	17.4	89	14.9	130	18.2	349	17.6
Diseases Of The Digestive System	520-579	33	21.9	34	16.0	53	17.4	120	20.1	109	15.2	349	17.6
Diseases Of The Genitourinary System	580-629	17	11.3	21	9.9	40	13.1	91	15.2	98	13.7	267	13.5
Pregnancy/Childbirth/Puerperium	630-679	0	0.0	1	0.5	0	0.0	0	0.0	0	0.0	1	0.1
Diseases Of The Skin	680-709	12	8.0	17	8.0	33	10.8	58	9.7	66	9.2	186	9.4
Diseases Of The Musculoskeletal System	710-739	28	18.5	38	17.8	77	25.3	162	27.1	219	30.6	524	26.5
Congenital Anomalies	740-759	2	1.3	1	0.5	1	0.3	6	1.0	8	1.1	18	0.0
Certain Conditions Originating In The Perinatal Period	760-779	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Symptoms, Signs, & Ill-Defined Conditions	780-799	46	30.5	64	30.1	113	37.1	190	31.8	247	34.6	660	33.3
Injury And Poisoning	800-999	25	16.6	21	9.9	35	11.5	56	9.4	47	6.6	184	9.3

Appendix Table 3
Utilization of ACE Enrollees by Clinic
First Six Months Following Enrollment
(% with service)

Service	Main Campus/ ICC	Coast Side	Daly City	Fair Oaks	Ravenswood	S. San Francisco	Willow	Unassigned	Total
Ambulatory Care Visit	73.0	72.4	59.1	85.8	90.0	80.5	87.7	66.4	72.2
ER Visit	36.9	13.8	19.2	25.7	20.0	28.6	27.2	30.7	31.3
Prescription	41.2	37.9	53.7	27.7	34.0	44.4	50.9	25.6	41.3
Hospital Admission	3.8	3.5	1.1	1.4	2.0	4.5	6.1	2.2	3.2
Lab/Radiology	38.3	17.2	25.4	32.4	42.0	30.1	36.0	24.1	34.2
N	1098	29	272	148	50	133	114	137	1981

Note: Based on enrollees who initiated coverage between September 2007 and February 2008, and remained enrolled for at least six months.

Appendix D
One-e-App Survey Questions

1. **During the past 12 months, how confident were you that you could get health care if you needed it?**

   Very confident
   Somewhat confident
   Not very confident
   Not at all confident
   Don't know
   Refused

2. **During the past 12 months, how financially difficult was it to meet your health care needs? Would you say…**

   Very difficult
   Somewhat difficult
   Not very difficult
   Not at all difficult
   Don't Know
   Refused

3. **Is there a place that you USUALLY go to when you are sick or need advice about your health?**

[If the individual answers "Yes," ask "What is the name of that place?"
If the individual names more than one place, ask "Where do you go most often?"]

   39th Avenue (SMMC) Adult Primary Care Clinic
   Coastside Health Center
   Fair Oaks Adult Clinic
   Mike Nevin (Daly City) Health Center
   Ravenswood Family Health Center-Belle Haven
   Ravenswood Family Health Center-East Palo Alto
   Samaritan House
   South San Francisco Health Center
   Willow Clinic
   SMMC Emergency Room
   Other Emergency Room
   Other Place (Specify:_____)
   No Place
   Don't Know
   Refused

4. [Ask this question only if the individual has a place he/she goes when sick or needing advice about health. Otherwise, choose "Not Applicable (does not have a usual place of care)."]

Do you have a doctor, nurse, or other health provider or team of health providers that you usually see when you go there?

Yes
No
Not Applicable (does not have a usual place of care)
Don't Know
Refused

5. Did you delay or not get a MEDICINE that you or a doctor believed necessary during the past 12 months?

Yes
No
Don't Know
Refused

6. Did you delay or not get CARE from a regular doctor or other health care professional for an illness, accident, or injury when you thought you needed it during the past 12 months?

Yes
No
Don't Know
Refused

7. Have you seen a doctor or any other health care professional such as a physician assistant or nurse during the past 12 months? (Do not include doctors or health professionals you saw during an overnight stay in a hospital or a visit to a hospital emergency room.)

Yes
No
Don't Know
Refused

8. [Ask this question only if the individual saw a doctor or other health care professional. Otherwise, choose "Not Applicable (did not see a health care professional)."]

Sometimes people need to see a specialist, such as a pulmonologist, cardiologist, endocrinologist, psychiatrist, or other doctor who takes care of special parts of the body. Were any of those visits you just mentioned to see a specialist?

Yes
No
Not Applicable (did not see a health care professional)
Don't Know
Refused

9. **During the past 12 months, how many times have you received care in a hospital emergency room?**

0 times
1 time
2 times
3 times
4 times
5 to 9 times
10 to 14 times
More than 15 times
Don't Know
Refused

10. [Ask this question only if the individual had one or more ER visits in the past 12 months. Otherwise, choose "Not Applicable (no ER visits in past 12 months)."]
Thinking about your MOST RECENT visit, what was the MAIN reason you went to the emergency room instead of somewhere else like a doctor's office or clinic?

Injured in an accident
Had an urgent medical problem, like a heart attack or stroke
Doctor or nurse told me go to there
No other place open
Pregnancy related
It's where I always go
Do not have a regular doctor or clinic
Some other reason: _____
Not Applicable (no ER visits in past 12 months)
Don't Know
Refused

11. **In general, compared to people your age, is your current health excellent, very good, good, fair, or poor?**

Excellent
Very Good
Good
Fair
Poor
Don't Know
Refused

12. Compared with 12 months ago, is your health better, worse, or about the same?

Better
Worse
About the same
Don't Know
Refused

13. How many days during the past 30 days did poor physical or mental health keep you from doing your usual activities?

0 days
1 day
2 days
3 days
4 days
5 days
6-10 days
11-15 days
16-20 days
21-25 days
26-30 days
Don't Know
Refused

14. Now I'd like to ask you about whether you have ongoing health conditions for which you need to be monitored regularly or for which you often need medical care. Do you have:

Arthritis or rheumatism
Asthma or other lung disease
Diabetes
Heart failure or other heart condition
High cholesterol
High blood pressure or hypertension
Liver disease
Depression

Any other physical or mental health problem (Specify _____)
Don't Know
Refused

15. [Ask this question ONCE if the respondent has any ongoing health conditions. Otherwise, choose "Not Applicable (no chronic condition)."]

During the past 12 months, did you receive routine care (such as checking blood pressure) for these health condition(s) from a doctor, nurse, or other health professional? Please include routine and/or preventive care you received during any visit.

Yes
No
Not Applicable (no chronic condition)
Don't Know
Refused

16. During the past 12 months, was there any time that you did not have any health insurance or coverage?

Yes, there was a time that I did not have health insurance or coverage during the past 12 months.
No, I was enrolled in ACE for the past 12 months.
No, I was enrolled in ACE County (WELL) for the past 12 months.
No, I had other health insurance or coverage during the past 12 months.
Don't Know
Refused