

**Participation in Healthy
San Francisco: Trends in
Enrollment and Retention**

Final Report

February 28, 2011

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Policy Research, Inc.

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I. BACKGROUND AND BRIEF SUMMARY

Healthy San Francisco (HSF) is an innovative health care access program implemented by the San Francisco Department of Public Health (DPH) in 2007 to ensure access to appropriate and timely medical care for low-income uninsured adults ages 18 to 64 living in San Francisco. HSF is not an insurance product, and access is limited to care provided in the city and county of San Francisco. It is an alternative approach to reducing the barriers to accessing consistent, comprehensive primary care that low-income, uninsured adults often face.

The HSF delivery system is built on the primary care network within the San Francisco safety-net system. HSF participants are required to choose a place (typically a safety-net primary care clinic) as their point of first contact for all basic medical care—their primary care medical home. This approach—selecting and seeking care at a specific medical home—is expected to alter the experience for both the provider and the patient, change utilization patterns, increase patient satisfaction, and ultimately improve the quality of care and control costs by reducing non-urgent emergency department (ED) visits and potentially avoidable hospital admissions, system inefficiency, and redundancy.

A key goal of HSF is to change the care-seeking behavior of these adults and improve their overall health status. Achieving this goal depends not only on the program's ability to enroll a large share of uninsured adults in San Francisco but also on the program's ability to keep them enrolled and engaged in the program. Ideally, participants will receive not only acute care when a health problem emerges but also preventive care and chronic care management at their medical homes.

In this paper, we draw on HSF administrative data to examine both overall trends in program enrollment and retention since 2007 as well as how these trends have varied among groups of nonelderly uninsured adults in San Francisco. In addition, drawing on data from focus groups that we conducted with adults who are (or were) enrolled in HSF or who have not enrolled but who are eligible, we explore factors that may be driving these trends and any differences that have emerged among groups over time. These data enable us to address the following four questions regarding enrollment and retention in HSF:

1. Who enrolls in HSF?
2. Which eligible individuals do not enroll in HSF?
3. Who remains enrolled in HSF and for how long?
4. Why do individuals leave HSF and who returns?

A. Summary of Results

Enrollment. As of June 2010, there were more than 53,000 enrollees in HSF. We do not have a precise 2010 estimate of how many working-age adults in San Francisco are eligible for this program. The 2007 California Health Interview Survey (CHIS) estimated that there were 60,000 uninsured working-age adults; extrapolations from the CHIS estimated that this figure had increased to 79,000 in 2010. The American Community Survey (ACS) yielded higher estimates—77,021 uninsured working-age adults in San Francisco in 2008 and 88,004 in 2009. An equal percentage increase in that number from 2009 to 2010 would suggest more than 100,000 uninsured nonelderly adults in 2010.

The pool of uninsured nonelderly adults is constantly changing, with some entrances and exits reflecting individuals' acquisition of private or public health insurance coverage, and others deriving from loss of coverage. In addition, capturing accurate measures of household income is problematic. It is difficult to ascertain how many adults are eligible for the program at any point in time and therefore what percentage of the eligible pool has enrolled in HSF, but it is fair to say that the program has been successful in enrolling a significant portion of uninsured working-age San Franciscans, especially those below 200 percent of the federal poverty level (FPL).

Although small sample sizes make it difficult to compare demographic characteristics of HSF enrollees with those of uninsured nonelderly adults, the data suggest that the program has enrolled notable percentages of most demographic groups, particularly women, those age 40 to 64, and Asian and Pacific Islanders. While those as young as 18 are eligible for HSF, older working age adults are more likely to have health care problems that need access to ongoing, coordinated medical care. Similarly, while working age adults with households incomes as high as 500 percent of the FPL are eligible to participate, adults in these households are more likely to experience only short term losses in private coverage. In many ways, HSF appears to be capturing those who need the program the most.

Retention. Just as the pool of uninsured adults changes, the pool of individuals enrolled in HSF changes. In the first three years of the program, more than 80,000 individuals have enrolled in HSF for some length of time. Many of these individuals have since exited the program, for a variety of reasons. Some obtained private or public coverage, others moved out of the city or otherwise became ineligible for the program, and others decided against renewal for unknown reasons. Early data from a renewal outreach call initiative recently begun by the HSF program indicates that more than one-fourth of individuals contacted during their renewal period had experienced a change in eligibility status, most often because they obtained insurance coverage or moved out of the county. Analysis of the 2008 ACS estimates that 10 percent of nonelderly adults in San Francisco moved out of the city and county that year. On average, close to 40 percent of enrollees leave the program at time of renewal, a rate that has been fairly constant over the last two years.

Fewer than 10 percent of enrollees leave before their 12-month renewal. Over half of these participants disenroll because they are no longer eligible for this program; most of the remainder leave because of insufficient payment of the participation fee, possibly for financial reasons but perhaps reflecting an unannounced move out of the city, acquisition of private coverage, or a decision that they no longer need to participate.

Although more than 85 percent of HSF enrollees remain in the program for at least 12 months, only half renew their enrollment at the 12-month renewal date, and most who fail to renew do not then re-enroll during the observed time period. Again, we have little information on why they leave the program. For the more than 97 percent of participants who remain enrolled for 12 months but fail to complete the rescreening process and renew participation, there is no known reason for their disenrollment.

Who stays and who exits? Although we do not have information about why some participants stay in the program and others do not, we can compare the characteristics of those who renew and those who leave. For example, older enrollees are more likely to renew, as are Chinese enrollees and enrollees who were established patients of the clinic that they chose as their HSF medical home. Among those enrollees who do leave the program, women, Latinos, and enrollees with incomes

above the FPL are more likely to re-enroll, as are patients who more heavily used physician and hospital services while they were enrolled.

"I have diabetes. I have an appointment every 3 months. I see the doctor, and when I don't have an appointment, they give me one. If I don't understand about the medicine, I call and they explain it to me."

"They treated me with dignity. The first time ever in my life. I never had that before."

Results from the focus groups shed light on the benefits many enrollees experience through participation in HSF. There was a general appreciation for the ability to obtain preventive care and to receive regular ongoing treatment for chronic health conditions. Most participants agreed that the providers were considerate and concerned with the participants' overall health, and some indicated that they were being treated with respect for

the first time. Both Spanish-speaking and Chinese-speaking participants expressed gratitude for having a medical home that was culturally and linguistically appropriate.

We also gained insight from these focus groups into why some enrollees chose not to renew or re-enroll. In some cases, the respondent cited participant and point-of-service (POS) fees as barriers to participation. Other individuals expressed frustration with what they view as limitations in the program, in some cases indicating a desire for more traditional insurance coverage. For example, despite that all participants are told at enrollment time that HSF is not an insurance

"I'd rather go to Walgreens and have a Walgreens card rather than wait. I go to Walgreens and pay straight cash because I refuse to wait in line."

"But then the appointment process when you get referred out...you wait a really long time for things that you really don't want to be waiting that long for."

product and that access is limited to a group of providers in the City and County of San Francisco, several respondents mentioned these factors as reasons for not renewing. In addition, almost every focus group participant cited long wait times for prescriptions, appointments, and referrals.

The following sections elaborate on these key findings. The paper begins with a description of the data sources, methods, and analytic approach we have taken to address the questions of how many eligible adults have enrolled in HSF and who has stayed in the program. We then discuss the findings from our analyses. We conclude by discussing some of the implications of our findings for the HSF program and describing some of the improvements in outreach, retention, and waiting times already implemented by HSF.

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II. METHODS AND ANALYTIC APPROACH

A. Data Sources

Our analysis of enrollment and retention patterns draws on several quantitative data sets, focus groups with current, former, and potential HSF enrollees, and site visits to San Francisco, including interviews with HSF program staff and participating providers.

Quantitative data sources. Our primary data source is enrollment records for the 80,091 individuals who enrolled for any length of time between July 2007, when HSF was first implemented, and June 2010, the end of the most recent fiscal year. We obtained these data from the Department of Public Health (DPH). The records include dates of HSF enrollment, demographic information, and, where relevant, reasons for disenrollment.

Since December 2008, DPH has also administered a Health Access Questionnaire (HAQ) at enrollment, renewal (when a participant elects to continue enrollment immediately at the end of a 12-month period), and re-enrollment (when a prior participant elects to rejoin HSF after a gap in enrollment). This ten-question instrument assesses perceived health status and access to care (captured by usual source of care, use of the ED, and difficulty receiving medical care). Our analysis uses HAQ data for the 37,931 respondents who first enrolled in HSF from December 2008 through June 2010 and who responded to the survey upon initial enrollment.¹

To supplement enrollment data, we used encounter data on services received by HSF enrollees to assess whether relationships exist between service use and program retention. Encounter data were extracted in April 2010. To allow time for complete encounter reporting, we restricted the data to services rendered from July 2007 through January 2010. To identify inpatient stays, ED visits, and physician office or outpatient visits, we relied on place-of-service codes.² Participants were limited to one of each service type per calendar day (that is, a maximum of three services on one day—one ED encounter, one inpatient admission, and one physician or outpatient visit). We then tabulated the number of visits that occurred during a given time frame, for example, during a quarter or during a participant's first enrollment period.³

¹ HAQ questions may be answered by the enrollee or by another member of the household applying for enrollment (for example, a spouse or parent). Our analysis did not suggest differences in data quality between those who responded for themselves and those for whom another household member responded (for example, comparable rates of “don’t know” and “refusal” responses were observed for both groups). Therefore, we present the data together and do not distinguish between self-respondents and other-respondents.

² We used the following place-of-service codes to identify physician office and outpatient visits: physician offices, clinics, state-run clinics, hospital outpatient departments.

³ Although encounter data are the best available tool to gain insight on service use by HSF enrollees, they are incomplete. For example, although all nonprofit hospitals in San Francisco might provide services to HSF enrollees, and these providers have agreed to report these admissions, the DPH suspects underreporting and is working to improve data collection from hospitals; however, at present, hospital-based services in the encounter data are primarily those reported by San Francisco General Hospital.

Finally, to assess the degree to which HSF has attracted its target population, we draw on two data sets to profile the uninsured working-age population in San Francisco: the 2007 California Health Interview Survey (CHIS), which draws on a sample of 943 adults (ages 18+) for San Francisco County, and the 2008 American Community Survey (ACS) Public Use Microdata Sample (PUMS) for San Francisco County, which has 5,719 adult (ages 18+) respondents. Both surveys ask about current insurance status and therefore provide a snapshot of the city's uninsured population at the time of their administration.

Qualitative data sources. Seven focus groups were conducted in 2010—three in July, two in October, and two in December.⁴ The sample for the July focus groups was drawn from participants who completed the Kaiser Family Foundation (KFF) survey in March 2009 and were still enrolled as of July 2010; the sample for the October focus groups was drawn from participants who had exited from the program at least once, with some having re-enrolled and others still not participating in the program as of October 2010; and the sample for the December focus groups was drawn from self-pay patients at San Francisco General Hospital (SFGH) and from employees whose employers chose the City Option to fulfill the Employer Spending Requirement. In all cases, the size of the focus group ranged from 10 to 13 individuals.

In the July and October focus groups, we collected information on enrollment into HSF, satisfaction with and perceived value of the program, the renewal process, and experience with their medical home, among other topics. Individuals were selected for these groups based on a random sample of HSF participants stratified by age, health status, and medical home. The three groups in July included one conducted in English, one in Cantonese, and one in Spanish. Both groups in October were conducted in English. Both of these groups were also asked about why they had exited the program and, where appropriate, the re-enrollment process. The December focus groups, also conducted in English, explored why individuals who had heard about HSF had not enrolled in the program. While the focus groups reflect only a small number of individuals, and the results are not generalizable, they nonetheless provide important qualitative data about the perceptions and experiences of various HSF participants and individuals who are eligible but not participating.⁵

We also incorporate relevant information collected during our site visits. To date, we have conducted two site visits in San Francisco, in October 2009 and February 2010. The aim of these visits was to gather qualitative information on HSF origins, structure, goals, and implementation experiences from key informants who have been closely involved with the program. These individuals included DPH HSF leaders and staff; San Francisco Health Plan (SFHP)⁶ leaders and staff; physicians, administrators, and other staff in various HSF medical homes; members of HSF advisory bodies; and San Francisco city employees who have been involved with HSF. In October 2009, Mathematica researchers spoke with 62 key informants; in February 2010, we spoke with 38 key informants. We discussed a broad range of topics, including program features; the enrollment, renewal, and re-enrollment processes; the role and function of the medical home; and program

⁴ Corey, Canapary, and Galanis Research (CCG) conducted these focus groups.

⁵ Throughout the report, we insert quotes from these focus groups for illustrative purposes. In all cases, there were multiple individuals who expressed similar opinions or described similar experiences.

⁶ SFHP is the third-party administrator for HSF.

strengths and weaknesses. These discussions have given us a better understanding of staff and provider perspectives on enrollment and disenrollment patterns.

B. Analytic Approach

To address our research questions, we applied descriptive and multivariate methods to examine variation in enrollment and retention trends over time and among important enrollee subgroups. Descriptive methods present actual enrollment flows, whereas regression analyses enable us to control for confounding factors and identify more clearly the characteristics associated with renewal and re-enrollment. In each case, we draw on qualitative data from the focus groups and site visits to illuminate and add depth to the quantitative results. Below, we describe our specific quantitative approach to each analysis.

Who enrolls in HSF? We analyzed enrollment records from July 2007 through June 2010. HSF has gradually expanded in scope as the program raised its income eligibility thresholds and attracted new providers. We anticipate that the populations that enroll after each major change will have different characteristics. For example, anecdotal reports during our site visits suggest that the earliest enrollees at the pilot sites (Chinatown Public Health Clinic and North East Medical Services) generally had longstanding relationships with their medical homes and may have been more likely to exhibit program loyalty than enrollees in other cohorts and at other clinic sites.

To capture this variation, we structured our analysis around five cohorts defined by major changes in program eligibility or provider participation. The first cohort includes individuals who enrolled in July and August of 2007 in the pilot sites listed above as well as other individuals who enrolled in these and other DPH and San Francisco Community Clinic Consortium (SFCCC) clinics from September through December 2007; all of these enrollees were from households with incomes under the FPL. The second cohort begins with the January 2008 increase in income eligibility to 300 percent of the FPL. The addition of new participating providers in September 2008 marks the start of the third cohort. The fourth cohort begins in February 2009 with the second increase in income eligibility to 500 percent of the FPL, and the fifth and final cohort starts in July 2009, when Kaiser Permanente joined as a medical home. For each cohort, we examine trends in the volume of enrollment over time and consider how the profile of enrollees has changed.

To supplement this analysis of enrollment flow and to begin evaluating the service needs of HSF enrollees, we draw on encounter records (July 2007-January 2010) for cohorts 1 through 4 that detail the frequency of inpatient, ED, and outpatient or physician service use. We exclude cohort 5 due to incomplete encounter data. We also descriptively examine HAQ responses for enrollees in cohorts 4 and 5 who completed the survey when first entering HSF ($N = 35,321$) to assess the strength of existing connections to the health care system upon enrollment.

Which eligible individuals do not enroll in HSF? To quantify and address the gap between likely eligible and enrolled individuals, we compared demographic characteristics of HSF participants with profiles of uninsured working-age San Franciscans from two recent surveys—the 2008 ACS and the 2007 CHIS. We assess to what degree HSF has enrolled various subgroups by comparing the number of HSF participants with the estimated number of uninsured individuals in each of these groups.

Who remains enrolled in HSF and for how long? To examine retention rates among HSF enrollees, we track exit, renewal, and re-enrollment rates, using HSF enrollment data. For renewal,

we focus on cohorts 1 through 4, as cohort 5 members have not had an opportunity to make a renewal decision (that is, they have not been enrolled for 12 months). Among those who exit and re-enroll, we also examine the length of enrollment gaps. More than two-thirds of those who re-enroll do so within six months, and 90 percent do so within the first year of leaving the program. Therefore, for re-enrollment statistics, we did not limit the window in which we looked for a second enrollment period. We considered all re-enrollments that we were able to observe through June 2010. In other words, participants in each cohort have had varying lengths of opportunity in which to re-enroll; however, cohort 5 is the only group that may experience any notable truncation.

Why do individuals leave HSF and who returns? To address the question of why individuals exit HSF, we descriptively examined the reported reasons for disenrollment as well as demographic characteristics by exit, renewal, and re-enrollment decisions, drawing on HSF enrollment and encounter data. However, among HSF enrollees, demographic characteristics tended to cluster within medical homes and cohorts. For example, cohort 1 enrollees were disproportionately older, female, and Chinese, and nearly all were well-established patients, reflecting the fact that the earliest HSF participants were patients of pilot sites that served neighborhoods with these characteristics.

To separate the effects of demographic characteristics, enrollment period, and medical home, we conduct regression analyses, modeling exit and renewal decisions. Regression analyses are structured as conditional logit models. We first model the probability that an individual remains enrolled for 12 months as a function of demographic characteristics and utilization. Then, among those who reach 12 months of enrollment, we model the probability that an individual renews HSF enrollment. We exclude from these regressions cohort 5, as insufficient time has elapsed for these members to reach 12 months of enrollment. We also exclude enrollees who we know have disenrolled due to eligibility reasons. To model the likelihood of re-enrollment among those who have left or failed to renew at month 12, we include all individuals who exited the program for any reason, in cohorts 1 through 5, and control for all of the reasons that were recorded—whether individuals left due to a reported inability to pay, insufficient payment, or a change in program eligibility.⁷

⁷ Although some reasons for becoming ineligible for HSF are permanent (for example, turning 65 years old and aging out of the program), others may be temporary (for example, moving out of the city or obtaining private or public insurance coverage).

III. RESULTS

A. Who Enrolls in HSF?

HSF continues to attract substantial numbers of low-income uninsured San Franciscans. HSF does not engage in paid advertising or marketing. It has pursued the same basic recruiting strategy since the program began—enrolling patients who visit participating clinics, doing outreach through news coverage and giving on-site presentations to employers and employees, and to staff serving low income uninsured adults who may be eligible, and other members of the community, utilizing the City and County’s 3-1-1 information hotline, and maintaining an Internet website.⁸ Nevertheless, through June 2010, Healthy San Francisco has attracted an average of 2,225 new clients to the program every month.⁹

Monthly enrollment exceeded 2,500 new clients immediately following both major income eligibility expansions. The first expansion occurred in January 2008 when individuals with incomes between 101 and 300 percent of the FPL became eligible, and the second occurred in February 2009 when HSF opened to individuals with incomes between 301 and 500 percent of the FPL (Figure 1).

The January 2008 surge in enrollment likely reflects program uptake by the newly eligible near poor (100-200 percent of the FPL), who were established clinic patients. In cohort 2, 27 percent of new enrollees had incomes between 100 and 200 percent of the FPL (Table 1), and 91 percent were prior users of their medical homes.

However, increased enrollment in February 2009 was not primarily due to the entrance of newly eligible San Franciscans with incomes greater than 300 percent of the FPL. Just 327 individuals in cohort 4 had incomes exceeding 300 percent of the FPL (2 percent of cohort 4), and those with income below 200 percent of the FPL continued to represent the majority of new enrollees (88 percent). Although income eligibility expansions may have played some role in enrollment growth in early 2009, we also believe that the strategic use of press releases was important.

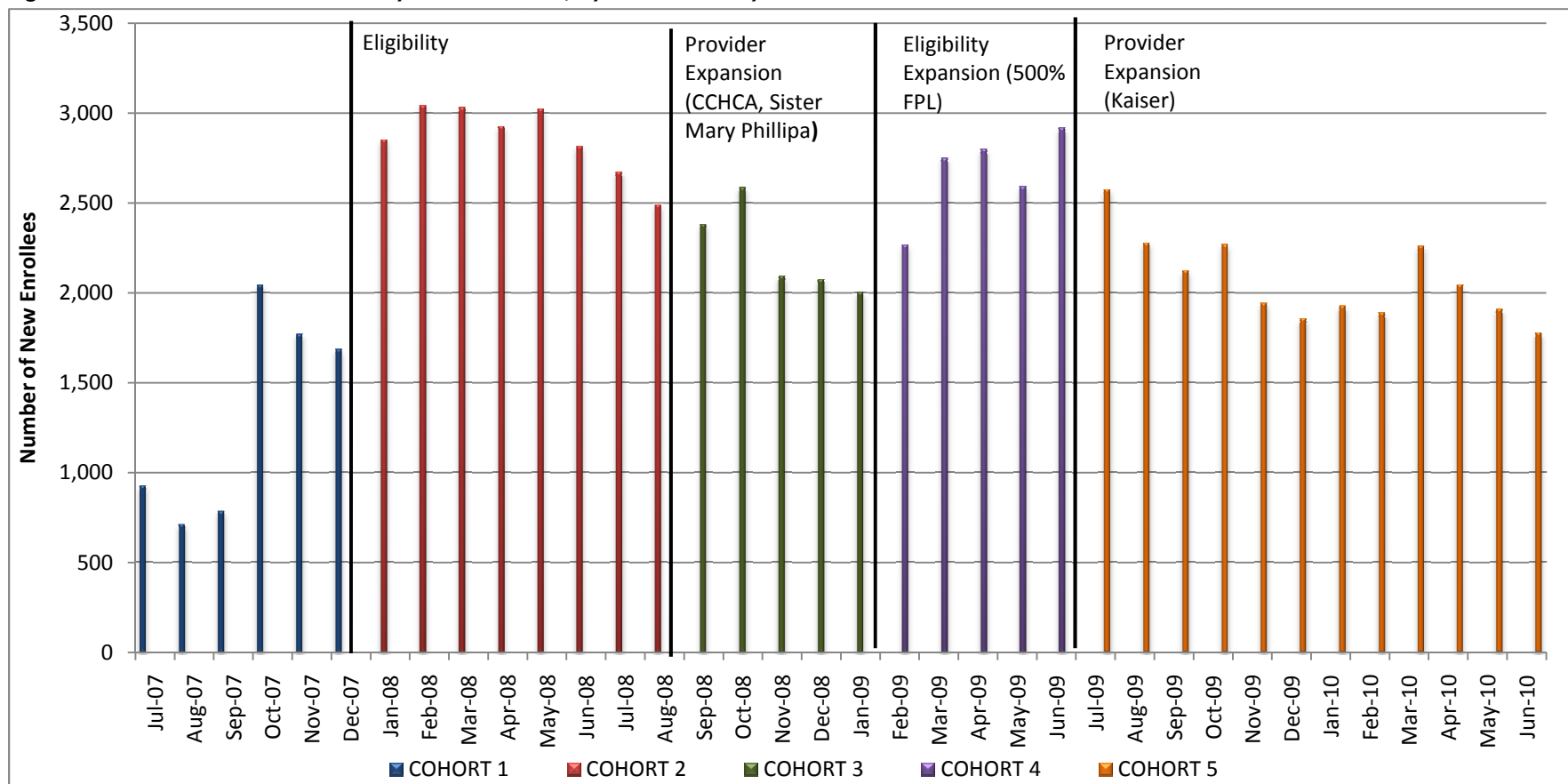
February 2009 saw an unusual volume of high-profile announcements—the eligibility increase to 500 percent of the FPL, praise for the program from President Obama, and an announcement that Pfizer would provide free prescription drugs to HSF enrollees at one medical home.¹⁰ Program visibility from news outlets that carried these announcements may have attracted individuals to HSF who lacked prior connections to the safety-net system. Indeed, we find that a steadily decreasing percentage of each cohort reports prior contact with their chosen medical home. In cohort 1, 98 percent of members were prior users of their medical home; by cohort 5, the most recent set of enrollees, just 59 percent reported visits to their medical home within the previous two years.

⁸ The program distributes approximately 20,000 HSF brochures each year at series of community events such as the Public School Enrollment Fair and in a variety of public and non-profit organizations such as the Medi-Cal office and Episcopal Community Services. In addition to on-site presentations, the Employer Outreach Team also conducts webinars and distributes a newsletter to promote the City Option.

⁹ One focus group participant heard about HSF at the restaurant when he noticed a line under the tax that said “\$1.00 for HSF.”

¹⁰ http://www.healthysanfrancisco.org/about_us/HSF_In_The_News/

Figure 1. New Enrollment in Healthy San Francisco, by Month and by Cohort



Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

Notes: Individuals are counted only in the month that they first enter HSF. Re-enrollments for participants who exit the program are not included in this graph.

The demographic composition of HSF enrollees has changed over time, although the income distribution of new enrollees has remained steady. The first cohort of enrollees were more likely to be near-elderly (39 percent were 55-64 years old), female (52 percent), and ethnically and linguistically Chinese (39 percent), reflecting the characteristics of populations served by the HSF pilot clinics, North East Medical Services (NEMS), and the Chinatown Public Health Center (Table 1). By cohort 5, larger percentages of the population were male (55 percent), younger (65 percent were 18-44 years old), white (24 percent), and English-speaking (65 percent).

Although demographic characteristics have changed over time, the income distribution of new enrollees has remained steady since the expansion of eligibility to 300 percent of the FPL. Just under two-thirds of each cohort report income of 0-100 percent of the FPL, and another quarter reports income between 101 and 200 percent of the FPL (Table 1). The changing demographics of new enrollees, stable income distribution, and continued strong enrollment (greater than 1,500 members per month; Figure 1) in a program entering its fourth year suggest that HSF continues to reach new pockets of low-income uninsured San Franciscans. This ongoing enrollment of new participants may reflect increases in the number of adults in San Francisco without health insurance, either due to the loss of coverage or to new entrants to the city. It may also reflect the addition of new providers, continued media attention to the program, or increased word of mouth as current enrollees relate their experiences to friends, family, and co-workers.

“I enrolled through General Hospital. Yeah, it was an office they had over there, so I signed up for it. I went and checked it out. They recommended it right away.”

“I was at St. Mary’s and they had to inform me that if I didn’t join I would lose my benefits altogether.”

Participants in all seven focus groups noted that they had heard about the program from the newspaper or the radio. For those in the Spanish and Chinese monolingual focus groups, the more frequent source of information was word of mouth from family and friends. But the most frequent response for all groups was that they had heard about the program from their provider. In some cases, participants felt as though they had no alternative if they wanted to receive care at one of the clinics. HSF does not require visitors

to participating providers to enroll or lose their access to care at that clinic. However, enrollment may be required to maintain subsidized access to services.

Table 1. Distribution of HSF Enrollment, by Demographic Characteristics by Cohort

Characteristics	All Cohorts		Cohort 1		Cohort 2		Cohort 3		Cohort 4		Cohort 5	
	N	%	N	%	N	%	N	%	N	%	N	%
Overall	80,091	100	7,922	100	22,852	100	11,139	100	13,323	100	24,855	100
Gender												
Male	42,607	53	3,824	48	11,880	52	5,843	52	7,294	55	13,766	55
Female	37,484	47	4,098	52	10,972	48	5,296	48	6,029	45	11,089	45
Initial Age Group												
18–24	10,594	13	506	6	2,100	9	1,757	16	2,242	17	3,989	16
25–44	35,177	44	2,274	29	9,687	42	4,921	44	6,178	46	12,117	49
45–54	18,651	23	2,036	26	6,068	27	2,543	23	2,898	22	5,106	21
55–64	15,669	20	3,106	39	4,997	22	1,918	17	2,005	15	3,643	15
Racial/Ethnic Group												
Black	7,681	10	775	10	2,253	10	967	9	1,240	9	2,446	10
Chinese	18,923	24	3,076	39	5,693	25	2,713	24	2,960	22	4,481	18
Latino	19,728	25	1,555	20	6,088	27	2,925	26	3,304	25	5,856	24
White	16,102	20	1,127	14	4,009	18	2,086	19	2,935	22	5,945	24
Other	17,657	22	1,389	18	4,809	21	2,448	22	2,884	22	6,127	25
Initial FPL Level												
0–100%	54,230	68	7,922	100	14,796	65	7,295	65	8,435	63	15,782	63
101–200%	18,205	23	0	0	6,083	27	2,887	26	3,295	25	5,940	24
201–300%	6,539	8	0	0	1,934	8	922	8	1,266	10	2,417	10
301%+	1,117	1	0	0	39	0	35	0	327	2	716	3
Spoken Language												
Chinese	18,487	23	3,123	39	5,610	25	2,632	24	2,839	21	4,283	17
English	44,344	55	3,326	42	11,440	50	5,737	52	7,763	58	16,078	65
Spanish	14,490	18	1,192	15	4,872	21	2,274	20	2,345	18	3,807	15
Other	2,770	3	281	4	930	4	496	4	376	3	687	3
Initial Medical Home												
SFGH clinic	12,914	16	1,326	17	4,965	22	1,644	15	2,326	17	2,653	11
Other DPH clinic	28,058	35	3,009	38	8,824	39	3,685	33	4,056	30	8,484	34
SFCCC–NEMS	17,105	21	2,568	32	5,045	22	2,319	21	3,006	23	4,167	17
Other SFCCC	16,436	21	874	11	4,017	18	2,397	22	3,288	25	5,860	24
All other (CCHCA, Kaiser, SMP)	5,428	7	0	0	0	0	1,094	10	643	5	3,691	15
Homeless Status												
Homeless at any point	12,078	15	1,435	18	3,696	16	1,465	13	1,923	14	3,559	14
Never homeless	68,013	85	6,487	82	19,156	84	9,674	87	11,400	86	21,296	86
Medical Home Prior Usage												
Yes	63,119	79	7,734	98	20,890	91	9,303	84	10,585	79	14,607	59
No	16,972	21	188	2	1,962	9	1,836	16	2,738	21	10,248	41

Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

Note: The SFGH medical homes are Family Health Center and General Medicine Clinic

Some new HSF enrollees report weak prior connections to the health care system. Self-reported use of medical services and connections to the health care system prior to HSF enrollment also shed light on the characteristics of new enrollees. More than 90 percent of enrollees in cohorts 4 and 5 completed the HAQ upon enrollment (Table 2). Although a significant number of enrollees were established patients at the various safety-net clinics, responses reveal that many of them lacked a strong connection to the medical care system. Five percent of the respondents considered the ED their usual source for care, whereas another 11 to 12 percent reported not having a usual source for care. In comparison, the California Health Care Foundation reported that in 2007, 40% of the California safety-net population (Medi-Cal, uninsured, Healthy Families) reported lacking a usual source of care. At the national level, the Centers for Disease Control found in 2007 that uninsured adults were more likely than those covered by Medicaid to lack a usual source of care (52.8 percent versus 11.5 percent).

“For most of us, before we had this program, you feel afraid to go to a hospital or a clinic because the first thing you think about is how much money you would have to pay. And that they might not take care of you because you don’t have insurance.”

Table 2. Health Access Questionnaire Responses upon Enrollment for Recent HSF Enrollees

Characteristics	Cohort 4		Cohort 5	
	N	%	N	%
Overall	13,323	100	24,855	100
Response at Initial Enrollment of Those with a Response:	12,095	91	23,226	93
General Health				
Excellent	1,170	10	2,532	11
Very good	2,258	19	4,157	18
Good	3,890	32	7,187	31
Fair	1,662	14	2,848	12
Poor	481	4	727	3
Don't Know	1,122	9	1,756	8
Refused	1,512	13	4,019	17
ED Visit in Past Year				
Yes	1,851	15	3,662	16
No	7,497	62	13,685	59
Don't know	1,077	9	1,665	7
Refused	1,670	14	4,214	18
Usual Source of Care				
Clinic/health center/hospital clinic	5,487	45	9,876	43
Doctor's office	1,462	12	2,630	11
Emergency room	629	5	1,201	5
Some other place	193	2	427	2
No one place	1,346	11	2,796	12
Don't Know	1,366	11	2,155	9
Refused	1,612	13	4,141	18
Difficulty Accessing Medical Care				
Extremely difficult	352	3	729	3
Very difficult	1,028	8	2,169	9
Somewhat difficult	2,101	17	4,210	18
Not too difficult	2,988	25	5,168	22
Not at all difficult	1,652	14	2,686	12
Don't know	2,284	19	4,068	18
Refused	1,690	14	4,196	18

Source: Mathematica analysis of HSF HAQ survey responses collected upon HSF enrollment from December 2008 through June 2010.

More than one-quarter of the enrollees had difficulty accessing medical care prior to enrolling in HSF, and more than 15 percent reported fair or poor health.¹¹ Several participants in the focus groups related feeling afraid to go to a clinic or ED prior to enrolling because of high out-of-pocket costs. A 2004 Kaiser Family Foundation chart book indicated that only 26% of uninsured residents of California, 54% of those enrolled in Medi-Cal or Healthy Families, and 29% of those with other public coverage reported using a doctor's office or HMO as their usual source of care.

Once enrolled, most HSF participants accessed services.

Across cohorts, fewer than 5 percent of enrollees who remained in the program for 12 months had inpatient hospitalizations, just over 10 percent used the ED, and 71 to 78 percent had at least one physician or outpatient visit (Table 3). Many enrollees with short first periods of enrollment (less than 12 months) also accessed services. Across the cohorts, 44 to 64 percent of those who exited early had at least one physician or outpatient visit while enrolled in HSF.¹²

"I see a change in the care from before. In fact, Healthy San Francisco provides more care. I go to the doctor more".

Consistent with the trend in attracting younger enrollees into the program, we find that later cohorts of enrollees use slightly fewer physician and outpatient services when compared with early cohorts. For example, among those enrolled at least 12 months, 16 percent of cohort 1 received eleven or more physician or outpatient visits while by cohort 3, just 10 percent had such frequent visits. Similarly, inpatient use declines from 4.9 percent of enrollees in cohort 1 to 3.4 percent of enrollees by cohort 3. The trends appear to continue with cohort 4.

¹¹ As noted previously, HAQ questions may be answered for another member of the household (for example, a spouse or parent). Our analysis did not suggest differences in the frequency of responding "don't know" or "refusal" for those who responded for themselves and those for whom another household member responded, so Table 2 presents the responses together.

¹² Utilization for cohort 4 may be underreported. Encounter data to support these statistics was pulled in April 2010. Allowing three months for complete encounter data reporting, we consider data for services delivered in January 2010 or earlier to be complete. Cohort 4 includes enrollees from February 2009 through June 2009; accordingly, we have complete data for between 8 and 12 months of enrollment for this group. Data for cohort 5 are considered incomplete and are not presented in this report. Utilization for this cohort will be presented as part of the final report.

Table 3. Inpatient, Emergency Room, and Physician/Outpatient Service Utilization During First Enrollment Period, by Cohort and Length of Enrollment

	Cohort 1		Cohort 2		Cohort 3		Cohort 4	
	N	%	N	%	N	%	N	%
Enrolled 12 Months	7,290	100	20,271	100	9,930	100	9,191	100
Inpatient Visits								
0	6,940	95	19,497	96	9,586	96	8,896	97
1	148	2	337	2	151	2	137	1
2+	202	3	437	2	193	2	158	2
Emergency Room Visits								
0	6,382	86	18,003	89	8,860	89	8,217	89
1	562	8	1,507	7	708	7	669	7
2+	346	5	761	4	362	4	305	3
Physician or Outpatient Visits								
0	1,570	22	5,513	27	2,828	28	2,704	29
1-2	1,412	19	4,385	22	2,427	24	2,368	26
3-5	1,497	20	4,297	21	2,062	21	1,859	20
6-10	1,630	22	3,677	18	1,600	16	1,451	16
11+	1,181	16	2,399	12	1,013	10	809	9
Exit Before 12 Months	632	100	2,581	100	1,209	100	4,132	100
Inpatient Visits								
0	600	95	2,495	97	1,172	97	4,014	97
1	13	2	41	2	16	1	62	2
2+	19	3	45	2	21	2	56	1
Emergency Room Visits								
0	562	89	2,410	93	1,117	92	3,783	92
1	45	7	113	4	57	5	249	6
2+	25	4	58	2	35	3	100	2
Physician/Outpatient Visits								
0	224	35	1,374	53	677	56	1,706	41
1-2	143	23	575	22	241	20	1,045	25
3-5	119	19	362	14	141	12	728	18
6-10	114	18	179	7	88	7	455	11
11+	32	5	91	4	62	5	198	5

Source: Mathematica analysis of HSF encounter data from July 2007 through January 2010.

B. Which Eligible Individuals Do Not Enroll in HSF?

Nearly all HSF applicants successfully enroll. As documented in the 2009-2010 annual report to the San Francisco Health Commission, HSF application assistants processed more than 55,000 applications during the most recent fiscal year, representing more than 64,000 individuals who sought HSF coverage. Approximately 95 percent of the applicants were HSF-eligible, and 99 percent of eligible applicants ultimately enrolled. Among those not eligible for HSF, more than half were processed for other public health insurance programs, such as Medi-Cal and Healthy Families, consistent with the program's broader goal of improving access to care for the pool of uninsured adults in the city.

HSF appears to have enrolled a large portion of working-age uninsured adults in San Francisco. Two recent surveys, the 2008 ACS and 2007 CHIS, estimate the number and characteristics of working-age uninsured San Franciscans. Both surveys ask respondents about their current insurance status; however differences in sampling and in variable definitions lead to slightly different overall population estimates.¹³ The downturn in the economy between 2007 and 2010 undoubtedly led to increases in the number of uninsured working-age adults in San Francisco since these surveys. CHIS estimated that there were 79,000 uninsured working-age adults in San Francisco in 2010, which would translate to enrolling an estimated 68 percent of the uninsured nonelderly population (Table 4).¹⁴ The 2009 ACS-PUMS estimated that the total number of uninsured nonelderly adults in San Francisco increased from 77,081 in 2008 to 88,004 in 2009. We do not have the information necessary to update the ACS number for 2010, but it is unlikely to be lower than the 2009 estimate, suggesting that HSF has enrolled at most 60 percent of the target population.

We are interested in whether HSF has been able to enroll more individuals from some subgroups of the uninsured than from others. To ascertain this information, we rely on the distribution of uninsured adults across these subgroups presented in Table 4 for the 2007 CHIS and the 2008 ACS. It is unclear whether the increase in the total number of uninsured individuals estimated by CHIS can be applied to different categories or, for example, whether there were proportionately more individuals from one group added to the pool of uninsured adults than from other groups. For example, it is possible that the number of uninsured adults above the FPL increased relatively more than the number below the FPL, reflecting the fact that individuals with higher incomes were more likely to have lost employer-sponsored insurance (ESI) in the downturn and are less likely to qualify for public coverage.¹⁵

With that caveat in mind, we used the rate of increase in the total number of uninsured nonelderly adults provided by CHIS to increase the numbers for all demographic categories. The estimated 2010 numbers from CHIS indicate that HSF may be approaching enrollment saturation among those in households below 200 percent of the FPL, a group that HSF is uniquely well positioned to reach and enroll through its network of safety-net providers. Similarly, HSF has achieved high penetration rates among uninsured working-age women and Asian and Pacific Islanders.

¹³ The ACS considered individuals insured if they reported insurance through (1) a current or former employer or union, (2) direct purchase from an insurance company, (3) Medicare, (4) Medicaid or any other government-assistance plan for the low-income or disabled, (5) TRICARE or other military health care, or (6) Veterans Administration. CHIS considered individuals insured if they were in any of these plans; they also considered individuals insured if they reported enrollment in AIM (Access for Infants and Mothers), MRMIP (Major Risk Medical Insurance Program), and/or Family PACT (which covers only contraception and reproductive services). Specifically asking about these three California programs may have resulted in fewer women, particularly younger women, being reported as uninsured in the CHIS survey, relative to the ACS survey.

¹⁴ Information from the 2010 Healthy San Francisco Annual Report.

¹⁵ Although there has been a steady decline in the percentage of the California population with ESI over the last decade, analysis by the California Health Care Foundation reveals a recent increase in rate of that decline as well as a notable increase in both the unemployment and uninsured rates.

Table 4. HSF Enrollment Compared with Uninsured Working-Age Population in San Francisco

	ACS 2008		CHIS 2007	CHIS 2010 ^b		HSF June 2010	
	N	%	N	N	%	N	%
Total Population	77,021	100	60,000	79,000	100	53,097	100
Sex							
Male	45,471	59	41,000	54,000	69	27,908	53
Female	31,550	41	19,000	25,000	32	25,189	47
Age							
18–24	15,140	20	6,000	8,000	9	6,949	13
25–39	27,832	36	30,000	38,000	49	17,082	32
40–64	34,049	44	25,000	33,000	42	29,066	55
Preferred Spoken Language^a							
Chinese ^a	15,181	20	10,000	13,000	16	13,661	26
English	31,147	40	28,000	37,000	47	28,174	53
English and Chinese ^a			4,000	5,000	7		
English and Spanish			3,000	4,000	6		
Spanish	17,339	23	10,000	13,000	17	9,391	18
Other	13,354	17	11,000	14,000	14	1,871	4
Race/Ethnicity							
Asian or Pacific Islander	27,701	36	17,000	22,000	28	20,200	38
Black	5,604	7	14,000	18,000	24	4,576	9
Latino	18,477	24	13,000	17,000	21	12,822	24
White	22,848	30	13,000	17,000	21	10,218	19
Other (including two or more races)	2,391	3	4,000	5,000	6	5,281	10
Income (FPL)							
0–100%	21,366	28	26,000	34,000	44	35,788	67
101–200%	17,561	23	9,000	12,000	14	12,234	23
201–300%	13,774	18	7,000	9,000	11	4,328	8
301% or greater	23,534	31	19,000	25,000	31	747	1

Source: Mathematica analysis of ACS 2008 data and HSF enrollment data. Queries of CHIS 2007 downloaded from AskCHIS tool (<http://www.chis.ucla.edu/main/default.asp>) UCLA Center for Health Policy Research on December 9, 2010.

^a Includes Chinese, Cantonese, and Mandarin. CHIS permitted individuals to respond that they spoke multiple languages at home. ACS codes whether someone spoke any language other than English at home. HSF asks applicants to indicate the preferred spoken language. The different questions make comparisons across these groups problematic.

^bThese are estimated numbers based on the increase in the total number of uninsured working-age adults provided by CHIS.

HSF enrollees are disproportionately female, older, and have lower incomes. We compared the distribution of HSF enrollees at the end of fiscal year 2009–2010 with the distribution of demographic characteristics in both the ACS and CHIS surveys. Based on this analysis, HSF enrollees are disproportionately female; that is, although 47 percent of HSF enrollees are women, CHIS estimates that only 32 percent of uninsured nonelderly adults in San Francisco are women, and ACS estimates that 41 percent are women. Similarly, more than half (55 percent) of HSF enrollees were over age 40, although this group represents just 42 to 44 percent of the working-age uninsured population. More than 90 percent of HSF enrollees are from households at less than 200 percent of the FPL, whereas both CHIS and ACS estimate that slightly more than half of the working-age population comes from these households.

HSF enrollees are less likely to be younger uninsured adults and those from households with incomes above 300 percent of the FPL. The difference in the estimated number of uninsured adults between 18 and 24 accounts for much of the difference between CHIS and ACS in

the total number of uninsured adults. It is unclear whether the difference reflects different sample sizes or design, or different questions, but the ACS estimates more than twice as many uninsured young adults than does the CHIS. It is difficult, therefore, to know what percentage of these individuals have enrolled in HSF. Estimates of the number of uninsured adults between 25 and 39 from both surveys, however, suggest that the enrollment rate for this age group lags that for older, uninsured adults. The same is true for those from higher income households.

Under-represented groups may not be enrolled in HSF because they are not eligible for HSF, less likely to be aware of the program, do not place as high a value on enrollment, perceive their current lack of coverage as a temporary situation, or see the enrollment process itself as a logistical challenge. Several explanations may account for the gap in HSF enrollment relative to the estimated population of uninsured working-age adults in these groups. Some of these individuals may be eligible for Medi-Cal even though at the time of the survey they were not enrolled. Certain groups may simply be unaware of HSF. This finding is particularly likely for the estimated 11,000 to 14,000 uninsured who do not speak English, Spanish, or a variant of Chinese, the three languages that HSF uses for communications. Other groups, such as younger adults who may not have current health issues, may simply place a lower value on enrollment; they may not need ongoing services and can opt into the program should problems arise. Finally, low enrollment among somewhat higher income groups may be due to personal preferences or to a reluctance to make required financial contributions for a service they do not want or feel they need. These individuals are also more likely to have had private coverage and expect to regain coverage within a few months.

Comments made by participants in the December focus groups, which comprised eligible individuals who were not enrolled, provide insight into why at least some individuals from these under-represented groups may have decided not to enroll. For example, several participants thought an enrollment process that requires income verification and initial screening was cumbersome or overwhelming.¹⁶ Some individuals did not understand why they had to enroll in person, rather than over the phone or online. Those who were currently or very recently working questioned why enrollment was so often restricted to normal business hours and explained that if enrollment had to be in person, they wanted more evening or weekend hours.¹⁷

C. Who Remains Enrolled in HSF and For How Long?

More than 85 percent of HSF enrollees remain in the program for at least 12 months, and roughly half of these participants renew enrollment at the first opportunity. Through June 2010, HSF had enrolled 80,091 participants; 57,080 enrollees have been enrolled for at least 12 months, so we can observe their first renewal decision (Figure 2).¹⁸ Of those 57,080 enrollees, 49,005 stayed enrolled for the full 12 months, and 28,186 (49 percent of the enrollees; 58 percent of those reaching the renewal period) renewed enrollment in the program at the end of the 12 months.

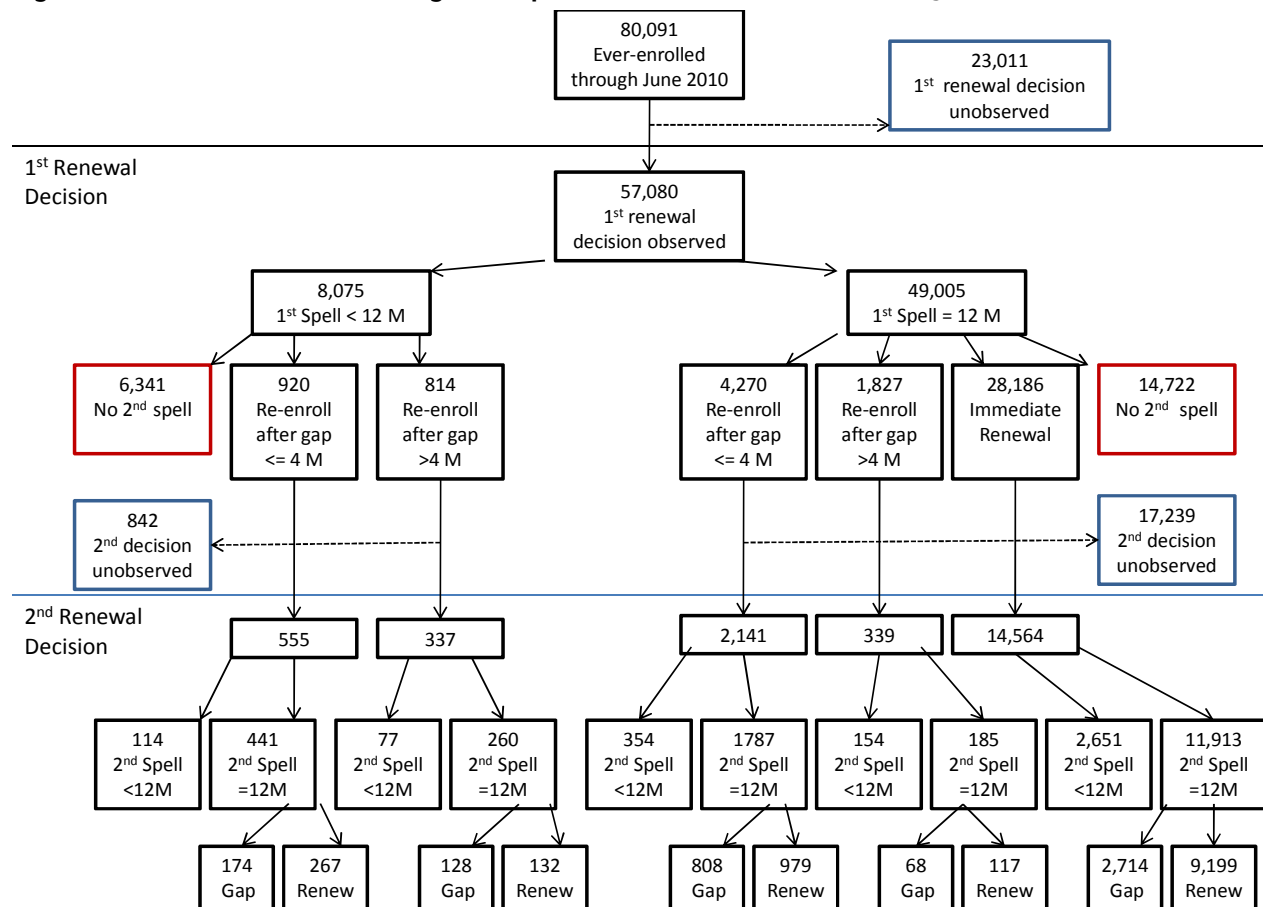
¹⁶ Interestingly, participants in the other focus groups, all of whom were current or former enrollees, said that the enrollment process was easy and efficient.

¹⁷ An increasing number of the HSF medical homes are offering extended hours or are open on Saturdays for enrollment.

¹⁸ The most recent 23,011 program entrants have not yet left the program but also have not been enrolled for 12 months and therefore have not faced a renewal decision.

Another 7,831 enrollees (14 percent) who either had a short first period (less than 12 months) or failed to renew at the end of the 12-month enrollment period, eventually re-enrolled in the program.¹⁹ Altogether, just over 60 percent of enrollees for whom we can observe renewal and re-enrollment decisions by June 2010 signaled the value they place on HSF enrollment by actively opting into the program for a second period.

Figure 2. Renewal Patterns Among Participants Ever Enrolled in HSF as of June 2010

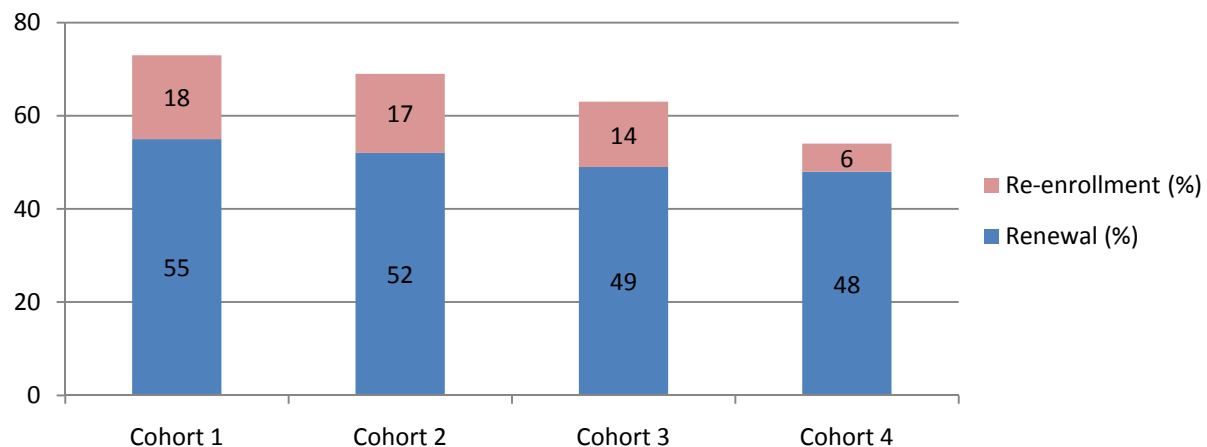


Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

¹⁹ After a gap of 4 or fewer months, 920 of the 1,734 who left before the 12 months re-enrolled, and 814 re-enrolled after a gap longer than 4 months; 4,270 of those who chose not to renew at 12 months re-enrolled after a gap of 4 or fewer months; 1,827 re-enrolled after a gap longer than 4 months.

The proportion of enrollees who renew or re-enroll in HSF declines across cohorts. The immediate renewal rate declines from 55 percent in cohort 1 to 48 percent by cohort 4, and the re-enrollment rate falls from 18 to 6 percent (Figure 3).²⁰ This pattern likely reflects the fact that as HSF has expanded, the program has attracted more individuals without prior ties to the safety-net system. Those who were not prior users may be more difficult to retain in HSF, because the medical home relationship must be newly established or they may be more likely to view HSF as a temporary solution to their health care needs. Although retention rates fall across cohorts, more than half of enrollees opt into the program a second time.

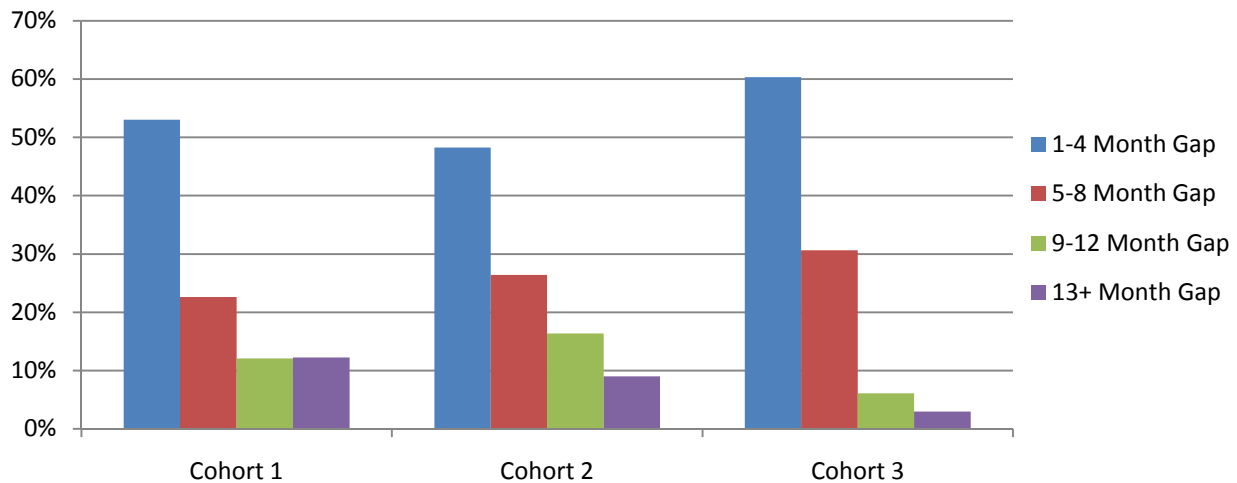
Figure 3. Percentage of Enrollees Renewing and Re-Enrolling in HSF, by Cohort



Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

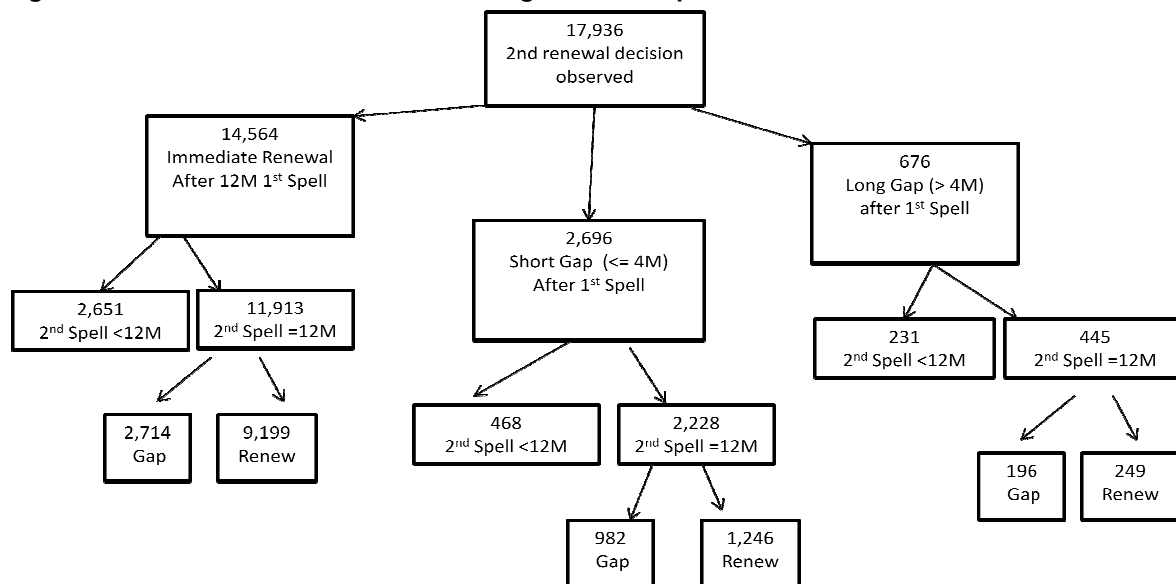
Among participants who exit, most who re-enroll do so within the first four months, and nearly all who eventually return do so within 12 months. Across cohorts 1 through 3, 48 to 60 percent of those who exit HSF and then re-enroll do so within the first four months of exiting the program. Between 88 and 97 percent of enrollees in cohorts 1 through 3 who exit HSF and then re-enroll do so within a year (Figure 4). Overall, the distribution of gap lengths differs very little between cohort 1 and cohort 3 re-enrollees, despite the fact that 30 months have elapsed since the end of cohort 1 (in our data running through June 2010), while just 18 months have elapsed since the end of cohort 3. These data suggests that returning to HSF after a long gap is relatively rare, and that re-enrollment can be examined across the first several cohorts without substantial concern about truncation.

²⁰ Flow charts with detailed renewal and re-enrollment decisions by cohort can be found in Appendix A.

Figure 4. Distribution of Re-Enrolling HSF Participants, by Length of Gap Between Enrollment Periods and Cohort

Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

For participants who renewed or re-enrolled in HSF, the second renewal rate is higher. For 17,936 individuals, mostly in cohorts 1 and 2, we can observe a second renewal decision (Figure 5). In this group, 10,694 (60 percent) renew the second time. The second renewal rate is highest (63 percent) for those with an immediate first renewal, lower for those who had a short gap in enrollment after their first enrollment period (46 percent), and lowest for those with a long gap in enrollment after their first enrollment period (37 percent).²¹

Figure 5. Second Renewal Patterns Among HSF Participants

Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

²¹ Of the 14,564 who renewed at month 12 of their first period, 9,199 renewed at month 12 of their second period; 1,246 of the 2,696 who had re-enrolled after a short gap their first time and 249 of the 676 who had re-enrolled after a long gap stayed and renewed at month 12 in their second period.

Overall, for cohort 1, 42 percent of initial enrollees have remained enrolled for at least 24 months, either continuously or with a gap of less than 4 months (Table A.1.). For cohort 2, this figure is 30 percent (Table A.2). The relatively high rate of renewal in the second year for those in cohort 1 is consistent with the explanation that early enrollees from the pilot sites at NEMS and Chinatown Public Health Clinic were unique and especially loyal to the HSF program, likely because they were already long-time users of those medical homes. In addition, cohort 1 members also paid no participation fees because their incomes were less than 100 percent of the FPL; therefore, financial concerns are not barriers to continued enrollment for this group.

In all three of the June focus groups, which comprised enrollees from these early cohorts, participants expressed appreciation for having received renewal reminder notices by mail or phone. In the Chinese and Spanish monolingual groups, there were minimal complaints about the process; most thought it was easy and efficient.

D. Why Do Individuals Leave HSF and Who Returns?

1. Disenrollment Reasons

Loss of HSF eligibility accounts for more than half of exits prior to renewal. Nearly all cohort 1 members who left prior to reaching renewal became ineligible for HSF (Table 5), and loss of eligibility continued to account for roughly half of early program exits among cohorts 2 through 4. In many cases, loss of HSF eligibility represents a positive development; roughly three-quarters of these individuals became insured through either private or public coverage sources. The remainder aged out of the program, moved out of San Francisco, or died.²² As we might expect, it was relatively rare for early-exiting participants who became ineligible to re-enroll; just 11 percent did so.

Although small, financial participation requirements may for some represent a barrier to remaining enrolled. After loss of HSF eligibility, making an insufficient payment is the leading reason for exiting HSF prior to renewal. By cohort 4, half of those exiting the program early failed to make sufficient payments (Table 5). Insufficient payment does not necessarily reflect a financial burden to the enrollee; it may simply mean the enrollee did not make a payment. Only 2 percent of enrollees reported an inability to afford the participation fee as their reason for leaving the program. Several participants in the focus group responded that cost was a major reason for leaving the program, adding that the costs were very reasonable, just not affordable for them at that time.

"It pretty much got too expensive on my part. Rent and bills on top of that. So I just let it lapse and hope I get better. I will get a job eventually. Not too big costs but, we didn't have any money at the time."

Many who remain in the program for 12 months but fail to renew may have already obtained needed services from HSF. Virtually all those exiting the program at month 13 did so for failure to complete re-screening.²³ This blanket disenrollment reason masks a number of

²² According to data from the 2008 CHIS, approximately 10 percent of nonelderly adults moved out of San Francisco in 2008.

²³ A small number were no longer eligible for HSF and several were coded as actively disenrolling but for no stated reason.

potential explanatory factors. Beneficiaries may have become ineligible without notifying HSF; for example, they may have moved out of the city or obtained access to insurance, or they may be relatively healthy individuals who have already addressed an episodic health care need during the first enrollment period.

Table 5. Reasons for Program Exit, by Cohort and Exit Timing

	Total		Cohort 1		Cohort 2		Cohort 3		Cohort 4	
	N	%	N	%	N	%	N	%	N	%
Exit Prior to Renewal	6,231	100	640	100	2,694	100	1,282	100	1,615	100
Reasons for First Disenrollment										
No longer HSF eligible	3,490	56	617	96	1,475	55	627	49	771	48
Insufficient payment	2,551	41	1	0	1,135	42	609	48	806	50
Cannot afford participation fee	94	2	0	0	53	2	24	2	17	1
Dissatisfied with HSF	58	1	0	0	23	1	18	1	17	1
Failure to complete re-screening	16	0	16	3	0	0	0	0	0	0
Incomplete or false documentation	13	0	3	0	4	0	2	0	4	0
Unknown disenrollment reason	9	0	3	0	4	0	2	0	0	0
Exit at Renewal	20,819	100	2,924	100	8,212	100	4,392	100	5,291	100
Reasons for First Disenrollment										
Failure to complete re-screening	20,081	96	2805	96	7,864	96	4,278	97	5,134	97
No longer HSF eligible	484	2	93	3	239	3	83	2	69	1
Unknown disenrollment reason	245	1	25	1	103	1	30	1	87	2
Cannot afford participation fee	6	0	1	0	4	0	1	0	0	0

Source: Mathematica analysis of enrollment data from July 2007 through June 2010.

When we compare individuals who remain in the program for 12 months and then fail to renew with individuals who immediately renew or who return to the program after a short gap, noteworthy differences in utilization over time appear. For example, looking at physician visits among those with incomes below the FPL (who pay no participation fees), utilization for those who fail to renew declines from 11.7 visits per 1000 members in the first quarter to 8.2 visits by the second quarter, before dropping to just 3.4 visits in quarter 4 (Table 6). For those who immediately renew, utilization changes from only 16.3 to 13.8 visits per 1000 members over the same period. We observe similar patterns for those with incomes above the FPL, who continue paying the participation fee throughout the first year. Those who go on to renew have persistently higher utilization rates, whereas the group that exits at month 13 has a drop-off in service use. Notably, this pattern does not reflect heavy up-front usage followed by disengagement. Nearly 70 percent of enrollees with incomes below the FPL who left HSF at month 13 accessed medical services at some point in their last two quarters of enrollment. The significant attrition in average service use for

those who exit may simply reflect the fact that they have fewer chronic conditions that need uninterrupted treatment.²⁴

Individuals who exit and come back show higher utilization rates during the second period. Across those ever enrolled, we found only 948 individuals (1 percent) whose first enrollment period was three months or less and who re-enrolled in the program (Table 6). Almost all of these individuals (95 percent) paid a participation fee.²⁵ First-quarter utilization during the first enrollment period for these 900 enrollees was comparable with that of enrollees who had 12-month first enrollment periods and then exited (95 and 93 physician visits for the two groups). Utilization in the first quarter of the second enrollment period was considerably higher: 30 percent more ED visits,

“I knew that I would be disenrolled because I hadn’t paid or I forgot to pay or something and I let it go and then I ended up sick and I needed to sign up again. I realized it, but I was like, it’ll be fine.”

almost 50 percent more physician visits, and more than twice the number of inpatient visits. In fact, they experienced higher inpatient- and ED-visit rates than did those who were continuously enrolled.²⁶ Higher utilization rates in the second period for those who left the program may reflect strategic re-enrollment; that is, participants in the focus groups told us that they discontinued enrollment when they thought they did not need care and re-enrolled when they got sick.

²⁴ Future papers will investigate the distribution and severity of chronic disease across cohorts, and subgroups defined by enrollment and renewal decisions.

²⁵ The utilization rates for the 48 who were below the FPL are not shown due to small sample size problems.

²⁶ A full analysis of these comparisons requires controlling for the presence of chronic health conditions or other health problems, and will appear in a future report.

Table 6. Mean Service Utilization per 1000 Enrollees, by FPL and Renewal and Re-Enrollment Decisions

	0-100% FPL			101%+ FPL		
	First Period = 12 Months, Then Exit	First Period = 12M and Second Period = 12M		First Period ≤ 3 Months, Re-Enroll ^b	First Period = 12 Months, Then Exit	Renewal After Two Complete Periods
		1-4 Month Gap, Re-Enroll ^a	Renewal			
Number of Individuals	8,353	776	5,553	900	2,234	933
Inpatient Visits per 1000 Enrollees						
Period 1, Quarter 1	.73	.95	.47	.29	.21	.26
Period 1, Quarter 2	.34	.50	.21		.08	.28
Period 1, Quarter 3	.25	.49	.32		.20	.26
Period 1, Quarter 4	.22	.21	.38		.06	.30
Period 2, Quarter 1		.37	.25	.69		.06
Period 2, Quarter 2		.57	.22			.09
Period 2, Quarter 3		.37	.23			.06
Period 2, Quarter 4		.15	.26			.17
ED Visits per 1000 Enrollees						
Period 1, Quarter 1	.64	1.10	.63	.38	.36	.21
Period 1, Quarter 2	.50	1.25	.57		.28	.30
Period 1, Quarter 3	.33	1.13	5.1		.21	.26
Period 1, Quarter 4	.31	1.08	.44		.15	.20
Period 2, Quarter 1		.98	.45	.49		.24
Period 2, Quarter 2		1.21	.55			.27
Period 2, Quarter 3		1.04	.53			.31
Period 2, Quarter 4		.93	.44			.17
Physician or Outpatient Visits per 1000 Enrollees						
Period 1, Quarter 1	11.68	16.49	16.34	9.47	9.33	16.02
Period 1, Quarter 2	8.24	17.32	15.61		6.80	16.63
Period 1, Quarter 3	5.33	14.70	14.37		5.09	14.16
Period 1, Quarter 4	3.44	13.79	13.80		3.31	13.61
Period 2, Quarter 1		14.45	13.02	13.92		15.08
Period 2, Quarter 2		17.28	14.07			15.21
Period 2, Quarter 3		15.73	13.92			14.78
Period 2, Quarter 4		12.42	12.67			12.23

Source: Mathematica analysis of HSF enrollment (July 2007 through June 2010) and encounter data (July 2007 through January 2010).

^a Only 42 enrollees from households above the FPL had full 12-month first and second periods with a short gap between periods before re-enrolling, so the sample is too small to make conclusions about service utilization levels and compare with this group from households below the FPL.

^b Only 48 enrollees from households below the FPL had a short first period and then re-enrolled, so the sample is too small to make conclusions about service utilization levels and compare with this group above the FPL.

2. Characteristics Associated with Retention, Renewal, and Re-Enrollment

As noted above, decisions to stay enrolled in HSF, re-enroll after leaving for a short time, or exit and not return reflect a multitude of factors, including a change in program eligibility. The HSF program recently increased its efforts to track individuals who have not renewed to obtain information on the reasons why they may have elected not to renew. Early data suggest that over 25 percent of those contacted who do not intend to renew have relocated outside of San Francisco or have obtained public or private coverage. Retention, renewal, and re-enrollment patterns across demographic and utilization characteristics are consistent with expectations that individuals likely to have more stability in their work and residency situations, with closer relationships to the medical home, and those for whom HSF represents a high-value or long-term solution are more likely to remain in HSF. Controlling for personal characteristics through regression analysis, we find that HSF has actually been *more* likely to retain individuals over time. The declining retention rates presented in Section C above reflect the changing composition of HSF enrollees over time.

a. Retention to 12 Months

Ethnically and linguistically Chinese individuals, those with lower incomes, and those who previously used their medical home were more likely to remain in the program for at least 12 months. Among the 57,080 individuals for whom we can observe an exit or renewal decision, 86 percent remained in the program for at least 12 months. Among ethnically and linguistically Chinese participants, this rate was 91 percent (Table 7).²⁷ NEMS, which has a high concentration of these patients, also saw a 91 percent rate of retention to 12 months.

When we control for the clustering of characteristics through regression analysis, having Chinese as a primary language remains an important positive predictor of retention to 12 months; however, the retention of ethnically Chinese individuals appears no different than that of whites (Table 8).²⁸ This finding suggests that the higher retention rate we see among Chinese enrollees may be driven by especially strong medical home bonds between Chinese-speakers and the safety-net providers who deliver care in those languages. Black and Latino enrollees were less likely to remain in the program for 12 months. Relative to those in the two large DPH clinics at SFGH (Family Health Center and General Medicine Clinic), enrollees in both NEMS and other SFCCC clinics were more likely to remain in the program for at least 12 months, even after controlling for personal characteristics.

“Because I went to Chinese Hospital, they are really nice people. Very, very nice, and my family doctor, they all, very, very nice. I really feel extremely good.”

Individuals from lower income households were also much more likely to reach 12 months of enrollment. Among those with incomes less than 100 percent of the FPL, 93 percent remained in

²⁷ Reproductions of Table 7 for each individual cohort can be found in Appendix B.

²⁸ Regression analyses exclude individuals who are coded as becoming ineligible for HSF because they did not have an opportunity to remain enrolled or to renew enrollment. However, we note that these coded disenrollment reasons are incomplete. For example, some of those who are recorded as disenrolling for failure to pay the participation fee or for failure to complete rescreening may in fact have lost HSF eligibility (perhaps by moving or obtaining coverage); they did not provide that information and therefore it is not recorded. Most participants have no incentive or obligation to report to HSF their reason for ending program participation.

HSF for 12 months, whereas just 74 percent of the near poor (100-200 percent of the FPL), 68 percent of those with incomes between 200 and 300 percent of the FPL, and only about half of the highest income group remained in the program for 12 months (Table 7). These results were confirmed by regression analysis in which other characteristics are controlled (Table 8) suggesting that participation and POS fees may be an obstacle to continued enrollment. Alternatively, the FPL of the household likely correlates with other, unobserved, factors that could influence enrollment decisions (for example, the availability of ESI).

Because those with incomes below the FPL do not pay a participation fee, we were initially concerned these results were due to measurement error; that is, there may not be a formal disenrollment signal because HSF does not periodically contact those who do not pay a fee to determine whether they are still active participants. However, we found that among those with incomes below the FPL who remained nominally enrolled to 12 months and then exited at month 13, 70 percent used services during the third and fourth quarter of their first enrollment year, a clear signal that they are still enrolled and engaged in the program. As a further sensitivity analysis, we modeled retention to 12 months and renewal separately for those above and below the FPL. The direction and significance of the effect of demographic and utilization characteristics remained stable.

Prior use of the medical home was also a strong predictor of remaining enrolled for at least 12 months. Among those with prior use, 88 percent remained enrolled for at least 12 months, whereas among those new to the safety net, just 71 percent did so (Table 7). After controlling for other personal characteristics, prior use remained a strong predictor of retention to 12 months (Table 8). Lower retention rates among those new to the system do not necessarily signal dissatisfaction with HSF medical homes. Rather, for some individuals, joining an HSF medical home represents a temporary *discontinuity* in medical homes. Those who enroll in HSF as a stopgap during employment transitions may have established relationships with medical providers outside the HSF network. Short tenure in HSF may reflect changing life circumstances that allow these individuals to reconnect with their prior, more established, medical homes.

After controlling for personal characteristics, homelessness emerges as having a negative correlation with retention to 12 months, and later cohorts of enrollees have higher retention. Relative to individuals who were never homeless, those who experienced a period of homelessness were less likely to remain in the program for 12 months (Table 8). These individuals may be difficult for the program to contact and keep engaged in the program. Relative to cohort 1, enrollees in cohorts 2 through 4 were more likely to remain in the program for 12 months, suggesting that HSF may have done a better job of communicating the benefits of continued enrollment over time or that individuals are making a more active choice to enroll.

Among populations for which we can observe a second enrollment period, lower incomes, prior medical home use, and later cohorts remained positive predictors of retention to 12 months. Homelessness also became a positive predictor of retention. Relative to those from households with incomes below 100 percent of the FPL, those with higher incomes were less likely to remain in the program for 12 months during their second period (Table C.2).²⁹

²⁹ We exclude from this analysis individuals with truncated enrollment periods. For example, this analysis would exclude someone whose second enrollment period began in February 2010, because he or she has not yet had an opportunity to reach 12 months of enrollment.

Table 7. Demographic Characteristics, by First Renewal and Re-Enrollment Decisions

Characteristics	Total Enrollees	Reach 12 Months	Renew at 12 Months	Gap in Enrollment	Re-enroll After Gap
	N	N	% of Total	N	% of Total
Overall	57,080	49,005	86	28,186	58
Gender					
Male	29,878	25,538	85	14,220	56
Female	27,202	23,467	86	13,966	60
Initial Age Group					
18–24	6,807	5,972	88	2,813	47
25–44	24,056	20,354	85	9,847	48
45–54	13,878	12,198	88	7,691	63
55–64	12,339	10,481	85	7,835	75
Ethnic Group					
Black	5,434	4,531	83	2,039	45
Chinese	14,624	13,325	91	10,134	76
Latino	14,308	12,226	85	6,199	51
White	10,761	8,849	82	4,494	51
Other	11,953	10,074	84	5,320	53
Initial FPL Level					
0–100%	38,857	35,957	93	19,652	55
101–200%	13,144	9,685	74	6,368	66
201–300%	4,524	3,090	68	2,017	65
301%+	555	273	49	149	55
Spoken Language					
English	29,583	24,669	83	12,049	49
Chinese	14,383	13,073	91	10,052	77
Spanish	10,969	9,420	86	4,908	52
Other	2,145	1,843	86	1,177	64
Initial Medical Home					
SFGH Clinic	10,460	8,831	84	4,778	54
Other DPH Clinic	20,393	17,071	84	9,701	57
SFCCC–NEMS	13,126	11,989	91	8,710	73
Other SFCCC	10,991	9,380	85	3,741	40
All Other Clinics	1,959	1,603	82	1,134	71
Homeless Status					
Homeless at any point	8,695	7,725	89	4,528	59
Never homeless	48,385	41,280	85	23,658	57
Medical Home Prior Usage					
Yes	49,644	43,761	88	27,953	64
No	7,436	5,244	71	233	4

Source: Mathematica analysis of enrollment data from July 2007 through June 2010.

Note: We did not limit the window in which we looked for a re-enrollment. That is, we counted all re-enrollments that occurred through June 2010. The earliest cohorts therefore have a longer window in which to re-enroll; however, as presented in Section C, nearly all participants who exit and go on to re-enroll do so within 12 months, and most do so within the first four months. Therefore, truncation should have a minimal impact on later cohorts.

Those without prior medical home use were also more likely to exit early. In contrast to the first enrollment period, homelessness was actually a positive predictor of retention to 12 months for those with a second period. We believe that this situation reflects a selection effect: Individuals who have enrolled in HSF twice have strongly signaled its value to them. The subset of homeless individuals who have a second enrollment period may place especially high value on HSF as their

only long-term source of health care access. Race, ethnicity, language, and medical home were no longer important.

b. Renewal at 12 Months

Among those who reached 12 months of enrollment, factors predicting renewal are generally similar to those predicting retention to 12 months. The estimated relationships are consistent with expectations that those with closer relationships to the medical home and those for whom HSF represents a high-value or long-term solution are more likely to renew. As with retention to 12 months, characteristics associated with renewal included being ethnically and linguistically Chinese, being previous users of the chosen medical home, enrollment in NEMS, and being part of

“They just make an appointment. And you can go over to take care of the paperwork. And they are all in Chinese writing, very easy.”

later cohorts of enrollees. Relative to cohort 1, cohort 2 is 33 percent more likely, cohort 3 is 45 percent more likely, and cohort 4 is 76 percent more likely to renew. These increasing renewal rates over time may reflect increased DPH efforts to notify participants about the renewal process. To promote on-time renewal, the program currently mails three reminder notices (at 90, 60, and 30 days before the renewal deadline) and contacts

participants via an automated telephone call. In April 2010, HSF began a renewal incentive program whereby participants who complete renewal on time are entered into a lottery to win a grocery store gift card. Focus group participants routinely recalled being contacted about renewing and described the renewal process as “Easy, just sign some papers.”

In addition, being older and having near-poor income levels were associated with higher rates of renewal among those who reached 12 months of enrollment. Although roughly 48 percent of those under 45 years of age renewed enrollment, 63 percent of those aged 45 to 54 and 75 percent of those aged 55 to 64 renewed enrollment (Table 7). Lower renewal rates among younger groups may occur because these groups have more variable life circumstances (for example, changes in income or pregnancy status that might result in eligibility for a public insurance program) or because those groups may be in generally better health, needing only episodic care. In regression models that controlled for other personal characteristics and health utilization, older age continued to be a positive predictor of renewal (Table 8). Individuals aged 45-54 were 36 percent more likely to renew at 12 months, relative to those aged 18-24, whereas those aged 55-64 were nearly twice as likely as the youngest group to renew.

Individuals with near-poor incomes (101 to 300 percent of the FPL) were more likely to renew enrollment than those with lower or higher incomes. Across all cohorts, roughly two-thirds of the near-poor group renewed, whereas 55 percent of those with lower or higher incomes renewed (Table 7). Controlling for other characteristics, higher income continued to predict renewal in regression models (Table 8). Failure to renew among those below the poverty level may occur because these individuals are more difficult to contact (for example, they may experience more frequent address changes). Another factor may be that they pay no participation fee and can re-enroll at any time. Therefore, without immediate health

“I showed up for an appointment and they said, well you’ve been dropped and you have to go back and bring paperwork.”

“When it was time to get medicine, they told me I couldn’t get it. So, I had to go through this whole process with paperwork and I’m like okay.”

care needs, they have little incentive to remain enrolled. They may, in fact, lose track of their enrollment status and simply re-enroll the next time they seek services.

Table 8. Individual Characteristics Associated with Remaining Enrolled for 12 Months and with Renewing at 12 Months: Regression Results

	Enrolled at 12 Months ^a	Renewed at 12 Months ^b
Female	0	+
Male	Reference	Reference
Age 18–24 years	Reference	Reference
Age 25–44 years	0	0
Age 45–54 years	0	+
Age 55–64 years	0	+
Household income below FPL	Reference	Reference
Household income between 101% and 200% of FPL	–	+
Household income between 201% and 300% of FPL	–	+
Household income above 300% FPL	–	+
Black/African-American	–	–
Chinese	0	+
Latino	–	–
White	Reference	Reference
Unknown or other ethnicity	–	0
Chinese/Mandarin/Cantonese speaking	+	+
English speaking	Reference	Reference
Spanish speaking	0	+
Other language	+	+
SFGH medical home	Reference	Reference
Other DPH medical home	0	0
NEMS medical home	+	+
Other SFCCC medical home	+	–
Other medical home (CCHCA, SMP, Kaiser, unknown)	+	+
Cohort 1	Reference	Reference
Cohort 2	+	+
Cohort 3	+	+
Cohort 4	+	+
Ever homeless	–	+
No prior use of medical home	–	–
Inpatient visit during first enrollment	–	
ED visit during first enrollment	+	0
No physician office visits during first enrollment	Reference	Reference
1–2 physician office visits during first enrollment	+	+
3 or more physician office visits during first enrollment	+	+
Total N	51,782	48,629

Source: Mathematica’s analysis of HSF Enrollment Data, July 2007–June 2010.

Note: Referent groups: never homeless; had prior medical care at medical home; did not have an inpatient visit during first enrollment period; did not have an emergency department visit during first enrollment period. Odds ratios and confidence intervals are given in Table C.1.

^a Variable = 1 if participant was enrolled for the full 12 months; 0 otherwise.

^b Variable = 1 if participant was enrolled for the full 12 months and renewed at 12 months; 0 otherwise.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Although homelessness was a negative predictor of retention to 12 months, it becomes a positive predictor of renewal. Homeless individuals were almost twice as likely as those who did not experience homelessness to renew enrollment in HSF. This disproportion likely reflects the high value of this program for these individuals, who have fewer avenues to high-quality coordinated care than other participants in the program (Table 8).

Among those with an opportunity to renew a second time, the same demographic characteristics continued to predict renewal; however, enrollees at the two SFGH clinics were more likely to renew than those at the other medical homes. Older individuals, those with higher incomes, ethnically Chinese, non-English speakers, the homeless, and those with prior medical home use are more likely to renew (Table C.2). However, in contrast to the first renewal decision, we find that enrollees in the two SFGH clinics were more likely to renew a second time, and that those in later cohorts are less likely to renew a second time. We believe that these patterns may reflect a differential selection effect across medical homes and cohorts. For example, in the first renewal round, patients of the SFGH clinics were more likely to leave than those at NEMS and the other clinics (CCHCA, Kaiser, and Sister Mary Phillipa). This stronger selection means that those who remain for a second enrollment round may be relatively more committed to receiving long-term care through HSF.

c. Re-Enrollment Among Those Who Exit at Some Point

Among those who have ever exited HSF, being in the 44-54 age group, being Latino or Spanish-speaking, and having any prior medical home use are characteristics associated with re-enrolling. Approximately one-third of the 44-54 age group re-enrolls in HSF after exiting, whereas just 20 percent of those in the youngest age group re-enroll (Table 7). The increased likelihood of re-enrolling for those 44-54 years old persists even after controlling for other characteristics (Table 9). These patterns across age groups likely reflect the fact that HSF—or health care access in general—is more valuable to older individuals who are likely to have greater health care needs. The ethnically Latino and Spanish-speaking subgroups and those who were existing patients of the medical home are also more likely to re-enroll in HSF after exiting (Table 7). These groups remain significantly more likely to re-enroll, controlling for other factors.

Having a higher income, homelessness, and use of physician services also emerge as positive predictors of re-enrollment, after controlling for other personal characteristics. Relative to those with incomes below the FPL, participants from higher income households are more likely to re-enroll. We speculate that higher household income levels may be correlated with more stable housing situations and contact information. Individuals from these households who exit the program may be easier to contact with information about re-enrollment, because their telephone number and address remain consistent. However, homelessness—the least stable residential situation—is actually a positive predictor of re-enrollment. This finding may be due to the fact that some clinics target the homeless population and help members re-enroll when they return for services. Finally, use of physician services is a positive predictor of re-enrollment, an unsurprising finding as these enrollees realized some positive value from their participation in HSF.

Those who disenroll for ineligibility and failure to pay or reported inability to afford the participation fee are less likely to re-enroll than those who exited for other reasons. It is possible for those who lose eligibility because they have gained private or public coverage, or because their household income has risen above the ceiling, to become eligible again as their situation changes. However, as a group, these enrollees are less likely to re-enroll. Although the unadjusted re-enrollment rate for those who exited for failure to pay the participant fee is relatively

high (33 percent), after controlling for demographic and utilization characteristics, we find that failure to pay the participant fee is negatively associated with re-enrollment. We do not know why individuals fail to pay the fee. Participants may decide that they do not want to incur the cost of re-enrolling if they use few services or have minimal health care needs. In other cases, failure to pay the fee may simply reflect a change in eligibility, increased mobility, or access to other health care options.

Table 9. Individual Characteristics Associated with Re-Enrolling After Exiting the Program

	Re-Enrolled After Exiting Program ¹
Male	Reference
Female	+***
Age 18–24 years	Reference
Age 25–44 years	+***
Age 45–54 years	+***
Age 55–64 years	0
Household income below FPL	Reference
Household income between 101% and 200% of FPL	+***
Household income between 201% and 300% of FPL	+***
Household income above 00% FPL	+***
Black/African-American	0
Chinese	0
Latino	+***
White	Reference
Unknown or other ethnicity	0
Chinese/Mandarin/Cantonese speaking	0
English speaking	Reference
Spanish speaking	+***
Other language	+***
SFGH clinic medical home	Reference
Other DPH medical home	0
NEMS medical home	0
Other SFCCC medical home	–***
All other medical home (CCHCA, Kaiser, SMP, unknown)	+***
Cohort 1	Reference
Cohort 2	–***
Cohort 3	–***
Cohort 4	–***
Cohort 5	0
Ever homeless	+***
No prior use of medical home	–***
Renewed after first enrollment	–***
Disenrolled because became ineligible	–***
Disenrolled because of failure (or could not afford) to pay fee	–***
Inpatient visit before exiting program	–**
ED visit before exiting program	0
No physician office visits before exiting program	Reference
1–2 physician office visits before exiting program	+
3 or more physician office visits before exiting program	+***
Total N	34,817

Source: Mathematica's analysis of HSF Enrollment Data, July 2007–June 2010.

Note: Referent groups: never homeless; had prior medical care at medical home; Disenrolled before 12 months; Disenrolled for other reason; did not have an inpatient visit during first enrollment period; did not have an emergency department visit during first enrollment period. Odds ratios and confidence intervals are given in Table C.3.

¹Variable = 1 if participant re-enrolled in HSF after exiting the program; 0 otherwise.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

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IV. SUMMARY AND IMPLICATIONS

A. Enrollment Patterns

Since July 2007, more than 80,000 individuals have enrolled in HSF for some length of time. As of June 2010, there were more than 53,000 enrollees. It is difficult to ascertain how many adults were eligible for the program over that time period and therefore what percentage of the eligible pool enrolled in HSF. Although two surveys estimate the number of working-age adults in San Francisco who lack private or public health insurance coverage at different points in time, these estimates, which range from approximately 60,000 to 77,000, provide at best a rough target number. The pool of uninsured adults is constantly changing. There have been various estimates of the length of periods without coverage, but most studies indicate that more than half of the uninsured adults in the United States at any point in time have been uninsured for less than one year, and more than one-third of uninsured adults have been uninsured for at most four months. With those caveats in mind, it is still reasonable to conclude that HSF has been very successful at enrolling eligible adults in the program.

Based on the demographics of those enrolled, the program appears to have been most successful reaching uninsured nonelderly adults in San Francisco who are female, aged 40-64, English and Chinese speakers, and from households with incomes below the FPL. The program has been less successful reaching uninsured individuals between 18 and 24 years old, whites, and those with household incomes greater than 200 percent of the FPL. Younger individuals may not perceive a need for medical care (the so-called “young invincibles”), and those with higher incomes may be between jobs with employer-sponsored coverage and willing to chance being without coverage during these periods.

With no formal advertising or marketing budget, the program has developed an outreach strategy that relies on news articles, presentations, word of mouth, and recruitment by safety-net providers who are part of the HSF system of medical homes. Most people in our focus groups said that they had heard about the program through one of these mechanisms. In the first year or so of the program, virtually all new enrollees had used the safety-net system prior to joining HSF, often finding out about the program and making the decision to enroll when they came to one of the participating primary-care clinics or EDs for medical care.

“I had to see a doctor so I went...by the time I left they had the paperwork done.”

“My brother-in-law was already in the program and he told me.”

At each HSF medical home, application assistors are available to answer questions from potentially eligible adults, review their application materials, and help them complete the program application. The HSF program reviewed several models for enrollment and renewal. The application assistor program was chosen in part because of positive experiences with a similar system in

“I thought it a little strange that I couldn’t register myself, but it was quick and easy.”

California’s Healthy Families Program and because it reduces the length of time between application submission and approval, in many instances facilitating immediate access to needed medical care. Many enrollees in our focus groups affirmed the success of the application assistor model, reporting that the enrollment process was easy and efficient.

In the last year, there has been an increase in the number of adults enrolling in HSF who have little or no previous experience at these clinics, reflecting various changes in both the program (for example, the increase in the maximum FPL for eligibility in 2009, the addition of Kaiser as a medical home) as well as in the broader economy (for example, increasing numbers of working age adults who have lost their jobs or have lost employer-sponsored insurance). Although the enrollment process was designed in part to make it easy for patients to enroll, several participants in our focus groups, some of whom had tried to enroll, others who had not, noted that the process is a barrier for them; in particular, participants cite the requirement to enroll in person at one of the HSF enrollment sites. Although several very good programmatic reasons for requiring in-person enrollment exist, several of the sites are open only during normal business hours, and others have limited hours in the evenings or on Saturdays, making it difficult for some of these workers to come in and apply.

“A lot of paperwork was involved...and just a lot of time.”

“The hours that you can go to enroll at are, again, 8 to 5.”

B. Renewal and Re-Enrollment Patterns

Just as the pool of uninsured adults is constantly changing, so is the pool of HSF enrollees. Although more than 85 percent of HSF enrollees remain in the program for at least 12 months, only half renew their enrollment at the 12-month renewal date, and only one-quarter of those who exit re-enroll. The window of time for observing re-enrollment varies across cohorts, and it is possible that the re-enrollment rate will increase for the later cohorts over the next year. It has been at least 30 months since participants in cohort 1 exited the program, and that cohort has the lowest rate of participants who have not returned (71 percent versus 76 percent for cohort 2, 82 percent for cohort 3, and 94 percent for cohort 4). However, there were few who re-enrolled after being out of the program for more than 12 months in the first two cohorts and almost none after 8 months for cohort 3, so we would not anticipate significant increases in the re-enrollment rates.

Who is more likely to renew? Controlling for other characteristics, older enrollees, Chinese speakers, and those who had prior experience as patients in their HSF medical homes are more likely

“It’s awesome. I’m glad that HSF exists so that those clinics get supported. Because I wasn’t able to pay them any time I went in there. And I felt bad leaving every time.”

“I’m satisfied with the program. I received a lot of care there. Before we had to pay a lot, but now, I don’t pay anything.”

to stay for the full 12 months and then renew. Not surprisingly, enrollees who are heavy users of the system, specifically those who have more than two physician visits during the year, are more likely to stay enrolled and to renew. In contrast, black and Latino enrollees are less likely to stay enrolled for the full 12 months and less likely to renew if they do stay.

Approximately half of the 15 percent of enrollees who leave the program before 12 months become ineligible for HSF (usually because they have obtained insurance elsewhere); the other half does not pay a participation fee. Virtually everyone who stays enrolled through the 12 months, but does not renew, leaves because he or she “fails to complete the re-screening process for renewal.”

Comments from focus group participants shed additional light on why some individuals fail to renew and why some then re-enroll later. Although there appeared to be widespread support for the complaint several participants expressed about the amount of paperwork necessary to renew—especially if they experienced no change in income, coverage, or residency in the previous 12 months—and the need to renew

“I was unemployed; I had a lot going on. I couldn’t make the payments. I guess I could have gone in and had it adjusted, but I did not know about that and I just thought that I had to make that payment and I couldn’t so I just let it lapse and nobody contacted me or anything else. Hindsight’s 20/20 so I should have gone back and said ‘Here’s the situation’ and I could have kept it.”

in person rather than over the phone, most of those who decided to renew acknowledged that, even with these requirements, renewal was fairly easy. The reasons given for not renewing were more likely to be either that they did not have the money for the participant fee and were going to wait until things got better or that they did not need health care at the time.

With no penalty in most cases for participants who fail to renew but then re-enroll when they need medical care, or have more cash on hand for the fees, the current pattern of exiting and re-enrollment observed for a small number of participants is likely to continue. DPH and Kaiser have enacted a policy that could be perceived as a penalty: If an enrollee who has Kaiser as their medical home exits the program, he or she is not eligible to choose Kaiser as his or her medical home upon re-enrollment.³⁰ Perhaps reflecting this policy, Kaiser has the highest renewal rate in the program.

“I didn’t renew right away because I wasn’t sick and didn’t need to see a doctor and I wasn’t thinking about it because I just got something in the mail. And when I got sick I went into the clinic and re-enrolled.”

The HSF program has undertaken multiple efforts to increase the retention rate and to track those who have not renewed. In addition to mailing notices to individuals prior to their renewal dates and placing calls to individuals who have not renewed as of 45 days after their term ended, the program has started an outreach effort aimed specifically at those in demographic groups with the lowest reported retention rates and has recently put into place an incentive to renew. Upon renewal, the individual is entered into a lottery to win a gift card. Early evidence suggests that this approach is also leading to increased renewal rates.

Who does not re-enroll? Approximately 40 percent of enrollees neither renew nor re-enroll, at least not within the time frame of our analysis. Controlling for a variety of individual characteristics, we estimate that men, those ages 18 to 24, individuals with incomes below the FPL, more recent enrollees, and those who were not existing patients at their medical home are more likely to exit and not re-enroll. It is likely that many of these individuals either see little or no need for ongoing medical care or regain coverage and therefore access to their previous usual source of care.

³⁰ Information presented at the October 2010 meeting of the HSF Advisory Committee.

C. Implications for HSF Program

The SFDPH has established a program that has attracted a large portion of the low income uninsured working-age adults in San Francisco. For some individuals, HSF is a stop-gap measure until they regain or obtain public or private insurance coverage. For other individuals, especially those who have been without insurance for a long time and have no immediate prospects of

"I'm very grateful that I have access to it, especially to the routine care, being able to build a relationship with your care provider as opposed to waiting for emergencies. And it also relieves our stress knowing that you have access to a doctor."

obtaining coverage, HSF provides a primary care medical home, emphasizing prevention and continuity of care. HSF has also implemented chronic care management programs aimed at improving the health of these patients. In the focus groups, HSF participants, particularly those who have renewed or re-enrolled in the program, expressed appreciation both for the improved access to primary care and the reduction in uncertainty that they experience because of this program.

Individuals who have elected not to enroll, or stay enrolled, in HSF or provided insight into perceived or actual limitations of the program that influenced their decision. Several of these individuals are hoping to obtain insurance that covers services not provided through HSF (for example, dental and vision care) or allows them to receive care from providers who not part of the HSF (for some, primary care physicians; for others, specialists).

Participants in focus groups cited as a barrier to enrollment, renewal, and re-enrollment the requirement that they appear in person at one of the medical homes during hours of operation. Given the need to check documents validating residency, calculating household income, and permitting screening for Medi-Cal and other programs, moving to a phone-based system for enrollment, renewal, or re-enrollment is not likely. In addition, some of the medical homes are open for extended hours during the week, and some are open on Saturdays. It may be necessary to make that information more widely available.

Focus group participants also mentioned the cost of the program or aspects of the delivery system as reasons why eligible adults might not enroll or remain enrolled. There appeared to be confusion over the ability to obtain a reduced fee following a decrease in household income. To address affordability, HSF allows a participant to seek an adjustment in their participation fee if there has been either a change in the participant's income or a change in household size. This change can be made at any time during the participant's enrollment. Broader educational efforts could address misinformation and lack of information about the policies.

Other aspects of the program could be modified to increase enrollment and retention of those who could benefit from ongoing care (for example, those with treatable chronic conditions) and are without alternative sources of care. Both focus group participants and providers interviewed in site visits expressed frustration with several aspects of the program, particularly difficulties getting referrals to specialists. Some focus group participants thought that the program stipulated they not see specialists outside of their medical home. In fact, although the list may not include the first-choice specialist, participants can see a specialist outside of their medical home if that physician is affiliated with the medical home. In both the survey and in site visits, providers told us that they often faced difficulties with these referrals. The e-referral

"I did not have trust because I always feel that I want a second opinion somewhere else. So that is one of the main reasons I did not want to renew, although it doesn't cost me anything."

system expanded under HSF appears to be easing some of these problems, and explaining the process to participants may reduce some of the anxiety.

SFDPH recognizes patient concerns with respect to long wait times for prescriptions and appointments and has enacted several changes. For example, in June 2010, SFGH convened an Outpatient Lobby Task Force to reduce pharmacy wait times and improve the process of dropping off and picking up prescriptions. They also have focused on improving communication with patients, including clearer signage in multiple languages and a staffed Information Desk in the Outpatient Lobby to assist and guide patients to the appropriate departments.

“They kept sending me to this one clinic that didn’t offer anything, just the bare minimum, but there were some that were very comprehensive and it seems like it hurt to go to your home clinic for something that it didn’t cover. Then you were kind of left out and it seems a really unfair system that some people even though they are paying the same might get ten services and some people might get one.”

There was also considerable frustration over the selection of a medical home, perceived inequities, and confusion over restrictions and opportunities. In some cases, these concerns did not affect decisions to stay in the program or re-enroll. In other cases, these issues were key to decisions to exit the program. Clear, written information about the medical homes at the time of enrollment is important in guaranteeing that enrollees receive the same information and opportunities.

HSF has a medical home directory that provides standard information for each participating medical home and is used at enrollment by application assistants. In addition, at the time of enrollment, applicants are informed about which medical homes are currently accepting new participants and which are closed. However, many individuals initially enroll when presenting with a health problem and may not be focused on the implications of their choice. Several members of the focus groups expressed surprise when presented with this same information later; others reported that it was only after they started using the health care services that they more fully understood the implications of their choice. In situations such as this, later frustration that a medical home is not the best fit for them will likely continue. The program may want to communicate further to new participants that the medical home can be changed within the first month of enrollment if the participant determines that their initial selection was not their intended choice. In addition, although this information is already made available, the program can remind participants that they can change their medical home at renewal if a preferred option is open at that time.

“I’m left with a bunch of questions is what I’m saying because I still don’t know what was covered or not. Then again, when I had my insurance I didn’t really know what was covered and what was not.”

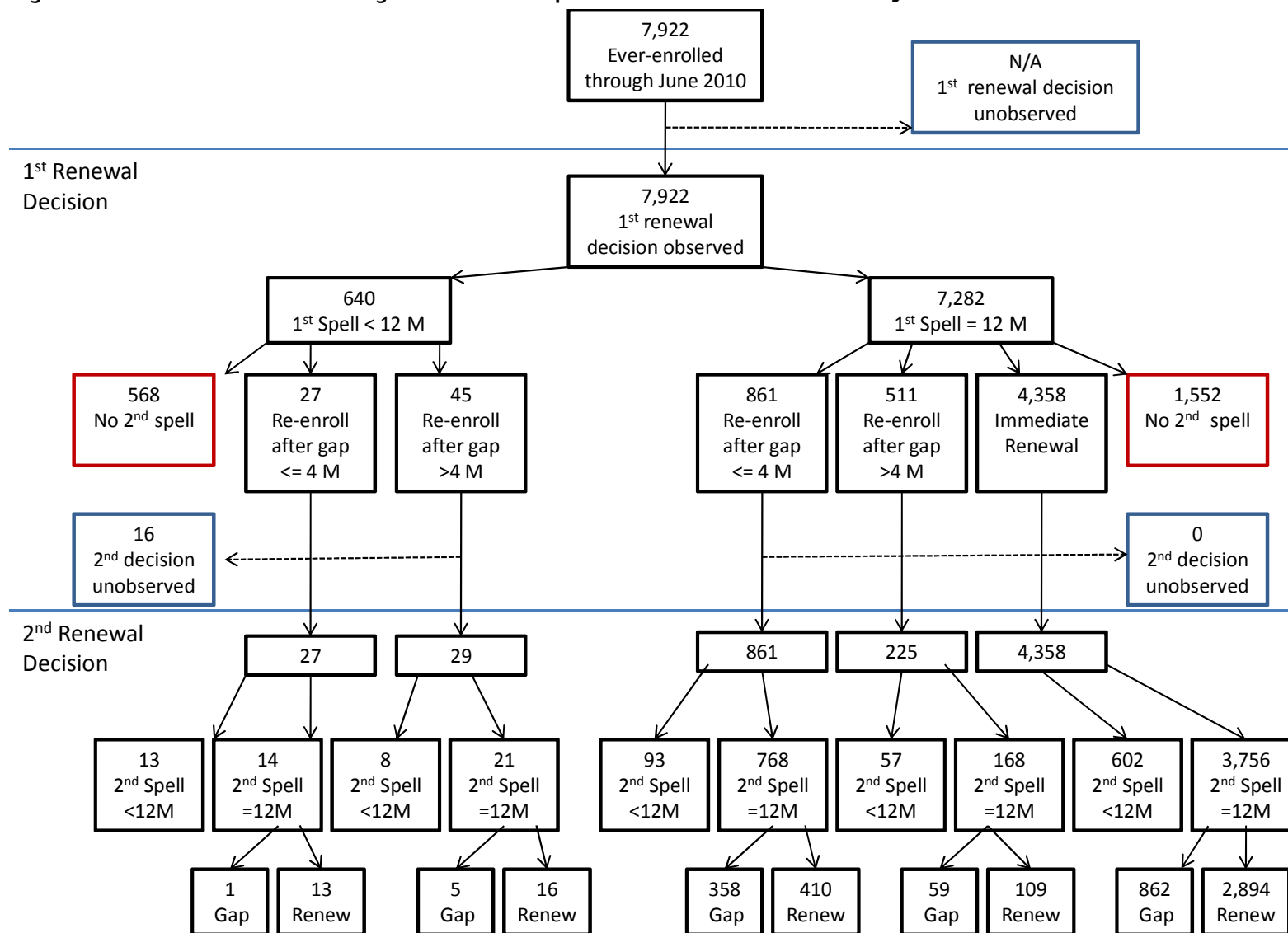
The HSF has been very effective in enrolling eligible uninsured adults, especially those who have received care at one of the HSF medical homes. The program has also implemented several activities aimed at improving the retention rate. The frequency with which people move into and out of San Francisco, coupled with changes in income levels and insurance coverage opportunities for many nonelderly working-age adults, results in eligibility changes that will continue to affect the retention rate. It is also important to remember that it is not necessary for HSF to enroll and retain all nonelderly low-income uninsured adults in San Francisco to improve the health of this population. Although the benefits of various vaccinations and checkups are well documented, for certain young, healthy adults, the benefits of an ongoing relationship with a medical home are less clear. In addition, for many of these individuals, lack of insurance coverage is an infrequent and

short-term phenomenon. Some of them have established relationships with providers who do not participate in HSF but who remain willing and able to see them while they are without coverage, accepting reduced or no payment for their services. For those without short-term access to a provider, having somewhere to go in the event of the onset of an acute condition or injury is clearly important. However, when these individuals regain coverage, they are likely to exit HSF and return to the provider who was their usual source of care before they lost coverage.

APPENDIX A
RENEWAL PATTERNS BY COHORT

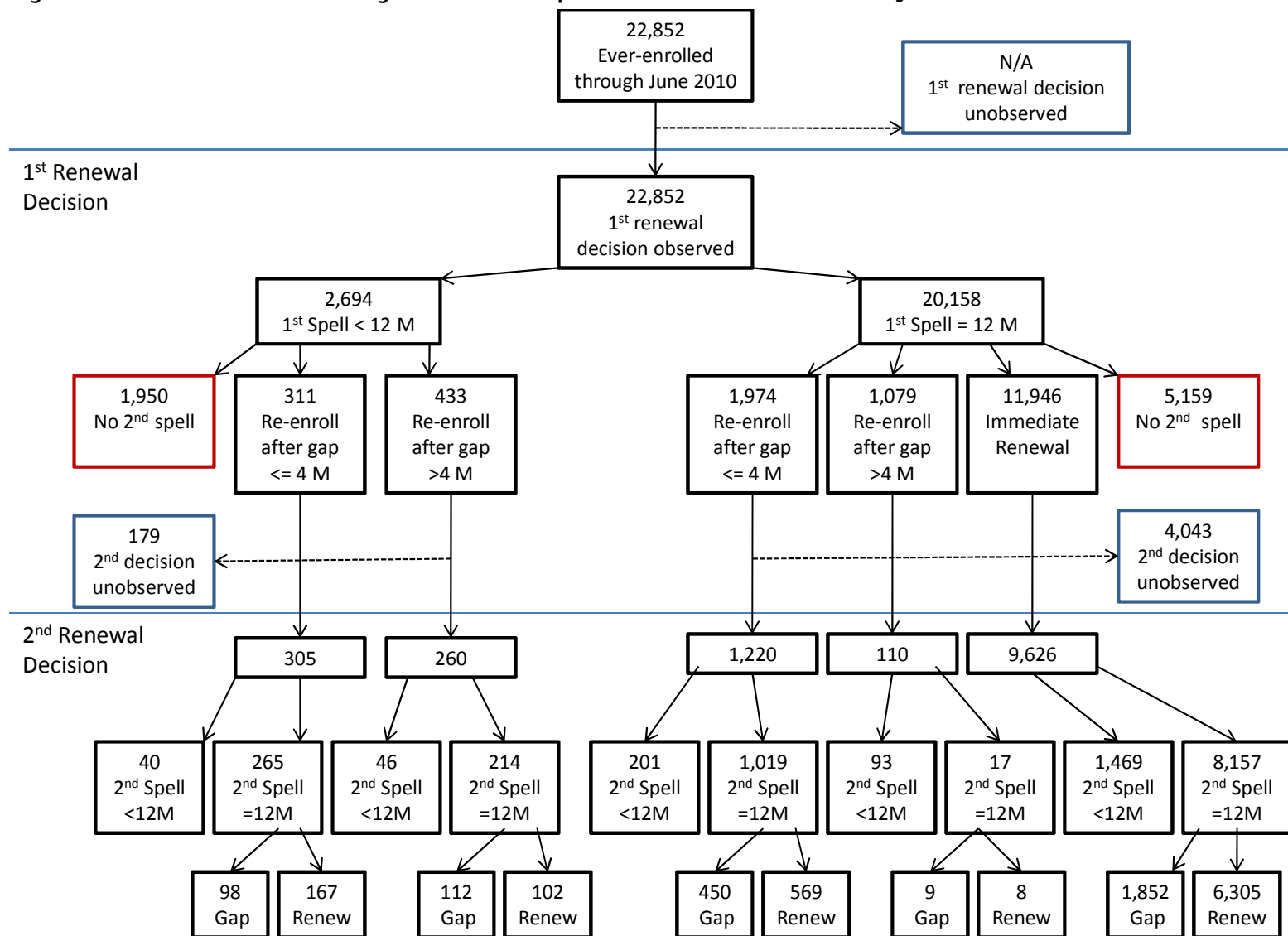
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Figure A.1. Renewal Patterns Among Cohort 1 Participants Ever-Enrolled in HSF as of June 2010



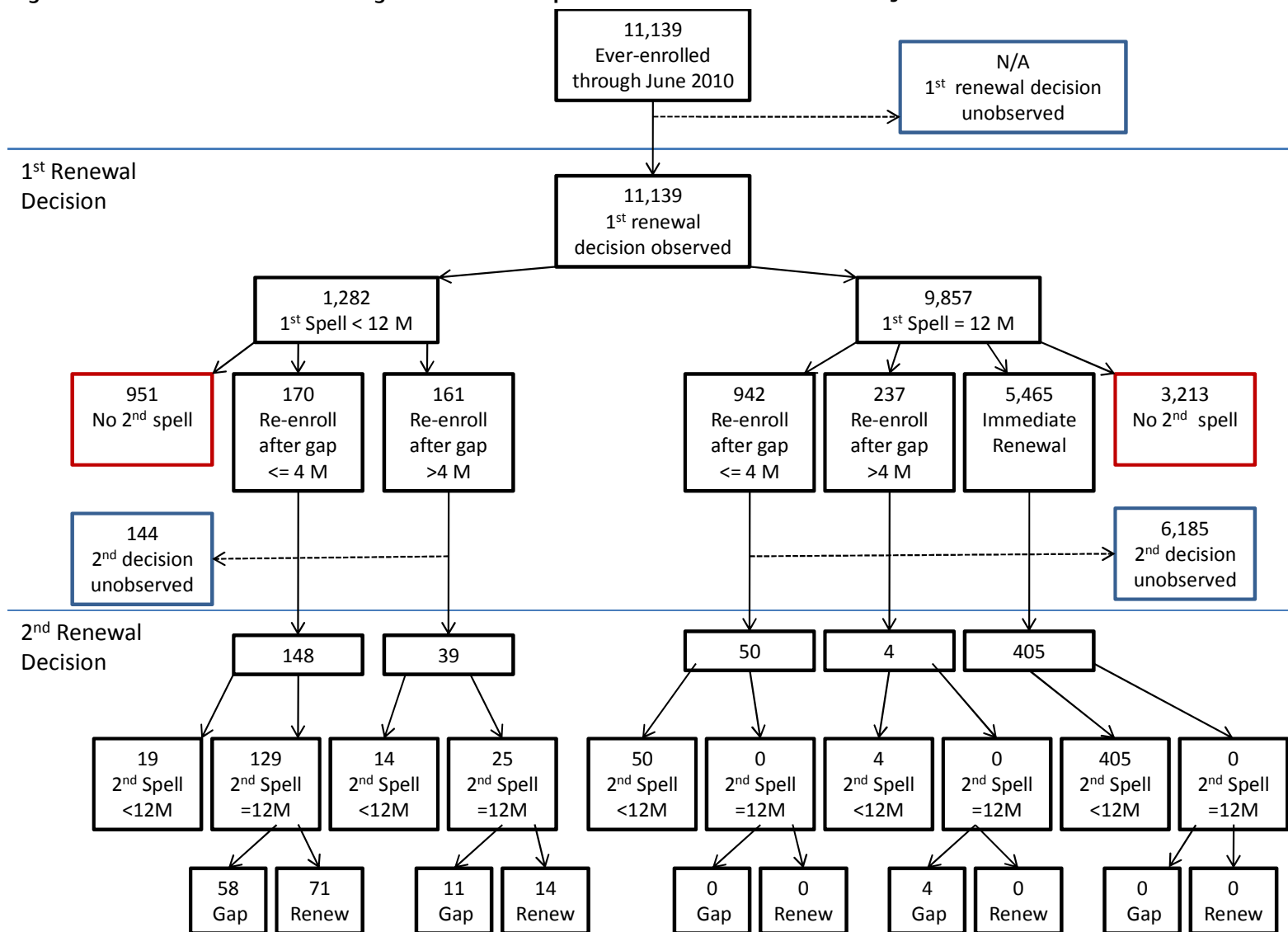
Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

Figure A.2. Renewal Patterns Among Cohort 2 Participants Ever-Enrolled in HSF as of June 2010



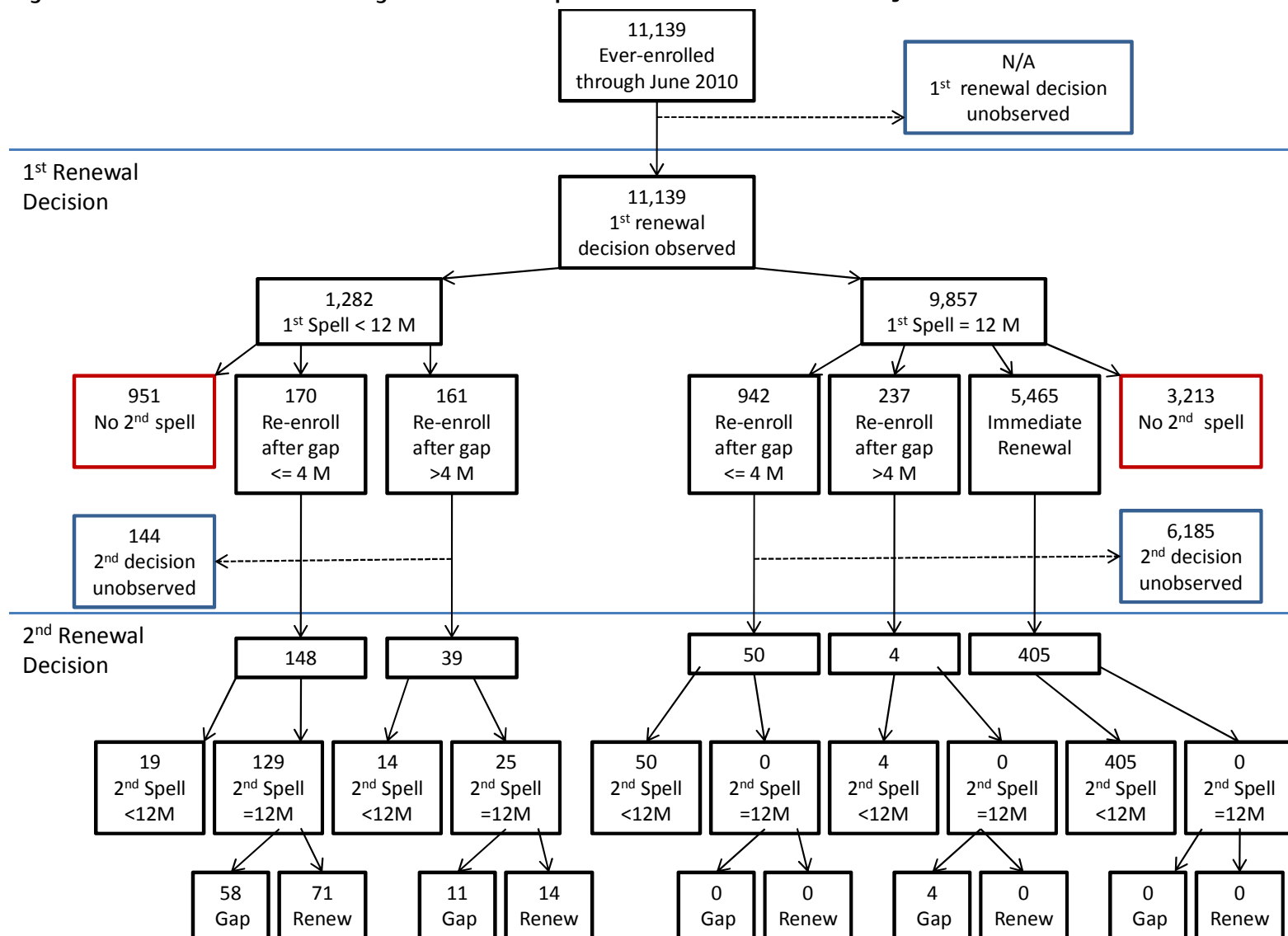
Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

Figure A.3. Renewal Patterns Among Cohort 3 Participants Ever-Enrolled in HSF as of June 2010



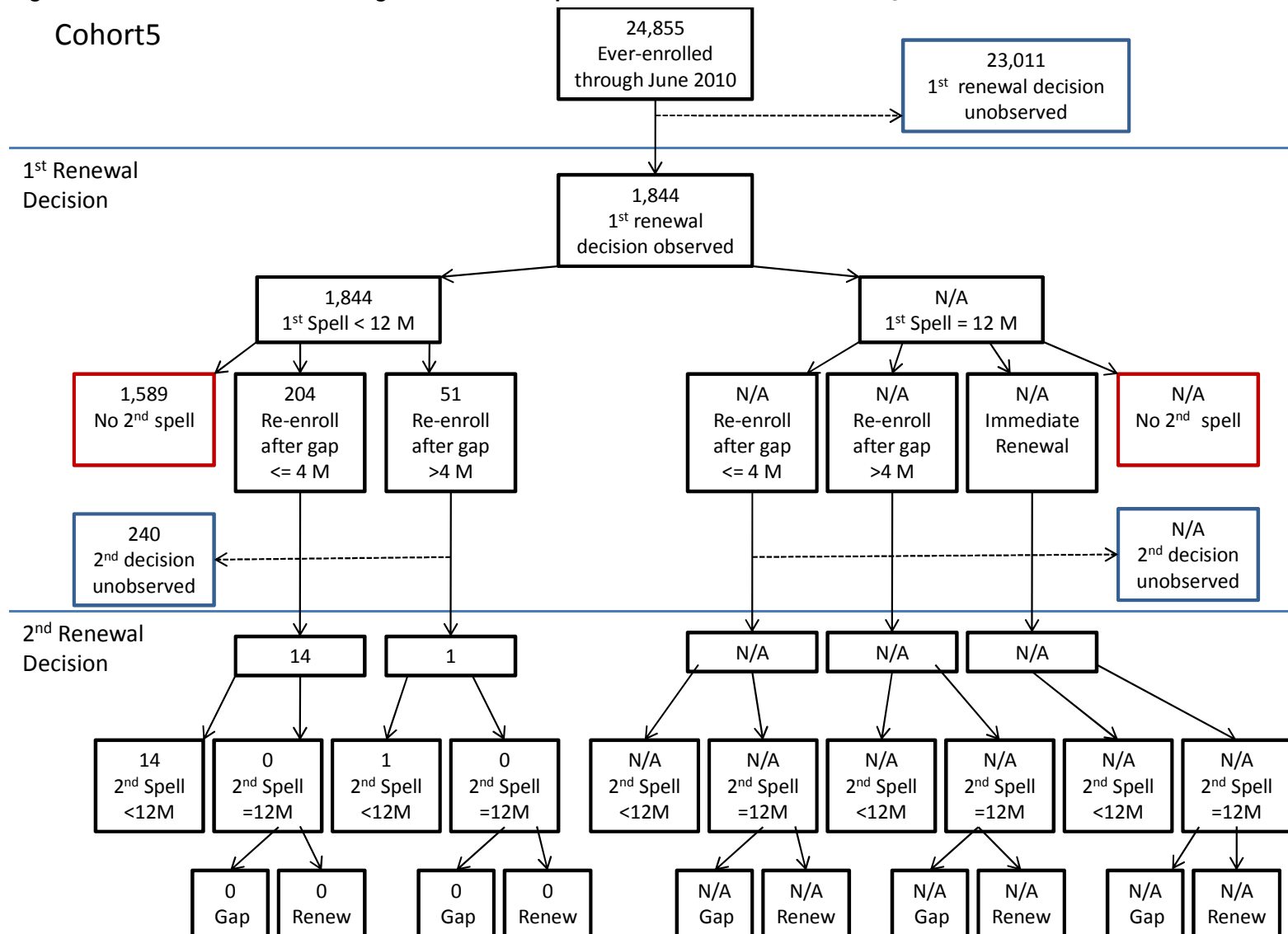
Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

Figure A.4. Renewal Patterns Among Cohort 4 Participants Ever-Enrolled in HSF as of June 2010



Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

Figure A.5. Renewal Patterns Among Cohort 5 Participants Ever-Enrolled in HSF as of June 2010



Source: Mathematica analysis of HSF enrollment data from July 2007 through June 2010.

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APPENDIX B

DEMOGRAPHIC CHARACTERISTICS BY FIRST RENEWAL AND RE-ENROLMENT

BY COHORT

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Table B.1. Demographic Characteristics by First Renewal and Re-enrollment Decisions: Cohort 1

Characteristics	Total Enrollees	Reach 12 Months Enrollment		Renew if Reached 12 Months Enrollment		Any Gap in Enrollment		Re-Enroll if Any Gap in Enrollment	
		N	%	N	%	N	%	N	%
Overall	7,922	7,282	92	4,358	60	3,564	45	1,444	41
Gender									
Male	3,824	3,519	92	1,871	53	1,953	51	804	41
Female	4,098	3,763	92	2,487	66	1,611	39	640	40
Initial Age Group									
18–24	506	495	98	243	49	263	52	85	32
25–44	2,274	2,149	95	888	41	1,386	61	619	45
45–54	2,036	1,904	94	1,067	56	969	48	459	47
55–64	3,109	2,734	88	2,160	79	946	30	281	30
Ethnic Group									
Black	775	708	91	261	37	514	66	270	53
Chinese	3,076	2,807	91	2,384	85	692	22	176	25
Latino	1,555	1,477	95	690	47	865	56	445	51
White	1,127	1,033	92	441	43	686	61	276	40
Other	1,389	1,257	90	582	46	807	58	277	34
Initial FPL Level									
0–100%	7,922	7,282	92	4,358	60	3,564	45	1,444	41
101–200%	0	0	0	0	0	0	0	0	0
201–300%	0	0	0	0	0	0	0	0	0
301%+	0	0	0	0	0	0	0	0	0
Spoken Language									
Chinese	3,123	2,837	91	2,405	85	718	23	174	24
English	3,326	3,048	92	1,252	41	2,074	62	865	42
Spanish	1,192	1,140	96	536	47	656	55	349	53
Other	281	257	91	165	64	116	41	56	48
Initial Medical Home									
SFGH Clinic	1,326	1,219	92	537	44	789	60	344	44
Other DPH Clinic	3,009	2,727	91	1,352	50	1,657	55	766	46
SFCCC–NEMS	2,568	2,375	92	2,003	84	565	22	136	24
Other SFCCC	874	833	95	344	41	530	61	193	36
All other – CCHCA, Kaiser, St. Mary's	0	0	0	0	0	0	0	0	0
Unknown	144	127	88	122	96	22	15	4	18
Homeless Status									
Homeless at any point	1,435	1,346	94	562	42	873	61	473	54
Never homeless	6,487	5,936	92	3,796	64	2,691	41	971	36
Medical Home Prior Usage									
Yes	7,734	7,109	92	4,352	61	3,382	44	1,438	43
No	188	173	92	6	3	182	97	6	3

Source: Mathematica analysis of enrollment data from July 2007 through June 2010.

Table B.2. Demographic Characteristics by First Renewal and Re-Enrollment Decisions: Cohort 2

Characteristics	Total Enrollees	Reach 12 Months Enrollment		Renew if Reached 12 Months Enrollment		Any Gap in Enrollment		Re-Enroll if Any Gap in Enrollment	
		N	%	N	%	N	%	N	%
Overall	22,852	20,158	88	11,946	59	10,906	48	3,797	35
Gender									
Male	11,880	10,437	88	6,151	59	5,729	48	1,912	33
Female	10,972	9,721	89	5,795	60	5,177	47	1,885	36
Initial Age Group									
18–24	2,100	1,874	89	833	44	1,267	60	368	29
25–44	9,687	8,501	88	4,334	51	5,353	55	1,822	34
45–54	6,068	5,454	90	3,566	65	2,502	41	1,011	40
55–64	5,000	4,329	87	3,213	74	1,784	36	596	33
Ethnic Group									
Black	2,253	1,931	86	955	49	1,298	58	454	35
Chinese	5,693	5,277	93	4,016	76	1,677	29	620	37
Latino	6,088	5,334	88	2,827	53	3,261	54	1,325	41
White	4,009	3,478	87	1,923	55	2,086	52	656	31
Other	4,809	4,138	86	2,225	54	2,584	54	742	29
Initial FPL Level									
0–100%	14,796	13,823	93	7,604	55	7,192	49	2,391	33
101–200%	6,083	4,858	80	3,341	69	2,742	45	1,066	39
201–300%	1,934	1,448	75	987	68	947	49	336	35
301%+	39	29	74	14	48	25	64	4	16
Spoken Language									
Chinese	5,610	5,184	92	3,949	76	1,661	30	612	37
English	11,440	9,901	87	5,166	52	6,274	55	1,976	31
Spanish	4,872	4,259	87	2,303	54	2,569	53	1,065	41
Other	930	814	88	528	65	402	43	144	36
Initial Medical Home									
SFGH Clinic	4,965	4,251	86	2,407	57	2,558	52	866	34
Other DPH Clinic	8,824	7,709	87	4,687	61	4,137	47	1,537	37
SFCCC–NEMS	5,045	4,700	93	3,413	73	1,632	32	587	36
Other SFCCC	4,017	3,498	87	1,439	41	2,578	64	807	31
All other – CCHCA, Kaiser, St. Mary's	0	0	0	0	0	0	0	0	0
Unknown	1	0	0	0	0	1	100	0	0
Homeless Status									
Homeless at any point	3,696	3,337	90	2,312	69	1,384	37	453	33
Never homeless	19,156	16,821	88	9,634	57	9,522	50	3,344	35
Medical Home Prior Usage									
Yes	20,890	18,702	90	11,894	64	8,996	43	3,735	42
No	1,962	1,456	74	52	4	1,910	97	62	3

Source: Mathematica analysis of enrollment data from July 2007 through June 2010.

Table B.3. Demographic Characteristics by First Renewal and Re-Enrollment Decisions: Cohort 3

Characteristics	Total Enrollees	Reach 12 Months Enrollment		Renew if Reached 12 Months Enrollment		Any Gap in Enrollment		Re-Enroll if Any Gap in Enrollment	
		N	%	N	%	N	%	N	%
Overall	11,139	9,857	88	5,465	55	5,674	51	1,510	27
Gender									
Male	5,843	5,168	88	2,790	54	3,053	52	760	25
Female	5,296	4,689	89	2,675	57	2,621	49	750	29
Initial Age Group									
18–24	1,757	1,580	90	763	48	994	57	208	21
25–44	4,921	4,327	88	2,059	48	2,862	58	798	28
45–54	2,543	2,275	89	1,447	64	1,096	43	319	29
55–64	1,921	1,675	87	1,196	71	722	38	185	26
Ethnic Group									
Black	967	833	86	365	44	602	62	152	25
Chinese	2,713	2,513	93	1,781	71	932	34	249	27
Latino	2,925	2,534	87	1,257	50	1,668	57	522	31
White	2,086	1,803	86	877	49	1,209	58	280	23
Other	2,448	2,174	89	1,185	55	1,263	52	307	24
Initial FPL Level									
0–100%	7,295	6,881	94	3,589	52	3,706	51	926	25
101–200%	2,887	2,274	79	1,438	63	1,449	50	440	30
201–300%	922	674	73	423	63	499	54	141	28
301%+	35	28	80	15	54	20	57	3	15
Spoken Language									
Chinese	2,632	2,430	92	1,765	73	867	33	229	26
English	5,737	5,023	88	2,421	48	3,316	58	817	25
Spanish	2,274	1,967	86	1,003	51	1,271	56	399	31
Other	496	437	88	276	63	220	44	65	30
Initial Medical Home									
SFGH Clinic	1,644	1,396	85	770	55	874	53	228	26
Other DPH Clinic	3,685	3,171	86	1,730	55	1,955	53	497	25
SFCCC–NEMS	2,319	2,154	93	1,456	68	863	37	249	29
Other SFCCC	2,397	2,123	89	812	38	1,585	66	396	25
All other – CCHCA, Kaiser, St. Mary's	1,094	1,013	93	697	69	397	36	140	35
Unknown	0	0	0	0	0	0	0	0	0
Homeless Status									
Homeless at any point	1,465	1,312	90	750	57	715	49	156	22
Never homeless	9,674	8,545	88	4,715	55	4,959	51	1,354	27
Medical Home Prior Usage									
Yes	9,303	8,412	90	5,398	64	3,905	42	1,479	38
No	1,836	1,445	79	67	5	1,769	96	31	2

Source: Mathematica analysis of enrollment data from July 2007 through June 2010.

Table B.4. Demographic Characteristics by First Renewal and Re-Enrollment Decisions: Cohort 4

Characteristics	Total Enrollees	Reach 12 Months Enrollment		Renew if Reached 12 Months Enrollment		Any Gap in Enrollment		Re-Enroll if Any Gap in Enrollment	
		N	%	N	%	N	%	N	%
Overall	13,323	11,708	88	6,417	55	6,906	52	825	12
Gender									
Male	7,294	6,414	88	3,408	53	3,886	53	438	11
Female	6,029	5,294	88	3,009	57	3,020	50	387	13
Initial Age Group									
18–24	2,242	2,023	90	974	48	1,268	57	122	10
25–44	6,178	5,377	87	2,566	48	3,612	58	401	11
45–54	2,898	2,565	89	1,611	63	1,287	44	196	15
55–64	3	0	0	0	0	0	0	0	0
Ethnic Group									
Black	1,240	1,059	85	458	43	782	63	77	10
Chinese	2,960	2,728	92	1,953	72	1,007	34	129	13
Latino	3,304	2,881	87	1,425	49	1,879	57	258	14
White	2,935	2,535	86	1,253	49	1,682	57	165	10
Other	2,884	2,505	87	1,328	53	1,556	54	196	13
Initial FPL Level									
0–100%	8,435	7,971	94	4,101	51	4,334	51	385	9
101–200%	3,295	2,553	77	1,589	62	1,706	52	308	18
201–300%	1,266	968	76	607	63	659	52	106	16
301%+	327	216	66	120	56	207	63	26	13
Spoken Language									
Chinese	2,839	2,622	92	1,933	74	906	32	122	13
English	7,763	6,697	86	3,210	48	4,553	59	485	11
Spanish	2,345	2,054	88	1,066	52	1,279	55	190	15
Other	376	335	89	208	62	168	45	28	17
Initial Medical Home									
SFGH Clinic	2,326	1,966	85	1,064	54	1,262	54	184	15
Other DPH Clinic	4,056	3,464	85	1,932	56	2,124	52	204	10
SFCCC–NEMS	3,006	2,760	92	1,838	67	1,168	39	156	13
Other SFCCC	3,288	2,926	89	1,146	39	2,142	65	245	11
All other – CCHCA, Kaiser, St. Mary's	643	590	92	437	74	206	32	36	17
Unknown	4	2	50	0	0	4	100	0	0
Homeless Status									
Homeless at any point	1,923	1,730	90	904	52	1,019	53	90	9
Never homeless	11,400	9,978	88	5,513	55	5,887	52	735	12
Medical Home Prior Usage									
Yes	10,585	9,538	90	6,309	66	4,276	40	806	19
No	2,738	2,170	79	108	5	2,630	96	19	1

Source: Mathematica analysis of enrollment data from July 2007 through June 2010.

APPENDIX C

RESULTS FROM MULTIPLE REGRESSION ANALYSES:

ODDS RATIOS AND CONFIDENCE INTERVALS

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Table C.1. Individual Characteristics Associated with Remaining Enrolled for 12 Months and with Renewing at 12 Months: Estimated Odds Ratios and Confidence Intervals

	Estimated Odds Ratios (95% Confidence Intervals)	
	Enrolled at 12 Months ^a	Renewed at 12 Months ^b
Female	0.973 (0.893, 1.059)	1.049 (1.005, 1.095)**
Age 25–44 years	1.085 (0.951, 1.239)	1.025 (0.957, 1.098)
Age 45–54 years	1.055 (0.905, 1.230)	1.359 (1.261, 1.465)***
Age 55–64 years	0.991 (0.835, 1.177)	2.015 (1.858, 2.185)***
Income between 101% and 200% of FPL	0.024 (0.020, 0.028)***	1.542 (1.454, 1.636)***
Income between 201% and 300% of FPL	0.017 (0.015, 0.021)***	1.698 (1.540, 1.873)***
Income above 300% FPL	0.016 (0.012, 0.022)***	1.717 (1.246, 2.364)***
Black/African-American	0.384 (0.320, 0.460)***	0.631 (0.582, 0.684)***
Chinese	1.088 (0.846, 1.399)	1.633 (1.447, 1.844)***
Latino	0.624 (0.531, 0.733)***	0.859 (0.789, 0.936)***
Unknown or other ethnicity	0.826 (0.722, 0.944)***	0.968 (0.903, 1.037)
Chinese/Mandarin/Cantonese speaking	2.443 (1.913, 3.120)***	1.604 (1.430, 1.799)***
Spanish speaking	0.921 (0.793, 1.068)	1.534 (1.414, 1.665)***
Other language	1.431 (1.118, 1.830)***	1.666 (1.478, 1.877)***
Other DPH medical home	1.084 (0.967, 1.216)	1.025 (0.966, 1.088)
NEMS medical home	1.589 (1.314, 1.922)***	1.088 (0.990, 1.197)*
Other SFCCC medical home	1.375 (1.213, 1.558)***	0.529 (0.494, 0.565)***
Other medical home (CCHCA, Kaiser, SMP, unknown)	1.513 (1.171, 1.953)***	1.876 (1.631, 2.159)***
Cohort 2	2.380 (1.843, 3.074)***	1.334 (1.252, 1.421)***
Cohort 3	2.294 (1.761, 2.989)***	1.454 (1.351, 1.564)***
Cohort 4	2.582 (1.985, 3.359)***	1.764 (1.641, 1.897)***
Ever homeless	0.804 (0.651, 0.992)**	1.978 (1.860, 2.104)***
No prior use of medical home	0.879 (0.788, 0.980)**	0.027 (0.024, 0.031)***
Inpatient visit during first enrollment	0.708 (0.507, 0.989)**	0.972 (0.869, 1.087)
ED visit during first enrollment	1.345 (1.079, 1.675)***	0.973 (0.907, 1.044)
1–2 physician office visits during first enrollment	2.371 (2.141, 2.625)***	1.233 (1.164, 1.307)***
3 or more physician office visits during first enrollment	10.003 (8.81, 11.349)***	1.855 (1.761, 1.955)***

Source: Mathematica's analysis of HSF Enrollment Data, July 2007–June 2010.

Note: Referent groups: Male; under 25 years old; Household below FPL; White; English-speaking; SFGH medical home; Cohort 1; never homeless; had prior medical care at medical home; no inpatient visit; no ED visit; no physician office visit.

^aVariable = 1 if participant was enrolled for the full 12 months; 0 otherwise.

^bVariable = 1 if participant was enrolled for the full 12 months and renewed at 12 months; 0 otherwise.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table C.2. Individual Characteristics Associated with Remaining Enrolled for 12 Months and with Renewing at 12 Months for the Second Spell: Estimated Odds Ratios and Confidence Intervals

	Estimated Odds Ratios (95% Confidence Intervals)	
	Enrolled at 12 Months ^a	Renewed at 12 Months ^b
Female	1.091 (0.959, 1.242)	1.006 (0.935, 1.082)
Age 25–44 years	1.068 (0.832, 1.370)***	1.267 (1.100, 1.459)
Age 45–54 years	1.294 (0.995, 1.683)***	1.750 (1.513, 2.025)*
Age 55–64 years	1.391 (1.061, 1.823)***	2.300 (1.981, 2.671)**
Income between 101% and 200% of FPL	0.560 (0.474, 0.662)***	1.319 (1.194, 1.458)***
Income above 200% FPL	0.557 (0.436, 0.712)***	1.333 (1.145, 1.552)***
Black/African-American	0.688 (0.535, 0.886)***	0.744 (0.642, 0.862)***
Chinese	1.355 (0.908, 2.022)**	1.255 (1.012, 1.557)
Latino	0.903 (0.687, 1.188)	0.942 (0.803, 1.105)
Unknown or other ethnicity	0.986 (0.788, 1.234)	1.094 (0.962, 1.244)
Chinese/Mandarin/Cantonese speaking	1.266 (0.862, 1.861)***	1.602 (1.304, 1.967)
Spanish speaking	1.013 (0.785, 1.307)***	1.302 (1.118, 1.515)
Other language	1.284 (0.894, 1.842)	0.953 (0.790, 1.150)
Other DPH medical home	0.883 (0.746, 1.045)***	0.728 (0.660, 0.803)
NEMS medical home	1.185 (0.899, 1.560)***	0.645 (0.555, 0.750)
Other SFCCC medical home	1.074 (0.867, 1.332)***	0.643 (0.569, 0.726)
Other medical home (CCHCA, Kaiser, SMP, unknown)	0.103 (0.068, 0.157)***	3.187 (1.568, 6.475)***
Cohort 2	1.204 (1.018, 1.425)***	0.668 (0.612, 0.730)**
Cohort 3 and 4	3.186 (1.498, 6.779)***	0.347 (0.243, 0.496)***
Ever homeless	2.453 (1.967, 3.060)***	2.416 (2.157, 2.705)***
No prior use of medical home	0.347 (0.187, 0.647)***	0.076 (0.027, 0.215)***
Re-enrolled after short first gap	1.532 (1.244, 1.887)***	0.482 (0.435, 0.533)***
Re-enrolled after long first gap	1.584 (1.032, 2.429)***	0.311 (0.252, 0.384)**
First spell was < 12 months	1.240 (0.805, 1.908)***	1.857 (1.479, 2.330)
Inpatient visit during first or second spell	0.843 (0.646, 1.101)	1.032 (0.882, 1.208)
ED visit during first or second spell	0.982 (0.818, 1.178)	1.000 (0.904, 1.107)
1–2 physician office visits during first or second spell	1.281 (1.027, 1.597)	1.028 (0.896, 1.180)**
3 or more physician office visits during first or second spell	1.885 (1.564, 2.271)***	1.392 (1.241, 1.562)***

Source: Mathematica's analysis of HSF Enrollment Data, July 2007–June 2010.

Note: Referent groups: Male; under 25 years old; Household below FPL; White; English-speaking; SFGH medical home; Cohort 1; never homeless; had prior medical care at medical home; no inpatient visit; no ED visit; no physician office visit.

^aVariable = 1 if participant was enrolled for the full 12 months; 0 otherwise.

^bVariable = 1 if participant was enrolled for the full 12 months and renewed at 12 months; 0 otherwise.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table C.3. Individual Characteristics Associated with Re-Enrolling after Exiting the Program: Estimated Odds Ratios and Confidence Intervals

	Estimated Odds Ratios (95% Confidence Intervals)
	Re-Enrolled After Exiting Program ^a
Female	1.099 (1.038, 1.162)***
Age 25–44 years	1.166 (1.062, 1.281)***
Age 45–54 years	1.379 (1.244, 1.528)***
Age 55–64 years	1.040 (0.931, 1.163)
Income between 101% and 200% of FPL	2.098 (1.946, 2.262)***
Income between 201% and 300% of FPL	2.368 (2.108, 2.661)***
Household income above 300% FPL	1.756 (1.227, 2.512)***
Black/African-American	1.063 (0.958, 1.180)***
Chinese	1.032 (0.860, 1.239)
Latino	1.206 (1.081, 1.345)
Unknown or other ethnicity	0.978 (0.892, 1.072)
Chinese/Mandarin/Cantonese speaking	0.928 (0.779, 1.106)
Spanish speaking	1.306 (1.179, 1.447)***
Other language	1.465 (1.254, 1.711)***
Other DPH medical home	1.039 (0.962, 1.122)
NEMS medical home	0.993 (0.869, 1.135)
Other SFCCC medical home	0.726 (0.665, 0.792)***
Other medical home (CCHCA, Kaiser, SMP, unknown)	1.395 (1.155, 1.685)***
Cohort 2	0.785 (0.726, 0.848)***
Cohort 3	0.702 (0.637, 0.774)***
Cohort 4	0.281 (0.253, 0.313)***
Cohort 5	0.997 (0.812, 1.226)
Ever homeless	1.128 (1.035, 1.229)***
No prior use of medical home	0.040 (0.033, 0.048)***
Renewed after first enrollment	0.395 (0.367, 0.426)***
Disenrolled because became ineligible	0.020 (0.015, 0.027)***
Disenrolled because of failure (or could not afford) to pay fee	0.103 (0.086, 0.123)***
Inpatient visit during first enrollment	0.851 (0.737, 0.983)**
ED visit during first enrollment	1.025 (0.936, 1.122)
1–2 physician office visits during first enrollment	1.078 (0.998, 1.165)*
3 or more physician office visits during first enrollment	1.408 (1.311, 1.511)***

Source: Mathematica's analysis of HSF Enrollment Data, July 2007–June 2010.

Note: Referent groups: Male; under 25 years old; Household below FPL; White; English-speaking; SFGH medical home; Cohort 1; never homeless; had prior medical care at medical home; no inpatient visit; no ED visit; no physician office visit.

^aVariable = 1 if participant re-enrolled after exiting the program; 0 otherwise.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

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