Evaluation of the San Francisco Support at Home Program: Year 2 Report

by Laura Wagner, Jacqueline Miller, Joanne Spetz, Connie Kwong, & Thefaf Hashem Philip R. Lee Institute for Health Policy Studies University of California San Francisco

September 24, 2019

Abstract

The purpose of this report is to outline the findings from the second year of the San Francisco Support at Home (S@H) program. This report provides some background information on the program, but more information and context can be found in the preliminary report. Overall, the evaluation has two purposes: (1) support continuous quality improvement of the S@H program through ongoing rapid data collection and analysis, and (2) assess the overall efficacy of the program in maintaining residence at home, reducing hospitalizations and emergency department visits, controlling costs, and supporting a high quality of life. This report provides: (1) demographic, care and financial need, home care services, and overall programmatic data for enrollees; (2) cost benefit analysis; (3) results from enrollee focus groups; (4) results from the independent care provider survey; and (5) considerations for Year 3.

1

Acknowledgements

This report was funded by the San Francisco Department of Aging and Adult Services (DAAS). This report was developed by the Philip R. Lee Institute for Health Policy Studies, (IHPS) at the University of California, San Francisco, in collaboration with DAAS and the Institute on Aging (IOA).

DAAS, IOA, and IHPS wish to thank all those who contributed to this pilot program, including but not limited to those listed below (in alphabetical order), and all the community members and service providers who participated in the research and planning efforts by attending the community forum, focus groups, and/or completing surveys. Their support has been invaluable in the development and implementation of the Support at Home Program Pilot in efforts to serve San Francisco's communities of older adults and people with disabilities.

- The Arc San Francisco
- Bay Area Care Council
- Bayview Senior Services
- California Domestic Workers Coalition
- Caring Across Generations
- Changing One Mind At A Time (COMAAT)
- Community Alliance of Disability Advocates
- Community Living Campaign
- Community Living Policy Center at UCSF
- Creative Explored
- Family Caregiver Alliance
- Felton Institute, Senior Division
- Gray Panthers
- Hand in Hand: The Domestic Employers Network
- Homebridge
- IHSS Public Authority
- Independent Living Resource Center-SF
- Institute on Aging
- Jobs with Justice
- La Colectiva
- Mujeres Unidas y Activas
- National Domestic Workers Alliance
- S@H Advisory Committee
- San Francisco Long Term Care Coordinating Council
- San Francisco Board of Supervisors
- San Francisco Aging and Adult Services Commission
- Senior and Disability Action

Contents

Abstract	1
Acknowledgements	2
Chapter 1 – Introduction	5
Limitations	6
Chapter 2 – Support at Home Enrollees & Comparison Group Members	6
Demographics	
Care Needs and Financial Needs	9
Pre-enrollment home care services	11
Programmatic Comments While Enrolled	13
Chapter 3 – Cost Benefit Analysis	14
Framework for Comparing Costs and Benefits	14
Quality of life benefits to enrollees	14
Financial stress	15
Quality of life	16
Depression	19
Maintenance of financial status	
Physical health of enrollees	21
Self-rated health suffering	21
Use of emergency departments	21
Hospitalizations	22
Medical appointments	
Falls	
ADL/IADL status	
Benefits to family and friends providing unpaid "informal" care	
Stress of providing informal care	
Self-reported health while providing informal care	
Financial stress of providing informal care	
Employment while providing informal care	
Costs of the Support at Home Program	
Cost of DAAS contracting / oversight	
Comparison of the benefits and costs of the Support at Home program	
Financial benefits of changes in nursing home admissions, hospitalizations, and emergency department	
USE	
Total Costs of Support at Home Program	
Net Financial Impact of Support At Home	
Enrollee Focus Group Results	
Administration of the Support at Home Program	
Caregivers and the Care They Provide	
Impact of Support at Home on Participants' Lives	
Chapter 4 – Independent Care Providers	
Independent Care Provider Survey Results	38

Independent Care Provider Feedback	39
Chapter 5 – Considerations for Year 3	41
Appendix A: Data and methods for describing the targeted population	42
Appendix B: Logic Model	44

Chapter 1 – Introduction

The purpose of this project is to conduct a two-year formative and summative evaluation of the San Francisco Support at Home (S@H) program. The Support at Home program provides financial support (a "voucher") for the purchase of home care services by adults living in San Francisco. The eligible population is comprised of those who have a demonstrated need of assistance with two or more activities of daily living (ADLs) or instrumental activities of daily living (IADLs), income up to 100% area median income in San Francisco, assets up to \$40,000 (excluding one house and one car), a demonstrated need for financial assistance paying for home care, and who agree to pay a copayment towards the purchase of additional home care services and participate in program evaluations. Anticipated enrollment is 175 to 250 individuals per year of the program. The original program plan was that half of enrollees would be aged 60 years and older, and half would be under 60 years old.

Enrollees are required to contribute copayments for home care services prior to availability of the voucher, with the copayment rate based on the enrollee's financial need demonstrated by monthly income. Those with low financial need pay 50% of the voucher amount towards home care services, those with medium financial need pay 33% of the voucher amount towards home care services, and those with high financial need pay 20% of the voucher amount towards home care services. Voucher values are based on the level of functional need demonstrated by the enrollee, which is determined by an assessment of the individual's limitations in 17 ADLs and IADLs ranging from independent through dependent/paramedical levels of need. For enrollees with low functional need, a \$346 voucher per month is available to apply to scheduled home care services, medium functional need, a \$693 voucher per month is available to apply to scheduled home care services, and high functional need, a \$1299 voucher per month is available to apply to scheduled home care services. Enrollees can elect 1) to purchase home care services directly from an independent provider paid bi-weekly through an approved payroll service in agreement with the Support at Home program or 2) to purchase services monthly in advance through an approved home care agency at an hourly cost determined by each agency in agreement with the Support at Home program. The total hours of service received per week are determined by each enrollee's choices regarding provider and scheduling of home care services.

The Support at Home program is administered by the Institute on Aging (IOA) via a contract from the San Francisco Department of Aging and Adult Services (DAAS). The University of California San Francisco is conducting an independent evaluation of the program via a contract from DAAS.

This evaluation has two purposes:

- (1) Support continuous quality improvement of the Support at Home program through ongoing rapid data collection and analysis, and
- (2) Assess the overall efficacy of the program in maintaining residence at home, reducing hospitalizations and emergency department visits, controlling costs, and supporting a high quality of life.

The evaluation is using a mixed-methods approach, incorporating qualitative, survey, and quantitative data. In order to assess the unique impact of the Support at Home program, the evaluation intends to compare the data from S@H enrollees with a comparison group of individuals who applied for S@H services but do not receive them because they did not meet income or asset eligibility requirements or chose to not enroll for any reason. Members of the comparison group might be receiving assistance at home informally from family and friends or formally by paying for it themselves.

Limitations

Due to the ongoing data collection process, some discretion should be exercised when interpreting the enrollee comparisons and the between-group comparisons presented in this report.

First, the follow-up period for enrollees and comparison group members to provide their most recent quality of life data in between initial assessments and reassessments, sent as survey mailings, varied between the two groups. Both groups completed initial surveys about their quality of life, either at the time of enrollment into S@H (enrollees) or at the time of S@H rejection, decision not to enroll, or disenrollment (comparison group). Comparison group members received their second survey six to nine months after the initial survey. In contrast, enrollees could have received the second survey anywhere from three to 12 months after their initial survey. Furthermore, when enrollees and comparison group members actually completed their surveys in relation to when the surveys were sent varied; some people completed their surveys sooner after receiving them than others. Consequently, the timeframes of the various measures compared between the two groups are not perfectly consistent.

Second, because all survey questions were voluntary, not every person answered every question on each survey. Therefore, the number of cases (Ns) presented in each analysis can vary.

Third, enrollees who left the S@H program may have done so due to health events that led to hospitalization or the need for institutional care. Consequently, the rate of hospitalization may be undercounted for enrollees.

In the final evaluation report of this study, these limitations will be discussed in greater detail, as well as strategies to address them.

Chapter 2 – Support at Home Enrollees & Comparison Group Members

The data presented here are as of May 10th, 2019. Please note that unless otherwise specified, the data from each year of the S@H program are cumulative (i.e., data from Year 2 include those who enrolled during Year 2 and enrollees that have remained enrolled since Year 1).

At the end of Year 1 of the program, there were 105 people enrolled in the S@H program. At the end of Year 2, 203 people were enrolled in the program. As of May 10th, 80 people had been discharged from the program and 40 had disenrolled. People may leave the program for various reasons and successfully re-enroll if they meet the eligibility criteria upon re-enrollment and if a voucher is available.

The comparison group is comprised of previous S@H applicants who either did not qualify for the program, chose not to enroll, or originally enrolled in the program and later disenrolled. There were a total of 104 comparison group members.

Demographics

As seen in Table 1, the distribution of S@H enrollees' age has not changed much in Year 2 of the program compared to Year 1. Support at Home enrollees remain notably older than the estimated eligible population in San Francisco.* While about 36% of the total eligible population is 18-59 years of age, only 11.4% of enrollees in

The eligible population was calculated using data from the American Community Survey (Appendix A).

Year 1 and 5.9% of enrollees in Year 2 are under 60 years old. Comparison group members are similar in age to S@H enrollees.

Table 1. Age distribution of Support at Home program enrollees and eligible population

				• •
AGE CATEGORY	S@H ENROLLEES, END OF YEAR 1	S@H ENROLLEES, END OF YEAR 2	S@H COMPARISON GROUP	ELIGIBLE POPULATION*
18-59 years	11.4%	5.9%	7.7%	36.1%
60-79 years	46.6%	52.2%	47.1%	32.9%
80 years & older	42.0%	41.9%	45.2%	31.0%
Total	100%	100%	100%	100%
Number of people	105	203	104	27,940

^{*}The eligible population was calculated using data from the American Community Survey (Appendix A).

While there are a number of reasons why people under 60 years old may be underrepresented among S@H enrollees and despite numerous efforts to reach this population, enrolling this age group into S@H remains a challenge. Some challenges include:

- More than half of eligible people in this age group have a cognitive disability (as reported in the American Community Survey) and may not perceive themselves as matching the services S@H offers. Thus, the targeted population of those under 60 years old may be as small as 5,000.
- Many of those in the eligible population under 60 years old are employed, and two-thirds live with other
 people. Although these individuals may benefit from enrollment in S@H, they may perceive that they do
 not have additional care needs because they are managing their employment effectively and have other
 household members who support them.

Table 2 presents the racial/ethnic composition of the S@H enrollee population in Year 1 and in Year 2 of the program, the comparison group, and the eligible population; note that differences in percentages between the enrollee, comparison group, and eligible population for the 18-59 year age group appear large due to the small number of enrollees in this group. Between Years 1 and 2, race/ethnicity distribution varied slightly, but did not change much for enrollees. Among those 18-59 years old, Latinos are underrepresented in both years among enrollees (16.7% in Y1, 8.3% in Y2 vs. 27.1%). Asians are slightly underrepresented in both years (16.7% in Y1 and Y2 vs. 20.9%). Blacks/African-Americans are overrepresented in both years (16.7% in Y1, 25% in Y2, vs. 11%), as are those of other race/ethnicity (16.7% in Y1 and Y2 vs. 6.1%). Among those 60 years and older, Blacks/African-Americans are overrepresented in both years (32.3% in Y1 and 23.7% in Y2 vs. 9.6%). Latinos are slightly underrepresented (7.5% in Y1 and 9% in Y2 vs.11.1%), and Asians are underrepresented (11.8% in Y1 and 15.8% in Y2 vs. 36.4%) in both years of the program. Other races/ethnicities are overrepresented (3.2% in Y1, 7.4% in Y2 vs. 1.3%).

Among comparison group members 18-59 years old, Blacks/African-Americans (0% vs. 11%) and Latinos (25% vs. 27.1%) are underrepresented. Asians (25% vs. 20.9%) and those reporting other race/ethnicity (12.5% vs. 6.1%) are overrepresented. Among comparison group members 60 years and older, Latinos (7.3% vs. 11.1%) and Asians (20.8% vs. 36.4%) are underrepresented. Other race/ethnicity (5.2% vs. 1.3%) and Blacks/African-Americans are overrepresented (20.8% vs. 9.6%).

Table 2. Race/Ethnicity of Support at Home program enrollees and eligible population, by age group

RACE/	S@H ENF	ROLLEES,	S@H EN	ROLLEES,	S@H EN	ROLLEES,	ELIC	SIBLE	
ETHNICITY	END OF	YEAR 1	END OF YEAR 2		COMPARISON		POPU	POPULATION	
					GR	OUP			
	18-59 years	60 years & older	18-59 years	60 years & older	18-59 years	60 years & older	18-59 years	60 years & older	
WHITE	4	42	4	84	3	44	3,516	7,435	
	33.3%	45.2%	33.3%	44.2%	37.5%	45.8%	34.9%	41.6%	
LATINO	2	7	1	17	2	7	2,735	1,980	
	16.7%	7.5%	8.3%	9%	25%	7.3%	27.1%	11.1%	
ASIAN	2	11	2	30	2	20	2,102	6,492	
	16.7%	11.8%	16.7%	15.8%	25%	20.8%	20.9%	36.4%	
BLACK OR	2	30	3	45	0	20	1,111	1,711	
AFRICAN AMERICAN	16.7%	32.3%	25%	23.7%	0%	20.8%	11.0%	9.6%	
OTHER	2	3	2	15	1	5	620	238	
RACE/ETHNICITY*	16.7%	3.2%	16.7%	7.4%	12.5%	5.2%	6.1%	1.3%	
TOTAL	12	93	12	191	8	96	10,084	17,856	
	100%	100%	100%	100%	100%	100%	100%	100%	

^{*}Other race/ethnicity includes American Indian or Alaska Native, Native Hawaiian or Pacific Islander, two or more races, and some other race. Estimate of some other race population ages 60 & older is based on fewer than 30 sample observations.

About 9.5% of S@H enrollees identify as gay/lesbian/same-gender-loving (6.9%) or bisexual (2.5%), and about 11% of the comparison group identify as gay/lesbian/same-gender-loving (9.2%) or bisexual (2.1%). According to the most recently available American Community Survey (2005), approximately 15.4% of San Francisco's population is gay or lesbian;[†] S@H enrollees and the comparison group slightly underrepresent this population.

Individuals from single-person households are overrepresented among S@H enrollees, for all age groups, across both years of the program, as seen in Table 3. There may be two reasons for this. First, individuals living in multiperson households may receive assistance from other household members and not perceive that they need additional assistance. Second, the analysis of American Community Survey data may understate the income of multi-person households and fewer people in these household are potentially eligible than estimated. Note that enrollees of Asian/Native Hawaiian/Pacific Islander and Hispanic/Latino backgrounds are more likely to live in multi-person households. The lower enrollment rates among those living in multi-person households may be associated with the under-enrollment of individuals in some racial/ethnic groups.

[†] Gates, Gary. Same-sex Couples and the Gay, Lesbian, Bisexual Population: New Estimates from the American Community Survey. The Williams Institute, UCLA School of Law, October 2006.

Table 3. Household size of enrolled and eligible population, by age group

HOUSE- HOLD	S@H ENROLLEES, END OF YEAR 1		- , , , , , , , , , , , , , , , , , , ,			ELIGIBLE POPULATION			
SIZE	18-59 years	60 years & older	All ages	18-59 years	60 years & older	All ages	18-59 years	60 years & older	All ages
1 person	75.0%	78.5%	78.1%	75%	83.8%	83.3%	33.4%	41.2%	38.4%
2 people	16.7%	19.4%	19%	16.7%	15.2%	15.3%	26.7%	33.2%	30.8%
3 or more people	8.3%	2.1%	2.9%	8.3%	1.1%	1.5%	39.9%	25.6%	30.8%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

^{*}This measure of household size is based on survey responses; it does not account for dependent family relationships and how those relationships would determine income eligibility. Number of sample cases in American Community Survey=1,335.

Care Needs and Financial Needs

As part of the enrollment process, the Support at Home team determines care needs through a multifaceted functional assessment. Eligibility and amount of voucher is determined by a functional needs assessment. As seen in Table 4, the share of enrollees with low functional need increased slightly (39% vs. 43.8%), the share of enrollees with medium functional need stayed about the same (39% vs. 38.4%), and the share of enrollees with high functional need decreased slightly (21.9% vs. 17.7%) between Year 1 and Year 2.

Table 4. Enrollee functional need level distribution

LEVEL OF FUNCTIONAL NEED	S@H ENROLLEES, END OF YEAR 1	S@H ENROLLEES, END OF YEAR 2
High	23 21.9%	36 17.7%
Medium	41 39%	78 38.4%
Low	41 39%	89 43.8%
Total	105 100%	203 100%

The initial assessment collects detailed information about functioning levels for specific activities. The activities for which enrollees are most often fully dependent on assistance are laundry (61.6%), housework (60.6%), shopping and errands (56.2%), transportation (54.2%), and meal preparation and cleanup (52.7%). The activities for which they are most often independent are eating (79.9%), telephone use (63.1%), toileting (61.9%), transferring (54.2%), and indoor mobility (53.2%).

The enrollment process also includes a complete review of applicants' financial situations. At enrollment, enrollees are grouped into three categories: high financial need (0-25% of annual median income), medium financial need (26-60% of annual median income), and low financial need (61-100% of annual median income).[‡] These categories are based on the San Francisco Mayor's Office of Housing and Community Development income definitions, which are sourced from the U.S. Department of Housing and Urban Development; these data

[‡] In future years, the definitions of these categories may change.

were published on March 28, 2016, April 14, 2017, and April 1, 2018. The thresholds for each group have changed periodically due to updated data from the Mayor's Office and programmatic adjustments.

The enrollee's level of financial need determines the share of home care they will need to pay. As seen in Table 5, fewer enrollees are considered high financial need (32% vs. 40%), more enrollees are considered medium financial need (58.1% vs. 45.7%), and fewer enrollees are considered low financial need (9.6% vs.14.3%) in Year 2 compared to Year 1.

Table 5. Enrollee financial need level distribution

LEVEL OF FINANCIAL NEED	S@H ENROLLEES, END OF YEAR 1	S@H ENROLLEES, END OF YEAR 2
High	42 40%	65 32%
Medium	48 45.7%	118 58.1%
Low	15 14.3%	20 9.6%
Total	105 100%	203 100%

As seen in Table 6, enrollees with medium financial need make up the majority in each functional need category (61.1% for high functional need, 59% for medium functional need, and 56.2% for low functional need) in Year 2.

Table 6. Enrollee level of financial need by functional need, Year 2

LEVEL OF FUNCTIONAL NEED	HIGH FINANCIAL NEED		FIN	EDIUM ANCIAL NEED	FIN	LOW ANCIAL IEED	TO	OTAL
	#	%	#	%	#	%	#	%
High	9	4.4%	22	10.8%	5	2.5%	36	17.7%
Medium	21	10.3%	46	22.7%	11	5.4%	78	38.4%
Low	35	17.2%	50	24.6%	4	2%	89	43.8%
Total	65	32%	118	58.1%	20	9.9%	203	100%

Table 7 summarizes enrollees' monthly household income during both years of the program. Enrollees reported monthly household incomes ranging from \$751 to nearly \$7,000 in Year 1 and \$930 to nearly \$7,800 in Year 2; note that this includes households of all sizes. In Year 1, the average monthly income was \$2,700.98, and the median was \$2,273.05. In Year 2, the average monthly income was \$2,529.59, and the median was \$2,184. Note that an individual could be eligible for Medi-Cal but not qualify for fully-paid in-home support services, and thus would be eligible for Support at Home.

Table 7. Monthly total household income of enrollees*

	S@H ENROLLEES, END OF YEAR 1	S@H ENROLLEES, END OF YEAR 2
Mean	\$2,700.98	\$2,529.59
Median	\$2,273.05	\$2,184
Minimum	\$751	\$930
Maximum	\$6,924.59	\$7,798.78

^{*}Data include all household sizes.

At the end of Year 2, enrollees who were not already receiving home care more often had high financial need than those receiving home care (50% vs. 29.8%) (Table 8). Those without existing home care at time of S@H enrollment had medium to high financial need (none had low financial need). Enrollees who reported they had some home care services were also asked during their assessment whether their care needs were being met by their current services. Most (71%) reported that their care needs were not being met prior to enrollment in S@H.

Table 8. Total Enrollee financial need level by home care status, Year 2

	RECEIVING HOME CARE AT TIME OF ASSESSMENT				
LEVEL OF		Yes		No	
FINANCIAL NEED	#	%	#	%	
High	54	29.8%	11	50%	
Medium	107	59.1%	11	50%	
Low	20	11.1%	0	0%	
Total	181	100%	22	100%	

Pre-enrollment home care services

The initial assessment of S@H enrollees includes questions about whether the enrollee already had some home care services at the time of the assessment. As seen in Table 9, more than 90% of enrollees in Year 1 and just under 90% of enrollees in Year 2 were receiving some home care at the time of their assessment. In both years, the majority were relying at least in part on temporary home care solutions.

Table 9. Receipt of home care by enrollees at initial assessment

HAS HOME CARE?	S@H ENROLLEES IN YEAR 1	S@H ENROLLEES IN YEAR 2
No home care	10 9.5%	15 11%
Currently has permanent home care	34	54
(including paid and unpaid caregivers)	32.5%	39.4%
Currently has fully temporary home	8	3
care	7.6%	2.2%
Currently has care that is partly	46	65
temporary and partly permanent	43.8%	47.4%
Currently has home care with	7	0
unspecified duration	6.7%	0%
Total	105	137
i Olai	100%	100%

During the initial assessment, completed at the time of enrollment, Support at Home staff ask enrollees questions about their stress level given their current financial responsibilities, health and wellbeing, and note any additional comments enrollees may have about their home care or lack thereof. As seen in Table 10, which summarizes the

additional comments, enrollees expressed concern about their financial status, stating that there is a heavy burden associated with paying for home care. In regards to their health and wellbeing, some enrollees commented that they were sometimes harmed (e.g., hospitalized, anxious, depressed, living in an unclean home) because they did not have care or did not have enough care. Others had family members that were able to provide some care, but these family members were stressed about caregiver costs. In terms of their home care status overall, many enrollees shared that they had varying degrees of help via informal and formal means, but that informal caregivers often had other responsibilities (e.g., job, other family) and that purchasing additional, needed home care would be expensive.

Table 10. Initial Assessment Comments

QUESTION	# OF RESPONSES	PREVALENT THEMES	QUOTES
HOW WOULD YOU RATE YOUR STRESS LEVEL TODAY BASED ON YOUR CURRENT FINANCIAL RESPONSIBILITIES?	241	 Financial independence Debt Cost of home care Forgoing home care 	 "Scared about hiring help that is not reliable" "Can't pay on my own" "Not paying for home care now" "Depends on how much the copayment is" "Scared about getting in debt"
MOOD ASSESSMENT - HEALTH AND WELLBEING COMMENT	215	 Potential for harm Reduced risk of harm Household tasks/Family Need for help/Stress Affordability/Budget 	 "Client feels harmed because she doesn't have help" "Client ended up hospitalized after trying to clean her home" "Not harmed because husband caring for her" "Ok right now with daughter's help, but need more help" "Family is stressed due to caregiver costs" "Stress may be affecting health" "Very depressed and anxious due to lack of cleanliness and ability to do housework"
DO YOU HAVE ANY COMMENTS ABOUT YOUR HOME CARE OR LACK OF HOME CARE?	284	 Help from friends and family Availability of help Temporary vs. permanent help Affordability 	 "Informal help from friends and family temporary, formal help is permanent (meals on wheels and paratransit)" "Informal help (daughter, son, spouse) is permanent. Usually (dressing, transferring, bathing, grooming, toileting, housework, laundry, shopping, errands)" "(Daughter, son, nephew) helps but works full-time" "Has caregiver support but cannot afford more help"

Programmatic Comments While Enrolled

Enrollees were asked to share programmatic-related comments during their monthly service plan reviews (Table 11). Many enrollees commented that they were happy with the program, explained if and/or why they switched between independent provider and agency mode and shared their desire for a consistent caregiver.

Table 11. Monthly Service Plan Review Comments

QUESTION	# OF RESPONSES	PREVALENT THEMES	QUOTES
MONTHLY REVIEW COMMENTS	1095	 Satisfaction with program Scheduling Continuity of care 	 "Happy with the program" "Switching to independent provider to maximize hours or due to poor first impression from agency or caregiver missing shifts or issue with scheduling"

During quarterly service plan reviews, enrollees shared their thoughts about their general mood and the program overall (Table 12). Many enrollees felt that the program relieves stress, but others reported having issues with their caregiver (e.g., caregiver cannot work enough hours, caregiver cannot complete all tasks that enrollee needs), understanding the intersection between S@H and other financial programs, and possible errors with being overcharged for services. Some expressed concern about the future if S@H is not extended. When providing overall cots about S@H, many enrollees continued to express gratitude for what the program does for them, but many enrollees still needed more help in addition to the services that they are receiving from S@H.

Table 12. Quarterly Service Plan Review Comments

QUESTION	# OF RESPONSES	PREVALENT THEMES	QUOTES
MOOD COMMENT	409	Stress Satisfaction with program	 "Program helps relieve the stress immensely" "Client's son expressed gratitude for program" "Client reports stress due to possible being overcharged by agency" "Client reports stress around caregiver not being able to work the hours she needs/client needs more help than what is offered through S@H"
QUARTERLY REVIEW COMMENTS	408	 Satisfaction with program Need for more caregiver hours 	 "The program is a lifesaver" "Client is grateful for the help but needs more help as her vision fades and she suffers falls" "Client's health has declined, physical pain has increased and she has suffered two falls. She is having a hard time with only 24 hours of help each month and would like to schedule a reassessment if possible"

Chapter 3 – Cost Benefit Analysis

Framework for Comparing Costs and Benefits

This cost-benefit analysis examines trends among enrollees and the comparison group to measure the unique impact of S@H. While this analysis includes both financial and non-financial (e.g., quality of life) benefit data, there was not a comparison group analysis for the analysis of enrollees' maintenance of financial status because the comparison group is not asked to report details of their financial status.

The cost-benefit analysis of the Support at Home (S@H) program is guided by the evaluation logic model (Appendix B). The S@H program engages in outreach activities to identify potentially qualified applicants for the program. From that pool, those that enroll receive financial support to purchase home care services, including domestic, non-medical personal and accompaniment services, from either a home care agency or an independently-hired caregiver. These services help enrollees accomplish activities of daily living (ADLs) and instrumental activities of daily living (IADLs), receive recommended health care services, and enhance their social engagement. As a result, the services are anticipated to lead to a set of benefits, including higher self-reported quality of life, lower risk of nursing home admission or other residential changes, to lower risk of hospitalization and emergency department visits, and lower burden on informal family and friend caregivers. In turn, these benefits will lead to additional benefits, including greater employment (either paid outside work or as a paid caregiver) and satisfaction of family members. Finally, the program may lead to lower health care costs, primarily due to reduced hospitalizations, emergency department visits, and nursing home admissions.

Quality of life benefits to enrollees

The assessments, phone calls, and surveys conducted by Support at Home and UCSF include many questions to evaluate enrollees' quality of life. Enrollees completed surveys at enrollment (initial survey), at their annual reassessment, and periodically in between. The surveys conducted of comparison group members also include many of the same questions to allow for comparison before and after enrollment for enrollees and over time for the comparison group.

[§] Low L-F, Yap M, Brodaty H. (2011) A systematic review of different models of home and community care services for older persons. BMC Health Services Research 11:9.

[&]quot;Kane RL, Lum TY, Kane RA, Homyak P, Parashuram S, Wysocki A. (2013) Does home- and community-based care affect nursing home use? J Aging Soc Policy 25(2):146-60.

^{††} Thomas KS, Keohane L, Mor V. (2014) Local Medicaid home- and community-based services spending and nursing home admissions of younger adults. Am J Public Health 104(11):e15-7.

[#] Xu H, Weiner M, et al. (2010) Volume of home- and community-based Medicaid waiver services and risk of hospital admissions. J Am Geriatr Society 58(1):109-115.

^{§§} Segelman M, Intrator O, Li Y, Mukamel D, Veazie P, Temkin-Greener H. (2017) HCBS Spending and Nursing Home Admissions for 1915(c) Waiver Enrollees. J Aging Soc Policy. 2017 Apr 17:1-18.

[&]quot;Mitchell G 2nd, Salmon JR, Polivka L, Soberon-Ferrer H. (2006) The relative benefits and cost of Medicaid home- and community-based services in Florida. Gerontologist 46(4):483-94.

ttt Harrington C, Ng T, Kitchener M. (2011) Do Medicaid home and community based service waivers save money? Home Health Care Serv Q. 30(4):198-213.

^{***} Newcomer RJ, Ko M, et al. (2016) Health Care Expenditures After Initiating Long-term Services and Supports in the Community Versus in a Nursing Facility. Medical Care 54(3):221-8.

Financial stress

Enrollees and comparison group members were asked, "How would you rate your stress level today based on your current financial responsibilities to pay for your home care?" In this question, a rating of 1 indicates lower stress and 5 indicates the highest stress level. As seen in Table 13, enrollees' ratings after enrollment indicated lower levels of stress associated with the financial responsibility of paying for home care. The average score declined over time, and the change was statistically significant. In contrast, there was essentially no change among comparison group members.

Table 13. Rating of stress level based on financial responsibility for home care*

	Enrollees of S@H		Compari	ison group
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Score				
(1-5 with 5=highest stress)				
1	17.7%	28.3%	16.7%	21.1%
2	4.6%	13.9%	12.2%	5.3%
3	23.3%	23.3%	25.6%	26.3%
4	17.3%	16.7%	23.3%	26.3%
5	37.1%	17.8%	22.2%	21.1%
Number of cases	283	180	90	38
Matched pairs				
Mean score	3.36	2.82	3.24	3.22
Difference	-0.	.54	-(0.03
Statistically significant?	Yes (p-	<0.001)	No (ı	p=0.89)

^{*}The question asked in the assessment and during quarterly phone calls is: "How would you rate your stress level today based on your current financial responsibilities to pay for your home care?"

Enrollees were asked in their initial assessment and each reassessment, "How much of a financial strain would you say paying for home care is/would be for you?" A score of 5 indicated the highest level of strain. There was a decrease in the average score between the initial assessment and most recent annual reassessment, and the change was statistically significant (Table 14). The comparison group was not asked a similar question.

Table 14. Rating of financial strain produced by paying for home care*

	Enrollees of S@H			
	Initial assessment	Most recent annual		
	ilillai assessifietil	reassessment		
Score				
(1-5 with 5=highest strain)				
1	4.6%	20.5%		
2	3.5%	7.7%		
3	17.3%	18.0%		
4	18.7%	23.1%		
5	55.8%	30.8%		
Number of cases	283	39		
Matched pairs				
Mean score	4.14	3.36		
Difference	-1.10			
Statistically significant?	Yes (p<0.001)			

^{*}The question asked in the assessment and reassessment is: "How much of a financial strain would you say paying for home care is/would be for you?" The comparison group is not asked a similar question.

Enrollees were asked during their initial assessment and quarterly phone calls, "How would you rate the harm to your health and well-being today based on your current financial responsibilities to pay for your caregiver expenses?" As seen in Table 15, the average rating of harm decreased between the initial assessment and the most recent report, and this change was statistically significant. The comparison group was not asked a similar question.

Table 15. Rating of harm to health and well-being due to cost of home care

	Enrollees of S@H			
	Initial assessment	Most recent report		
Score				
(1-5 with 5=highest harm)				
1	27.6%	35.6%		
2	5.7%	13.9%		
3	21.6%	21.1%		
4	15.9%	14.4%		
5	29.3%	15.0%		
Number of cases	283	180		
Matched pairs				
Mean score	2.96	2.59		
Difference	-0.37			
Statistically significant?	Yes (p=0.018)			

^{*}The question asked in the assessment and during quarterly phone calls is: "How would you rate the harm to your health and well-being today based on your current financial responsibilities to pay for your caregiver expenses?" The comparison group is not asked a similar question.

Quality of life

The surveys conducted by UCSF ask respondents to rate their overall quality of life on a scale of 1-5, with 5 indicating the highest quality of life. As seen in Table 16, there was an increase in the average quality of life score among enrollees between their first survey and most recent survey, although the change was not statistically

significant. The average score decreased among comparison group members, but this change also was not statistically significant.

Table 16. Rating of quality of life as a whole

	Enrollees of S@H		Comparison group	
	Initial assessment	Most recent survey or annual reassessment	Initial survey	Most recent survey
Score				
(1-5 with 5=highest quality)				
1	5.4%	2.6%	5.7%	2.9%
2	15.1%	12.8%	15.9%	25.7%
3	40.4%	34.6%	42.1%	40.0%
4	30.7%	38.5%	26.1%	28.6%
5	8.4%	11.5%	10.2%	2.9%
Number of cases	166	78	88	35
Matched pairs				
Mean score	3.26	3.42	3.10	3.06
Difference	0.15		-(0.03
Statistically significant?	No (p=0.15)	No (į	p=0.83)

Table 17 provides detailed information about specific quality of life items included in the UCSF survey. The items with the highest percentages of respondents saying they "agree" or "strongly agree" during the initial assessment included "I feel lucky compared to most people," "I take life as it comes and make the best of things," "I get pleasure from my home," "I feel safe where I live," and "My family, friends, or neighbors would help me if needed."

Table 17. Enrollee responses in initial survey for specific quality of life components

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
Laniou my life averall	6	31	25	90	23
I enjoy my life overall	3.4%	17.7%	14.3%	51.4%	13.1%
Lie als ferrored to this se	5	19	33	96	20
I look forward to things	2.9%	11.0%	19.1%	55.5%	11.6%
I am healthy enough to get out and	23	52	34	55	10
about	13.2%	29.9%	19.5%	31.6%	5.8%
My family, friends, or neighbors	14	23	11	80	46
would help me if needed	8.1%	13.2%	6.3%	46.0%	26.4%
I have social or leisure	16	46	21	73	19
activities/hobbies that I enjoy doing	9.1%	26.3%	12.0%	41.7%	10.9%
	9	40	25	83	18
I try to stay involved with things	5.1%	22.9%	14.3%	47.4%	10.3%
I am healthy enough to have my	29	48	29	57	11
independence	16.7%	27.6%	16.7%	32.8%	6.3%
Life all a affa colo and Life a	4	10	14	95	52
I feel safe where I live	2.3%	5.7%	8.0%	54.3%	29.7%
Last placeure from my bone	1	11	28	88	46
I get pleasure from my home	0.6%	6.3%	16.1%	50.6%	26.4%
I take life as it comes and make the	5	8	26	105	30
best of things	2.9%	4.6%	14.9%	60.3%	17.2%
I feel lucky compared to most	4	18	26	91	35
people	2.3%	10.3%	14.9%	52.3%	20.1%
I have enough money to pay for	17	34	29	80	15
household bills	9.7%	19.4%	16.6%	45.7%	8.6%

Number of respondents = 169-175, depending on the question.

The average of the quality of life items can be used as an overall measure of quality of life, as presented in Table 18. Among enrollees, there was a small, statistically insignificant increase in the composite score. Among the comparison group members, there was a small, statistically insignificant decrease in the score.

Table 18. Composite score of Quality of Life (mean of individual items)

	Enrolle	es of S@H	Comparison group	
	Initial assessment	Most recent survey or annual reassessment	Initial survey	Most recent survey
Mean (1-5 with 5=highest quality)	3.48	3.49	3.36	3.22
Number of cases	185	87	93	40
Matched pairs				
Mean score	3.41	3.48	3.34	3.25
Difference	0.07		-(0.09
Statistically significant?	No (p=0.27)		No (p	o=0.37)

Depression

Enrollees and comparison group members were asked two questions from a standardized depression screening scale. Responses indicate that depression is a concern for many S@H enrollees and comparison group members (Tables 19 and 20). Among both enrollees and comparison group members, there was very little change in the percentages of respondents reporting they had "little interest or pleasure with doing things." There were decreases in the percentages reporting that they frequently were "feeling down, depressed, or hopeless," but these changes were not statistically significant.

Table 19. Frequency of "little interest or pleasure with doing things" (from PHQ-2 depression screening)

, ,	Enrolle	es of S@H	Comparison group	
	Initial assessment	Most recent survey or annual reassessment	Initial survey	Most recent survey
Score				
0 = not at all	27.1%	30.6%	33.3%	23.7%
1 = several days	32.8%	35.3%	32.3%	50.0%
2 = more than half the days	18.6%	14.1%	12.9%	5.3%
3 = nearly every day	21.5%	20.0%	21.5%	21.1%
Number of cases	177	85	93	38
Matched pairs				
Mean score	1.29	1.29	1.22	1.24
Difference	0.00		C	0.03
Statistically significant?	No (p=1.00)	No (p	o=0.87)

Table 20. Frequency of "feeling down, depressed, or hopeless" (from PHQ-2 depression screening)

	Enrolle	es of S@H	Comparison group	
	Initial assessment	Most recent survey or annual reassessment	Initial survey	Most recent survey
Score				
0 = not at all	30.5%	40.2%	29.8%	31.6%
1 = several days	30.5%	37.8%	34.0%	34.2%
2 = more than half the days	21.5%	9.8%	19.2%	21.1%
3 = nearly every day	17.5%	12.2%	17.0%	13.2%
Number of cases	177	82	94	38
Matched pairs				
Mean score	1.18	0.97	1.24	1.16
Difference	-0.21		-0.08	
Statistically significant?	No (p=0.11)		No (p=0.62)

Maintenance of financial status

The S@H program seeks to reduce financial barriers to receipt of home care for adults in San Francisco. For some individuals, additional support may enable them to increase their employment or leverage their earnings more effectively. During the initial assessment and each reassessment, enrollees are asked to detail their income and specify the sources of income. Table 21 summarizes the total monthly income of enrollees. Average income

of enrollees was \$2,568.05 at the initial assessment, and \$2,706.14 at the most recent annual reassessment. A comparison of changes in income among those who have been reassessed reveals a statistically significant increase in average income of about \$145.

Analysis of the sources of income indicate that enrollees who have had an annual reassessment reported a statistically significant difference in income from the Social Security Administration that averaged \$205.13 more per month, a significant difference in pension income that averaged \$199.15 more per month, and a difference in wage income of \$87.07 less per month (not statistically significant). Minor changes were observed in other income categories, but none were statistically significant.

Table 21. Income variation from initial assessment and most recent annual reassessment for enrollees

	Initial	Annual	
	assessment	reassessment	
Average monthly income	\$2,568.05	\$2,706.14	
25 th percentile income	\$1,682.73	\$1,629.00	
Median income	\$2,198.50	\$2,103.00	
75 th percentile income	\$3,058.00	\$3,457.00	
Number of cases	283	39	
Matched pairs			
Average income	\$2,561.37	\$2,706.14	
Difference	\$144.77		
Statistically significant?	No (p=0.13)		

Enrollees are also asked to report the assets they have in their checking account, savings account, other investments, and other assets. As seen in Table 22, average assets of enrollees were about \$7,761 at the initial assessment and about \$7,518 at the most recent annual reassessment. A comparison of those with reassessments found a decrease in average assets of more than \$2,000, but this change was not statistically significant. For these individuals, the difference in checking account funds averaged \$1,006.39 less, the difference in savings account funds averaged \$996.44 less, and the difference in investment assets averaged \$587.54; all differences were not statistically significant.

Table 22. Asset variation from initial assessment and most recent annual reassessment for enrollees

	Initial	Annual	
	assessment	reassessment	
Average total assets	\$7,760.97	\$7,517.92	
25 th percentile assets	\$676.95	\$894.34	
Median assets	\$2,835.08	\$1,954.48	
75 th percentile assets	\$9,995.00	\$11,070.64	
Number of cases	283	39	
Matched pairs			
Average assets	\$9,654.79	\$7,517.92	
Difference	-\$2,1	36.86	
Statistically significant?	No (p=0.09)		

Physical health of enrollees

The evaluation instruments include self-reported questions about health, as well as questions about emergency department visits, hospitalizations, falls, and attendance at medical appointments.

Self-rated health suffering

As seen in Table 23, a smaller percentage of enrollees and comparison group members indicated that their health suffered due to their inability to afford home care in the most recent survey as compared with the initial survey. However, neither of these changes were statistically significant. Note that at the time of the initial survey, most enrollees were not receiving home care services, whereas after program enrollment respondents are receiving services. The ratings of those receiving services may reflect a belief that their health is suffering because they could not afford more home care than they were receiving at the time of the survey.

Table 23. Percent reporting their health suffered due to inability to afford home care

	Enrollees of S@H		Comparison group	
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Percent "yes"	51.9%	41.1%	50.6%	37.5%
Number of cases	283	73	91	40
Matched pairs: significant?	No (p=0.40)		No (p	o=0.58)

Use of emergency departments

At the initial assessment and during quarterly service plan reviews, enrollees are asked if they had any visits to the emergency department during the prior three months, and how many visits they had (if any). Comparison group members are also asked about emergency department visits as part of the surveys they are asked to complete. As seen in Table 24, there was a statistically significant decrease in the average number of emergency department visits between the initial assessment and the most recent report among enrollees. In addition, a significantly greater percentage of enrollees indicated that they had no emergency department visits in the most recent report compared with the initial report. In contrast, there was an increase in the average number of emergency department visits among comparison group members (not statistically significant), and a statistically significant decrease in the percentage of comparison group members reporting they had no emergency department visits over the prior three months.

Table 24. Number of emergency department visits in prior 3 months

	Enrollees of S@H		Compari	son group
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Number of visits				
0	70.2%	86.7%	63.2%	64.9%
1	18.2%	10.0%	17.2%	29.7%
2	5.5%	2.2%	6.9%	0.0%
3	4.4%	0.6%	6.9%	5.4%
4	0.4%	0.0%	2.3%	0.0%
5 or more	1.3%	0.6%	3.5%	0.0%
Number of cases	275	180	87	37
Matched pair test of mean				
number of ED visits				
Mean ED visits	0.38	0.19	0.36	0.47
Difference	-0	.19	0.11	
Statistically significant?	Yes (p:	=0.008)	No (p=0.61)	
Matched pair test of zero ED				
visits				
Percent with zero ED visits	69.4%	86.7%	83.8%	64.9%
Difference	0.	17	-().19
Statistically significant?	Yes (p:	=0.001)	Yes (p=0.05)

Hospitalizations

At the initial assessment and during quarterly service plan reviews, enrollees are asked if they had any hospitalizations during the prior three months, and how many they had (if any). Comparison group members are also asked about hospitalizations as part of the surveys they are asked to complete. As seen in Table 25, there was a statistically significant decrease in the average number of hospitalizations reported by enrollees, and the percentage reporting no hospitalizations increased (but not significantly). In contrast, those in the comparison group had an increase in the average number of hospitalizations and decrease in the percentage with no hospitalizations between their first and most recent surveys, although neither change was statistically significant.

Table 25. Number of hospitalizations in prior 3 months

	Enrollees of S@H		Comparison group	
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Number of hospitalizations				
0	61.5%	83.3%	54.0%	56.8%
1	25.1%	11.1%	20.7%	21.6%
2	9.2%	3.3%	6.9%	16.2%
3	2.1%	2.2%	11.5%	5.4%
4	0.7%	0.0%	2.3%	0.0%
5 or more	1.4%	0.0%	1.2%	0.0%
Number of cases	283	180	87	37
Matched pair test of mean				
number of hospitalizations				
Mean hospitalizations	0.43	0.24	0.67	0.72
Difference	-0.	.19	0.06	
Statistically significant?	Yes (p	=0.005)	No (p=0.78)	
Matched pair test of zero				
hospitalizations				
Percent with no hospitalizations	68.3%	83.3%	67.6%	56.8%
Difference	0.	15	-(0.11
Statistically significant?	Yes (p-	<0.001)	No (į	0=0.25)

Medical appointments

At the initial assessment and during quarterly service plan reviews, enrollees are asked to report the number of medical appointments they attended during the prior three months. Comparison group members are also asked about medical appointments as part of the surveys they are asked to complete. As seen in Table 26, enrollees of Support at Home reported a significant and large decrease in the average number of visits, from 7.9 to 4.7, between their initial assessment and most recent report. There also was a significant decrease in the percentage of enrollees with any attended appointments in the prior three months. However, there was no significant change in the average number of medical appointments attended by members of the comparison group between their initial and most recent surveys. Recent studies have linked high-quality home care with reduced demand for primary care visits and interpreted this as an indication that home care services can improve overall care coordination.§§§§ Thus, the decline in medical appointments attended by enrollees can be viewed as a sign of better overall care.

Table 26. Number of medical appointments attended in prior 3 months

	Enrollees of S@H		Comparison group	
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Number of appointments attended				
0	9.5%	22.2%	8.2%	13.2%
1	11.7%	19.4%	16.5%	2.6%
2	11.0%	15.0%	8.2%	13.2%
3	13.4%	10.0%	23.5%	21.1%
4	8.5%	5.6%	7.1%	13.2%
5-9	20.2%	16.1%	20.0%	21.0%
10 or more	25.7%	11.7%	16.5%	15.8%
Number of cases	283	180	85	38
Matched pair test of mean appointments attended				
Mean appointments attended	7.90	4.67	8.21	6.21
Difference	-3	.23	-2.00	
Statistically significant?	Yes (p-	<0.001)	No (p=0.26)	
Matched pair test of any attended appointments				
Percent with any attended appointments	90.6%	77.8%	73.7%	86.8%
Difference	-0.	128	C).13
Statistically significant?	Yes (p	<0.001)	No (ı	0=0.06)

Enrollees and comparison group members also are asked to report the number of medical appointments they missed during the prior three months. Although a decrease in the number of appointments attended can be viewed as a sign of improving care for enrollees, missed appointments should not be considered as a positive indicator. There was no significant change among enrollees in the average number of appointments missed between their initial assessment and most recent report, but there was a small, significant increase in the percentage reporting they missed no appointments (Table 27). There were no significant changes in missed appointments for comparison group members.

Table 27. Number of medical appointments missed

	Enrollees of S@H		Compari	son group
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Number of appointments missed				
0	77.4%	83.3%	65.2%	78.4%
1	12.4%	11.1%	14.6%	8.1%
2	5.3%	2.2%	7.9%	2.7%
3	1.8%	1.1%	4.5%	0.0%
4	2.1%	0.6%	2.3%	2.7%
5 or more	1.0%	1.7%	5.6%	0.0%
Number of cases	283	180	89	37
Matched pair test of mean				
appointments missed				
Mean appointments missed	0.43	0.30	0.65	0.71
Difference	-0	.13	0.06	
Statistically significant?	No (p	=0.25)	No (p=0.74)	
Matched pair test of no missed				
appointments				
Percent with no missed	80.6%	83.3%	62.2%	78.4%
appointments				
Difference	0.03		0	.16
Statistically significant?	No (p	=0.44)	No (p	0=0.06)

Falls

At the initial assessment and during quarterly service plan reviews, enrollees are asked if they had any falls during the prior three months and how many they had (if any). Comparison group members are also asked about falls as part of the surveys they are asked to complete. Among enrollees, there was not a significant change in the average number of falls reported, but there was a statistically significant increase in the percentage of enrollees reporting no falls, from 58.3% to 70.6% (Table 28). In contrast, there was a statistically significant change in the average number of falls among comparison group members, but there was not a significant change in the percentage of comparison group members reporting no falls.

Table 28. Number of falls in prior 3 months

	Enrollees of S@H		Compari	son group
	Initial	Most recent	Initial	Most recent
	assessment	report	survey	survey
Number of falls				
0	51.9%	70.6%	47.3%	47.4%
1	20.1%	10.0%	20.9%	18.4%
2	10.3%	6.1%	9.9%	15.8%
3	5.0%	6.1%	11.0%	13.2%
4	3.2%	0.6%	4.4%	2.6%
5 or more	9.5%	6.6%	6.5%	2.6%
Number of cases	283	180	91	38
Matched pair test of mean falls				
Mean falls	1.23	1.14	0.81	1.19
Difference	-0.	.08	0.39	
Statistically significant?	No (p=0.73)		Yes (p=0.04)	
Matched pair test of no falls				
Percent with no falls	58.3%	70.6%	55.3%	47.4%
Difference	0.12		-(0.08
Statistically significant?	Yes (p:	=0.001)	No (p	p=0.32)

ADL/IADL status

During enrollees' initial assessments, detailed information about difficulties with activities of daily living and instrumental activities of daily living is collected using the Level of Care Assessment Tool (LOCAT). The individual items in the LOCAT are converted into a score ranging from 0 to 72 points, with 72 points indicating the highest possible level of need for assistance. This information is used to determine how many hours of care will be supported by the program. The data are also collected when enrollees are reassessed to determine whether a change in service is needed. The comparison group surveys collect similar self-reported data. As seen in Table 29, enrollees' average scores increased significantly between their initial assessment and most recent annual reassessment, indicating the increasing frailty of many enrollees. Members of the comparison group did not report a similar increase in their scores.

A comparison of LOCAT scores for enrollees who had annual reassessments revealed that 78.1% of enrollees had increases in their scores between initial assessment and most recent annual reassessment. Among those with higher scores upon reassessment, the average increase was 15.2%, and among those with lower scores, the average decrease was 46.5%.

Table 29. Average total score from LOCAT assessment tool

	Enrollee	s of S@H	Comparison group	
	Initial	Annual	Initial	Most recent
	assessment	reassessment	survey	survey
Mean (0-72 with 72 is highest need)	32.6	38.2	24.0	28.6
Number of cases	283	39	115	38
Matched pairs				
Mean score	31.6	38.2	28.7	28.6
Difference	6.6		-0.1	
Statistically significant?	Yes (p<0.001)		No (p=0.98)	

Benefits to family and friends providing unpaid "informal" care

The evaluation includes surveys of family and friends of enrollees who provide enrollees with unpaid, "informal" care. These individuals are identified by enrollees as part of the quality of life surveys, including an email address and/or telephone number with which to contact the family member or friend. The surveys include questions about extent of caregiving, satisfaction with and stress of caregiving, employment, and changes in employment caused by caregiving responsibilities. A follow-up survey of these individuals will be conducted during the third year of the pilot project; at this time, only initial survey data are available.

Stress of providing informal care

Friends and family members are asked 10 questions about the stresses they experience providing informal care. As seen in Table 30, the items with which respondents most often agreed or strongly agreed were that they were worried about their future because of their caregiving (66.0%), relationships with other family members and friends were suffering due to providing care (66.0%), and sometimes not feeling like "myself" (58.0%). The items with which respondents most often disagreed or strongly disagreed were that their life satisfaction has suffered (63.5%), that they often feel physically exhausted (61.6%), wishing at times they could run away (53.0%), and the care takes a lot of their own strength (52.9%).

Table 30. Agreement with factors related to stress of providing informal care

	Strongly disagree (1)	Disagree (2)	Agree (3)	Strongly agree (4)	Number responding
My life satisfaction has suffered because of the care	17.3%	46.2%	25.0%	11.5%	52
I often feel physically exhausted	13.5%	48.1%	30.8%	7.7%	52
From time to time I wish I could "run away" from the situation I am in	21.6%	31.4%	33.3%	13.7%	51
Sometimes I don't really feel like "myself" as before	12.0%	30.0%	48.0%	10.0%	50
Since I have been a caregiver my financial situation has decreased	15.4%	30.8%	42.3%	11.5%	52
My health is affected by the care situation	13.7%	33.3%	43.1%	9.8%	51
The care takes a lot of my own strength	13.7%	39.2%	39.2%	7.8%	51
I feel torn between the demands of my environment (such as family) and the demands of the care	14.0%	34.0%	38.0%	14.0%	50
I am worried about my future because of the care I give	14.0%	20.0%	54.0%	12.0%	50
My relationships with other family members, relatives, friends and acquaintances are suffering as a result of the care	12.0%	22.0%	50.0%	16.0%	50

The 10 individual items regarding stress associated with providing informal care can be averaged to obtain a composite score. A score of 4 would indicate the highest level of stress, and a score of 1 indicates a low level of stress. As seen in Table 31, the overall composite stress score averaged 2.48 among family and friends providing informal care.

Table 31. Composite score of stress of providing informal care

	Initial survey
Mean (0-4 with 4 being highest stress)	2.48
Number of cases	52

Self-reported health while providing informal care

Family and friends were asked to rate their health in general, ranging from excellent to poor. As seen in Table 32, most respondents indicated they were in good, very good, or excellent health. However, 20.9% indicated they were in fair or poor health.

Table 32. Overall health while providing informal care

	Initial survey
Overall health in general	
1 = excellent	12.5%
2 = very good	20.8%
3 = good	45.8%
4 = fair	16.7%
5 = poor	4.2%
Number of cases	48

Financial stress of providing informal care

Family and friends who provide informal care to Support at Home enrollees reported that they had experienced adverse financial impacts due to their caregiving. As seen in Table 33, the most frequently reported experiences were dipping into personal savings to cover caregiving expenses (42.2%) and cutting back on personal expenses (52.8%). The least frequent experiences included dipping into retirement savings to cover caregiving expenses (14.8%), taking out a loan to cover expenses (18.9%), and cutting back on their spending for their own health care (18.9%).

Table 33. Percent indicating they experienced specific financial burdens from providing informal care

	Percent	Number responding
Dipped into your personal savings to cover expenses	48.2%	54
Dipped into your retirement savings to cover expenses	14.8%	54
Reduced how much you save for retirement	28.3%	53
Took out a loan, borrowed from a friend or family member, or assumed other debts to cover expenses	18.9%	53
Cut back on personal spending to cover expenses	52.8%	53
Cut back on spending for your own health care	18.9%	53

The six items that measure financial burdens can be averaged to obtain a composite score, which is presented in Table 34. The average composite score was 0.30 for family and friends who provide informal care to enrollees.

Table 34. Composite score of financial burden of providing informal care

	Initial survey
Mean	0.30
(0-1 with 1 being highest burden)	
Number of cases	51

Employment while providing informal care

Family members and friends of enrollees were asked about their employment status. As seen in Table 35, a plurality of respondents was employed full-time (40.8%), and 28.6% were retired. Ten percent were not employed and the remainder (18.4%) were employed part-time. Seventeen percent reported self-employment.

Table 35. Employment status while providing informal care

	Initial survey
Employed full-time	40.8%
Employed part-time	18.4%
Not employed	10.2%
Retired	28.6%
Number of cases	49
Self-employed	17.4%
Number of cases	46

Respondents were asked to report the average number of hours they work per week, as well as their weekly earnings. Among all 33 respondents, the average number of hours worked per week was 35.36. Among the 22 who reported earnings, average weekly earnings was \$939.09.

Table 36. Hours and earnings per week while providing informal care

	Initial survey
Average hours per week	35.36
Number of cases	33
Average earnings per week	\$939.09
Number of cases	22

Respondents often reported that they changed their employment situation due to their caregiving responsibilities. About 38.3% of respondents reported a reduction in work or stopping work due to caregiving, while 34% reported an increase in work.

Table 37. Increased or decreased work due to providing informal care

	Initial survey
Reduced/quit work due to caregiving	38.3%
Number of cases	47
Increased work due to caregiving	34.0%
Number of cases	47

Many of those who provide informal care to S@H enrollees receive benefits from their employer (Table 38). The most common benefit received is health insurance for the respondent (41.7%). Less than 20% of respondents received health insurance for their family, a pension, a retirement savings account, or other benefit. Many received no employment-based benefits (41.7%), and 12.5% reported that they lost benefits due to their caregiving responsibilities. This most likely occurred among people who took a leave of absence from work or reduced their work hours.

Table 38. Employment-based benefits while providing informal care

	Initial survey
Benefits	
Health insurance for me	41.7%
Health insurance for family	19.4%
Pension	19.4%
Retirement savings account	16.7%
Other	5.6%
None	41.7%
Number of cases	36
Lost benefits due to caregiving	12.5%
Number of cases	48

Family members and friends of enrollees were asked about specific conflicts they may have experienced between their employment and their responsibilities for providing informal care. Table 39 details their responses. The most common experiences included going to work late, leaving early, or taking time off to provide care (44%); working different hours (44.9%); working more hours (28%); taking a leave of absence (21.2%); and reducing hours (19.6%).

Table 39. Percent indicating they experienced specific conflicts between employment and providing informal care

	Percent	Number responding
Went in late, left early, or took time off during the day to provide care	44.0%	50
Took a leave of absence	21.2%	52
Went from working full-time to part-time, or cut back your hours	19.6%	51
Turned down a promotion	3.9%	52
Lost any of your job benefits	11.8%	51
Gave up working entirely	9.6%	52
Retired early	12.2%	49
Received a warning about your performance or attendance at work	12.0%	50
Worked more hours at your job	28.0%	50
Worked different hours at your job	44.9%	49
Took an additional job	12.0%	50

The average of the specific employment-caregiving conflict items is a composite score, which had an average of 0.24 (Table 40).

Table 40. Composite score of conflict between employment and providing informal care

	Initial survey
Mean (0-1 with 1 being highest stress)	0.24
Number of cases	49

Respondents were specifically asked about whether their retirement savings had changed as a result of their informal caregiving responsibilities. As seen in Table 41, 32% reported they had decreased retirement savings.

Table 41. Decreased retirement savings due to providing informal care

	Initial
	survey
Reduced retirement savings due to caregiving	32.0%
Number of cases	50

Costs of the Support at Home Program

The Support at Home program incurs costs for payment for home care services and for operating the program. The costs of home care services are shared between Support at Home and enrollees, with enrollees' copayments based on their functional need and their financial need. Table 42 summarizes the voucher amounts paid by Support at Home for home care service, as well as the copayments made by enrollees for home care service. The analysis included 945 monthly payments made for agency services and 1,992 biweekly payments made for independent care providers. The biweekly payments were converted to monthly equivalent payments in order to summarize costs on a monthly basis, by multiplying by 26/12.

As seen in Table 42, the average monthly value of voucher payments for home care services was \$579.50 per enrollees, with an interquartile range of \$320.67 to \$693.00. The average monthly copayment was \$227.56, with an interquartile range of \$114.00 to \$331.50. In sum, the total copayments by all enrollees for home care services was \$437,028 and the total voucher payments were \$1,112,901.

Table 42. S@H Voucher payments and enrollee copayments for home care services, monthly values, current and discharged enrollees (277 enrollees included, data not weighted for varying numbers of months of service for each enrollee)

	Voucher	Enrollee	
	payments	Copayments	
Number of monthly payments made	9	60	
Number of biweekly payments made	2,081		
Average per enrollee per month	\$579.50	\$227.56	
25 th percentile per enrollee per month	\$320.67	\$114.00	
Median per enrollee per month	\$542.53	\$173.33	
75 th percentile per enrollee per month	\$693.00	\$331.50	
Total cumulative to date	\$1,112,901	\$437,028	
Net Voucher payments to date	\$675,872		
Percentage of total vouchers paid through copayments	39	.3%	

IOA incurs costs to manage the Support at Home program, which are mostly comprised of personnel costs. As seen in Table 43, total IOA spending on S@H has been \$1,245,123 over the first 26 months of the program. Of this, \$141,855 has been start-up and evaluation-related costs, which would not exist in a permanently-operating program. The operational expenditures total \$1,103,268, averaging \$42,433 per month. These expenses include the costs of the social workers who coordinate and conduct assessments, a financial manager who ensures all billing, invoices, and vouchers are processed, a project manager, and other costs associated with program operations.

 Table 43. Institute on Aging operational costs for Support at Home Pilot Program

	FY16-17	FY17-18	FY18-19*	Total
Number of months	2	12	12	26
Total expenditures	\$50,125.00	\$556,895.00	\$638,103.00	\$1,245,123.00
Start-up and evaluation costs	\$50,125.00	\$75,000.00	\$16,730.00	\$141,855.00
Operational expenses only (without start-up/evaluation)	\$0	\$481,895.00	\$621,373.00	\$1,103,268.00
Average total spending per month	\$25,062.50	\$46,407.92	\$53,175.25	\$47,889.35
Average operational spending per month (without start-up/evaluation)	\$0.00	\$40,157.92	\$51,781.08	\$42,433.38

^{*} The FY18-19 data cover 12 months, whereas the evaluation data cover 10.5 months.

Cost of DAAS contracting / oversight

The San Francisco Department of Aging and Adult Services (DAAS) also incurs costs for operation and oversight of the program. The total budgeted costs for DAAS are summarized in Table 44. During the 2016-17 fiscal year, DAAS dedicated staff time for 9 months, followed by 3 full years of staff time. The total for the program is \$204,721, with an average monthly cost of \$4,549.36.

Table 44. Department of Aging and Adult Services operational costs for Support at Home Pilot Program

	FY16-17	FY17-18	FY18-19	FY19-20	Total
Number of months	9	12	12	12	45
Total expenditures	\$41,226	\$54,968	\$54,686	\$53,840	\$204,721
Average spending per month	\$4,580.67	\$4,580.67	\$4,557.17	\$4,486.67	\$4,549.36

Comparison of the benefits and costs of the Support at Home program

Financial benefits of changes in nursing home admissions, hospitalizations, and emergency department visit use

The financial value of reductions in nursing home admission, hospitalization, and emergency department use were estimated by gathering data from the published literature. Some benefits are accrued by private insurance companies (e.g., Medicare Advantage plans), some are received by San Francisco (Medicaid), and some are received by other levels of government (e.g., the federal government for Medicare). The cost savings presented in this report do not distinguish by beneficiary of savings.

Financial savings associated with reduced hospitalizations

A reduction in the number of hospitalizations among S@H enrollees has a financial benefit. Data from the Healthcare Cost Utilization Project of the U.S. Agency for Healthcare Research and Quality reported that the average cost for a hospitalization among patients aged 45 to 84 years was \$14,500 in 2016," which is equivalent to \$15,405.56 in 2019 dollars using the Consumer Price Index.††† The data indicate that S@H enrollees experienced a statistically significant decrease in hospitalization rates after enrollment, whereas the comparison group did not. The decreased hospitalization rate for enrollees has a financial value of \$975.69 per enrollee per month, as detailed in Table 45.

https://www.hcup-us.ahrq.gov/reports/statbriefs/sb246-Geographic-Variation-Hospital-Stays.pdf

^{††††} https://www.bls.gov/data/inflation_calculator.htm

Table 45. Cost savings from change in hospitalizations

	Enrollees	Comparison	
	Lillonees	group	
Initial average hospitalization rate (quarterly)	0.43	0.67	
Most recent average hospitalization rate	0.24	0.72*	
Change in hospitalizations per enrollee	-0.19	0.00*	
Cost per hospitalization	\$15,405.56		
Cost change per enrollee per quarter	-\$2,927.06	\$0.00	
Net cost change per enrollee per quarter	\$2,927.06 savings		
Net cost change per enrollee per month	\$975.69 savings		

^{*} Change was not statistically significant.

Cost of Emergency Department visits

Avoided emergency department visits also have a financial value. Data form the Agency for Healthcare Research and Quality's Medical Expenditure Panel Survey reported an average cost of \$1,431 per emergency department visit for people 65 years and older insured by Medicare and private insurance plans. Using the Consumer Price Index, the inflation-adjusted cost is \$1,539.87 in 2019 dollars.

S@H enrollees experienced a statistically significant decrease in the rate of emergency department visits, but comparison group members did not. As seen in Table 46, the financial value of the decrease in emergency department visits is \$97.53 per enrollee per month.

Table 46. Cost savings from change in emergency department visits

	Enrollees	Comparison group	
Initial average ED visit rate (quarterly)	0.38	0.36	
Most recent average ED visit rate	0.19	0.47*	
Change in ED visits per enrollee	-0.19	0.00*	
Cost per ED visit	\$1,539.87		
Cost change per enrollee per quarter	-\$292.58	\$0.00	
Net cost change per enrollee per quarter	\$292.58 savings		
Net cost change per enrollee per month	\$97.53 savings		

^{*} Change was not statistically significant.

Cost of unneeded physician visits

Physician visits are expensive, and a benefit of well-coordinated home care can be a reduction in the need for physician services. The financial value of this was calculated by using data derived from the Medicare program. The average cost of a follow-up visit of moderate complexity in Northern California was reported as \$121.45. When applied to the statistically significant decrease in physician visits reported among S@H enrollees, this is linked to cost savings of \$130.76 per enrollee per month.

::::

https://meps.ahrq.gov/mepsweb/data_stats/tables_compendia_hh_interactive.jsp?_SERVICE=MEPSSocket0&_PROGRAM=MEPSPGM.TC.S AS&File=HCFY2014&Table=HCFY2014_PLEXP_E&VAR1=AGE&VAR2=SEX&VAR3=RACETH5C&VAR4=INSURCOV&VAR5=POVCAT14& VAR6=REGION&VAR7=HEALTH&VARO1=4+

^{\$\$\$\$} https://www.bls.gov/data/inflation_calculator.htm

http://truecostofhealthcare.org/medicare_part_b/

Table 47. Cost savings from change in physician visits (current enrollees only)

	Enrollees	Comparison
	Ellionees	group
Initial average physician visit rate	7.90	8.21
Most recent average physician visit rate	4.67	6.21*
Change in physician visits per enrollee	-3.23	0.00*
Cost per physician visit, moderate complexity	\$121.45	
Cost difference per enrollee per quarter	-\$392.28	\$0.00
Net cost change per enrollee per quarter	\$392.28 savings	
Net cost change per enrollee per month	\$130.76 savings	

^{*} Change was not statistically significant

Total Costs of Support at Home Program

The total costs of the Support at Home program are summarized in Table 48. Total costs of the program throughout its operation are \$2,341,126, and the monthly cost per enrollee is \$1,222.26. For this calculation the IOA operational costs in FY18-19 were pro-rated to match the 10.5 months of data used for the outcomes data in this report. The computations are based on the equivalent of 1,920.5 service months for enrollees, as calculated from the numbers of monthly and biweekly voucher payments.

Table 48. Costs of Support at Home program, total and per service month (1,920.5 service months)

	Total cost	Average monthly cost per enrollee
Enrollee Copayments	\$437,028	\$227.56
Voucher Payments by S@H	\$675,872	\$351.93
IOA operational costs	\$1,023,505	\$532.94
DAAS operational costs	\$204,721	\$109.83
Total	\$2,341,126	\$1,222.26

Net Financial Impact of Support At Home

The costs and financial savings of S@H can be compared, as seen in Table 49. The total savings from reduced hospitalizations, emergency department visits, and physician visits are \$1,203.98 per month per enrollee. These savings do not include additional potential savings from increase ability of informal caregivers who provide support to enrollees who can maintain or increase their employment due to S@H providing home care services. The cost of operating the program, including the costs of vouchers to IOA, the costs of vouchers to enrollees, operational costs, and oversight costs, are \$1,222.26 per month per enrollee. The program thus costs \$18.28 per month per enrollee more than saved, with a total net of -\$96,907 to date.

Table 49. Summary of financial benefits and costs of Support at Home

	Per month per enrollee	Total (1,864 enrollee- months)
Savings		
Hospitalizations	\$975.69	\$1,818,686
Emergency department visits	\$97.53	\$181,796
Physician visits	\$130.76	\$243,737
Total savings	\$1,203.98	\$2,244,219
Total program costs	\$1,222.26	\$2,341,126
Net	-\$18.28	-\$96,907

Enrollee Focus Group Results

Two focus groups were held at the Institute on Aging (IOA), one on the evening of Monday, January 14th and one on the morning of Tuesday, March 22nd. Seven enrollees attended each group. Both groups were asked similar questions that focused on three areas: general questions regarding program administration and outreach, questions about caregivers and the care they provide, and questions about the program's impact on participants' lives.

Administration of the Support at Home Program

Focus group participants found out about the program through case managers/social workers, doctors, friends, or marketing techniques (e.g., newsletter, *SF Chronicle* article). Most enrollees knew their Support at Home assessment coordinator and their role in the program, and most noted a high level of quality in their interactions and communication with the entirety of the Support at Home team.

Among both groups, some enrollees found the enrollment process to be overwhelming and confusing; one commented, "I was confused as hell in the very beginning." However, most felt that once the initial paperwork was completed, the process went smoothly. A few enrollees noted that alternative materials for describing the enrollment process would be helpful, such as a video orientation guide. It was noted, that in addition to the hardcopy client orientation, that IOA has since released an instructional video that was not yet available for the early enrollees.

One enrollee felt that "[a] book with all the agencies and options" would be helpful to aid them in understanding all the available agency options and identify the qualities that make each agency unique. Another participant said, "I had a hard time understanding what the different options were all about. I don't know whether I am losing my mind or not."

Frequently, there was confusion about how the program works, the different options available, and who to contact with questions. Additionally, one enrollee was confused about how her enrollment in Support at Home affected her eligibility to receive other government benefits. Several enrollees in agency mode said they chose it because hiring someone independently sounded like a "headache," despite the help and resources offered by HomeWork Solutions, Inc. One individual said, "I work with the agency because I don't want to deal with the paperwork."

Finally, given the different due dates and therefore amounts of an enrollees' copayments depending on selected mode (monthly in agency mode versus bimonthly in independent provider mode), there was some confusion on when copayments were due, especially among individuals who had changed provider mode. An enrollee commented, "They keep changing the (copayment) dates on me and I was so confused in the beginning."

Caregivers and the Care They Provide

Caregivers provided services such as general cleaning, taking enrollees to medical appointments, laundry, shopping, and meal preparation. However, one enrollee's daughter, who accompanied the enrollee to the focus group, described that all of her mother's needs had not yet been met: "My mother almost caused a fire in the house. She can cook, but not safely, so we need someone to help with that, so finding a caregiver who likes to cook would be great."

In both groups, the conversation overwhelmingly focused on feedback related to enrollees' individual caregivers. Both groups noted that the program should offer more initial training, as well as ongoing, standardized training for all caregivers:

"There was a lack of training with the people [the agency] are sending out. There must be some rules out there on what the minimum standards are."

"I have contacted the Institute on Aging people on the lack of training. I had one lady who had NO idea what to do. We need an open conversation with [the agency] so they know what is needed to take care of our needs."

"Clients need to be told what kind of training our providers have received. One caregiver I had didn't know how to fold laundry. And the other thing she did, and I didn't tell them at the agency, was that I told her not to go into my bedroom and she went in and looked in. I got really upset. I felt violated by that."

Although outside the directed purview of the program, enrollees desired an enrollee-agency caregiver matching process before caregivers are assigned, expressing that "[w]hoever is running this program needs to dig deeper into [how the agencies are] matching the individual clients with the caregivers." Most stated that they had to go through one, two, or more caregivers before they found a needs and personality match. Some enrollees in agency mode found that the caregivers they identified as a good match were not always able to consistently to provide care for them (i.e., other people often requested those caregivers, too).

"Finally, I got someone who I like, but if you find a good worker, that person is stretched to the hills."

Some of the participants' concerns with difficulties in finding the correct caregiver match were related to the limited amount of mode switches that are allowed in the program:

"Sometimes it takes time to work things out. Suppose you don't click right away. If it's an independent provider, you only get to switch two, no three, no two, no three times, and then you are out of the program. That's not fair! You put up with what you got because you don't get [switch] number four because then you are out of the program. I had to go through three workers before I found someone who works well with me."

"I've had some lousy caregivers and I'm afraid to switch because that next person might be worse. [Agencies] need to look at giving [caregivers] more money to make it worthwhile. It's been a real challenge for me."

Despite the challenges associated with first learning how the program functions and periods of adjustment (i.e., switching between provider modes or caregivers) in the beginning, nearly everyone was generally happy with their caregiver at the time of the focus group. However, most expressed that they still needed more financial assistance to pay for more care because they could not contribute more than the copayment toward purchasing care.

"What I like about the program is getting help. I just don't get enough help. I could use more hours. My caregiver is perfect. I'm so grateful for what [the caregivers] do. I need more because I have to go to the store and I'm worried I will fall."

Impact of Support at Home on Participants' Lives

All participants said they would recommend the program to others, and several said that they already had. Prior to the program, many enrollees were generally able to meet their own care needs, but struggled in doing so. One enrollee said that before the program, it was a "big f---ing deal" to go to the library or the grocery store, but that Support at Home changed this. Another no longer had to budget an entire day to complete one task – their caregiver could accomplish everything in one visit, leaving more time for additional activities.

"It's been incredible for me....The program encourages me to keep things up. I am a recovering hoarder. I haven't had friends over in years. It makes me feel great. They can sit and eat. It's worked out really well, just having someone there. I'm happy with it."

"It's really the difference between existing and living. It gives you hope."

Chapter 4 – Independent Care Providers

Independent Care Provider Survey Results

The Independent Provider Survey was initially sent to 87 independent care providers (IPs). The initial sending in December 2018 and secondary sending in February 2019 yielded 31 responses. The survey was sent to the same group of IPs in December and February (participants who completed the survey in December were not contacted in February). Sending the survey a second time in February was meant to stimulate more responses from those who might have been busy in December during the holiday season. After the initial distribution in December and secondary distribution in February, up to four reminder messages were sent to the IPs who had not started, or who had started but not finished, the survey. Another group of IPs was trained in April, and the survey was sent to these additional 24 IPs a week after their training occurred. Up to four reminder messages were also sent to this group. This produced 12 more completed surveys, resulting in a total of 43 completed surveys for a response rate of 38.7 %. Surveys were sent via SMS or email, and sometimes both if a response was not received via the first medium. Surveys could be taken in English, Spanish, or Chinese.

52.1% of respondents were female, 41.9% were male, and 7% declined to share their gender. Respondents represented a variety of racial and ethnic backgrounds, including Black or African American (27.9%), Asian/Native Hawaiian/Pacific Islander (20.9%), White (Non-Hispanic) (20.9%), Hispanic or Latino/a (11.6%), Native American (2.3%), and multi-ethnic (4.7%). The plurality of respondents (27.9%) held a bachelor's degree as their highest level of education. Ages ranged from 22 to 80, with the mean age being 55.6 years. Eighty percent of respondents reported that their health was good or very good, and 18.6% reported living with disabilities.

Self-reported weekly hours of care provided to Support at Home (S@H) enrollees ranged from six to 50, with a mean of 22.7 hours. Reported median weekly earnings before taxes from S@H caregiving work ranged from \$79 to \$798, where the median was \$225. The majority (n=24, 55.8%) reported that they do not commute to provide care to S@H enrollees. The same number (n=24, 55.8%) also reported that they were live-in caregivers. Nearly half (n=20, 46.5%) of respondents reported holding at least one other paid job in addition to caregiving. Given that the reported median number of total hours worked per week ranged from eight to 60, with a median of 40, this indicates that a large number of IPs are working more than 40 hours per week. Fourteen percent reported missing time from paid work in the past month, with the number of hours missed ranging from six to 20.

One quarter (n=11, 25.6%) reported already working as caregivers before caring for S@H enrollees. Few (n=4, 9.3%) reported providing care to more than one S@H enrollee, and almost half (n=18, 41.9%) reported previously providing unpaid care for S@H enrollees. Among the 20 IPs who held other paid jobs, 13 had previously provided unpaid care to S@H enrollees. A Pearson chi-square test found the relationship between holding other jobs and previously providing unpaid care to S@H enrollees to be statistically significant (p=0.015).

IPs were asked to rate the extent to which they agreed with the statement, "I would recommend working as a caregiver to other people." Among IPs who held other paid jobs (n=19), 84.2% (n=16) agreed or strongly agreed with the statement. Among IPs who did not hold other paid jobs (n=22), 59.1% (n=13) agreed or strongly agreed with the statement. Among the 23 live-in caregivers, nearly half (n=10, 43.5%) disagreed or strongly disagreed with the statement. Conversely, only two out of 18 caregivers who did not live with their enrollees (11.1%) disagreed or strongly disagreed.

The survey also contained two free-response questions, which allowed IPs to provide narrative insights. Regarding their perceptions of how S@H affects enrollees, comments highlighted the program's positive impacts, financial support, help with daily tasks, and improvements to quality of life. As one IP wrote, "The program provides much needed assistance for elderly people living at home by relieving them of physically demanding tasks that could result in serious injury. Also, by assisting with day to day tasks, I provide them with much needed respite, allowing more time to pursue hobbies and interests."

Several comments noted how S@H allows enrollees to maintain a sense of a comfort and safety by remaining at home. One IP wrote that without the program, their enrollee "would not be able to get by. It is fortunate for [him] that [the caregiver] is someone that he knows and loves. There would be no other path than a nursing home."

Additionally, comments highlighted how S@H positively impacts enrollees' loved ones' because of the positive impacts on the enrollee. For instance, one IP wrote, "The program is helping my entire family with the little extra money [that] we [can now] use on groceries, supplies and bills. I also personally get to care for my dad [without] needing to bring in strangers which hadn't worked well in the past." Another IP mused, "I think that my enrollee is happy. My enrollee's daughter is happy with me." When asked to provide feedback as to what they would change about the program, money was a prevalent theme. IPs wanted to claim more hours and earn higher wages. Additionally, one IP pointed out difficulties in maintaining financial records, writing, "Technology is difficult for me. He [the enrollee] can't go online to get copies of pay stubs. When it comes time for the W-2...it gets tricky. Difficult to do anything online."

Independent Care Provider Feedback

In addition to completing the survey, one IP reached out to the research team directly to share an anecdote about their deceased enrollee's experience with S@H. The IP had been a friend to the enrollee for nearly ten years. As the aging enrollee's needs grew, he did not have access to help and care from family, and therefore applied for and enrolled in S@H. The IP noted that the context under which they became the enrollee's caregiver was partially a consequence of the program's design:

"We signed up for Support at Home through the Institute of Aging and hired a Home Care Worker, but that person proved less than responsible. We hired another, but their work with the enrollee conflicted with their other job as a student; and I accepted the responsibility myself as no more than three changes are permitted by the rules."

Additionally, the anecdote demonstrated several of the themes that were addressed in others' responses to the survey's free-response questions, such as allowing enrollees to remain at home, the need for more hours, and the caregiving roles that friends and family often play in enrollees' lives. The IP explained:

"I accepted the payment from Support at Home, but it was only a small fraction of the time I put in to help the enrollee remain at home - in fact, it became almost a full-time job of more than 30 hours per week! This is not my profession but something I did for a friend in need. I truly appreciate what Support at Home is doing and the work of Home Care workers, especially now that I've seen it from the inside. But I believe that my answers do not properly reflect the situation of all the other people who are being surveyed, except perhaps other friends or family members who would do it anyway, even if they could not be paid."

Chapter 5 – Considerations for Year 3

Throughout Year 2, IOA has continued to adapt the Support at Home program as needed in light of gaining more knowledge about the targeted population and their needs. Data in this report suggest that the program significantly benefits enrollees' quality of life while also reducing costs, especially costs related to utilization of health care services (e.g., emergency room visits).

Enrollees and their caregivers have personally commented on the positive impact that the program has had on their lives. Data collected from friend/family ("informal") caregivers at the time of their loved ones' enrollment into S@H indicate that they are stressed about providing care, demonstrating that they may also benefit from the program. While some of the quantitative measures do not show statistically significant changes as it pertains to quality of life, the qualitative comments from clients and caregivers confirm that the program is having a substantial impact on their well-being.

Unlike the enrolled group, the comparison group did not experience a reduction in hospitalizations or emergency room visits. The inclusion of a comparison group will continue in Year 3 to gather more outcomes data. Given the potential for attrition, the evaluation team will increase efforts to recruit and retain those in the comparison group. This includes additional staff time as well as increasing the monetary incentives.

Enrollment in the program has steadily increased over the past year, although IOA is still striving to increase enrollment, particularly for those under 60 years of age and among communities of color. IOA has made an exhaustive effort towards increasing enrollment numbers through various outreach and advertising modalities. While the target enrollment numbers were met by the end of Year 2, the program is continually challenged by frequent transitions among those who do not enroll and those who are discharged or disenrolled from the program. There are myriad reasons for clients to either not participate in the first place (e.g., denied need, unwilling to disclose financial information), disenroll (e.g., unable to maintain contract), or discharge from the program (e.g., transfer to long-term care or deceased). Given the significant resources needed to assess client eligibility, increased assessment coordination efforts were added. Moving forward, the S@H program should consider a sustainability plan that focuses on maintaining growth, streamlining the assessment process, and identifying strategies to minimize attrition. Ongoing reviews and assessments conducted by IOA and surveys conducted by UCSF will track the continuing impact of Support at Home on the well-being of San Franciscans. Such efforts should especially prioritize those who are under 60 years of age; those who come from non-white, Hispanic and Chinese communities; and those from non-English speaking backgrounds. Given that these groups are most likely to already be connected to greater social support networks than White and African American residents, creative and purposive outreach is needed.

Year 3 of the program should also focus on a plan for continuous quality improvement, especially focused on working with the agency providers to help improve the "matching" process for clients. This includes strategic negotiations on minimum caregiving hours per shift, reasonable hourly rates, and caregiver compensation to be especially considered for the permanent program. In Year 2, the program added two agency providers to increase clients' options, yet the evaluation did not assess the impact this addition had on the program. Moving forward, the S@H program will continue to enhance the process and information provided to clients to help them make informed choices when deciding on a provider to ease the client-reported burden of feeling overwhelmed and/or frustrated with the initial stages of the program or when the caregiver-client dyad is not a good fit. Assessing the caregiver-agency-client satisfaction in Year 3 is another consideration.

Appendix A: Data and methods for describing the targeted population

Data from American Community Survey (ACS), which is conducted by the U.S. Census Bureau, were used to measure and describe the targeted population in San Francisco. The merged 2012-2016 5-year Public-Use Microdata Sample housing and population for the public-use microdata areas (PUMAs) defining San Francisco County were analyzed. This was the same regional definition used in reports that guided development of the Support at Home program.

The population of individuals potentially eligible for Support at Home was constructed by excluding all vacant housing units and the institutionalized population, and including only sample cases where age of person was reported as 18 or older with at least one of the specified disability conditions:

- · VA service-connected disability rating
- · Cognitive difficulty
- · Ambulatory difficulty
- · Independent living difficulty
- Self-care difficulty

From this population, cases where health insurance coverage was reported as "Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability" were excluded.

The approach used to evaluate the income status of this potentially eligible population approximated Medicaid eligibility rules, which are based on an applicant's tax filing status (e.g. individual, married couple, head of household, dependent). Because the American Community Survey does not include this information, assumptions were made regarding household size and dependent relationships. For most households the relationships are relatively straightforward, such as for a single-person household, a two-person husband-and-wife household, or single adult head of household with two of her own children present. Other households are more challenging to assess in terms of size and dependent relationships, such as a multigenerational household with married and unmarried adult children who may or may not report income and who may or may not have children themselves (who also may be married and who may or may not report income), in addition to the presence of married or unmarried in-laws or other relatives, who may or may not report income.

Individuals who were identified as potentially eligible, and who were living in multi-person non-family households, were treated as a single person household. The exception to this was households with unmarried partners, who were treated as a married couple (with dependents if own children were present). Biological children under the age of 18 were assumed to be dependents, as were unmarried adult children who were either not in the labor force or who reported income of less than \$10,000 per year, grandchildren under the age of 18 living in the care of a grandparent, and unmarried adult grandchildren living in the household of a grandparent who were not in the labor force or who reported income of less than \$10,000 per year.

When the relationship could be clearly determined, non-head of household married couples living in the household of a related adult were treated as any other married couple (e.g. a mother and father-in-law, one of whom has a qualifying disability and meets the income requirements, and the couple resides in the house of an adult child). A single parent or in-law living in the household of an adult child was treated as an individual (i.e., a single person household), regardless of reported income. Adult siblings were treated as a single person household, regardless of reported income.

Based on this set of assumptions, an individual's income eligibility was evaluated in terms of household size using the 2016 Unadjusted Area Median Income (AMI) for HUD Metro Fair Market Rent Area (HMFA) that contains San Francisco. Individuals with household income greater than 100% of the area median for household size were considered not eligible. Note that personal income as reported in the ACS may not be the same as the income used by Support at Home to determine eligibility, and information about assets (e.g., savings accounts, investments) is not available in the ACS.

In most cases, cell sizes presented in tables that include American Community Survey data are based on sample count of at least 30 observations. Sample sizes were too small to explore some demographic combinations, such as the cross-tabulation of age group with disability type. Exceptions to this criterion are noted.

Appendix B: Logic Model

