Second Interim Evaluation of California's Health Homes Program (HHP)

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Exhibit 1 defines acronyms and terms referenced throughout the report.

Exhibit 1: General Health Homes Program Acronyms and Definitions

Acronym	Definition
AB	Assembly Bill
ACO	Accountable Care Organization
AHF	AIDS Healthcare Foundation
AHS	Alameda Health Systems
AOD	Alcohol and Other Drug
ASC	Ambulatory Surgical Center
ASP	Average Sales Price
BMI	Body Mass Index
CB-CME	Community-Based Care Management Entity
CBO	Community Based Organizations
CBAS	Community-Based Adult Services
CCA	Clinical Care Advance
CCW	Chronic Condition Warehouse
CDPS	Chronic Illness and Disability Payment System Risk Score
CKD	Chronic Kidney Disease
CM	Care Management
CMS	Centers for Medicare and Medicaid Services
COPD	Chronic Obstructive Pulmonary Disease
CPT	Current Procedural Terminology
CSH	Corporation for Supportive Housing
DD	Difference-in-Difference
DHCS	California Department of Health Care Services
DME	Durable Medical Equipment
DRG	Diagnosis Related Grouping
E&M	Evaluation & Management
ED	Emergency Department
EHR	Electronic Health Record
ER	Emergency Room
FFS	Fee-for-Service
FMAP	Federal Medical Assistance Percentage
FQHC	Federally Qualified Health Center
GRM	General Risk Model
HAP	Health Action Plan
HCPCS	Healthcare Common Procedure Coding System
HCSA	Alameda County Health Care Services Agency
HEDIS	Healthcare Effectiveness Data and Information Set
HH/HCBS	Home Health and Home and Community-Based Services
HHP	Health Homes Program
HIE	Health Information Exchange
HIT	Health Information Technology
HMIS	Homeless Management Information Session
ICD	International Classification of Diseases
LA	Los Angeles
LCSW	Licensed Clinical Social Worker
LTC	Long-Term Care
MCP	Managed Care Plan

Acronym	Definition
MFT	Marriage and Family Therapist
MM	Member months
NADAC	National Average Drug Acquisition Cost
NPI	National Provider Identifier
NPPES	National Plan and Provider Enumeration System
NUCC	National Uniform Claims Committee
OPPS	Outpatient Prospective Payment System
OUD	Opioid Use Disorder
PACE	Program of All-Inclusive Care for the Elderly
PCP	Primary Care Provider
PMPM	Per Member per Month
POS	Place of Service
PQI	Prevention Quality Indicator
RHC	Rural Health Center
RN	Registered Nurse
SCAN	Senior Care Action Network
SFTP	Secure File Transfer Protocol
SMI	Severe Mental Illness
SNF	Skilled Nursing Facility
SNOMED CT	Systematized Nomenclature of Medicine-Clinical Terms
SPA	State Plan Amendment
SUD	Substance Use Disorder
SW	Social Worker
TAR	Treatment Authorization Request
TEL	Targeted Engagement List
UBREV	Revenue Code
UCLA	University of California, Los Angeles Center for Health Policy Research
UOS	Unit of Service

Exhibit 2 defines acronyms and full names of participating Managed Care Plans.

Exhibit 2: Managed Care Plans Acronyms/Abbreviations and Definitions

Acronym/Abbreviations	Managed Care Plan Full Name
ABHCA	Aetna Better Health of California
AAH	Alameda Alliance for Health
Anthem	Anthem Blue Cross of California Partnership Plan, Inc.
BSCPHP	Blue Shield of California Promise Health Plan
CHW	California Health & Wellness
CalOptima	CalOptima
CHG	Community Health Group Partnership Plan
HNCS	Health Net Community Solutions, Inc.
IEHP	Inland Empire Health Plan
Kaiser	Kaiser Permanente
KHS	Kern Health Systems
L.A. Care	L.A. Care Health Plan
MHC	Molina Healthcare of California Partner Plan, Inc.
SFHP	San Francisco Health Plan
SCFHP	Santa Clara Family Health Plan
UnitedHealthcare	UnitedHealthcare Community Plan of California, Inc.

Executive Summary

Health Homes Program (HHP) Overview

The California Department of Health Care Services (DHCS) implemented the Medi-Cal Health Homes Program (HHP) to serve eligible Medi-Cal beneficiaries with complex needs and chronic conditions. HHP was authorized under California Assembly Bill 361 and approved by Centers for Medicare and Medicaid Services under Section 2703 of the 2010 Patient Protection and Affordable Care Act.

HHP was designed to provide six core services for eligible enrollees: (1) comprehensive care management; (2) care coordination; (3) health promotion; (4) comprehensive transitional care; (5) individual and family support; and (6) referral to community and social support services. DHCS selected 12 California counties where all 16 Medi-Cal managed care plans (MCPs) operating in those counties would implement HHP for their enrollees who met certain chronic condition and acuity criteria. HHP was implemented in phases by county groupings and two subsets of enrollees, with the first group implementing in July 2018 and the last group implementing in July 2020. Subsets of enrollees included those with chronic physical health conditions or substance use disorders (SUD) referred to as SPA 1 (State Plan Amendment 1) and those with severe mental illness (SMI) referred to as SPA 2. MCPs implemented SPA 2 six months after SPA 1 within each county grouping. DHCS published a program guide to ensure uniform HHP implementation, delivery of services, and reporting across all MCPs. MCPs contracted with Community-Based Care Management Entities (CB-CMEs) to deliver HHP services. MCPs enrolled eligible beneficiaries from a Targeted Engagement List (TEL) provided by DHCS but had discretion in enrolling other eligible beneficiaries.

Evaluation Methods

The UCLA Center for Health Policy Research was selected to evaluate HHP and developed a conceptual framework and evaluation questions to conduct a rigorous assessment of the program. UCLA used all available data for the evaluation. These included MCP readiness documents that contained MCP's HHP policies and procedures for implementation and delivery of services; Targeted Engagement Lists (TEL) created every six months by DHCS to identify potentially eligible HHP enrollees per MCP; MCP enrollment and quarterly reports that included beneficiary level enrollment data and homeless status; and Medi-Cal enrollment and claims data for all HHP enrollees with information on demographics, health status, and use of health services. UCLA used readiness documents to describe HHP implementation including composition of HHP networks, types of staff, data sharing, enrollee outreach and engagement, and HHP service delivery approaches. UCLA used TEL, MCP enrollment and utilization reports,

and Medi-Cal data to assess HHP enrollment patterns, demographics, health status, HHP service use, and health care service utilization. UCLA attributed a dollar amount to all claims and assessed change in estimated payments.

Results

HHP Implementation and Infrastructure

HHP was implemented by all 16 MCPs operating in 12 California counties, with six MCPs implementing HHP in more than one county. MCP HHP implementation plans outlined in readiness documents at the beginning of HHP indicated that 15 MCPs used HHP delivery Model I, where CB-CMEs were typically medical providers that hired and housed HHP staff, including care coordinators. In addition, MCPs ensured that CB-CMEs had adequate staffing to deliver HHP services; utilized data sharing technologies including SFTP, dedicated email, electronic health records (EHR), care management platforms, or health information exchange (HIE); and used predictive modeling and risk grouping of eligible beneficiaries to identify and target beneficiaries for HHP enrollment. See the first interim evaluation report for more details.

- In their Quarterly HHP Reports, MCPs reported that they had developed HHP delivery networks with 244 unique CB-CMEs by September 2020. These CB-CMEs were primarily community health centers (41%), followed by community based social service organizations or local government entities (28%) and community based primary care or specialty physicians (19%). Six MCPs indicated that they acted as a CB-CME for a portion of their HHP enrollees in an effort to expand service capacity in regions where community based infrastructure was insufficient.
- MCPs reported that they anticipated that contracted CB-CMEs had an enrollment capacity of approximately 79,370 enrollees with 34% of that capacity in community health centers. The median capacity per CB-CME was 180 enrollees.

HHP and COVID-19

- The evaluation timeframe for this interim report encompasses activities and data from July 2018 through September 2020. The COVID-19 pandemic began during this time and led to a statewide shelter in place order in mid-March 2020, 20 months following the first HHP enrollment. The COVID-19 hospitalizations in HHP counties peaked near the end of July 2020 with 18 hospitalizations per 100,000.
- MCPs reported that the COVID-19 pandemic had impacted HHP processes, procedures, and/or policies, with the greatest impact on housing and homeless support services, comprehensive transitional care, and delivery of care coordination by frontline staff. MCPs were able to establish effective workflows and infrastructure to support their own and CB-

CME's operation by transitioning to telehealth and strategically coordinating with shelters and other short-term housing services.

- UCLA estimated that 4.3% of both HHP enrollees and a group of similar Medi-Cal beneficiaries not enrolled in HHP, the control group, had at least one service with COVID-19 as the primary or secondary diagnosis. This rate was highest in July 2020. HHP enrollees and controls with a COVID-19 diagnosis most commonly had used COVID-19 related primary care services (53% for HHP enrollees vs 47% for the control group), followed by emergency department visits (28% vs 29%) and hospitalizations (28% vs 28%).
- Examining the overall service utilization patterns from 2019 and 2020 showed a limited decline in use of primary care services for HHP enrollees in 2020 compared to 2019. In contrast, specialty care services, ED visits, and hospitalizations declined in 2020 compared to 2019. Specialty care services utilization returned to 2019 levels by September 2020 but the rates of ED visits and hospitalizations remained below 2019 levels through September 2020.
- Telehealth service use was under 0.2% before March 2020 but rapidly increased to 19% of primary care services in April and declined to 13% by September among HHP enrollees. A similar pattern was observed for specialty telehealth services.

HHP Enrollment and Enrollment Patterns

- A total of 48,925 individuals enrolled in HHP between July 1, 2018 and September 30, 2020, with 38,228 enrolled in SPA 1 and 10,697 enrolled in SPA 2. As of September 2020, three-quarters of the current enrollment were in SPA 1.
- The number of enrollees experiencing homelessness or at risk of homelessness increased over time and represented 10% of all HHP enrollees by September 2020; a likely underestimate due to data limitations.
- The rate of enrollment varied by when each group implemented HHP. Groups 2 and 3 had the highest levels of enrollment (14,426 and 32,530, respectively) and Group 4 had the lowest levels of enrollment (759), by September 2020. Los Angeles County had the highest level of enrollment with 18,919 enrollees.
- DHCS identified eligible Medi-Cal beneficiaries in the Targeted Engagement List (TEL) and shared it with MCPs. Overall, 78% of HHP enrollees were reported on the TEL prior to enrollment. The highest rate of enrollment from the TEL was 90% in Groups 1 and 4.
- Most (70%) of HHP enrollees were continuously enrolled through September 2020, 30% were disenrolled by September 2020, and 0.2% enrolled multiple times through September 2020. The average length of enrollment in Group 1 was 10.7 months for SPA 1 enrollees and 8.4 months for SPA 2 enrollees. Overall, the average length of enrollment was 9.4 months for Group 2, 6.7 months for Group 3, and 4.3 months for Group 4 enrollees.

- The most common reason MCPs reported for not enrolling from the TEL in Groups 2 and 3 was that an eligible beneficiary was not an MCP member, indicating the data informing the TEL did not always reflect current enrollment status (members are permitted to change MCPs every 30 days). The most common reason for Group 1 was eligible enrollee declined to participate and for Group 4 it was the eligible enrollee was already well managed.

HHP Enrollee Demographics and Health Status

- The majority of HHP enrollees were between 50 and 64 years old, female, and spoke English. Nearly half of enrollees were Latinx. SPA 2 enrollees were more often between 18 and 49 years old and more often female in comparison to SPA 1 enrollees.
- Prior to enrollment, the most common chronic conditions among all HHP enrollees and SPA 1 enrollees were hypertension (67%) and diabetes (49%). The most common condition among SPA 2 enrollees was depression (72%).
- MCPs enrolled Medi-Cal managed care beneficiaries with multiple chronic health conditions, consistent with HHP's requirements. For example, 55% had hypertension along with chronic obstructive pulmonary disease, diabetes, coronary artery disease, and/or chronic or congestive heart failure and 40% had a combination of complex conditions such as chronic renal (kidney) disease, chronic liver disease, and traumatic brain injury.

HHP Service Utilization among HHP Enrollees

- MCPs reported challenges and significant lag with reporting of HHP services by way of encounter data, which led to 24% of enrollees without any HHP service codes during this time frame. Existing data showed that MCPs reported 412,463 HHP units of service (UOS) to HHP enrollees from July 2018 through September 2020. In months where encounter data for HHP services were present, enrollees averaged 2.1 HHP UOS per month. Enrollees had a higher average use of core HHP services (1.7 UOS per month) and other HHP services (1.6) compared to engagement services (1.3). Average number of services was higher for services provided through telehealth (1.6 UOS per month) compared to in-person (1.3) and by non-clinical providers (1.8) compared to clinical providers (1.6).
- Among enrollees at risk of or experiencing homelessness in the third quarter of 2020, 68% received housing services and 7% were reported as no longer homeless by September 2020.

Acute Care Utilization Groups in HHP

- UCLA examined the HHP population by their level of acute care utilization in the 24 months prior to HHP by creating five groups; enrollees with super utilization (6% of all enrollees), high utilization (15%), moderate utilization (35%), low utilization (32%), and enrollees at risk for high utilization (13%). These rates were similar for SPA 1 and SPA 2. Enrollees with super

utilization had 14.9 ED visits and 4.1 hospitalizations on average per year compared to 2.7 and 0.5 on average per year among those with moderate utilization.

- Group 4, which consisted of Orange County and the latest to implement HHP, included the highest share of enrollees with super utilization (18%) and high utilization (28%) and the lowest share of enrollees at risk for high utilization (3%).
- Enrollees with super utilization were more often younger than 65 (96%), male (49%), white (26%), and were experiencing homelessness (14.6%) compared to other acute care utilization groups. The super utilization group had the largest proportion of homeless enrollees (14.6%) and the at-risk group had the smallest proportion of homeless enrollees (5.6%).
- The prevalence of HHP chronic condition eligibility criteria varied by acute utilization groups. Criteria 1 was the second most prevalent eligibility criteria (two specific chronic conditions) and the majority of enrollees with super utilization met this criterion (65%) vs. 49% of those with high and 35% of those with moderate utilization. Furthermore, hypertension was the most common chronic condition across all groups, followed by chronic kidney disease among enrollees with super utilization and diabetes among all other groups.
- An examination of the unadjusted rates of service use of HHP enrollees showed the lowest number of primary care services per 1,000 member months 19 to 24 months before enrollment and the largest increase during months 1 to 6 of HHP enrollment. This usage declined 7 to 12 months after enrollment but remained at above pre-enrollment numbers.
- Enrollees with super utilization included a cohort of 14.6% enrollees who were experiencing homelessness. Those with super utilization had the highest magnitude of primary care service use, peaking at 1,346 services per 1,000 member months. The same pattern was observed for specialty services; enrollees with super utilization peaked at 928 specialty services per 1,000 member months.
- From 19-24 months before enrollment to 7-12 months during enrollment, the unadjusted ED visits followed by discharge decreased among enrollees with super utilization (from 921 to 635), high utilization and moderate utilization; and hospitalizations declined among enrollees with super utilization (from 284 to 227) as well as those with high and moderate utilization.
- Admissions to an institution from the community were calculated annually before enrollment (Pre-Year 2 and Pre-Year 1) and the first year of enrollment (HHP Year 1). When comparing Pre-Year 2 to HHP Year 1, the unadjusted number of short-term stays in long-term care facilities declined for enrollees with super utilization, high utilization, and moderate utilization. However, the number of medium-term stays increased for enrollees with super, high, and moderate utilization prior to enrollment and then declined post-enrollment. The number of long-term stays increased for all acute care utilization groups.

HHP Outcomes

- Exhibit 3 and Exhibit 4 display an overview of changes in HHP core metrics and optional measures of health care utilization and estimated Medi-Cal payments. For each measure, UCLA hypothesized an intended direction consistent with HHP goals. UCLA did not hypothesize a direction for outpatient utilization and related payments because unmet need for outpatient care is likely at enrollment but the utilization level and subsequent payments are likely to drop over time as unmet need is addressed. Similarly, UCLA did not hypothesize a direction for outpatient prescription estimated payments. The exhibits show (1) if the trend changed significantly in the intended direction during HHP for enrollees, (2) if the trend changed significantly in the intended direction from before to during HHP for enrollees, and (3) whether the trend from before to during HHP was significantly changed in the intended direction for enrollees compared to the control group.
- Data indicated a significant and overall decline in primary care and specialty care services compared to the control group. More in-depth analysis showed that there was an initial increase early in enrollment followed by a decline later on. Analysis also showed that the rate of use of these services remained higher than before HHP enrollment and compared to the control group.
- Improvements in comparison to the control group were observed for some HHP core metrics measuring utilization, process, and outcomes of care, but trends in some metrics did not change.
- Specifically, the HHP core metric of Ambulatory Care: Emergency Department (ED) Visits declined significantly during the first year of HHP in the intended direction (SPA 1: 17 visits per six months; SPA 2: 25 visits) and this decline was greater compared to before HHP (SPA 1: 20; SPA 2: 29) and in comparison to the control group for both SPA 1 (DD: 9) and SPA 2 (DD: 15) enrollees. In contrast, there was a significant increase (rather than the intended decrease) in the HHP core metric of Admissions to an Institution from the Community (Long-Term Stay) during the first year of HHP for SPA 1 and SPA 2 enrollees. The trend in this HHP core metric from before to during HHP was significantly greater (DD: 0.4 admission per year) for SPA 2 enrollees vs. their control group.
- Among HHP core metrics reflecting processes of care, Adult BMI Assessment metric increased in the intended direction during the first year of HHP and in comparison to the control group for SPA 1 (DD: 1.1% per year) and SPA 2 (DD: 1.0%) enrollees. Similarly, Screening for Depression and Follow-Up Plan improved more for SPA 1 (DD: 1.6%) enrollees than the control group. Initiation of Alcohol and Other Drug Treatment metric declined (in the wrong direction) for SPA 1 (DD: 2.7%) HHP enrollees and in comparison to the control group. There were no other significant changes for the remaining metrics for SPA 1

enrollees. However, the Engagement of Alcohol and Other Drug Treatment metric improved in the intended direction for SPA 2 (DD: 10.9%) enrollees vs. their control group.

- Among HHP core metrics reflecting outcomes of care, the Controlling High Blood Pressure metric increased (in the intended direction) significantly during HHP for SPA 1 enrollees but decreased significantly (in the wrong direction) for SPA 2 enrollees. However, there were no differences in trends with the respective control groups. In addition, the Prevention Quality Indicator (PQI 92) significantly improved (in the intended direction) during HHP for SPA 1 and SPA 2 enrollees. However, when compared to the control group, the change for SPA 1 enrollees was significantly smaller (in the wrong direction) than the control group (DD: 0.9 per year) but the rate was similar to the control group for SPA 2 enrollees.

Exhibit 3: Outcomes for SPA 1 HHP Enrollees as of September 30, 2020

	Intended direction	Trend during HHP changed significantly in the intended direction?	Trend from before to during HHP changed significantly in the intended direction?	Trend for HHP patients was better than control group (DD)?
UTILIZATION MEASURES				
Primary Care Services per 1,000 MM	Not Specified	No Direction (-126)	No Direction (-159)	No Direction (-101)
Specialty Services per 1,000 MM	Not Specified	No Direction (-40)	No Direction (-114)	No Direction (-60)
Mental Health Services per 1,000 MM	Not Specified	Not Significant	No Direction (-420)	No Direction (-236)
Substance Use Disorder Services per 1,000 MM	Not Specified	No Direction (-24)	No Direction (-26)	No Direction (-19)
Ambulatory Care: ED Visits per 1,000 MM	Decrease	Yes (-17)	Yes (-20)	Yes (-9)
Percentage of HHP Enrollees with Any ED Visits Resulting in Discharge	Decrease	Yes (-2.40%)	Yes (-2.30%)	Yes (-1.10%)
Hospitalizations per 1,000 MM	Decrease	Yes (-10)	Yes (-15)	Yes (-7)
Percentage of HHP Enrollees with Any Hospitalizations	Decrease	Yes (-3.1%)	Yes (-4.9%)	Yes (-1.9%)
Average Length of Stay for Hospitalizations	Decrease	Not Significant	Not Significant	Not Significant
Admission to an Institution from the Community (Short-Term Stay)	Decrease	Y (-0.30)	Y (-0.60)	Not Significant

	Intended direction	Trend during HHP changed significantly in the intended direction?	Trend from before to during HHP changed significantly in the intended direction?	Trend for HHP patients was better than control group (DD)?
Admission to an Institution from the Community (Medium-Term Stay)	Decrease	Not Significant	Not Significant	Not Significant
Admission to an Institution from the Community (Long-Term Stay)	Decrease	No (0.30)	No (0.40)	Not Significant
PROCESS METRICS				
Adult Body Mass Index Assessment	Increase	Yes (5.40%)	No (-4.90%)	Yes (1.10%)
Screening for Depression and Follow-Up Plan	Increase	Yes (9.00%)	Yes (3.10%)	Yes (1.60%)
Initiation of Alcohol and Other Drug Treatment	Increase	No (-3.40%)	No (-4.70%)	No (-2.70%)
Engagement of Alcohol and Other Drug Treatment	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Hospitalization for Mental Illness within 7 days	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Hospitalization for Mental Illness within 30 days	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence within 7 days	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence within 30 days	Increase	Not Significant	Not Significant	Not Significant
Use of Pharmacotherapy for Opioid Use Disorder	Increase	Not Significant	Not Significant	Not Significant

	Intended direction	Trend during HHP changed significantly in the intended direction?	Trend from before to during HHP changed significantly in the intended direction?	Trend for HHP patients was better than control group (DD)?
OUTCOME METRICS				
Plan All-Cause Readmissions	Decrease	Not Significant	Not Significant	No (1.20%)
Controlling High Blood Pressure	Increase	Yes (3.10%)	No (-0.90%)	Not Significant
Prevention Quality Indicator (PQI) 92: Chronic Conditions Composite	Decrease	Yes (-1.90)	Yes (-4.60)	No (0.90)
ESTIMATED PAYMENTS				
Estimated Total Payments per Enrollee per 6 Months	Decrease	No ($331)	No ($163)	Yes (-$96)
Estimated Payments for Outpatient Services per Enrollee per 6 Months	Not specified	No Direction ($258)	No Direction ($148)	No Direction (-$23)
Estimated Payments for Outpatient Medications per Enrollee per 6 Months	Not specified	No Direction ($50)	No Direction ($25)	No Direction (-$7)
Estimated Payments for ED Visits Resulting in Discharge per Enrollee per 6 Months	Decrease	Yes (-$7)	Yes (-$9)	Yes (-$29)
Estimated Payments for Hospitalizations per Enrollee per 6 Months	Decrease	No ($7)	Yes (-$53)	Yes (-$7)

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.

Notes: Yes indicates significant in the intended direction. No indicates significant in the unintended direction. Green indicates change in the intended direction. Red indicates change in the unintended direction. Yellow indicates significant change when direction is not specified. MM indicates member months. ED indicates Emergency Department.

Exhibit 4: Outcomes for SPA 2 HHP Enrollees as of September 30, 2020

	Intended direction	Trend during HHP changed significantly in the intended direction?	Trend from before to during HHP changed significantly in the intended direction?	Trend for HHP patients was better than control group (DD)?
UTILIZATION MEASURES				
Primary Care Services per 1,000 MM	Not Specified	No Direction (-80)	No Direction (-102)	No Direction (-83)
Specialty Services per 1,000 MM	Not Specified	Not Significant	No Direction (-47)	No Direction (-49)
Mental Health Services per 1,000 MM	Not Specified	No Direction (-578)	No Direction (-1,354)	No Direction (-957)
Substance Use Disorder Services per 1,000 MM	Not Specified	No Direction (-56)	No Direction (-78)	No Direction (-62)
Ambulatory Care: ED Visits per 1,000 MM	Decrease	Yes (-25)	Yes (-29)	Yes (-15)
Percentage of HHP Enrollees with Any ED Visits Resulting in Discharge	Decrease	Yes (-3.20%)	Yes (-3.50%)	Not Significant
Hospitalizations per 1,000 MM	Decrease	Yes (-12)	Yes (-16)	Yes (-10)
Percentage of HHP Enrollees with Any Hospitalizations	Decrease	Yes (-4.2%)	Yes (-5.7%)	Yes (-1.9%)
Average Length of Stay for Hospitalizations	Decrease	Not Significant	Not Significant	Not Significant
Admission to an Institution from the Community (Short-Term Stay)	Decrease	Not Significant	Yes (-0.40)	Not Significant
Admission to an Institution from the Community (Medium-Term Stay)	Decrease	Not Significant	Not Significant	Not Significant
Admission to an Institution from the Community (Long-Term Stay)	Decrease	No (0.40)	No (0.50)	No (0.40)
PROCESS METRICS				

	Intended direction	Trend during HHP changed significantly in the intended direction?	Trend from before to during HHP changed significantly in the intended direction?	Trend for HHP patients was better than control group (DD)?
Adult Body Mass Index Assessment	Increase	Yes (2.90%)	No (-8.50%)	Yes (1.00%)
Initiation of Alcohol and Other Drug Treatment	Increase	No (-3.40%)	No (-5.80%)	Not Significant
Engagement of Alcohol and Other Drug Treatment	Increase	Yes (8.30%)	Not Significant	Yes (10.90%)
Follow-Up After Hospitalization for Mental Illness within 7 days	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Hospitalization for Mental Illness within 30 days	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence within 7 days	Increase	Not Significant	Not Significant	Not Significant
Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence within 30 days	Increase	Not Significant	Not Significant	Not Significant
Use of Pharmacotherapy for Opioid Use Disorder	Increase	Not Significant	No (-5.30%)	Not Significant
OUTCOME METRICS				
Plan All-Cause Readmissions	Decrease	Not Significant	Not Significant	Not Significant
Controlling High Blood Pressure	Increase	No (-1.80%)	No (-6.40%)	Not Significant
Prevention Quality Indicator (PQI) 92:	Decrease	Yes (-1.30)	Yes (-2.50)	Not Significant

	Intended direction	Trend during HHP changed significantly in the intended direction?	Trend from before to during HHP changed significantly in the intended direction?	Trend for HHP patients was better than control group (DD)?
Chronic Conditions Composite				
ESTIMATED PAYMENTS				
Estimated Total Payments per Enrollee per 6 Months	Decrease	No ($1,277)	No ($1,116)	Yes (-$121)
Estimated Payments for Outpatient Services per Enrollee per 6 Months	Not Specified	No Direction ($529)	No Direction ($436)	No Direction ($18)
Estimated Payments for Outpatient Medications per Enrollee per 6 Months	Not Specified	No Direction ($311)	No Direction ($302)	Not Significant
Estimated Payments for ED Visits Resulting in Discharge per Enrollee per 6 Months	Decrease	No ($55)	No ($50)	Yes (-$20)
Estimated Payments for Hospitalizations per Enrollee per 6 Months	Decrease	No ($200)	No ($136)	Yes (-$127)

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: Yes indicates significant in the intended direction. No indicates significant in the unintended direction. Green indicates change in the intended direction. Red indicates change in the unintended direction. Yellow indicates significant change when direction is not specified. MM indicates member months. ED indicates Emergency Department.

Estimated Med-Cal Payments for HHP Enrollees and HHP Costs

- UCLA developed estimated payments for Medi-Cal services and these estimated payments are intended for measuring whether HHP led to efficiencies by reducing the total payments for HHP enrollees before and after the program, and in comparison to a group of similar patients in the same timeframe.

- Exhibit 3 and Exhibit 4 show that the total estimated Medi-Cal payments continued to increase during the first year of HHP for enrollees compared to before HHP, for both SPA 1 ($163 per enrollee per 6 month) and SPA 2 ($1,116) enrollees. However, the growth in payments for HHP enrollees was smaller than the growth for the respective control groups (DD) by $96 for SPA 1 and $121 for SPA 2. This is likely due to savings associated with receipt of HHP services.
    - Among SPA 1 enrollees, the trends in estimated payments for all categories of service examined showed a significantly slower growth in total payments for HHP enrollees than the control group, including ED visits (DD: $29) and hospitalizations (DD: $7).
    - For SPA 2 enrollees, the trends in estimated payments for ED visits (DD: $20) and hospitalizations (DD: $127) decreased significantly more than the control group but trends in outpatient payments increased significantly more (DD: $18) than the control group.
- Total estimated HHP expenditures were $189,737,702 and the average expenditures per enrollee per month was $479 by September 30, 2020.

Conclusions and Next Steps

The findings in this report build on the findings of the first interim evaluation report, which described early progress in building CB-CME networks by MCPs; delivery of HHP services; enrollment size; and health and utilization profile of HHP enrollees prior to enrollment.

This report has highlighted the progress made by MCPs in the same areas through September 2020 and additional comparisons that highlight the early impact of HHP. The updated information on the CB-CME networks indicated a substantial growth commensurate with the growth in HHP enrollment over time and continued challenges in reporting of HHP services in claims data.

The growth in enrollment may have slowed down and the ability of MCPs and their contracted CB-CMEs to provide HHP services were likely diminished by the onset of the COVID-19 pandemic and subsequent statewide shelter in place order in mid-March 2020. Some of this impact was mitigated by MCP efforts to adapt their workflows and use infrastructure such as telehealth capacity to address challenges.

HHP enrollees were complex and high need as highlighted previously in the first interim evaluation report. A closer look at use of acute care services further indicated that a notable proportion of enrollees had super utilization of acute care in emergency departments and hospitals but most had moderate or low utilization. The higher prevalence of enrollees with

super utilization who were also experiencing homelessness and had conditions such as chronic kidney disease and depression confirmed the level of complexity of these enrollees and the reasons for their high use of acute services.

This report also included analyses of changes in HHP core metrics and additional utilization and estimated Medi-Cal payment measures. Findings indicated some improvements in metrics that reflected processes and outcomes of care compared to the control group but no change in others. Among the latter were several process metrics related to enrollees with substance use disorders. Lack of change in these metrics during the first year of HHP may reflect challenges of engaging this population in treatment particularly for those who also have SMI in SPA 2. Lack of improvement in outcome metrics compared to the control group may similarly reflect challenges of improving outcomes for enrollees with multiple comorbidities.

In contrast to limited findings for core HHP process and outcome metrics, the findings indicated greater declines from before HHP in core metrics for ED visits and hospitalizations in the intended direction and significantly greater declines compared to the control group. These findings provided evidence that enrollment in HHP had the desired effect of reducing the use of acute and high cost services. While estimated payments for ED visits and hospitalization grew more slowly among HHP enrollees than the control group, the payments during HHP increased. These findings likely reflect a higher average cost per service due to a reduction in avoidable and lower cost ED visits and hospitalizations. The findings of increased reductions during HHP among those with super and high utilization of acute care services are consistent with these findings.

UCLA further examined use of outpatient services and their associated payments, including payments for outpatient medications to further highlight how reductions in acute care and associated payments may have been realized. The analyses indicated that reductions in acute services occurred concurrently with provision of more primary, specialty, mental health, and SUD services as well as outpatient medications in the first six months following HHP enrollment likely to address the needs of enrollees. These increases were followed by reductions in use of these services in the second half of the year likely because those early needs were addressed.

The DD findings are not likely to have been impacted by changes in service utilization due to the COVID-19 pandemic because the pandemic appeared to impact the HHP enrollee and the control groups similarly. Nevertheless, use of telehealth in lieu of in-person outpatient visits may have restricted the ability to provide certain types of services that require an in-person visit. For example, it may have been more challenging to initiate treatment for alcohol and drug use and more difficult to provide outpatient care through telehealth for patients following mental health hospitalizations for patient with more severe conditions such as SMI.

Certain data limitations prevented a comprehensive assessment of the impact of HHP. For example, UCLA lacked adequate data on delivery of HHP services and could not assess the role of CB-CMEs and specific services they provided on enrollee outcomes. It is possible that outcomes varied by CB-CMEs or type of services they provided. UCLA also lacked data on specific approaches employed by MCPs in selecting eligible beneficiaries or approaches to program implementation beyond their preliminary plans highlighted in their readiness documents.

The next evaluation report will include data for the final year of HHP, including changes in the HHP core metrics and measures of utilization and estimated Medi-Cal payments. The report will also discuss the implications of the findings for improving the health of Medi-Cal beneficiaries with complex conditions and high utilization of health care services.

Introduction

Health Homes Program Overview

The Health Homes Program (HHP) was created and implemented under the statutory authority of California Assembly Bill (AB) 361. The legislation authorizes the California Department of Health Care Services (DHCS) to create HHP under Section 2703 of the 2010 Patient Protection and Affordable Care Act. Section 2703 allows states to create Medicaid health homes to coordinate the full range of physical health, behavioral health, and community-based long-term services and supports needed by Medi-Cal enrollees with chronic conditions.

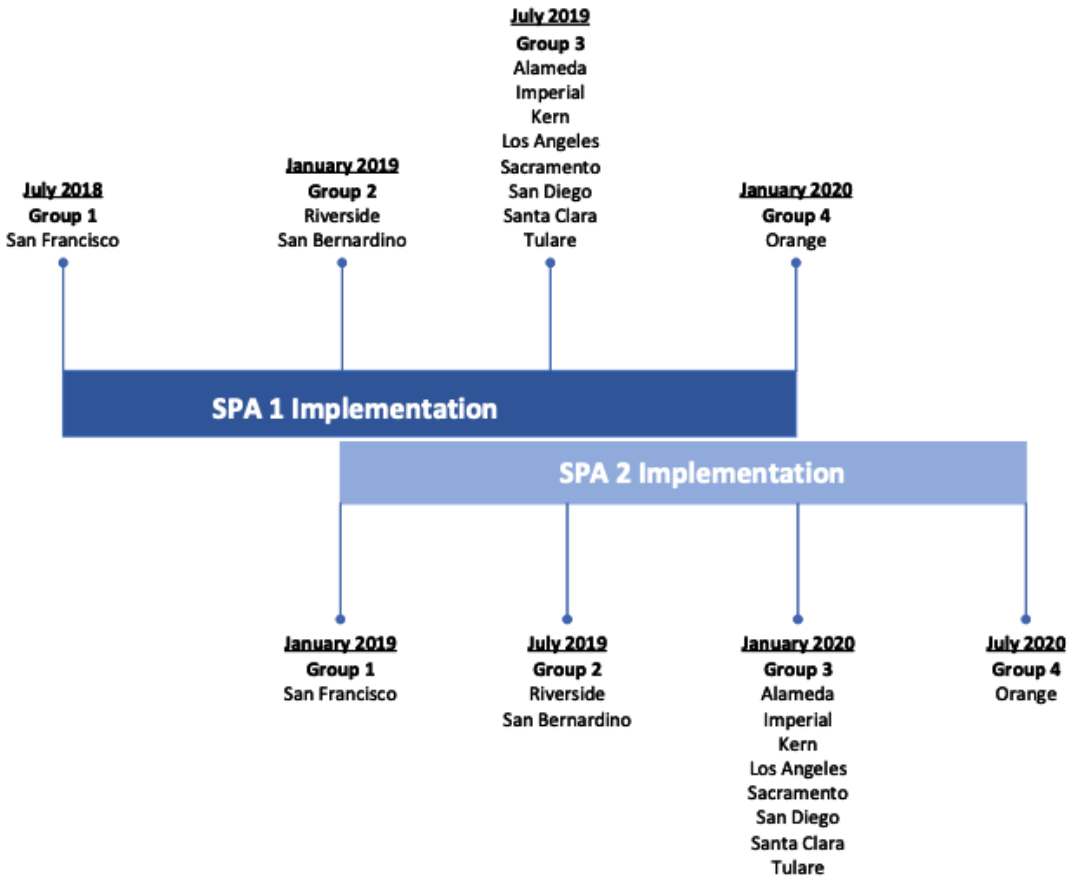
HHP is implemented in 12 California counties for Medi-Cal Managed Care Plan (MCP) enrollees who meet certain chronic condition and acuity criteria. All Medi-Cal MCPs in the 12 participating counties were required to participate in HHP. HHP has a phased implementation schedule, and individuals with chronic physical health conditions or substance use disorders (SUD) are included in State Plan Amendment (SPA) 1 (i.e., Phase 1) and those with severe mental illness (SMI) are included in SPA 2 (i.e., Phase 2).

The primary goals of HHP are to improve member outcomes through care coordination and reduce avoidable health care costs. MCPs are expected to deliver HHP services directly or through contracted community-based care management entities (CB-CMEs), which could include primary care providers (PCPs), Federally Qualified Health Centers (FQHCs), and other service providers. CB-CMEs work with Community Based Organizations (CBOs) to provide linkages to community and social support services, as needed.

HHP Implementation Plan

The HHP implementation schedule is displayed in Exhibit 5. The 12 counties implementing HHP were divided into four groups, with Group 1 scheduled to begin implementation on July 1, 2018, and Group 4 to implement the final phase on July 1, 2020. Each Group would first implement HHP for SPA 1 enrollees (those with chronic physical health conditions and/or SUD), followed six months later by SPA 2 enrollees (those with SMI).

Exhibit 5: Timeline of HHP Implementation by Group and SPA



Source: Adapted from HHP Implementation Schedule. HHP Managed Care Plans.
Note: SPA is State Plan Amendment.

A total of 16 MCPs implemented HHP across the 12 counties (Exhibit 6). MCPs were responsible for the overall administration of HHP and expected to fulfill HHP requirements by leveraging existing infrastructure, communication, and reporting capabilities. MCP responsibilities included (1) performing regular auditing and monitoring activities; (2) training, supporting, and qualifying CB-CMEs; (3) providing CB-CMEs with timely information on admissions, discharges, and other key utilization and health condition information; (4) when possible, providing access to immediate housing post discharge and permanent housing for the homeless; and (5) fulfilling HHP care management requirements.

Exhibit 6: MCPs that Implemented HHP across California, by Group and County

Group	County	Managed Care Plan
1	San Francisco	Anthem Blue Cross of California Partnership Plan, Inc.
		San Francisco Health Plan
2	Riverside	Inland Empire Health Plan
		Molina Healthcare of California Partner Plan, Inc.
	San Bernardino	Inland Empire Health Plan
		Molina Healthcare of California Partner Plan, Inc.
3	Alameda	Alameda Alliance for Health
		Anthem Blue Cross of California Partnership Plan, Inc.
	Imperial	California Health & Wellness
		Molina Healthcare of California Partner Plan, Inc.
	Kern	Health Net Community Solutions, Inc.
		Kern Health Systems
	Los Angeles	Health Net Community Solutions, Inc.
		L.A. Care Health Plan
	Sacramento	Aetna Better Health of California
		Anthem Blue Cross of California Partnership Plan, Inc.
		Health Net Community Solutions, Inc.
		Kaiser Permanente
		Molina Healthcare of California Partner Plan, Inc.
	San Diego	Aetna Better Health of California
		Blue Shield of California Promise Health Plan
		Community Health Group Partnership Plan
		Health Net Community Solutions, Inc.
		Kaiser Permanente
		Molina Healthcare of California Partner Plan, Inc.
		UnitedHealthcare Community Plan of California, Inc.
	Santa Clara	Anthem Blue Cross of California Partnership Plan, Inc.
		Santa Clara Family Health Plan
	Tulare	Anthem Blue Cross of California Partnership Plan, Inc.
		Health Net Community Solutions, Inc.
4	Orange	CalOptima

Source: DHCS.
Notes: MCP is Managed Care Plan and DHCS is the California Department of Health Care Services.

HHP Services

The overarching goal of HHP was to achieve the "triple aim" of better care, better health, and lower costs. To achieve these goals, MCPs provided HHP services most often through community-rooted CB-CMEs. These services included (1) comprehensive care management, (2) care coordination, (3) health promotion, (4) comprehensive transitional care, (5) individual and family support services, and (6) referrals to community and social support services. Exhibit 7 displays detailed descriptions of these services.

Exhibit 7: HHP Services Provided through MCPs and CB-CMEs

Service	Description
Comprehensive care management	• Engage MCP members to participate in HHP • Collaborate with HHP enrollees and their family/support persons to develop a Health Action Plan (HAP) within 90 days of enrollment that is comprehensive and person-centered • Reassess HAP as needed and track referrals • Case conferencing to support continuous and integrated care among all service providers
Care coordination	• Provide enrollee support to implement HAP and attain enrollee goals • Coordinate referrals and follow-ups, share information to all involved parties, and facilitate communication • Frequent, in-person contact between HHP enrollees and care coordinators • Appointment with primary care physician within 60 days of enrollment encouraged • Identify and address enrollee gaps in care • Maintain an appointment reminder system for enrollees as appropriate • Link eligible enrollees who are homeless or experiencing housing instability to permanent housing
Health promotion	• Encourage and support HHP enrollees to make lifestyle choices based on health behavior • Encourage and support health education • Assess and motivate enrollees and family/support person understanding of health condition and motivation to engage in self-management
Comprehensive transitional care	• Facilitate HHP enrollees' transition from and among treatment facilities • Provide medication information and reconciliation • Plan follow-up appointments and anticipate care or place to stay post-discharge
Individual and family support services	• Ensure HHP enrollees and family/support persons are educated about the enrollee's conditions to improve treatment and medical adherence
Referrals to community and social support services	• Determine appropriate services to meet HHP enrollee's needs • Identify and refer enrollees to available community resources

Source: Adapted from Health Homes Program Guide.
Notes: MCP is Managed Care Plan and CB-CME is Community-Based Care Management Entity.

HHP Target Populations

The eligibility criteria defined by DHCS for HHP was based on the presence of specific chronic conditions and evidence of high acuity (Exhibit 8). These criteria aimed to identify the Medi-Cal population who may benefit the most from HHP services. DHCS identified a Targeted Engagement List (TEL) of Medi-Cal MCP enrollees in the 12 participating counties who were likely to be eligible for HHP services based on specific inclusion and exclusion criteria.

The exclusion criteria were designed to limit enrollment to eligible enrollees who were not receiving similar services in other programs and were more likely to benefit from HHP than other interventions, among other reasons. The TEL did not capture the inclusion criteria of chronic homelessness or some exclusion criteria, such as enrollees who would benefit from alternative care management programs, due to data limitations. DHCS delegated this responsibility to MCPs, and allowed MCPs to use other eligibility identification strategies, subject to DHCS approval.

Exhibit 8: HHP Eligibility Inclusion and Exclusion Criteria

Eligibility Requirement	Criteria Details
Met at least one chronic condition criteria	• At least two of the following: chronic obstructive pulmonary disease, diabetes, traumatic brain injury, chronic or congestive heart failure, coronary artery disease, chronic liver disease, chronic renal (kidney) disease, dementia, substance use disorders • Hypertension and one of the following: chronic obstructive pulmonary disease, diabetes, coronary artery disease, chronic or congestive heart failure • One of the following: major depression disorders, bipolar disorder, psychotic disorders (including schizophrenia) • Asthma
Met at least one acuity/complexity criteria	• Has at least three or more of the HHP eligible chronic conditions • At least one inpatient hospital stay in the last year • Three or more emergency department (ED) visits in the last year • Chronic homelessness
Did not meet one of the exclusion criteria	• Hospice recipient or skilled nursing home resident • Enrolled in specialized MCPs (e.g., Program of All-Inclusive Care for the Elderly (PACE), Senior Care Action Network (SCAN) and AIDS Healthcare Foundation (AHF)) • Fee-for-service rather than managed care • Sufficiently well managed through self-management or another program • More appropriate for alternative care management programs • Behavior or environment is unsafe for CB-CME staff

Source: Adapted from Health Homes Program Guide.

Funding and Payment Methodology

Under federal rules, DHCS would receive a 90% enhanced Federal Medical Assistance Percentage (FMAP) for HHP services for the first two years of each phase of implementation. However, the federal portion will revert to the 50% FMAP after this period. DHCS used grant funds provided by The California Endowment to pay for the state's share of HHP services. MCPs received a supplemental per member per month (PMPM) payment for HHP services and reimbursed CB-CMEs based on claims for services under contractual agreements. DHCS also created an HHP-specified Healthcare Common Procedure Coding System (HCPCS) procedure

code and modifiers to report HHP services. These codes are described later in this report in the HHP Service Utilization among HHP Enrollees chapter.

Transition to CalAIM

Services provided under HHP will be incorporated into CalAIM, a multi-year initiative by DHCS designed to use HHP approaches to improve beneficiaries' health outcomes. Under CalAIM, Medi-Cal managed care plans are expected to provide Enhanced Care Management and Community Supports through contracts with community-based providers, including CB-CMEs participating in HHP. Members receiving HHP will be transitioned to Enhanced Care Management when CalAIM is expected to begin implementation in January 2022.

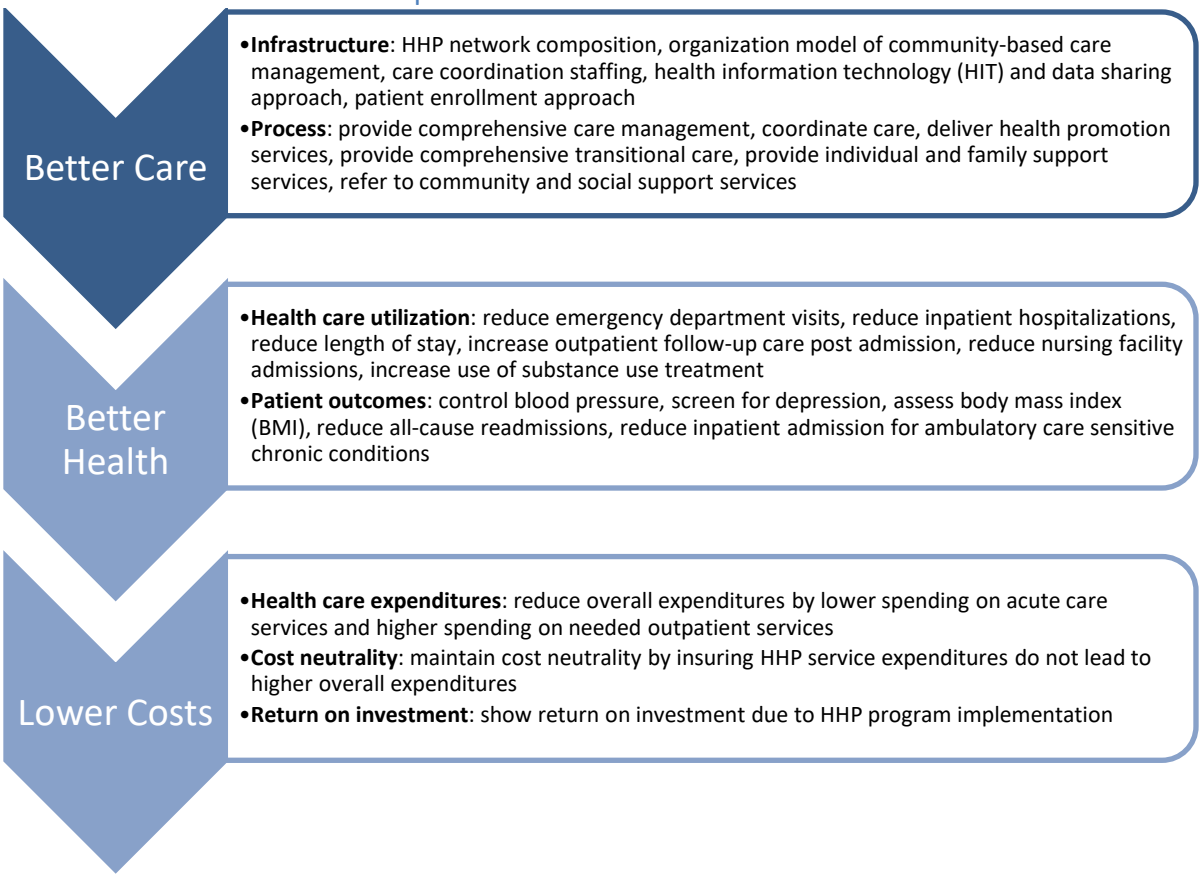
UCLA HHP Evaluation

AB 361 required an independent evaluation of HHP and submission of a report to the legislature after two years of implementation; this requirement was met by way of submission of the first HHP Evaluation Report in October 2020. This is the second interim evaluation report and a final evaluation report will be developed after the HHP program ends at the end of 2021, and Members are transitioned to Enhanced Care Management as part of CalAIM in January 2022. The UCLA Center for Health Policy Research (UCLA) was selected as the evaluator of the HHP program.

Conceptual Framework

UCLA developed a conceptual framework for the evaluation of HHP (Exhibit 9). Following the HHP program goals and structure, the framework indicated that better care is achieved when MCPs establish the necessary infrastructure and deliver HHP services. Delivery of HHP services will in turn lead to better health indicated by reduced utilization of health care services that are associated with negative health outcomes as well as improvements in population health indicators. Better care and better health will lead to lower overall health care expenditures.

Exhibit 9: HHP Evaluation Conceptual Framework



Evaluation Questions and Data Sources

Exhibit 10 displays the evaluation questions and data sources that were used to answer those questions. The evaluation questions were aligned with the components of the conceptual framework. Questions 1-7 examined the infrastructure established by MCPs including the composition of their networks, populations enrolled, and the services delivered. Questions 8-13 examined the impact of HHP service delivery on multiple indicators of health services utilization as well as patient health indicators. Questions 14 and 15 examined the impact of HHP on lowering costs of the Medi-Cal program.

Exhibit 10: Health Homes Program Evaluation Questions and Data Sources

Evaluation Questions	**Data Sources**
Better Care	
Infrastructure	
1. What was the composition of HHP networks? 2. Which HHP network model was employed? 3. When possible, what types of staff provided HHP services? 4. What was the data sharing approach? 5. What was the approach to targeting patients for enrollment per HHP network?	• MCP Readiness Documentation • MCP Quarterly HHP Reports
Process	
6. What were the demographics of program enrollees? What was the acuity level of the enrollees including health and health risk profile indicators, such as aggregate inpatient, ED, and rehab skilled nursing facility (SNF) utilization? What proportion of eligible enrollees were enrolled? How did enrollment patterns change over time? What proportion of enrollees are homeless? 7. Were Health Home services provided in-person or telephonically? Were Health Home services provided by clinical or non-clinical staff? How many enrollees received engagement services? How many homeless enrollees received housing services?	• MCP Enrollment Reports • MCP Quarterly HHP Reports • TEL • Medi-Cal Enrollment and Encounter Data
Better Health	
Health care utilization	
8. How did patterns of health care service use among HHP enrollees change before and after HHP implementation? 9. Did rates of acute care services, length of stay for hospitalizations, nursing home admissions and length of stay decline? 10. Did rates of other services such as substance use treatment or outpatient visits increase?	• Medi-Cal Enrollment and Claims Data
Patient outcomes	

Evaluation Questions	Data Sources
11. How did HHP core health quality measures improve before and after HHP implementation? 12. Did patient outcomes (e.g., controlled blood pressure, screening for clinical depression) improve before and after HHP implementation? 13. How many homeless enrollees were housed?	• MCP Quarterly HHP Reports • Medi-Cal Enrollment and Claims Data
Lower Costs	
Health care expenditures	
14. Did Medi-Cal expenditures for health services decline after HHP implementation? 15. Did Medi-Cal expenditures for needed outpatient services increase?	• Medi-Cal Enrollment and Claims Data

Note: TEL is Targeted Engagement List.

Detailed descriptions of the data sources and analytic methods used in the evaluations can be found in Appendix A: Data Sources and Analytic Methods and Appendix B: UCLA HHP Evaluation Design.

HHP Implementation and Infrastructure

This section addresses the following HHP evaluation questions:

1. What was the composition of HHP networks?
2. Which HHP network model was employed?
3. When possible, what types of staff provided HHP services?
4. What was the data sharing approach?
5. What was the approach to targeting patients for enrollment per HHP network?

UCLA relied on three data sources to address these questions: (1) MCP readiness documents, which outlined MCPs' plans to develop and implement HHP under the guidelines set by DHCS; (2) the MCP Quarterly HHP Reports, which detailed the networks developed by the MCP during each quarter of the program; and (3) a one-time self-report by MCPs in September 2020 to provide additional detail on their CB-CME networks.

A total of 16 MCPs implemented HHP across California, submitting both readiness documents and Quarterly HHP Reports. The time period of this report covers data through September 30, 2020. UCLA aimed to answer the HHP evaluation questions by identifying and analyzing the strategies that each MCP planned to implement and by providing selected illustrative examples of these strategies. Since the first interim report, the data available through MCP readiness documents remain the same and UCLA provides a summary of these findings from the first interim report in this section. The HHP Delivery Networks section is updated with new information. Further analytic approach details can be found in Appendix A: Data Sources and Analytic Methods.

HHP Implementation

Exhibit 11 displays the participating HHP counties by their respective implementation groups and the MCPs implementing HHP in each county. Of the 12 counties implementing HHP, four counties were in Northern California, two in Central California, and the remaining six were in Southern California. A total of 16 MCPs were operating across the state with six MCPs (Aetna, Anthem, Health Net, Inland Empire, Kaiser Permanente, and Molina) operating in multiple counties.

Exhibit 11: Distribution of California Counties by Health Homes Program Implementation Group and MCPs Implementing Health Homes Program by County

MCP	Counties
Aetna Better Health of California	Sacramento, San Diego
Alameda Alliance for Health	Alameda
Anthem Blue Cross of California Partnership Plan, Inc.	Alameda, Sacramento, Santa Clara, Tulare, San Francisco
Blue Shield of California Promise Health Plan	San Diego
California Health & Wellness	Imperial
CalOptima	Orange
Community Health Group Partnership Plan	San Diego
Health Net Community Solutions, Inc.	Kern, Los Angeles, Sacramento, San Diego, Tulare
Inland Empire Health Plan	Riverside, San Bernardino
Kaiser Permanente	Sacramento, San Diego
Kern Health Systems	Kern
L.A. Care Health Plan	Los Angeles
Molina Healthcare of California Partner Plan, Inc.	Imperial, Riverside, San Bernardino, Sacramento, San Diego
San Francisco Health Plan	San Francisco
Santa Clara Family Health Plan	Santa Clara
United Healthcare Community Plan of California, Inc.	San Diego

Source: Adapted from Health Homes Program Guide.
Note: MCP is Managed Care Plan.

HHP Delivery Models

MCP HHP implementation plans outlined in readiness documents were used to examine MCP intentions at the beginning of HHP, even though the plans may have changed during implementation. These plans indicated that 15 (of 16) MCPs used delivery Model I, where CB-CMEs were typically medical providers that hired and housed HHP staff, including care coordinators. When HHP enrollees' medical providers were not able to take on these responsibilities, MCPs utilized Models II and III to deliver services centrally or regionally. See the first interim evaluation for more details.

HHP Delivery Networks

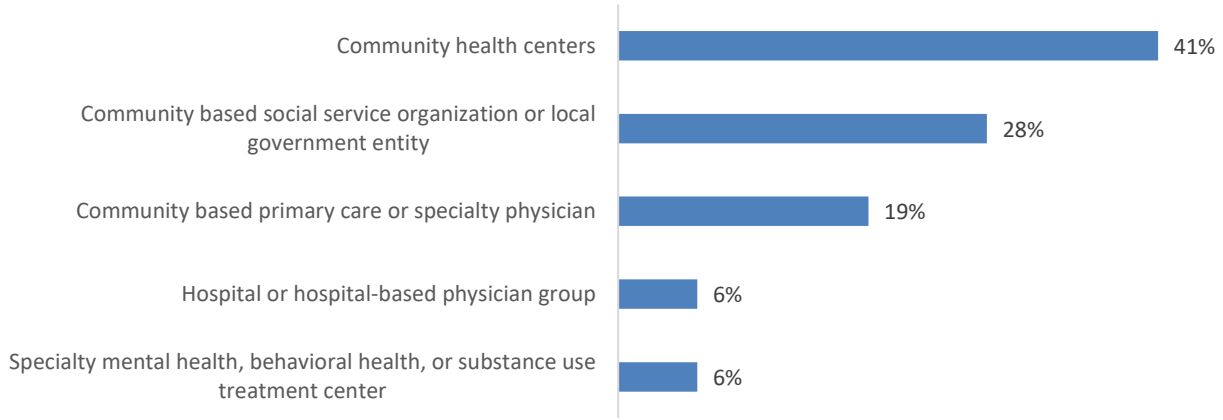
HHP delivery networks were composed of CB-CMEs who either used their own staff or sub-contracted with other community-based organization to deliver care management (CM) services. CB-CMEs were certified by the MCPs using DHCS general guidelines and requirements. CB-CMEs were required to maintain a strong and direct connection with the HHP enrollee and their primary care physician, the latter being applicable when CB-CMEs were not medical providers. Goals in developing a MCP's CB-CME network included: (1) ensuring CM delivery at point of care, (2) experience with high utilizing and homeless populations, and (3) building upon existing CM infrastructure within the county.

Six MCPs indicated that they acted as a CB-CME for a portion of their HHP enrollees; these MCPs included Blue Shield, CalOptima, Inland Empire, Kern, LA Care, and San Francisco Health Plan. In their Quarterly HHP Reports, and as verified through self-reports to UCLA, MCPs reported developing contracts with 244 unique CB-CMEs (as identified by organization name per MCP) by September 2020.

CB-CMEs by Organization Type

MCPs identified the organization type of their CB-CMEs. Of the 244 unique reported CB-CMEs, MCPs most commonly identified them as community health centers (includes Federally Qualified Health Centers, rural health centers, Indian health centers, and other similar organizations; 41%; Exhibit 12). The next most common organizational type of CB-CMEs included community-based social service organizations or local government entities (28%). CB-CMEs were also commonly identified as community based primary care or specialty physicians (19%).

Exhibit 12: Health Homes Program CB-CME Network by Organization Type as of September 2020



Source: MCP Quarterly HHP Reports up to September 2020 and MCP Self-Reports to UCLA in September 2020.
Note: CB-CME is Community-Based Care Management Entity, MCP is Managed Care Plan, and NPI is National Provider Identifier. A total of 244 CB-CMEs were reported and MCPs clarified CB-CME type in self reports to UCLA in September 2020. Community health centers included Federally Qualified Health Centers, rural health centers, Indian health centers, and other similar organizations.

CB-CMEs and Projected HHP Capacity

MCPs reported the projected number of enrollees each CB-CME would serve under their contracts (referred to as capacity) in MCP Quarterly HHP reports. DHCS required MCPs to report capacity criteria such as the HHP care manager ratios and certification requirements. For example, CB-CMEs had to have the ability to provide appropriate and timely in-person care coordination, telephonic communication, and accompany HHP enrollees to critical appointments.

As of September 2020, MCPs reported 224 CB-CMEs with capacity for a minimum of 11 or more enrollees. These CB-CMEs collectively had a projected capacity for managing the needs of approximately 79,370 HHP enrollees, with a median of 180 enrollees per CB-CME (Exhibit 13). The median capacity was largest among community based primary care or specialty physicians and hospital or hospital-based physician groups (240 enrollees). Community health centers reported the smallest median capacity (122 enrollees). An additional 20 CB-CMEs with less than 11 enrollees were reported, but not included in the analysis below.

Exhibit 13: Total Projected CB-CME Capacity for Health Homes Program Enrollment by CB-CME Organization Type as of September 2020

CB-CME Type	N	Total Capacity	Median Projected Capacity
Total	**224**	**79,370**	**180**
Community health centers	95	26,974 (34%)	122
Other entity (e.g., community based social service organization, homeless service provider)	56	17,935(23%)	150
Community based primary care or specialty physician	45	28,722 (36%)	240
Hospital or hospital-based physician group	15	3,713 (5%)	174
Specialty mental health, behavioral health, or substance use treatment center	13	2,026 (3%)	132

Source: MCP Quarterly HHP Reports up to September 2020 and MCP Self-Reports to UCLA in September 2020.
Notes: CB-CME is Community-Based Care Management Entity, MCP is Managed Care Plan, and NPI is National Provider Identifier. A total of 224 CB-CMEs were reported to have 11 or more enrollees assigned and MCPs self-reported CB-CMEs into distinct organization types in self reports to UCLA. Community health centers included Federally Qualified Health Centers, rural health centers, Indian health centers, and other similar organizations. CB-CMEs in the "Other" category included community based social service organizations, homeless service providers, and local government entities.

Changes in CB-CME Networks Over Time

Since September 2019, an additional 54 CB-CMEs were reported among all MCPs as of September 2020 (previously 190 CB-CMEs). MCPs most often classified these new CB-CMEs as community based social service organizations (41 of 54). From September 2019 to September 2020, most MCPs gained CB-CMEs (9 of 16), ranging from one to 13 additional CB-CMEs. Few MCPs (3 of 16) lost CB-CMEs or had no change (four of 16) within their CB-CME network. CalOptima and L.A. Care reported the greatest increase in CB-CMEs (13), whereas Inland Empire Health Plan had the greatest decrease in CB-CMEs (only two).

HHP Staffing

MCPs ensured that CB-CMEs had adequate staffing to deliver HHP services by requiring certain staffing types such as care coordinators, HHP directors, clinical consultants, and housing navigators. In readiness documents, 11 MCPs (of 16), including all of the MCPs that implemented in more than one County, indicated that they planned to hire certain HHP staff internally to improve efficiency and effectiveness. These roles most often included directors, program managers, and housing specialists. See the first interim evaluation for more details.

HHP Data Sharing

Seven MCPs planned to use a SFTP or dedicated email and six MCPs planned to use electronic health records (EHR), care management platforms, or health information exchange (HIE) data sharing technologies. Both CB-CMEs and MCPs planned to use data sharing technologies to provide timely access to information. Eight MCPs (of 16) planned to provide access to a dynamic Health Action Plan (HAP) to allow access to up-to-date information and five MCPs planned to provide real-time and automated notifications of HHP hospital admissions or emergency department visits to CB-CMEs. See the first interim evaluation for more details.

Communication with HHP Enrollees

MCPs developed plans for identifying and targeting individuals for HHP enrollment including use of predictive modeling and risk grouping of eligible beneficiaries. MCPs most often planned to use newsletters (nine of 16) and websites (nine) to communicate with eligible beneficiaries and developed plans on how often they would outreach to eligible beneficiaries. MCPs planned to use a mix of approaches to target individuals experiencing homelessness. These approaches included collaborating with CB-CMEs or community-based organizations that specialized in working with these individuals and leveraging existing infrastructure developed under Whole Person Care to provide outreach. See the first interim evaluation for more details.

HHP and COVID-19

This section addresses the following evaluation questions, included in response to the COVID-19 pandemic:

1. How did the COVID-19 pandemic impact HHP implementation?
2. How many HHP enrollees had COVID-19 related services?
3. How did healthcare utilization patterns change among HHP enrollees during the COVID-19 pandemic compared to the year prior to the pandemic?

The COVID-19 pandemic began during HHP enrollment. HHP Group 1, Group 2 and Group 3/SPA 1 were implemented between 6 and 18 months prior to the first reports of COVID-19 in the United States in January 2020. HHP Group 3/SPA 2 and Group 4 implemented just as these first cases were reported. In this chapter, UCLA examines the likely impact of the pandemic on HHP implementation.

The progress of the pandemic in counties where HHP was implemented was examined using data on COVID-19 cases and hospitalizations from April 2020, when such data were first available, through September 2020, the last month of this evaluation. These data, along with population counts from the Census Bureau, were used to calculate cases and hospitalizations per 100,000.

The impact of COVID on MCP implementation efforts was examined through a COVID-19 Impact Survey (Appendix E) of all participating MCPs (n=16, response rate of 100%) in September 2020. MCPs respondents included HHP program managers and directors who were most informed about HHP implementation at their respective organizations. The impact of COVID-19 on CB-CMEs that had contracted with MCPs was assessed from a survey administered by the Corporation for Supportive Housing (CSH) in August 2020. UCLA submitted survey questions that were similar to those asked from MCPs to CSH who then distributed the survey to all contracted CB-CMEs at the time and collected the data. The 59 CB-CMEs (response rate of 24%) that responded were unevenly distributed by county with six CB-CMEs operating in more than one county. In addition, respondents ranged from frontline staff such as care coordinators, to program managers, to chief operating officers and were likely to represent different points of view. This data was included in this section to provide a general overview of CB-CME experiences during the pandemic, but represents a convenience sample that may not be generalizable to all CB-CMEs participating in HHP.

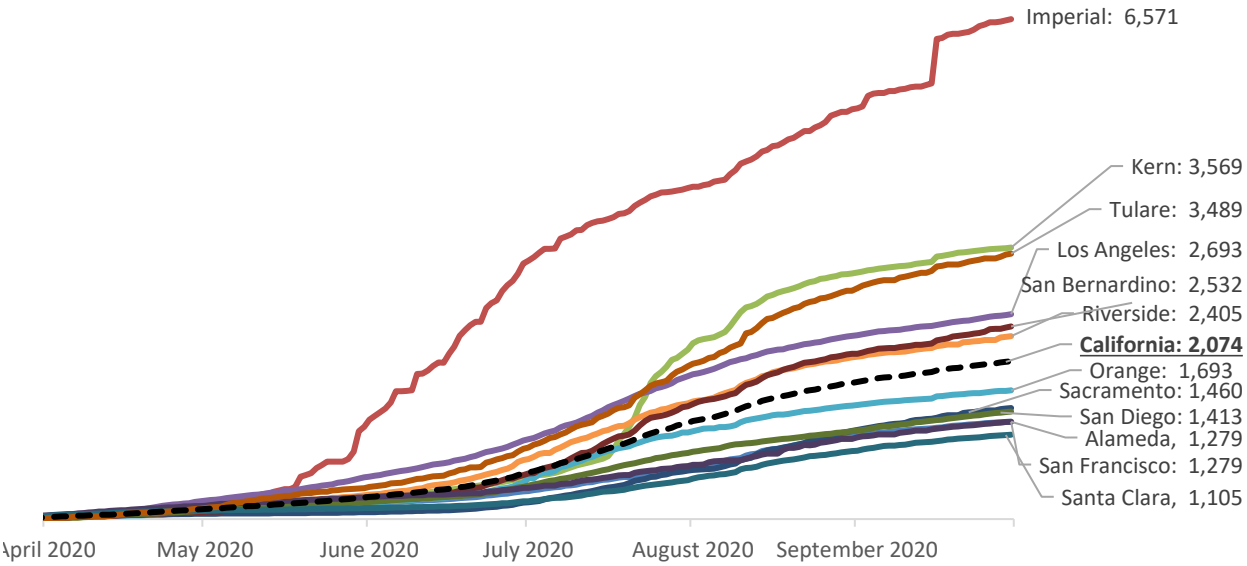
UCLA further used Medi-Cal enrollment and claims data to (1) identify HHP enrollees and their controls that have services with COVID-19 as the primary or secondary diagnosis and (2) report

changes in overall health care utilization pre- and post-pandemic for HHP enrollees and their controls. COVID-19 cases were identified using the COVID-19 ICD diagnosis code, which was first introduced in late March 2020. Therefore, these cases were likely to be underreported early in the pandemic.

Progression of COVID-19 Cases and Hospitalizations in HHP Counties

UCLA assessed the progression of the COVID-19 cases by examining cumulative case rates and 14-day average hospitalization rates in HHP counties and California overall. Among all Californians, the cumulative case rate of COVID-19 reached 2,074 per 100,000 by the end of September 2020 (Exhibit 14). Rates remained low across the state and HHP counties, with the exception of Imperial County, until June 2020 and then began to climb. Cumulative case rate per 100,000 as of September 2020 among HHP counties ranged from a low of 1,105 in Santa Clara to a high of 6,571 in Imperial. The cumulative case rates for all Group 2 (Riverside and San Bernardino) HHP counties were above that of the entire state. Changes in these rates over time represent both the progression of the pandemic as well as changes in testing and reporting.

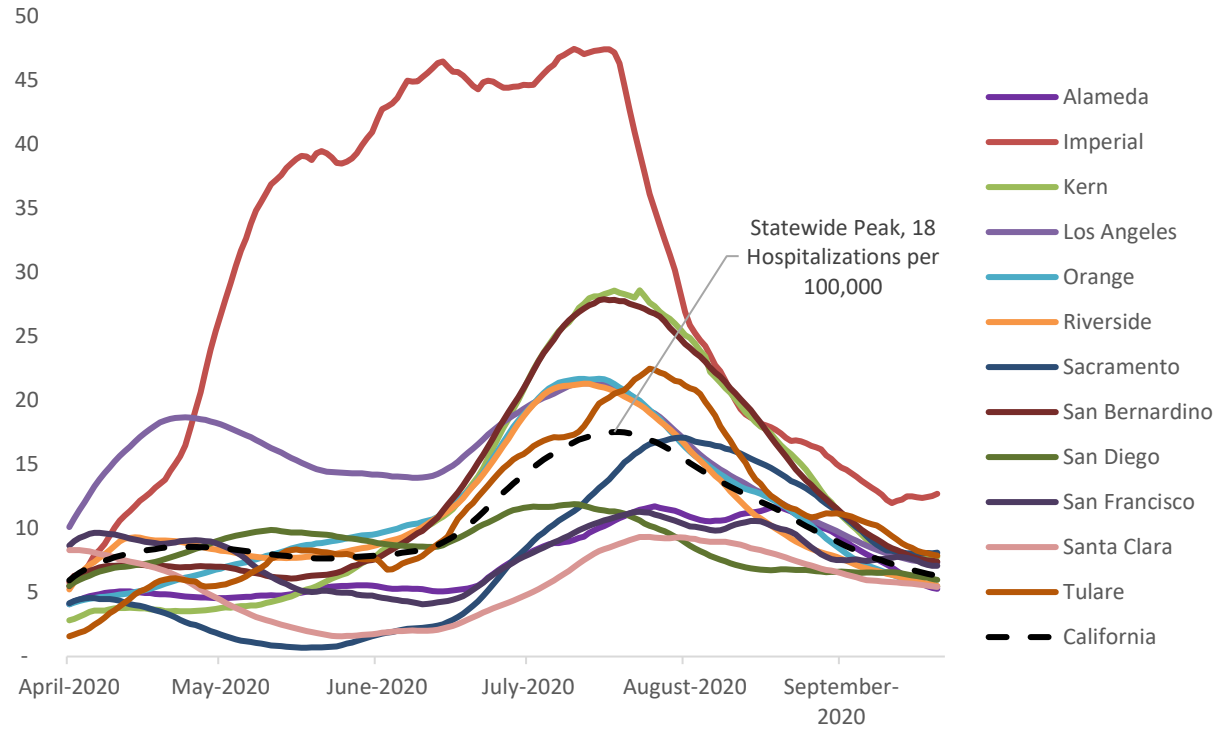
Exhibit 14: Cumulative COVID-19 Cases per 100,000, April 2020 to September 2020, HHP Counties and California



Source: UCLA analysis of daily COVID-19 cases reported from April 1, 2020 to September 30, 2020 by the LA Times. State and County population numbers were collected through Census data. Cases per 100,000 were calculated by multiplying cases by 100,000 then dividing by the population.

UCLA also assessed COVID-19 hospitalization rates as an indicator of the burden of disease on the healthcare system. From April to September 2020, the 14-day average hospitalization rate across California peaked near the end of July with 18 hospitalizations per 100,000 before returning to around 7 hospitalizations per 100,000 as seen early in the pandemic (Exhibit 15). While most HHP counties had a similar burden of disease, notable exceptions included Imperial County that had an extended peak from May 2020 through August 2020 and two peaks in Los Angeles County in late April 2020 and late July 2020.

Exhibit 15: 14-day Average COVID-19 Hospitalization Rate per 100,000, April 2020 to September 2020, Statewide and HHP Counties



Source: Daily COVID-19 hospitalizations reported from April 1, 2020 to September 30, 2020 through the California Department of Public Health. State and County population numbers were collected through Census data. Hospitalizations per 100,000 were calculated by multiplying hospitalizations by 100,000 then dividing by the population.

UCLA also assessed the cumulative death rate per 100,000 and new daily deaths from COVID-19 in California, as reported by local public health departments, to estimate the burden of highly resource intensive, severe disease. By the end of September 2020, there were 40 COVID-19 deaths per 100,000 in California (data not shown). The death rate among HHP counties was highest in Imperial (177 deaths per 100,000), followed by Los Angeles (66 per 100,000). The new daily deaths from COVID-19 in California had an initial peak on April 22, 2020 at 115 new deaths and a second peak at 219 new deaths on July 31, 2020 (data not shown), which aligned with the peaks in hospitalizations in Los Angeles County.

Impact of COVID-19 on HHP Implementation and Infrastructure

UCLA assessed the impact of COVID-19 on HHP implementation using the MCP and CB-CME surveys. At the time of these surveys, all HHP counties were at or beyond their first peak in COVID-19 hospitalizations as shown in Exhibit 15.

Impact of COVID-19 on MCP Processes, Procedures, and Policies

MCPs were asked to indicate if any of their processes, procedures, or policies changed and how they were impacted due to the COVID-19 pandemic. They were further asked to rate the overall impact of the pandemic on these processes, procedures, or policies. Responses showed that only two processes, (1) identifying eligible HHP enrollees and (2) reporting, were not changed by any MCP due to the pandemic (Exhibit 16). However, other activities, such as (1) housing and homeless support services, (2) comprehensive transitional care, and (3) delivery of care coordination by frontline staff, were largely impacted with mean impact scores of 7.5, 6.9, and 6.8, respectively. Overall, there was no difference between SPA 1 and SPA 2 in changes to processes, procedures, or policies, except for the ability to provide health promotion and individual/family support services (eight MCPs reported a change in SPA 1, while seven MCPs reported a change in SPA 2). Only Anthem and Molina noted variation in impact at the county level (data not shown).

Exhibit 16: MCP Reports of Impact of COVID-19 Pandemic on HHP Processes, Procedures, and/or Policies

Process/Procedure/Policy	Number (N=16) of MCPs that Reported a Change Due to COVID-19	Number (N=16) of MCPs that Reported an Impact Due to COVID-19	For MCPs Who Reported an Impact, Mean Impact Score (Scale 0-10, 0 = Not at all impacted and 10 = Extremely impacted)
Identifying eligible HHP enrollees (e.g., administrative data, referrals)	0	3	5.0
Engagement and enrollment of eligible beneficiaries into HHP (e.g., outreach)	8	15	4.9
Communications with HHP enrollees (e.g., telephonic, telehealth, in-person)	10	13	6.0
Frontline staffing policies and procedures (e.g., shift to telework, protocols for in-person visits and use of PPE, recruitment or retention policies and practices)	11	15	5.1
Delivery of comprehensive care management by frontline staff (e.g., frequency, modality, location in which provided)	10	11	6.8
Delivery of care coordination by frontline staff (e.g., implementation of Health Action Plan, case conferences)	9	11	5.9
Ability to provide health promotion and individual/family support services (e.g., effective health education, referrals to resources such as smoking cessation) *	8	11	5.7
Comprehensive transitional care (e.g., admission notifications, coordinating with hospital discharge planners, transportation)	5	8	6.9
Housing and homeless support services	7	11	7.5
Referral by MCP and/or CB-CMEs to community and social supports (e.g., housing, food resources)	5	11	6.7
Contracts with CB-CMEs (e.g., challenges contracting with new CB-CMEs, revisions to existing CB-CME contracts in response to policy/process changes)	3	5	4.4
Reporting (e.g., delays in receiving data from CB-CMEs, accuracy or comprehensiveness of data)	0	4	3.3
MCP monitoring and oversight of CB-CMEs	6	9	5.3

Source: UCLA HHP COVID-19 Impact Survey, September-November 2020, n=16.
Note: Response to question: "On a scale of 0-10, please rate the impact of the COVID-19 pandemic on your organization's (or your contracted CB-CME's) ability to perform the following HHP-related activities. Please briefly describe the changes and impact. *Variation in response by SPA – eight in SPA 1 and seven in SPA 2 noted an impact on the ability to provide health promotion and individual/family support services due to COVID-19. **Of those who denoted an impact (score > 0) in either SPA.

Overall, the majority of MCPs (n=9) noted a relatively low impact of COVID-19 on their plan's overall ability to achieve desired HHP outcomes (e.g., enrollment, care management, outreach and engagement), while three MCPs reported more extensive impacts (data not shown). In general, there was an initial adjustment period to the new restrictions and policies put into place for the MCPs, but many were able to establish new workflows and infrastructure to support their own and CB-CME's operation in the pandemic environment (e.g., acquiring the necessary personal protective equipment, transitioning services to telehealth, strategic coordination with housing services and shelters).

CB-CMEs ratings of the impact of COVID-19 on their (1) ability to engage enrollees in HHP, (2) infrastructure and HHP implementation, (3) delivery of HHP core services, and (4) linkages and referral activities are shown in Exhibit 17. On a scale of 0-10, average CB-CMEs ratings to each question ranged from 5.7-6.4 and there was variability by county. For example, CB-CMEs reported an average rating of 6.3 on delivery of HHP core services, but this rating was as low as 3.3 in some counties and as high as 10 in others.

Exhibit 17: COVID-19 Pandemic Impact on HHP Processes, Procedures, and Policies, from the CB-CME Perspective, Overall and Range by County

	Engagement of enrollees in HHP (e.g., outreach, communication, follow-up)	Infrastructure (e.g., policies and procedures, staffing, data sharing) and HHP implementation (e.g., shift to telework, telehealth)	Delivery of HHP core services (e.g., care management, care coordination)	Linkages and referrals (i.e., community and social support services, housing services)
Average Rating	5.9	6.4	6.3	5.7
Range of Ratings by County	4.7-10.0	4.1-8.3	3.3-10.0	2.7-10.0

Source: Corporation for Supportive Housing (CSH), Health Home Program & Homeless Training Survey, August-September 2020 (n=59).
Note: Response to question: "On a scale of 0-10, please rate the impact of the COVID-19 pandemic on your organization's ability to perform the following HHP-related activities."

Exhibit 18 highlights illustrative quotes from CB-CME respondents on the impact of COVID-19 on the same four questions. CB-CMEs transitioned to predominantly telephonic engagement and service provision with mixed success, indicating that some enrollees have been more available to engage telephonically and others have been challenging to engage meaningfully. Throughout the pandemic, data sharing and electronic health records had proved beneficial to coordinating care and ensuring timely communication with enrollees and amongst the care team. Many CB-CMEs noted how community resources have been stretched thin as a result of the pandemic, which has created challenges for timely linkages and referrals.

Exhibit 18: Illustrative Quotes on COVID-19 Pandemic Impact on HHP Processes, Procedures, and Policies, from the CB-CME Perspective

Themes	Quotes	Organization Type
Engagement of enrollees in HHP (e.g., outreach, communication, follow-up)	*"We have transitioned to a predominately phone engagement process. This has helped with some patients; however, overall, it has not helped with outreach. We have had both surprising months, but we've also had some months with very little interaction."*	Community health center
	"Contacts with patients shifted primarily to telephone engagements while staff worked remotely. We have experienced an increase in successful contacts with patients through telephone encounters. More patients at home. More time to answer telephone calls. More time to talk."	Community health center
	"Due to COVID 19, members services had to be via telehealth and not in person. Members have felt disconnected from their providers and team. The inability to fully utilize the services has made life challenging for them. We have weekly calls via telephone, monthly calls with physician to ensure their basic needs are being met. Our team continues to educate members and provide resources available to them."	Community based primary care medical group
Infrastructure (e.g., policies and procedures, staffing, data sharing) and HHP implementation (e.g., shift to telework, telehealth)	*"Increased hiring to support telehealth services for HHP."*	Substance use treatment center
	"… When the COVID-19 lock down was initiated, had to temporarily suspend the face to face visits. With this valued process not an option, additional engagement with phones, emails, mailing out of letters and adoption of a HIPPA compliant texting platform for communication between members and case managers… impacted by HHP staff reduction of almost 30%... Data sharing continues as an important measure of internal and external communication, capability to filter resources and information with other organizations, and monitoring and evaluation…"	Community health center
Delivery of HHP core services (e.g., care management, care coordination)	*"Additional time to allocate and find resources for our member has had to be set. With COVID-19 many*	Substance use treatment center

Themes	Quotes	Organization Type
	resources we previously used shut down and or are at capacity."	
	"Prior to COVID, face-to-face and accessibility of providers were notable components of HHP. As a result of COVID-19, our team experienced challenges and limitations, but we continue to provide coordination of care using alternative modes. We use the internal electronic medical record (EMR) system called GuidingCare and data tracking systems, as well as telephonic coordination of services through our computers and phones. We have implemented trainings on telephonic engagement in order to establish rapport, build trust, use motivational interviewing (MI) techniques, and create a supportive mutual connection. We have established desktop procedures (DTPs) to outline the process from an initial call to engagement in appropriate level of case management. We also have regular online staff meetings to ensure we are all operating cohesively."	Community based primary care
Linkages and referrals (i.e., community and social support services, housing services)	*"We continue to link to all required services, however, turnaround time for referrals has increased. Internally we are adding more staff to support but, connection to outside agencies has become challenging."*	Behavioral health provider
	"It has impacted in the way that there are less resources available during the pandemic. For example, less food pantries, less shelters are open. And this makes it more difficult to assist patients."	Community health center

Source: Corporation for Supportive Housing (CSH), Health Home Program & Homeless Training Survey, August-September 2020 (n=59).
Note: Response to question: "On a scale of 0-10, please rate the impact of the COVID-19 pandemic on your organization's ability to perform the following HHP-related activities. What changes have you made to the above process as a result of COVID-19?"

Transition to Telephonic Delivery of HHP Outreach, Engagement, and Services

In the UCLA survey and as a result of COVID-19, many MCPs reported that they transitioned to delivering HHP services through telehealth and electronic modalities (n=13; data not shown). The majority of MCPs (n=10) noted that they would continue to use telehealth for physical and behavioral health services after the COVID-19 pandemic, and recognized many tangible benefits. Some MCPs (n=7) noted improvements in enrollee engagement as a result of the pandemic, as individuals were more likely to be available by phone due to shelter in place orders and staff had additional time to contact a larger number of enrollees. However, some MCPs (n=5) noted limitations in not being able to engage in face-to-face contact with enrollees and an inability to have meaningful and consistent encounters. Exhibit 19 provides illustrative quotes that highlight these findings.

Exhibit 19: Illustrative Quotes from MCPs on Transition to Predominantly Telephonic Contact during the COVID-19 Pandemic

Themes	Quotes	Managed Care Plan
Continued use of telehealth	*"UnitedHealthcare has offered greater flexibility regarding modes of engagement via telephonic and telemedicine, in addition to in-person encounters. As we move forward post COVID-19 pandemic, we plan on continuation of this greater flexibility based on our Member feedback to support their preferences. Our focus remains to support continuous engagement and Member choice."*	United Healthcare
	"We are considering the possibility of on-going use of telehealth given the positive impacts. We are continuing to compile feedback and will continue to look at support and services that are impacting health in a positive way."	Blue Shield of California
Improvements in enrollee engagement through telehealth	*"The direct impact from COVID-19 on HHP desired outcomes was primarily evident in the conversion from in-person to telephonic and virtual visits. Pandemic stay-at-home orders increased the likelihood of members being available by phone and engaging with care managers. So far there is no evidence that COVID prevented us from achieving any HHP desired outcome."*	Kaiser Permanente
	"CB-CMEs utilized telephonic out-reach to enroll, engage, and provide resources during the pandemic. We have seen a steady enrollment throughout the pandemic."	Community Health Group Partnership Plan
Limitations due to lack of face-to-face contact	*"The ability to engage with members who don't have access to phones and/or computers limits the ability to engage all eligible folk for the intervention/program. The technology gap has really been highlighted by COVID."*	San Francisco Health Plan
	"Some in-home visits were replaced with telephonic check-ins which seem to be adequate, yet not optimal. Telephonic check-ins are more effective when there has been a previous, well established relationship."	Kaiser Permanente

Source: UCLA HHP COVID-19 Impact Survey, September-November 2020, n=16.
Note: Quotes are directly taken from open ended responses to survey questions.

Contribution of HHP to MCPs' COVID-19 Pandemic Response

Three-fourths of MCPs reported that HHP contributed in positive and synergistic ways to their plan's overall COVID-19 response (data not shown). More specifically, HHP had established infrastructure and partnership networks for providing care management and coordination to Medi-Cal's most vulnerable populations. Many MCPs found that there was a significant overlap between HHP enrollees and those most at risk for COVID-19 complications. Exhibit 20 highlights illustrative quotes from MCPs regarding how HHP contributed to their response to COVID-19.

Exhibit 20: Illustrative Quotes from MCPs on How HHP Facilitated MCP Response to COVID-19 Pandemic

Quotes	Managed Care Plan
"Many members who were eligible for our COVID outreach program were also enrolled or eligible for Health Homes. This mean we could combine efforts for those members."	San Francisco Health Plan
"Because we had an established communications infrastructure within our CB-CME network, we were able to immediately pivot our communications and training strategies to address concerns related to Covid-19."	Inland Empire Health Plan
"HHP helped with overall response as our CB-CMEs enabled us to ensure outreach that included COVID-19 screening and support to enrollees who may need additional support during this time."	Blue Shield of California
"Medi-Cal Health Home significantly helped provide support during the pandemic by having an established infrastructure, clinically rigorous framework and network to provide care coordination services in our most vulnerable Medicaid Members. Through the Health Home Program, UnitedHealthcare has been able to identify and address homelessness by providing housing support and services to a targeted population greatly impacted by COVID-19."	United Healthcare

Source: UCLA HHP COVID-19 Impact Survey, September-November 2020, n=16.
Note: Quotes are directly taken from open ended responses to survey questions.

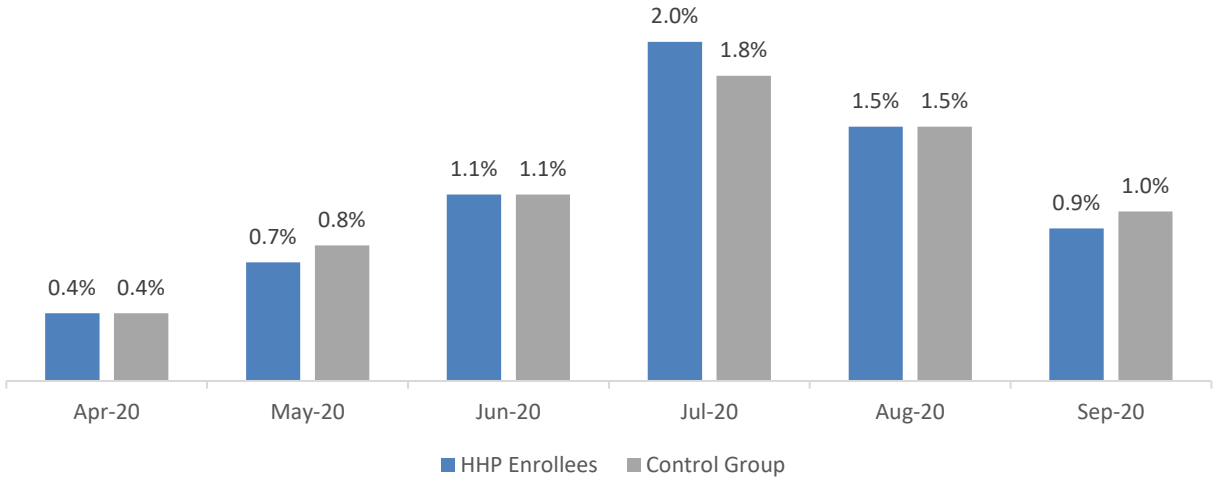
Estimated Prevalence of and Trends in COVID-19 among HHP Enrollees and their Controls

The diagnosis code for COVID-19 was developed and utilized by providers starting in late March 2020. UCLA analyzed Medi-Cal claims starting in March 2020 and identified services used that had COVID-19 as the primary or secondary diagnosis in order to estimate the prevalence of the disease among HHP enrollees and the control group. A total of 2,088 HHP enrollees (4.3%) had at least one COVID-19 related service. The same proportion of the control group, 4.3%, had at least one COVID-19 related service (data not shown).

UCLA examined monthly trends in the proportion of enrollees and their controls with at least one COVID-19 related service in that month. Data showed a peak in July 2020 (Exhibit 21), similar to the peak in COVID-19 hospitalizations seen in California and HHP counties during this

timeframe (Exhibit 15). The estimated incidence of COVID-19 per month was similar between HHP enrollees and their controls.

Exhibit 21: Proportion of HHP Enrollees and their Controls with a COVID-19 Related Service by month, April 2020 to September 2020

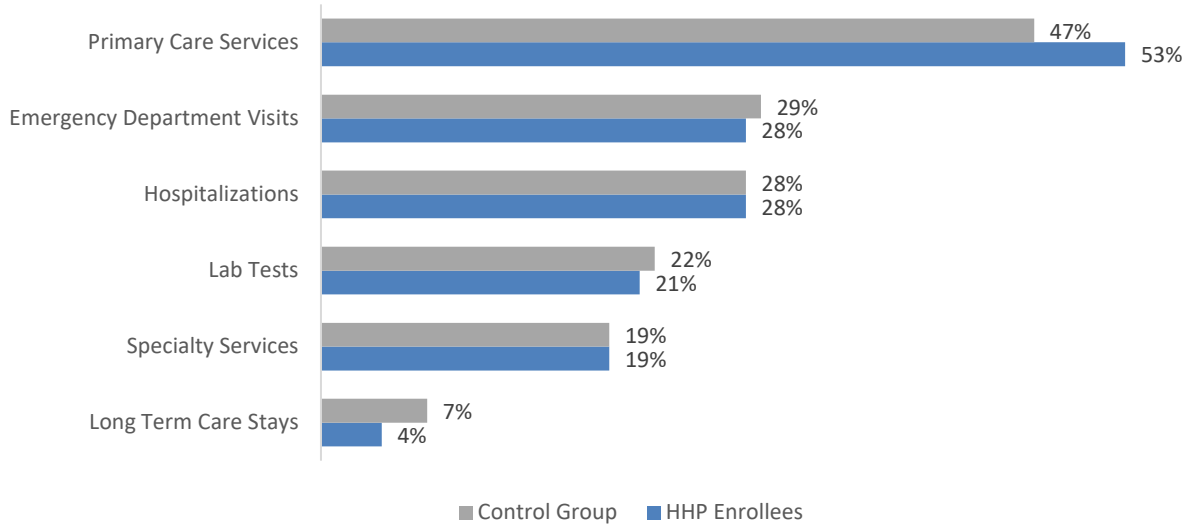


Source: UCLA analyses of Medi-Cal enrollment and claims data from April 2020 to September 2020.
Notes: COVID-19 diagnosis was identified using ICD code U07.1 in primary or secondary diagnosis per claim. March 2020 was not included because of limited reporting using U07.1 that month.

COVID-19 Related Service Use of HHP Enrollees and their Controls

UCLA examined the type of COVID-19-related health services used by HHP enrollees and their controls with at least one COVID-19-realted service in 2020. Both enrollees and their controls most commonly used primary care services (53% for HHP enrollees vs 47% for controls), followed by emergency department visits (28% vs 29%) and hospitalizations (28% vs 28%). Less common services included lab tests (21% vs 22%), specialty services (19% vs 19%), and long-term care stays (7% vs 4%; Exhibit 22).

Exhibit 22: Proportion of HHP Enrollees and their Controls with a COVID-19 Diagnosis that Received Specific COVID-19-Related Services

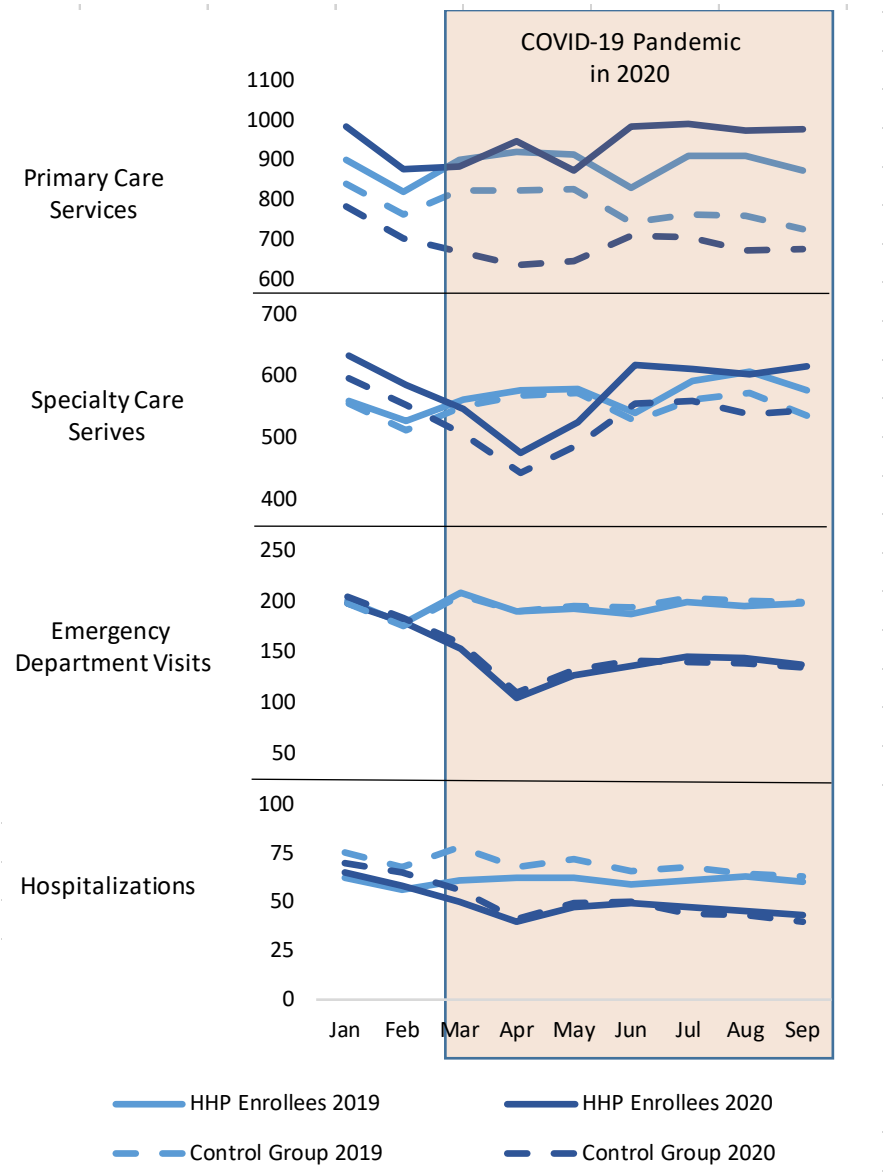


Source: UCLA analyses of Medi-Cal enrollment and claims data from March 2020 to September 2020.
Notes: Services with COVID-19 as primary or secondary diagnosis (identified using ICD code U07.1) only. Emergency department visits only include visits that did not result in hospitalization.

Changes in Use of Health Services Before and During the COVID-19 Pandemic

UCLA assessed service utilization patterns among all HHP enrollees and their controls before and during the pandemic and found a decline around April 2020 compared to April 2019 for all service types except for primary care services (Exhibit 23). Data showed that the rate of primary care services per month for HHP enrollees had not declined in March or when the shelter in place order was issued in late March 2020 in California but this rate declined in May and increased by June 2020 above the 2019 levels. The rate of primary care services per month for the control group was generally lower in 2020. Specialty care services, emergency department visits, and hospitalizations declined around April 2020, corresponding to a statewide shelter in place order. By September 2020, however, rates of specialty service utilization were similar to those observed in September 2019 for both enrollees and controls. In contrast, the number of ED visits and hospitalizations declined in April 2020 (relative to April 2019) and stayed lower by September 2020 (relative to September 2019) for both enrollees and the control group.

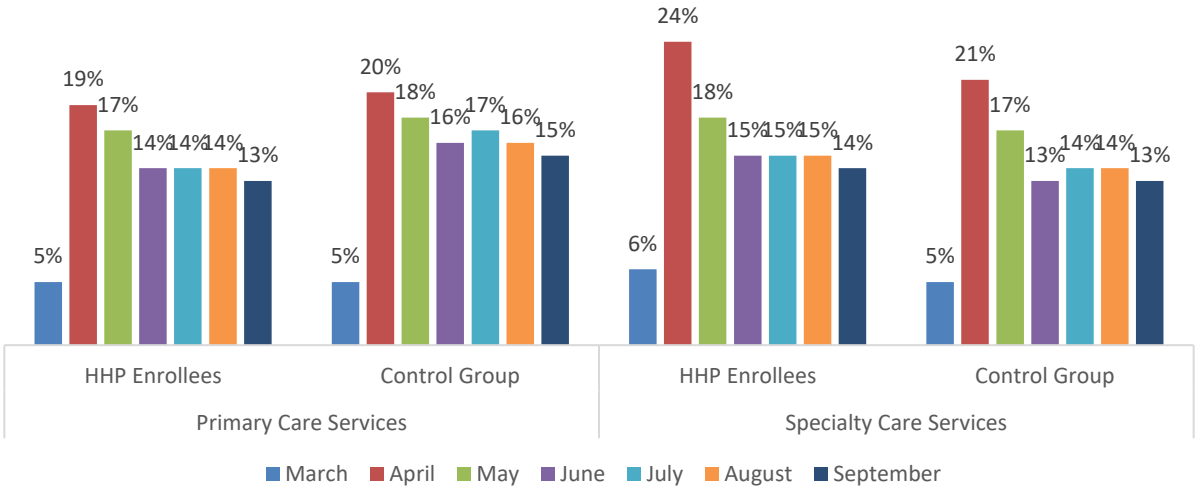
Exhibit 23: Comparing Monthly Service Utilization Rates in the Year Before the COVID-19 Pandemic (2019) versus the Year During (2020) for HHP Enrollees and the Control Group



Source: UCLA analyses of Medi-Cal enrollment and claims data from January 2019 to September 2020.
Notes: Emergency department visits only include visits that did not result in hospitalization.

Further analyses (data not shown) found that less than 0.2% of primary care and specialty services were delivered via telehealth before the pandemic. In response to the pandemic, California's Department of Managed Health Care required that MCPs must reimburse telehealth visits at the same rate as in-person visits starting March 18, 2020. Starting in March 2020, rates of telehealth primary care and specialty care services increased substantially for both enrollees and the control group, peaking in April 2020 (Exhibit 24).

Exhibit 24: Proportion of Primary Care and Specialty Care Services Provided through Telehealth by HHP Enrollees and Control groups, March 2020 to September 2020



Source: UCLA analyses of Medi-Cal enrollment and claims data from March 2020 to September 2020.

HHP Enrollment and Enrollment Patterns

This section addresses the following HHP evaluation questions:

1. What proportion of eligible enrollees were enrolled?
2. What proportion of enrollees were homeless?
3. How did enrollment patterns change over time?

From July 1, 2018 to July 31, 2019, MCPs reported data on individual-level enrollment in ad hoc Enrollment Reports requested by DHCS. Beginning in the third quarter of 2019, DHCS requested for MCPs to report on member level enrollment data in their Quarterly HHP Reports. Both reports included monthly enrollment status by individual, along with individual level SPA data. Homeless status was reported by MCPs at the member level in Quarterly HHP Reports beginning in Quarter 3 of 2019. Therefore, enrollment growth and patterns among homeless enrollees was not available for enrollees who had disenrolled prior to this time.

UCLA used these data from July 1, 2018, to September 30, 2020, to examine how enrollment changed over time for the overall HHP population, by SPA, and for homeless enrollees. Data was available for counties for all implementation groups (Groups 1, 2, 3, and 4) at the time of this report. Further details can be found in Appendix A: Data Sources and Analytic Methods.

A small number of HHP enrollees (1,439) were enrolled for less than 31 days and were excluded from these analyses. MCPs received PMPM payments for one month which allowed for MCPs and CB-CMEs to work together to verify HHP eligibility, however MCPs did not receive payments if those individuals could no longer be enrolled in the program. MCPs did not provide other services to this group. Comparison of these enrollees with those enrolled for longer than 30 days indicated the groups had similar demographics, health status, and health care utilization prior to HHP. Further detail about this group can be found in Appendix C: HHP Enrollees Enrolled Less Than 31 Days.

DHCS defined inclusion and exclusion eligibility criteria for HHP enrollees and used these criteria to identify eligible Medi-Cal beneficiaries to be included in the TEL, which was then distributed to MCPs in six-month intervals. However, DHCS did not have access to all eligibility criteria in Medi-Cal enrollment and claims data. Specifically, DHCS lacked information on three exclusion criteria including “sufficiently well managed through self-management or another program”, “more appropriate for alternative care management programs”, and “behavior or environment is unsafe for CB-CME staff”. In addition to lack of data, the TEL was based on retrospective claims data used to define acuity criteria of “at least one inpatient hospital stay in the last year” and “three or more emergency department (ED) visits in the last year”. Nearly all

the exclusion criteria were also retrospective and may have changed prior to enrollment by the MCPs. For example, individuals in a skilled nursing facility, enrolled in specialized MCPs, or enrolled in fee-for-service Medi-Cal may have been discharged back to the community, disenrolled from a specialized MCP, or enrolled in managed care outside of the TEL defined timeline, respectively.

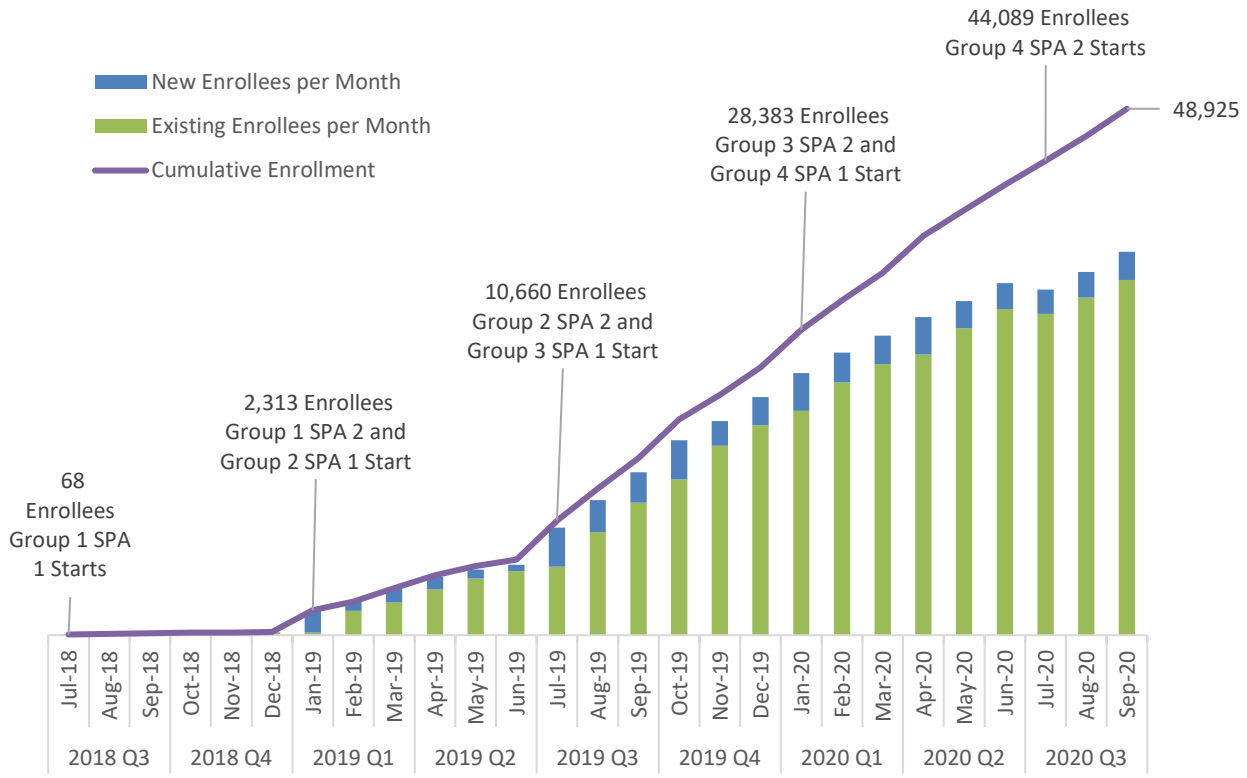
In addition, DHCS issued the TEL every six months based on adjudicated Medi-Cal claims data, while MCPs had and used more recent data on diagnoses and service utilization. MCPs were likely to have access to electronic medical records that contain more comprehensive diagnoses and information on health problems and needs of patients. Furthermore, MCPs had the option to enroll members that were referred by providers that may not have matched the HHP eligibility criteria in Medi-Cal data. Ultimately, MCPs prioritized some TEL enrollees based on severity, complexity, or risk-status using information not available to DHCS

Trends in Enrollment

Growth in HHP Enrollment Overall and by SPA

A total of 48,925 enrollees had ever enrolled in HHP by the end of September 2020 (Exhibit 25). Enrollment in HHP began with Group 1, SPA 1 in San Francisco in July 2018 and expanded rapidly when Groups 2 and 3 began enrollment. The growth in enrollment continued steadily after enrollment and when Group 4 started. Monthly new enrollment into the program varied between a high of 3,625 in July 2019 and a low of 26 in November 2018, averaging at 1,839 new enrollees per month (data not shown). Total monthly enrollment (new enrollment plus existing enrollment) increased each month except for July 2020.

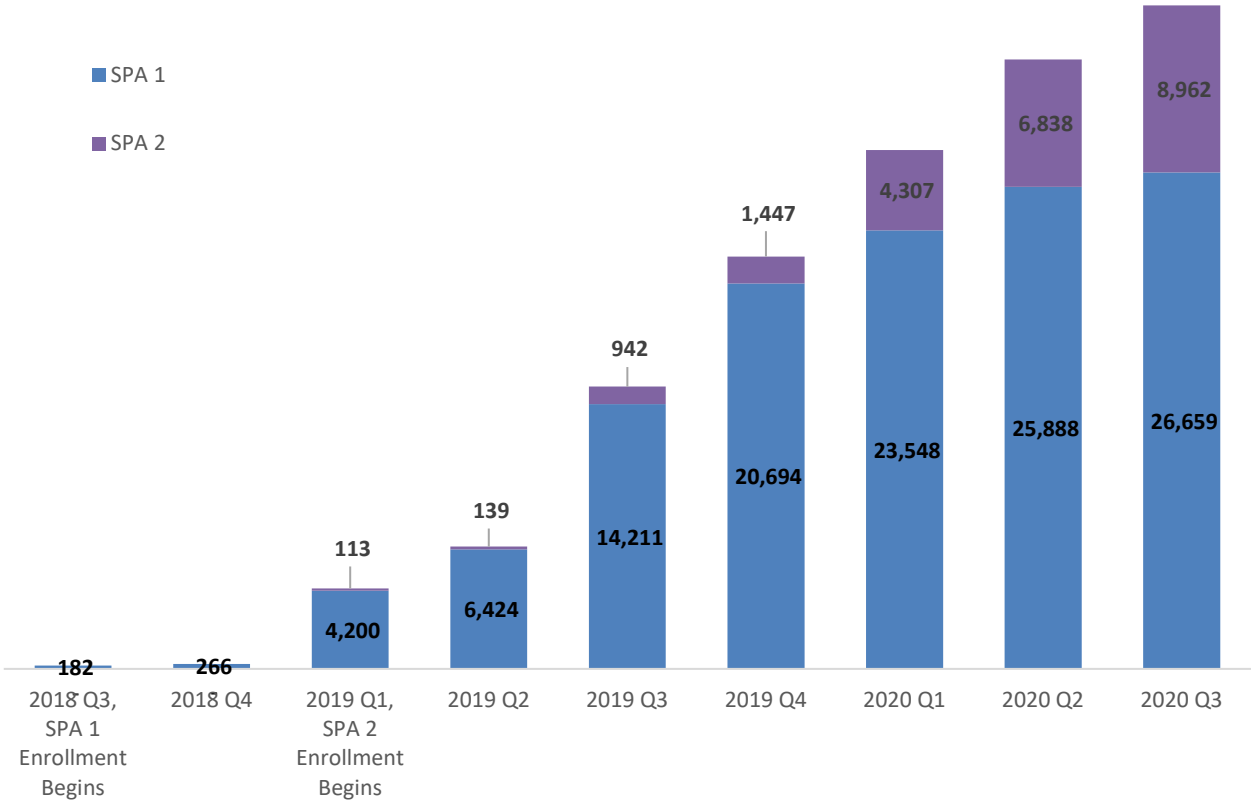
Exhibit 25: Unduplicated Monthly and Cumulative Enrollment in HHP, July 1, 2018 to September 30, 2020



Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. HHP enrollment was limited to available data for the period between July 2018 and September 2020.
Notes: MCP is managed care plan. Groups of MCPs implemented at different time points. Those enrolled for less than 31 days were excluded from this analysis. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness.

Examining HHP enrollment by SPA revealed a total cumulative enrollment of 38,228 in SPA 1 and 10,697 in SPA as of September 2020 (data not shown). In the third quarter of 2020, there were 26,659 SPA 1 enrollees and 8,962 SPA 2 enrollees (Exhibit 26). In the first two quarters of the program, MCPs only enrolled in SPA 1 but enrollment grew over time.

Exhibit 26: Unduplicated Quarterly Enrollment in HHP by SPA, July 1, 2018 to September 30, 2020

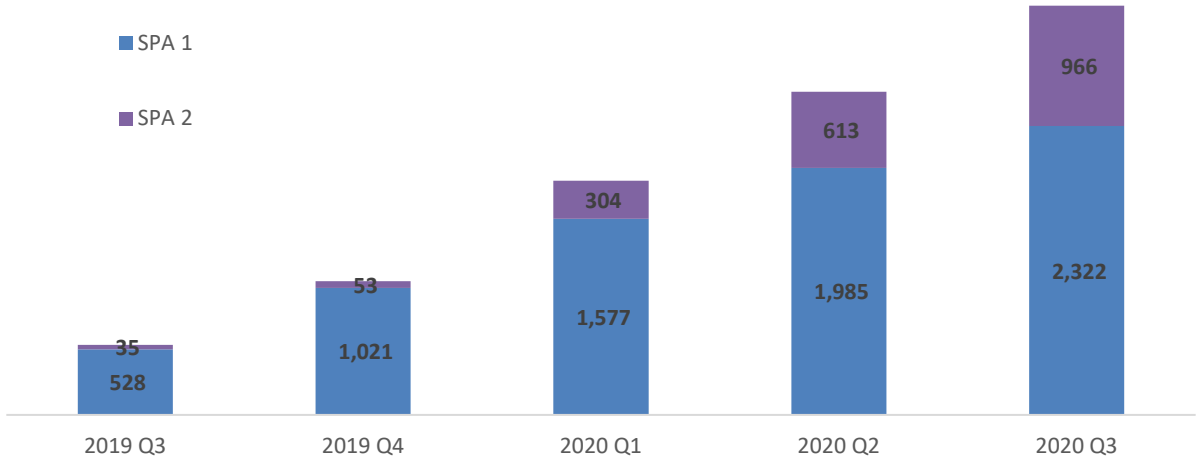


Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. HHP enrollment was limited to available data for the period between July 2018 and September 2020.
Notes: MCP is managed care plan. Those enrolled for less than 31 days were excluded from this analysis. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness.

Growth in HHP Enrollment among Homeless by SPA

MCPs began reporting homeless data per enrollee in Quarter 3 of 2019 (Q3; July 1 to September 30) through HHP Quarterly Reports. UCLA used the identifier indicating enrollees who were ever homeless or at risk of homelessness during each quarter to show the patterns of enrollment over time. However, these data underestimate the size of homeless enrollees in HHP because they excluded homeless enrollees that disenrolled prior to July 2019 and did not reenroll in HHP. During the third quarter of 2020, 2,322 SPA 1 and 966 SPA 2 enrollees were homeless or at risk of homelessness (Exhibit 27). Enrollees experiencing homelessness or at risk of homelessness represented 10% of HHP enrollees overall by September 2020 (data not shown). The variation in number of homeless enrollees by Group can be seen in Appendix D: Homeless Enrollment by Group.

Exhibit 27: Enrollment of Individuals Reported as Homeless or At-Risk of Homelessness each Quarter in HHP by SPA, July 1, 2019 to September 30, 2020



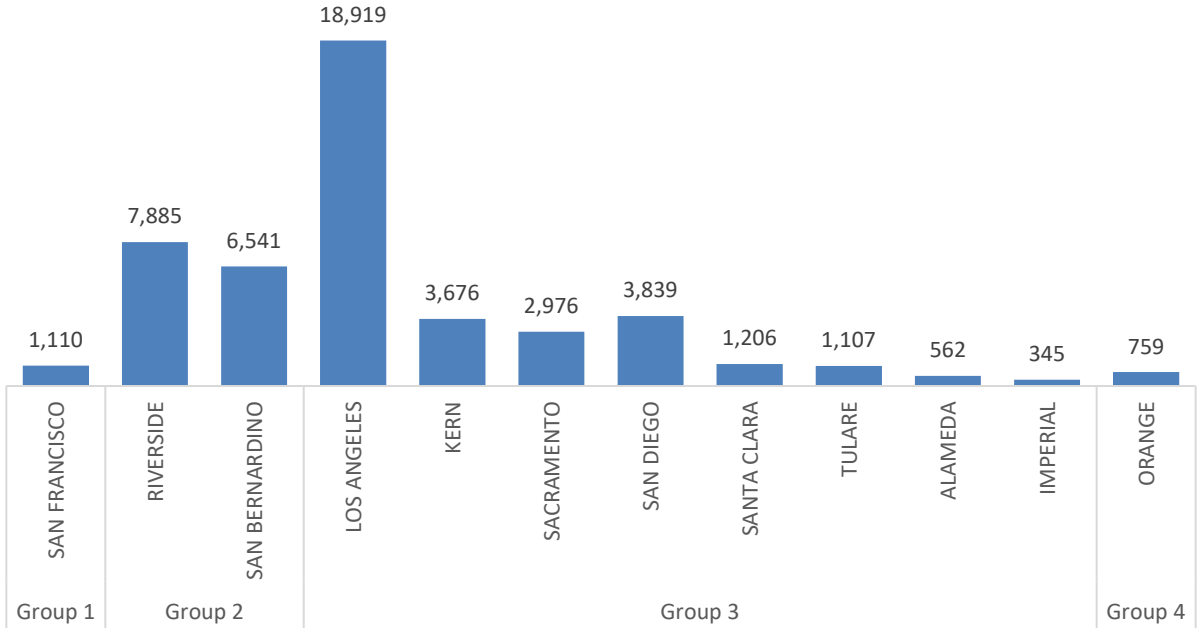
Source: Quarterly HHP Reports from July 2019 to September 2020. Homeless enrollees that disenrolled prior to July 2019 are not included.

Notes: MCP is Managed Care Plan. Those enrolled for less than 31 days were excluded from this analysis. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Monthly enrollment of less than 11 was recorded as 11. Excludes HHP enrollees that were designated as homeless and were disenrolled prior to Q3. Includes homeless enrollees that were included in Q3 HHP Quarterly Reports.

Enrollment Size by Group and County

Exhibit 28 shows enrollment by group and county as of September 2020. Enrollment varied by county. Los Angeles had the largest enrollment, reaching 18,919 in September 2020. Other counties with large enrollment include Riverside (7,885) and San Bernardino (6,541), from Group 2.

Exhibit 28: Unduplicated Cumulative HHP Enrollment by Group and County as of September 30, 2020



Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. HHP enrollment was limited to available data for the period between July 2018 and September 2020.
Notes: MCP is Managed Care Plan. Those enrolled for less than 31 days were excluded from this analysis. Group 1 implemented HHP on July 1, 2018, Group 2 implemented HHP on January 1, 2019, Group 3 implemented HHP on July 1, 2019, and Group 4 implemented HHP on January 1, 2020 (SPA1) and June 1, 2020 (SPA2).

Enrollment from the Target Engagement List

UCLA assessed the concordance between Medi-Cal enrollees identified by DHCS as eligible for HHP, based on their prior claims and communicated to MCPs biannually in the Targeted Engagement List (TEL), and Medi-Cal beneficiaries enrolled in HHP. The analyses showed that 78% of HHP enrollees were identified in the TEL as of September 2020 and this proportion varied by group (Exhibit 29). The proportion of enrollees identified in the TEL did not differ by SPA (data not shown).

Exhibit 29: Proportion of HHP Enrollees that were identified in the Target Engagement List (TEL) as of September 2020, Overall and by Group

	Total Enrollment	Proportion Identified in TEL
Overall	48,375	78%
Group 1	1,110	90%
Group 2	14,426	82%
Group 3	32,630	75%
Group 4	759	90%

Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. Target Engagement Lists from May 2018 to May 2020.
Notes: Those enrolled for less than 31 days were excluded from this analysis. Group 1 implemented HHP on July 1, 2018, Group 2 implemented HHP on January 1, 2019, Group 3 implemented HHP on July 1, 2019, and Group 4 implemented HHP on January 1, 2020. Individuals identified on the TEL supplemental list were not included as part of TEL.

Enrollment Patterns

Enrollment Churn

Most HHP enrollees (70%) remained continuously enrolled from enrollment date to September 2020, with a higher share for SPA 2 enrollees (82%) than SPA 1 enrollees (67%; Exhibit 30). Disenrollment rates increased since September 2019 for each of the two SPAs (data not shown). Overall, nearly one-third of enrollees (30%) have disenrolled once and stayed disenrolled from the program. Re-enrollment rates are low across both SPA 1 (0.2%) and SPA 2 (0.1%).

Exhibit 30: Enrollment and Disenrollment Patterns in HHP as of September 30, 2020

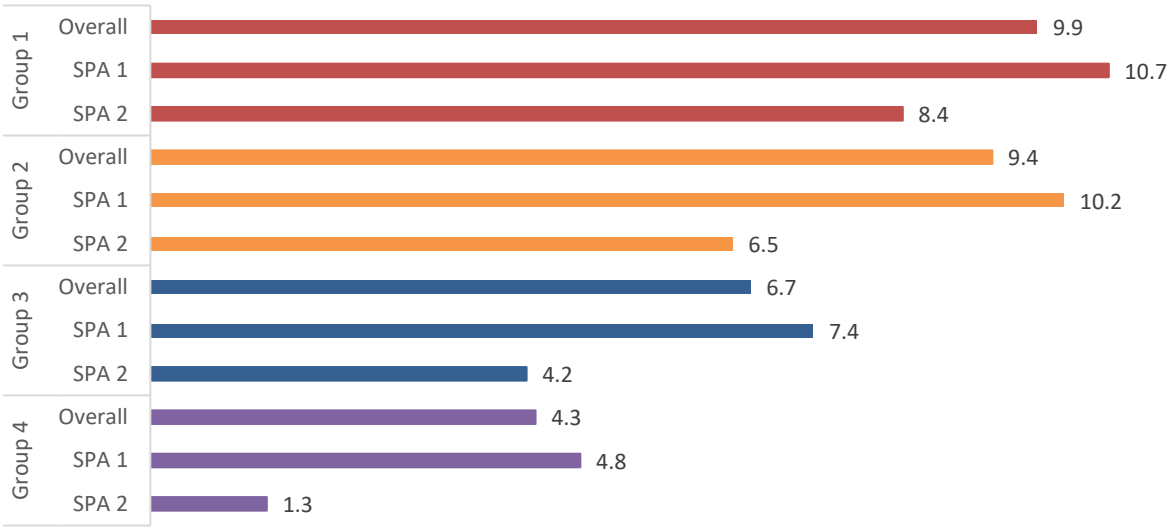
	Total Enrollment	Continuously Enrolled	Disenrolled Once	Enrolled Multiple Times
Overall	48,925	70%	30%	0.2%
SPA 1	38,228	67%	33%	0.2%
SPA 2	10,697	82%	18%	0.1%

Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. HHP enrollment was limited to available data for the period between July 2018 and September 2020.
Notes: MCP is Managed Care Plan. Those enrolled for less than 31 days were excluded from this analysis. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness.

Enrollment Length

Average length of enrollment by Group and SPA was commensurate with implementation date. The length of enrollment was shorter for Groups 2 through 4 relative to Group 1, and was shorter for SPA 2 than for SPA 1 (Exhibit 31).

Exhibit 31: Average Length of Enrollment in Months in HHP by Group as of September 30, 2020



Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. HHP enrollment was limited to available data for the period between July 2018 and September 2020.
Notes: MCP is managed care plan. Those enrolled for less than 31 days were excluded from this analysis. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness.

MCP Exclusions of Specific HHP Eligible Populations

MCPs were able to use standardized criteria to exclude some of the eligible beneficiaries identified in their respective TELs and were required to report the reason for such exclusions in their Quarterly HHP Reports in the aggregate and for the first year of implementation. Ten MCPs only reported for the first three quarters of implementation and one MCP did not report at all. Exhibit 32 displays the percent of eligible beneficiaries in the TEL that were excluded by reasons for such exclusions. For Groups 2 and 3 the most common reason was that an eligible beneficiary was not an MCP member. At the time the TEL was constructed, these individuals may have been members of the MCP, but were no longer members when the MCP began enrollment either due to enrollment in another MCP or disenrollment from Medi-Cal. Other most common reasons for exclusion were eligible enrollee declined to participate (Group 1) and eligible enrollee was already well managed (Group 4).

Exhibit 32: Percent of Eligible Beneficiaries Excluded by MCPs by Reason for Exclusion in the First Year of HHP Implementation

	Group			
Exclusion Rationale	**1**	**2**	**3**	**4**
Excluded because well-managed	0.4%	0.5%	0.4%	7.2%
Excluded because declined to participate	3.1%	1.9%	2.2%	2.2%
Excluded because of unsuccessful engagement	0.9%	3.0%	2.5%	4.8%
Excluded because duplicative program	0.5%	0.3%	1.0%	0.6%
Excluded because unsafe behavior or environment	n/a	<0.0%	<0.0%	n/a
Excluded because not enrolled in Medi-Cal at MCP	0.3%	7.4%	3.1%	1.8%
Externally referred but excluded	<0.0%	0.1%	<0.0%	n/a

Source: MCP Quarterly HHP Reports from September 1, 2018 to September 30, 2012. Groups 1 and 2 reported excluded beneficiaries for the first year of implementation. Group 3 MCPs reported 3 or 4 quarters of excluded beneficiaries. Group 4 only reported 3 quarters of excluded beneficiaries. HealthNet counties (Kern, Los Angeles, Sacramento, San Diego and Tulare) were excluded from analysis due to insufficient reporting. Eligible beneficiaries were identified on the targeted engagement lists created prior to the last quarter of reporting for each MCP and County.
Notes: MCP is Managed Care Plan and TEL is Targeted Engagement List. n/a indicates small cell size.

HHP Enrollee Demographics and Health Status

This section addresses the following HHP evaluation questions:

1. What were the demographics of program enrollees?
2. What was the acuity level of the enrollees including health and health risk profile indicators, such as aggregate inpatient, ED, and rehab SNF utilization?
3. What proportion of enrollees are homeless?

UCLA used demographic information from the Medi-Cal enrollment data, homeless status from MCP Quarterly HHP Reports, and Medi-Cal claims data to construct measures of health status and healthcare utilization prior to enrollment in HHP. Medi-Cal data included both managed care and fee-for-service encounters. UCLA used a look-back period of 24 months for these measures in line with the HHP Program Guide. The exception to this was calculation of enrollee demographics, which was based on an enrollee's HHP enrollment date. Measures of chronic conditions and acuity eligibility criteria were created based on definitions in the HHP Program Guide and the Centers for Medicare and Medicaid Service's Chronic Condition Warehouse condition categories, using primary and secondary diagnosis codes in each Medi-Cal claim. Further details can be found in Appendix A: Data Sources and Analytic Methods.

UCLA reported demographics and health status for (1) all enrollees, (2) SPA 1 enrollees, and (3) SPA 2 enrollees. Of the 48,922 HHP enrollees (see HHP Enrollment and Enrollment Patterns), three enrollees were missing Medi-Cal data prior to HHP enrollment and were not included in these analyses. HHP enrollees enrolled for less than 31 days (1,436 enrollees) were excluded from these analyses.

DHCS defined inclusion and exclusion eligibility criteria for HHP enrollees and used these criteria to identify eligible Medi-Cal beneficiaries to be included in the TEL, which was then distributed to MCPs in six-month intervals. However, DHCS did not have access to all eligibility criteria in Medi-Cal enrollment and claims data. Specifically, DHCS lacked information on the "chronic homelessness" acuity criteria.

Demographics of HHP Enrollees at Time of Enrollment

As of September 2020, MCPs had enrolled 48,922 individuals for over 30 days, with 38,225 in SPA 1 and 10,697 in SPA 2. Overall, HHP enrollees were most often 50 to 64 years old, female and Latinx. When comparing SPA 1 and SPA 2 enrollees, the former group were more often older, less likely to be White, and less likely to speak English. Some (8%) of HHP enrollees were reported as experiencing homelessness at any point during HHP enrollment, and rates varied by SPA with 7% for SPA 1 and 9% for SPA 2 (Exhibit 33). The overall demographics of enrollees as of September 2020 did not differ greatly from the demographics of enrollees as of September 2019 (data not shown).

Exhibit 33: HHP Enrollee Demographics, Overall, and by SPA, at the Time of HHP Enrollment as of September 30, 2020

		Total	SPA 1 Enrollees	SPA 2 Enrollees
Enrollment	N	48,922	38,225	10,697
Age (at time of enrollment)	% 0-17	7%	8%	5%
	% 18-34	13%	11%	22%
	% 35-49	22%	21%	26%
	% 50-64	50%	51%	44%
	% 65+	8%	9%	4%
Gender	% male	41%	42%	35%
Race/Ethnicity	% White	21%	20%	26%
	% Latinx	46%	47%	41%
	% African American	18%	18%	17%
	% Alaskan Native or American Indian	<1%	<1%	<1%
	% Asian	5%	5%	3%
	% Hawaiian, Guamanian, Samoan, Other Asian or Pacific Islander	1%	1%	1%
	% other	4%	4%	7%
	% unknown	5%	5%	5%
Language	% English proficient	72%	70%	78%
Enrolled in Medi-Cal full-scope during the year prior to enrollment	Average number of months	12	12	12
Homelessness	Experienced homelessness during enrollment	8%	7%	9%

Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 – September 2020. HHP enrollment was limited to available data for the period between July 1, 2018 and September 30, 2020, and homelessness is only reported for enrollees who were active as of July 2019. Demographics at the time of HHP enrollment were obtained from Medi-Cal enrollment data from July 1, 2016 to September 30, 2020.

Notes: MCP is Managed Care Plan. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Homeless data was not reported for 720 enrollees.

Health Status of HHP Enrollees Prior to Enrollment

UCLA examined the proportion of enrollees with the top ten most frequent physical health and mental health conditions in the 24 months prior to enrollment. Data showed high rates of hypertension (67%) and diabetes (49%) among HHP enrollees (Exhibit 34). When comparing SPA 1 and SPA 2, SPA 2 enrollees were more likely to have mental health conditions, including depression (72%), anxiety (50%), and bipolar disorder (27%) compared to SPA 1.

Exhibit 34: Top Ten Most Frequent Physical and Mental Health Conditions among HHP Enrollees, 24 Months Prior to HHP Enrollment

Total	SPA 1 Enrollees	SPA 2 Enrollees
N=48,922	**N=38,225**	**N=10,697**
Hypertension (67%)	Hypertension (71%)	Depression (72%)
Diabetes (49%)	Diabetes (54%)	Depressive Disorders (68%)
Hyperlipidemia (42%)	Hyperlipidemia (45%)	Hypertension (52%)
Obesity (40%)	Chronic Kidney Disease (41%)	Anxiety (50%)
Depression (38%)	Obesity (40%)	Obesity (37%)
Chronic Kidney Disease (37%)	Asthma (31%)	Hyperlipidemia (33%)
Depressive Disorders (36%)	Depression (29%)	Diabetes (30%)
Anxiety (30%)	Depressive Disorders (27%)	Fibromyalgia, Chronic Pain and Fatigue (30%)
Asthma (28%)	Fibromyalgia, Chronic Pain and Fatigue (26%)	Bipolar (27%)
Fibromyalgia, Chronic Pain and Fatigue (27%)	Rheumatoid Arthritis / Osteoarthritis (25%)	Drug Use Disorders (25%)

Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2020. HHP enrollment was limited to available data for the period between July 1, 2018 and September 30, 2020. Chronic and other chronic health, mental health, and potentially disabling condition categories were identified using the Chronic Condition Warehouse methodology using Medi-Cal claims data from July 1, 2016 to September 30, 2020.
Notes: MCP is managed care plan. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness.

In order to further examine the level of complexity of health status of HHP enrollees, UCLA examined the proportion of HHP enrollees that met each of the four HHP eligibility criteria outlined in the HHP Program Guide in the 24 months prior to enrollment. Exhibit 35 shows that 55% of HHP enrollees had hypertension along with chronic obstructive pulmonary disease, diabetes, coronary artery disease, chronic or congestive heart failure (Criteria 2). A greater proportion of enrollees had serious mental health conditions (Criteria 3) compared to a combination of very complex conditions such as chronic renal (kidney) disease, chronic liver disease, traumatic brain injury and a more common condition (Criteria 1). A smaller proportion of HHP enrollees (28%) had asthma (Criteria 4). Consistent with HHP program goals, more SPA 2 enrollees had major depression disorder, bipolar disorder, or psychotic disorders (Criteria 3)

than SPA 1 enrollees (83% versus 32%). The composition of enrollees by eligibility criteria did not differ greatly as of September 2020 compared to September 2019 (data not shown).

Exhibit 35: Complexity of HHP Enrollees' Health Status by SPA, 24 Months Prior to HHP Enrollment as of September 30, 2020

	Total	SPA 1 Enrollees	SPA 2 Enrollees
Number of HHP Enrollees	**N=48,922**	**N=38,225**	**N=10,697**
Two specific conditions (Criteria 1)	40%	44%	23%
Hypertension and another specific condition (Criteria 2)	55%	61%	32%
Serious mental health conditions (Criteria 3)	43%	32%	83%
Asthma (Criteria 4)	28%	31%	16%

Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 - 2020. HHP enrollment was limited to available data for the period between July 1, 2018 and September 30, 2020. Utilization data was calculated using Medi-Cal claims data from July 1, 2016 to September 30, 2020. Chronic condition categories were based on definitions from the HHP Program Guide.

Notes: Criteria 1 includes any two of the following conditions: chronic obstructive pulmonary disease, diabetes, traumatic brain injury, chronic or congestive heart failure, coronary artery disease, chronic liver disease, chronic renal (kidney) disease, dementia, substance use disorders. Criteria 2 includes hypertension and one of the following: chronic obstructive pulmonary disease, diabetes, coronary artery disease, chronic or congestive heart failure. Criteria 3 includes one of the following: major depression disorders, bipolar disorder, psychotic disorders including schizophrenia. Criteria 4 includes asthma. HHP enrollees may meet multiple criteria.

HHP Service Utilization among HHP Enrollees

This section addresses the following HHP evaluation questions:

1. Were HHP services provided in-person or telephonically?
2. Were HHP services provided by clinical or non-clinical staff?
3. How many homeless enrollees received housing services?

MCPs were required to report HHP services to DHCS in Medi-Cal claims data starting on July 1, 2018. Two different procedure codes with unique modifiers that further indicated type and modality of services as well as type of providers were used. DHCS required HCPCS code G0506 from July 1, 2018 to September 30, 2018, but discontinued it because it led to denial of claims where a provider had submitted more than one unit of service per date of service. Therefore, DHCS adopted HCPCS code G9008 starting on October 1, 2018. Both codes were used to report HHP services in this report.

Prior to Q3 2019, MCPs reported on the number of HHP enrollees experiencing or at risk for homelessness and the provision of housing services to these beneficiaries in the aggregate and per quarter. This data could not be used to assess trends since it lacked information on each individual member and changes in their status. MCPs began reporting this data at the member level starting in Q3 2019, representing July 1 through September 30, 2019, and reported homeless status during each quarter, receipt of housing services during each quarter, and whether a person was no longer homeless by the end of each quarter. Therefore, this report describes the homeless status and receipt of housing services for homeless and at-risk-of-homelessness beneficiaries for each quarter from Q3 2019 to Q3 2020.

UCLA used all available data to examine the type and frequency of HHP services received by enrollees at the SPA level. Further details can be found in Appendix A: Data Sources and Analytic Methods.

HHP Services

MCPs were required to report HHP services under HCPCS code G9008, defined as "coordinated care fee, physician coordinated care oversight services." MCPs were required to use HCPCS code modifiers (U1 – U7) to identify three unique service types, service provider, and service modality (Exhibit 36). MCPs were expected to use at least one modifier per claim to define an HHP service. For example, a single visit where an enrollee receives HHP core services in-person by both clinical and non-clinical staff would use two modifiers (U1 and U4). Multiple units of service (UOS) were allowed, where one UOS was equivalent to 15 minutes of time to provide the service. Clinical staff included licensed medical professionals such as physicians, nurse practitioners, LCSWs, and medical assistants, while non-clinical staff included employees working in administrative or technical roles. In-person visits could occur at a variety of locations (e.g., home, office, or clinic). Telehealth allowed for remote patient monitoring (e.g., vitals and blood pressure), allowing enrollee care, reminders, and education to occur through telephone and electronic communications.

Exhibit 36: HHP Services

Provider Type	HCPCS Modifier	Modality	Definition
Engagement Services			
Provider Type Not Specified	U7	Not specified	Active outreach such as direct communications with member (e.g., face-to-face, mail, electronic, and telephone), follow-up if the member presents to another partner in the HHP network or using claims data to contact providers the member is known to use. Providers must show active, meaningful, and progressive attempts at member engagement each month until the member is engaged. Examples of acceptable engagement include: (1) letter to member followed by phone call to member; (2) phone call to member, outreach to care delivery partners and social service partners; (3) and street level outreach, including, but not limited to, where the member lives or is accessible.
Core Services			
Provided by Clinical Staff	U1	In-person	Comprehensive care management, care coordination, health promotion, comprehensive transitional care, individual and family support services, and referral to community and social supports
	U2	Telehealth	
Provided by Non-Clinical Staff	U4	In-person	
	U5	Telehealth	
Other Services			
Provided by Clinical Staff	U3	Not specified	Case notes, case conferences, tenant supportive services, and driving to appointments
Provided by Non-Clinical Staff	U6	Not specified	

Source: Adapted from Health Homes Program Guide.
Notes: HCPCS is Healthcare Common Procedure Coding System, MCP is Managed Care Plan, and UOS is Unit of Service. Service use was reported by MCPs in claims data. Each service (UOS) represented a 15-minute interaction between HHP staff and HHP enrollee. Multiple UOS' were allowed within a single visit. Modifiers U1-U7 accompanied both HCPCS code G0506 (July 1, 2018 to September 30, 2018) and HCPCS code G9008 (October 1, 2018 to September 30, 2020) to specify the service. Telehealth includes phone and other forms of remote communication.

UCLA's examination of claims data revealed that HHP-specific HCPCS codes were not yet reported for 24% of HHP enrollees and that enrollees without these codes came from all 16 MCPs (data not shown). DHCS reported identifying deficiencies in reporting of HHP services both in claims and in MCP reports. MCPs reported to DHCS that CB-CMEs had challenges in reporting of HHP services that were included in claims. DHCS provided technical support to MCPs to address these problems. MCPs also reported to DHCS that they were providing technical assistance to CB-CMEs to improve reporting for all data.

An examination of the extent of this under-reporting showed that 24% of HHP enrollees lacked any HHP-specific HCPCS modifier codes and 38% of HHP enrollees lacked HCPCS codes for some months during their enrollment (data not shown). Further analysis showed that the rate of under-reporting varied by type of service with a higher rate for engagement services and a lower rate for core services. Therefore, UCLA calculated the average number of HHP services during months when HHP-specific HCPCS codes were present for each enrollee rather than calculating HHP services across all months of enrollment. The latter methodology would have been based on the incorrect assumption that HHP enrollees did not receive HHP services when HCPCS modifier codes were missing. Due to the limitations of data on HHP services and the methodology employed by UCLA, the data presented in this chapter are considered estimates of HHP services received by enrollees.

Estimated Overall HHP Service Delivery to HHP Enrollees

Exhibit 37 shows estimated service utilization for any HHP service (HCPCS modifiers U1-U7), regardless of provider type and modality between July 1, 2018 and September 30, 2020. Available data showed that a total of 412,463 UOS (in 15-minute increments) were received during this time period, averaging to 2.1 UOS per enrollee per month in months where services were received.

Comparison of services received by HHP enrollees by SPA showed a higher number of total UOS delivered to SPA 1 enrollees corresponding to more enrollees in this SPA. However, SPA 2 enrollees had a slightly higher average number of UOS than SPA 1 enrollees (2.2 UOS versus 2.1 UOS per month per enrollee in months that HHP services were received). The median UOS per enrollee was similar between SPAs.

Exhibit 37: Estimated Overall HHP Units of Service Received by HHP Enrollees by SPA, July 1, 2018 to September 30, 2020

	All HHP Enrollees (n=48,922)	SPA 1 Enrollees (n=38,225)	SPA 2 Enrollees (n=10,697)
Total number of units of service received	412,463	348,959	63,504
Average number of units of service per enrollee per month in months where HHP services were received	2.1	2.1	2.2
Median number of units of service per enrollee per month in months where HHP services were received	1.0	1.0	1.0

Source: Medi-Cal Claims data from June 1, 2018 to September 30, 2020.
Notes: HCPCS is Healthcare Common Procedure Coding System, MCP is Managed Care Plan. Service use was under-reported by MCPs in claims data. Each unit of service (UOS) represented a 15-minute interaction between HHP staff and HHP enrollee. Multiple UOS' were allowed within a single visit. Modifiers U1-U7 accompanied both HCPCS code G0506 (July 1, 2018 to September 30, 2018) and HCPCS code G9008 (October 1, 2018 to September 30, 2020) to specify the service. Data are based on the number of months during HHP enrollment where HCPCS codes were present.

Estimated Types of HHP Services Received

Exhibit 38 shows estimated average number of UOS per enrollee per month in months where HHP services were received by type of service from July 1, 2018 to September 30, 2020. The average number of UOS received was higher for core HHP services (1.7) than engagement services (1.3) or other HHP services (1.6). Also, the average number of UOS for engagement and other HHP services was higher for SPA 2 than SPA 1 enrollees.

Exhibit 38: Estimated Average Number of HHP Units of Service Provided to HHP Enrollees in Months HHP Services were Received by Service Type and SPA, July 1, 2018 to September 30, 2020

Service Type	All HHP Enrollees (n=48,922)	SPA 1 Enrollees (n=38,225)	SPA 2 Enrollees (n=10,697)
Engagement Services (U7)	1.3	1.3	1.4
Core HHP Services (U1, U2, U4, or U5)	1.7	1.7	1.7
Other Health Homes Services (U3 or U6)	1.6	1.6	1.7

Source: Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Data show estimated average number of units of services (UOS) per enrollee during months that specific service was received. HCPCS is Healthcare Common Procedure Coding System, MCP is Managed Care Plan. Service use is under-reported by MCPs in claims data. Each UOS represented a 15-minute interaction between HHP staff and HHP enrollee. Multiple UOS' were allowed within a single visit. Core HHP services include claims with HCPCS code G0506 (July 1, 2018 to September 30, 2018), HCPCS code G9008 (October 1, 2018 to June 30, 2019), and modifier U1, U2, U4, or U5. HHP engagement service includes claims with HCPCS code G0506 (July 1, 2018 to September 30, 2018), HCPCS code G9008 (October 1, 2018 to June 30, 2019), and modifier U7. Other HHP service includes claims with HCPCS code G0506 (July 1, 2018 to September 30, 2018), HCPCS code G9008 (October 1, 2018 to September 30, 2020), and modifier U3 or U6. Data are based on the number of months during HHP enrollment where HCPCS codes were present.

Estimated HHP Core Services by Modality and Staff Type

MCPs were required to report the modality of HHP core services including in-person or through telehealth. However, DHCS did not require reporting modality for other HHP services or engagement services. Exhibit 39 shows the average number of telehealth UOS received per enrollee during months that telehealth services were received (1.6 UOS) was higher than the average number of in-person services received per enrollee (1.3 UOS). MCPs were required to report the types of staff that provided core and other HHP services. The average number of services received from non-clinical staff (1.8 UOS) were higher than clinical staff (1.6 UOS) for SPA 2.

Exhibit 39: Estimated Average Number of HHP Core Unites of Service Provided to HHP Enrollees in Months those HHP Services were received by Modality and SPA, July 1, 2018 to September 30, 2020

	All HHP Enrollees (n=48,922)	SPA 1 Enrollees (n=38,225)	SPA 2 Enrollees (n=10,697)
Modality			
In-Person UOS (U1 or U4)	1.3	1.3	1.3
Telehealth UOS (U2 or U5)	1.6	1.6	1.7
Staff Types Who Delivered the Service			
Clinical Staff UOS (U1, U2, or U3)	1.6	1.6	1.7
Non-Clinical Staff UOS (U4, U5, or U6)	1.8	1.8	1.9

Source: Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Data show estimated average number of units of services per enrollee during months that service was received. HCPCS is Healthcare Common Procedure Coding System, MCP is Managed Care Plan, and UOS is Unit of Service. Service use was under-reported by MCPs in claims data. Each service (UOS) represented a 15-minute interaction between HHP staff and HHP enrollee. Multiple UOS' were allowed within a single visit. Modifiers U1-U7 accompanied both HCPCS code G0506 (July 1, 2018 to September 30, 2018) and HCPCS code G9008 (October 1, 2018 to September 30, 2020) to specify the service. Data are based on the number of months during HHP enrollment where HCPCS codes were present.

HHP Housing Services

Housing navigation and transition services included activities such as conducting tenant screenings, developing an individualized housing plan, assisting with move-in, and assisting with the housing search and application process. MCPs began reporting enrollee level data on homeless status and delivery of housing services in Q3 2019 (July 1 through September 30, 2019). In this period and onward, MCPs reported on enrollees who were homeless or at risk for homelessness during each quarter, those who were no longer homeless by the end of the quarter, and those who received housing services during the quarter. They also reported on whether an enrollee had ever been homeless during HHP, although this measure was not examined due to data inconsistencies. MCPs communicated challenges in reporting for provision of housing services. DHCS provided technical support to MCPs to address these problems, and MCPs reported to DHCS that they were providing technical assistance to CB-CMEs to improve reporting for all data.

The table below is considered an estimation of homeless status and receipt of housing services due to inconsistent reporting across these variables. Inconsistencies were present when an enrollee was reported as no longer homeless while that enrollee was never reported as homeless or at risk; an enrollee was reported as receiving housing services although they were never reported as homeless or at risk; and an enrollee was not reported as homeless or at risk during the same quarter when they first reported as being homeless at some point during the program. One reason for such discrepancies may have been that CB-CMEs had 90 days to assess an enrollee's homeless status and may not have done so when the quarterly report had to be submitted 60 days after the end the quarter.

Using data from the MCP Quarterly Reports, UCLA estimated that the percentage of enrollees who were homeless or at risk for homelessness in a given quarter grew during HHP, from 4% of the population in Q3 2019 to 9% of the population in Q3 2020 (Exhibit 40). The percentage of homeless or at risk enrollees who received housing services also increased over time, starting at 38% in Q3 2019 and increasing to 68% in Q3 2020. This percentage did not include an additional 118 enrollees who were not identified as homeless or at risk but who received housing services. Of those who were homeless or at risk during a given quarter, 3% were no longer homeless by the end of Q3 2019, and this number peaked in Q2 2020 at 10%. This percentage does not include 330 enrollees who reported as no longer homeless, but were not identified as homeless or at risk.

Exhibit 40: Homeless Status and Receipt of Housing Services by HHP Enrollees, July 1, 2019 to September 30, 2020

	Percentage of Enrollees Experiencing Homelessness or were at Risk During Quarter	Percentage of Enrollees Experiencing Homeless or were at Risk who Received Housing Services During Quarter	Percentage of Enrollees Experiencing Homeless or were at Risk who were No Longer Homeless by End of Quarter
Q3 2019	4%	38%	3%
Q4 2019	6%	44%	--
Q1 2020	7%	47%	4%
Q2 2020	8%	54%	10%
Q3 2020	9%	68%	7%

Source: MCP Quarterly Reports from July 1, 2019 to September 30, 2020.
Notes: "--" indicates samples of less than 11 enrollees. Housing services data is shown only for enrollees who were reported as homeless or at risk for homelessness.

Acute Care Utilization Groups in HHP

This section examines characteristics and health utilization of enrollees given their level of acute care service use. The data specifically inform the following HHP evaluation questions:

1. What was the acuity level of the enrollees including health and health risk profile indicators, such as aggregate inpatient, ED, and rehab SNF utilization?
2. How did patterns of health care service use among HHP enrollees change before and after HHP implementation?

UCLA examined the number of ED visits and hospitalizations of HHP enrollees prior to enrollment and identified five categories of enrollees including those with super utilization (10 or more ED visits or 4 or more hospitalizations a year), high utilization (5 or more ED visits or 2 or more hospitalizations), moderate utilization (2 or more ED visits or 1 or more hospitalization), low utilization (less than 2 ED visits or less than 1 hospitalization); and those at risk for high utilization (no ED visits or hospitalizations, but were eligible for HHP mostly due to multiple chronic conditions). UCLA examined the demographics, health status, and service utilization of these five groups.

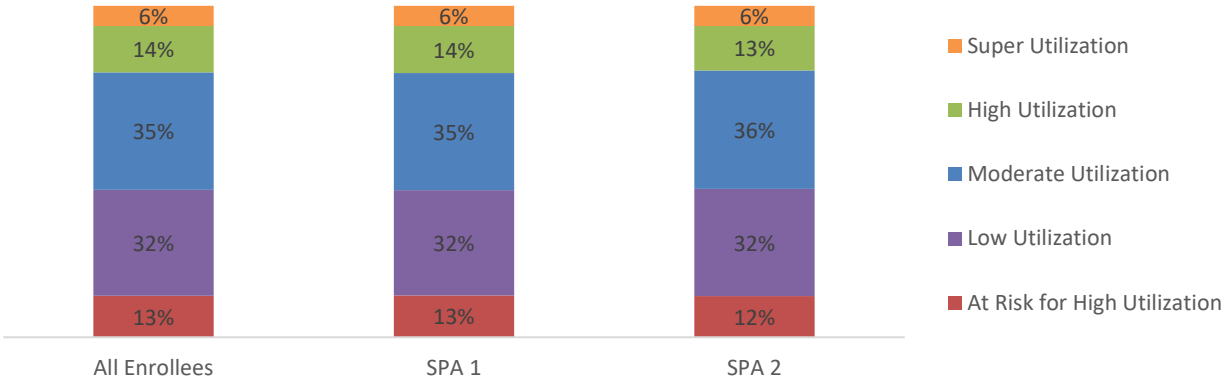
UCLA used demographic information from the Medi-Cal enrollment data, enrollment information and homeless status from MCP ad hoc Enrollment Reports and Quarterly HHP Reports, and Medi-Cal claims data to construct measures of health status prior to enrollment in HHP, healthcare utilization prior to enrollment in HHP, and metric trends before and during HHP. Medi-Cal data included both managed care and fee-for-service encounters. UCLA used a look-back period of 24 months for the measures of health status in line with the HHP Program Guide. The calculation of enrollee demographics was based on an enrollee's HHP enrollment date. Measures of chronic conditions and acuity eligibility criteria were created based on definitions in the HHP Program Guide and the Centers for Medicare and Medicaid Service's Chronic Condition Warehouse condition categories, using primary and secondary diagnosis codes in each Medi-Cal claim. Utilization measures were constructed following the HHP Technical Specifications. Further details can be found in Appendix A: Data Sources and Analytic Methods.

HHP enrollees enrolled for less than 31 days (1,436 enrollees) were excluded from these analyses. Of the 48,922 HHP enrollees (see HHP Enrollment and Enrollment Patterns), three enrollees were missing Medi-Cal data prior to HHP enrollment and were not included in these analyses.

Acute Care Utilization of HHP Enrollees

Exhibit 41 shows that the majority of HHP enrollees had moderate utilization (35%) or low utilization (32%). A small proportion of enrollees had super utilization (6%). The proportion of enrollees in each acute care utilization group in SPA 1 and SPA 2 was similar.

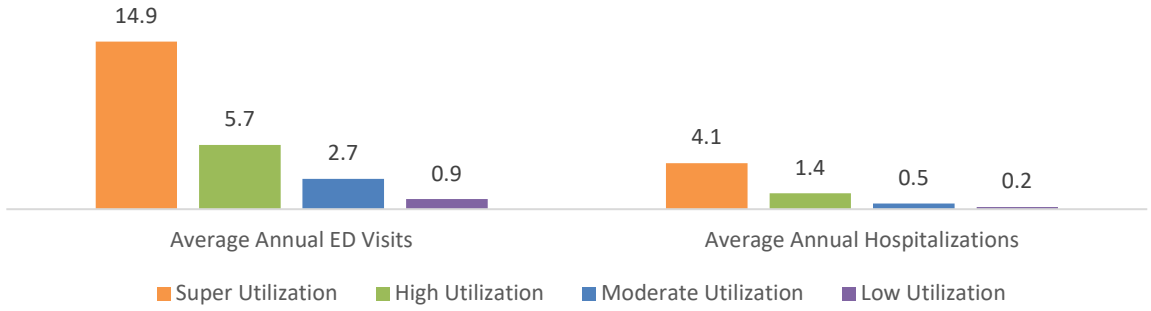
Exhibit 41: Proportion of HHP Enrollees in Acute Care Utilization Groups at HHP Enrollment, Overall and by SPA



Source: UCLA analysis of MCP Enrollment Reports from August 2019 and Quarterly HHP Reports through September 2020. HHP enrollment was limited to available data for the period between July 1, 2018 and September 30, 2020. Utilization data was calculated using Medi-Cal claims data from July 1, 2016 to September 30, 2020.
Notes: At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Further analysis showed that the average annual number of ED visits and hospitalizations for enrollees with super utilization were 14.9 and 4.1 vs. 2.7 and 0.5 for moderate utilization, respectively (Exhibit 42). Enrollees who were at risk for high utilization but had no ED visits or hospitalizations in the 24 months prior to enrollment are not shown.

Exhibit 42: Average Number of ED Visits and Hospitalizations by Acute Care Utilization Group, 24 months prior to Enrollment

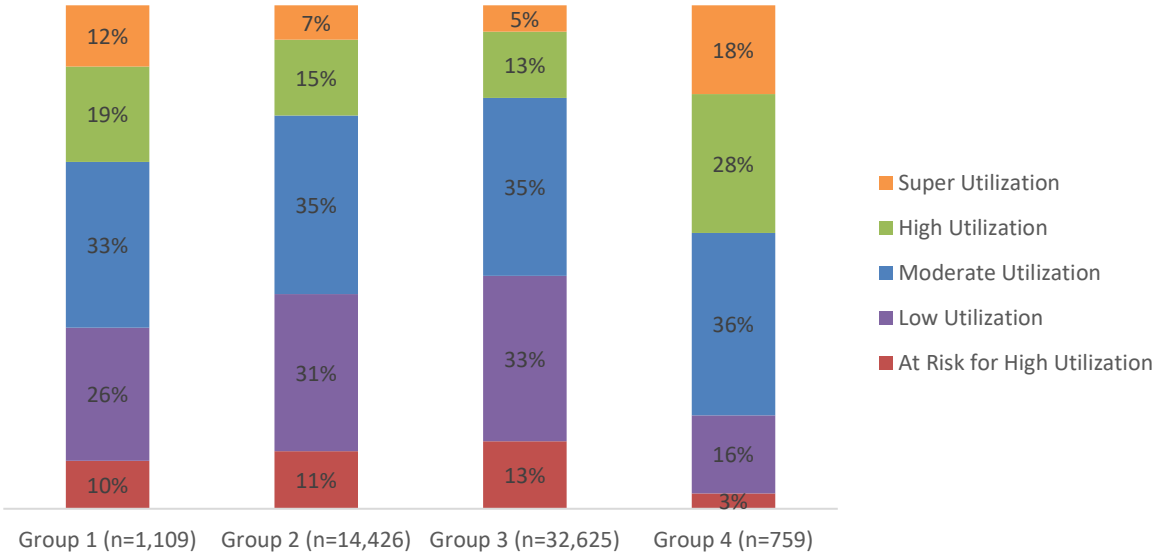


Source: MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2020. HHP enrollment was limited to available data for the period between July 1, 2018 and September 30, 2020. Utilization data was calculated using Medi-Cal claims data from July 1, 2016 to September 30, 2020.
Notes: Low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Acute Care Utilization of HHP Implementation Groups

Exhibit 43 shows the acute care utilization groups by implementation group. Group 1, which consisted of San Francisco County and the earliest HHP enrollees, included a higher proportion of enrollees with super utilization (12%) than Group 2 and Group 3. Group 4, which consisted of Orange County and the latest HHP enrollees, included the highest share (18%) of those with super utilization and high utilization (28%) and the lowest share of enrollees at risk for high utilization (3%).

Exhibit 43: HHP Acute Care Utilization Groups by HHP Implementation Groups



Source: UCLA analysis of MCP Enrollment Reports from August 2019 and Quarterly HHP Reports through September 2020. HHP enrollment was limited to available data for the period between July 1, 2018 and September 30, 2020.
Notes: At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year. Group 1 began SPA 1 enrollment in July 2018, Group 2 in January 2019, Group 3 in July 2019, and Group 4 in January 2020. SPA 2 enrollment began six months after the start of enrollment for each group.

The average length of enrollment varied by acute care utilization group and implementation group. Group 2, the largest implementation group through September 30, 2020, had the shortest average enrollment for enrollees with super utilization (257 days) and the longest average enrollment for enrollees at risk for high utilization (212 days; data not shown). Group 4, the smallest implementation group, had mostly an inverse pattern; enrollees with low utilization had the shortest enrollment (113 days) and enrollees with super utilization had the longest enrollment (154 days). Group 3 had consistent enrollment across all acute care groups except the at-risk group, which was longer than the other groups, and Group 1 had variable enrollment across all acute care groups, with enrollees with high utilization enrolled for the shortest period of time and enrollees with low utilization enrolled for the longest period of time. Further analysis of acute care utilization of new enrollees showed few differences in patterns over time through September 2020 (data not shown).

Demographics of HHP Enrollees by Acute Care Utilization Groups

Exhibit 44 shows demographics of HHP enrollees by acute care utilization groups. Enrollees with super utilization were most often younger than 65 (96%), male (49%), white (26%), and were experiencing homelessness (14.6%). Those at risk for high utilization were more often 50 years of age or older (78%), Asian (11%), and had a primary language other than English (40%). The super utilization group had the largest proportion of homeless enrollees (14.6%) and the at-risk group had the smallest proportion of homeless enrollees (5.6%).

Exhibit 44: Demographics of HHP Acute Care Utilization Groups at the Time of HHP Enrollment

		Super Utilization	High Utilization	Moderate Utilization	Low Utilization	At risk for High Utilization
Enrollees	N	2,967	6,875	17,303	15,634	6,140
Age (at time of enrollment)	% 0-17	2%	5%	11%	7%	1%
	% 18-34	18%	18%	17%	10%	5%
	% 35-49	30%	26%	23%	19%	16%
	% 50-64	47%	45%	44%	54%	62%
	% 65+	4%	5%	6%	10%	16%
Gender	% male	49%	41%	39%	40%	43%
Race/Ethnicity	% White	26%	24%	21%	20%	20%
	% Latinx	37%	42%	47%	48%	44%
	% African American	23%	20%	19%	16%	14%
	% Alaskan Native or American Indian	0%	0%	0%	0%	0%
	% Asian	2%	2%	3%	5%	11%
	% Native Hawaiian and Pacific Islander	1%	1%	1%	1%	2%
	% other/unknown	10%	9%	9%	10%	10%
Primary Language	% speak English	86%	81%	75%	67%	60%
Enrolled in Medi-Cal full-scope during the year prior to enrollment	Average number of months	11.49	11.78	11.88	11.94	11.78
Homelessness	Experienced homelessness during enrollment	14.6%	10.9%	7.9%	6.2%	5.6%

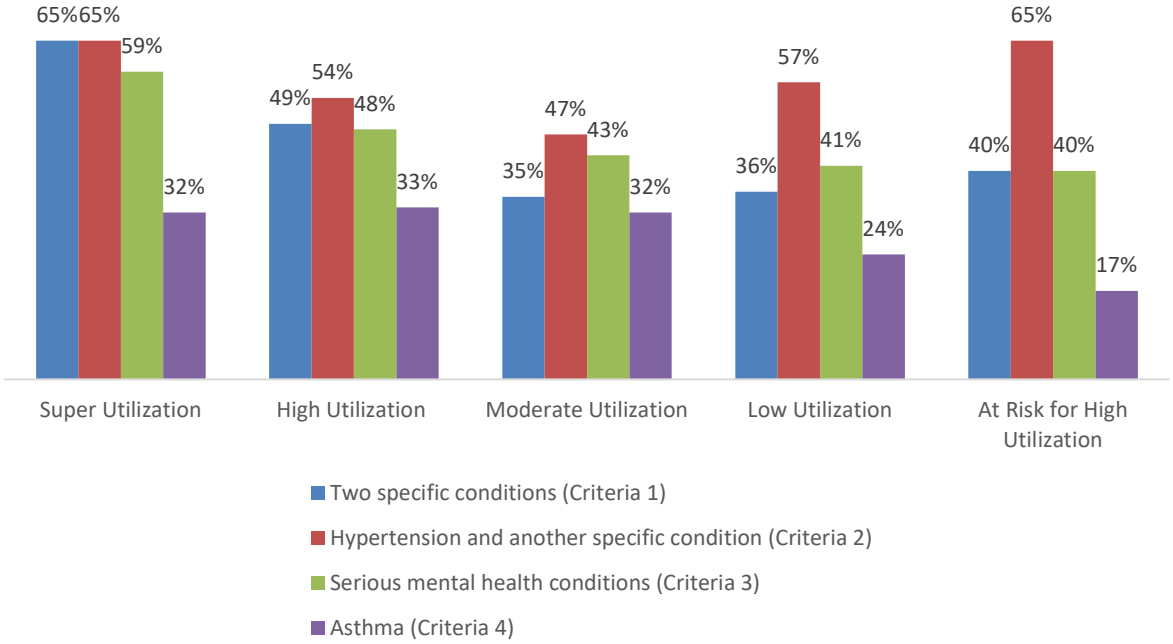
Source: UCLA analysis of Medi-Cal enrollment data from July 1, 2016 to September 30, 2020 and Quarterly HHP Reports. Demographics were reported at the time of enrollment into HHP.
Notes: Homeless data was not reported for 720 enrollees. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year,

moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Health Status of HHP Enrollees by Acute Care Utilization Groups

Exhibit 45 shows the proportion of enrollees in each acute care utilization group that met a given HHP chronic condition eligibility criteria. Data showed highest prevalence of enrollees who met criteria 2 (hypertension and another specific condition) and lowest prevalence of criteria 4 among all acute care utilization groups. There were variations in the criteria as well. For example, the majority of enrollees with super utilization met criteria 1 (two specific chronic conditions; 65%) but 49% of enrollees with high utilization and 35% of enrollees with moderate utilization met that criteria.

Exhibit 45: HHP Acute Care Utilization Groups by Chronic Condition Eligibility Criteria, 24 Months Prior to Enrollment



Source: UCLA analysis of Medi-Cal claims data from July 1, 2016 to September 30, 2019.
Notes: At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year. Criteria 1 includes any two of the following conditions: chronic obstructive pulmonary disease, diabetes, traumatic brain injury, chronic or congestive heart failure, coronary artery disease, chronic liver disease, chronic renal (kidney) disease, dementia, substance use disorders. Criteria 2 includes hypertension and one of the following: chronic obstructive pulmonary disease, diabetes, coronary artery disease, chronic or congestive heart failure. Criteria 3 includes one of the following: major depression disorders, bipolar disorder, psychotic disorders including schizophrenia. Criteria 4 includes asthma. HHP enrollees may meet multiple criteria.

Exhibit 46 shows the most frequent physical and behavioral health conditions of acute care utilization groups. Hypertension was the most common condition for all enrollee groups. However, chronic kidney disease was the second most common condition among enrollees with super utilization (55%) followed by mental health conditions like depression (53%) and anxiety (53%). Diabetes was the second most common condition in all other acute care utilization groups.

Exhibit 46: Top Ten Most Frequent Physical and Behavioral Health Conditions among HHP Enrollees by Acute Care Utilization Group Prior to HHP Enrollment

Super Utilization (N=2,967)	High Utilization (N=6,875)	Moderate Utilization (N=17,303)	Low Utilization (N=15,634)	At risk for high utilization (N=6,140)
Hypertension (78%)	Hypertension (67%)	Hypertension (59%)	Hypertension (69%)	Hypertension (78%)
Chronic Kidney Disease (55%)	Diabetes (45%)	Diabetes (42%)	Diabetes (52%)	Diabetes (63%)
Depression (53%)	Chronic Kidney Disease (45%)	Obesity (39%)	Hyperlipidemia (46%)	Hyperlipidemia (55%)
Anxiety (53%)	Depression (43%)	Depression (38%)	Obesity (41%)	Obesity (39%)
Diabetes (51%)	Depressive Disorder (40%)	Hyperlipidemia (37%)	Depression (36%)	Chronic Kidney Disease (38%)
Depressive Disorder (50%)	Obesity (39%)	Depressive Disorder (35%)	Chronic Kidney Disease (35%)	Depression (34%)
Anemia (48%)	Anxiety (39%)	Chronic Kidney Disease (34%)	Depressive Disorder (33%)	Depressive Disorder (32%)
Drug (48%)	Hyperlipidemia (38%)	Asthma (32%)	Anxiety (25%)	Rheumatoid Arthritis / Osteoarthritis (24%)
Fibromyalgia, Chronic Pain and Fatigue (47%)	Fibromyalgia, Chronic Pain and Fatigue (34%)	Anxiety (30%)	Rheumatoid Arthritis / Osteoarthritis (25%)	Anxiety (21%)
Tobacco (42%)	Anemia (33%)	Fibromyalgia, Chronic Pain and Fatigue (26%)	Fibromyalgia, Chronic Pain and Fatigue (24%)	Fibromyalgia, Chronic Pain and Fatigue (20%)

Source: UCLA analysis of Medi-Cal claims data from July 1, 2016 to September 30, 2019. Physical and Behavioral Health condition categories were identified using the Chronic Condition Warehouse methodology.
Notes At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

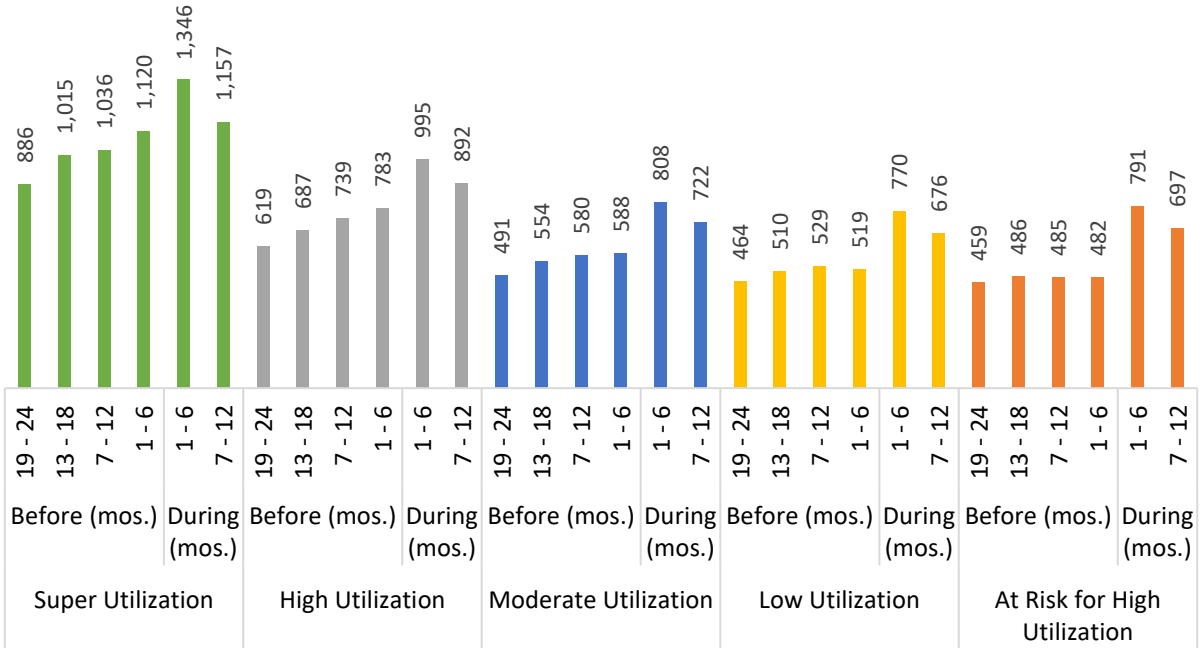
Health Service Utilization Trends of Acute Care Utilization Groups

UCLA examined the unadjusted trends in a number of different types of health services used per 1,000 member months for acute care utilization groups using Medi-Cal claims data. These measures were constructed per the HHP Technical Specifications when possible. UCLA examined trends in these measures for each enrollee in six month increments up to 24 months (1-6, 7-12, 13-18, and 19-24) before HHP enrollment and up to 12 months (1-6 and 7-12) during HHP.

Trends in Primary Care Services

Exhibit 47 shows that enrollees with super utilization had the lowest number of primary care services per 1,000 member months 19 to 24 months before enrollment (886);this number notably increased during months 1 to 6 of enrollment (1,346) with a decline 7 to 12 months during enrollment (1,157). Rates of primary care services were higher in the first year of HHP compared to before HHP. The same pattern was observed for other utilization groups though the numbers were lower. The number of services were relatively similar for enrollees with moderate or low utilization, and those at risk for high utilization.

Exhibit 47: Primary Care Services per 1,000 Member Months Before and During HHP Enrollment by Acute Care Utilization Group



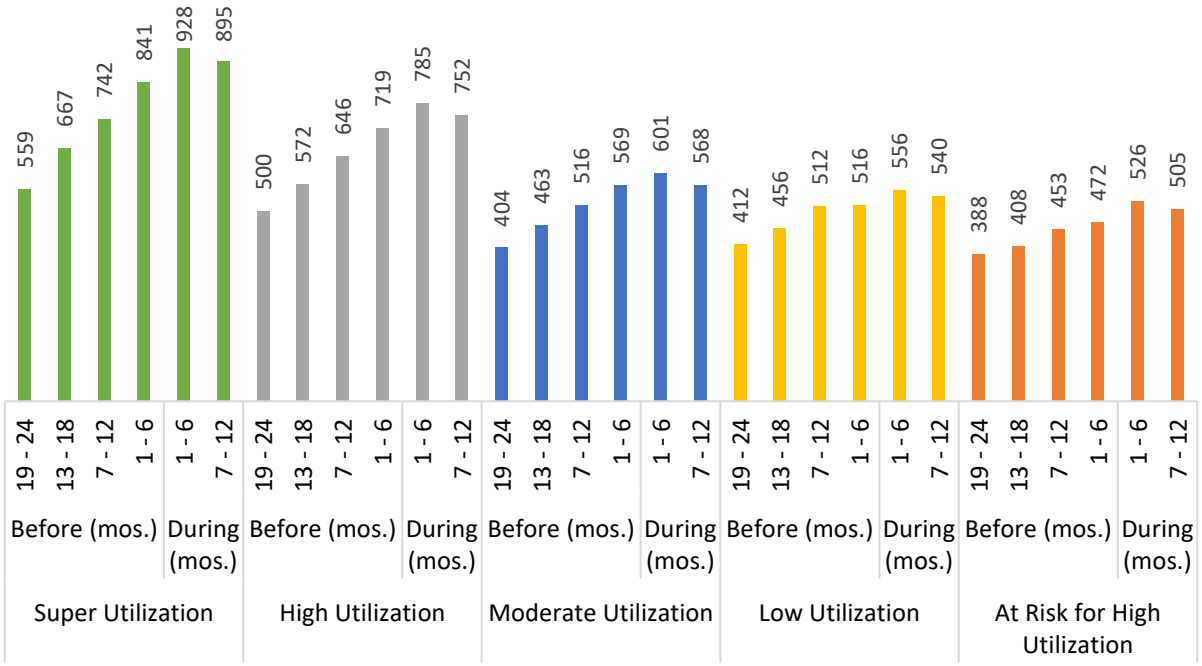
Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.

Notes: Service rates are unadjusted. Primary care services were identified as services with a primary care physician, physician assistant, or nurse practitioner per NUCC's Taxonomy code set. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year. Before (mos.) is the number of months before HHP. During (mos.) is the number of months after HHP enrollment.

Trends in Specialty Services

Exhibit 48 shows that enrollees with super utilization had the lowest number of specialty services per 1,000 member months 19 to 24 months before enrollment (559) and this number continued to increase through 1 to 6 months during enrollment (928) with a decline 7 to 12 months during enrollment (895). Rates of specialty services were higher in the first year of HHP compared to before HHP. The same pattern was observed for other utilization groups though the numbers were lower. The number of services were relatively similar for enrollees with moderate or low utilization, and those at risk for high utilization.

Exhibit 48: Specialty Services per 1,000 Member Months Before and During HHP Enrollment by Acute Care Utilization Group

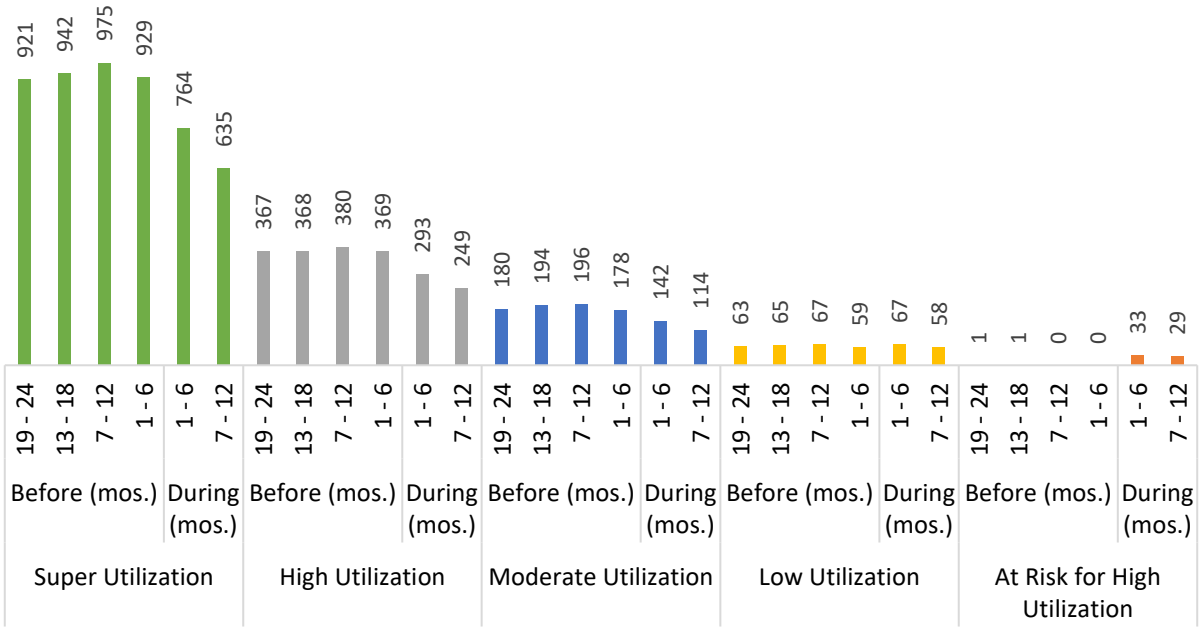


Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Service rates are unadjusted. Specialty care services were identified as services with a specialty physician, physician assistant, or nurse practitioner per NUCC's Taxonomy code set. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year. Before (mos.) is the number of months before HHP. During (mos.) is the number of months after HHP enrollment.

Trends in Emergency Department Visits

Exhibit 49 shows a decline in number of ED visits that did not result in a hospitalization per 1,000 member months among enrollees with super utilization from 19 to 24 months before enrollment (921) to 1 to 6 months during enrollment (635). Enrollees with high, moderate, and low utilization also had a decline in ED visits followed by discharge.

Exhibit 49: Emergency Department Visits per 1,000 Member Months from Before to During HHP Enrollment by Acute Care Utilization Group

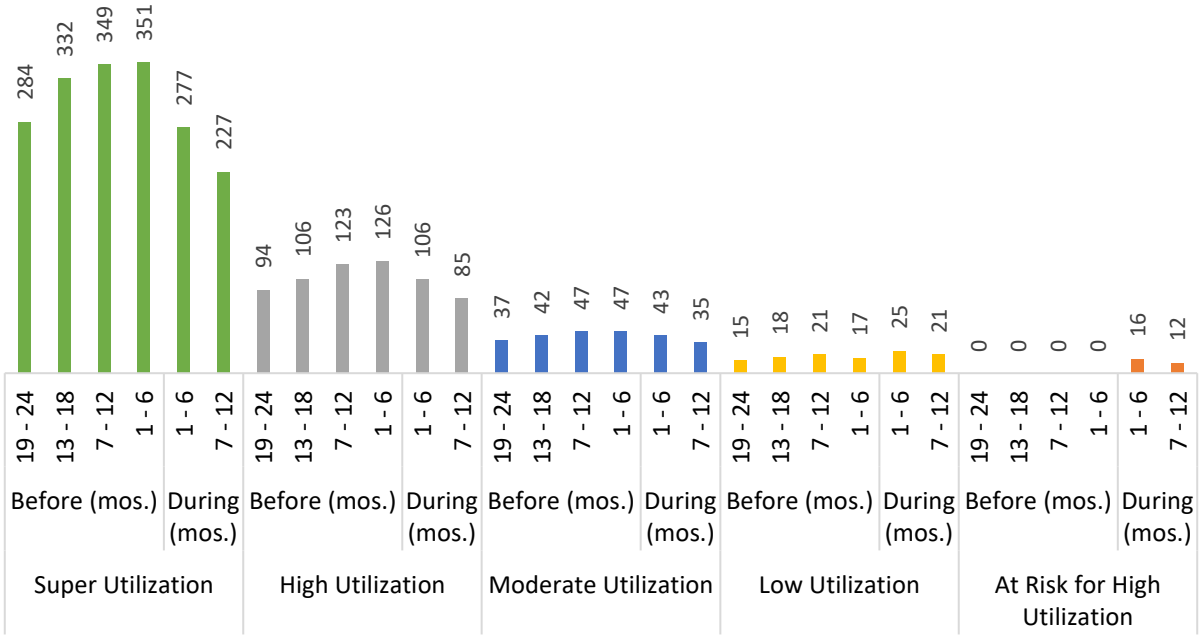


Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Only includes ED visits that did not result in hospitalization. Service rates are unadjusted. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year. Before (mos.) is the number of months before HHP. During (mos.) is the number of months after HHP enrollment.

Trends in Hospitalizations

Exhibit 50 shows that hospitalizations per 1,000 member months declined among enrollees with super utilization from 19 to 24 months before enrollment (284) to 1 to 6 months during enrollment (227). The same pattern was observed among those with high and moderate utilization.

Exhibit 50: Hospitalizations per 1,000 Member Months from Before to During HHP Enrollment by Acute Care Utilization Group

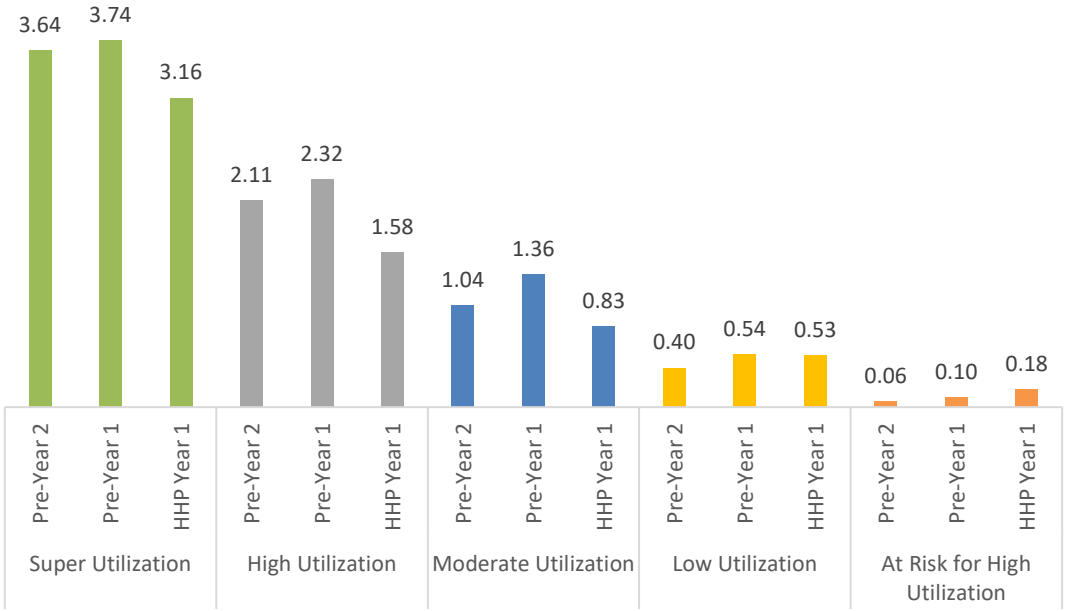


Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Service rates are unadjusted. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year. Before (mos.) is the number of months before HHP. During (mos.) is the number of months after HHP enrollment.

Trends in Admissions to a Long-Term Care Facility from the Community

Exhibit 51 shows the number of admissions to a skilled nursing or intermediate care facility from the community that resulted in short-term stays of up to 20 days per 1,000 member months. Trends for this metric were examined on an annual rather than semi-annual basis due to an enrollment requirement requiring one year of observation. The number of short-term stays declined from 3.64 in Pre-Year 2 to 3.16 in HHP Year 1 among enrollees with super utilization and the same pattern was observed among those with high and moderate utilization.

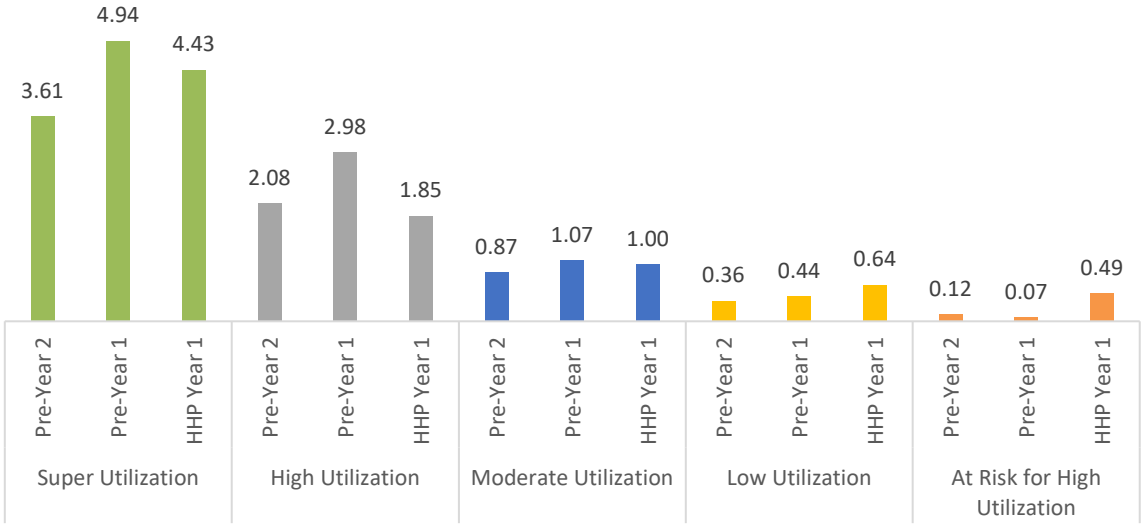
Exhibit 51: Admissions to a Long-Term Care Facility Resulting in a Short-Term Stay per 1,000 Member Months from Before to During HHP Enrollment by Acute Care Utilization Group



Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Short-term stay is defined as up to 20 days. Service rates are unadjusted. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 52 shows trends in the number of admissions to a long-term care facility from the community that resulted in a medium-term stay (21 to 100 days) per 1,000 member months. Medium-term stays increased from 3.61 in Pre-Year 2 to 4.94 in Pre-Year 1 for enrollees with super utilization. By HHP Year 1, the rate had declined to 4.43 for this group. Similar increases prior to enrollment and declines during enrollment were observed for enrollees with high and moderate utilization.

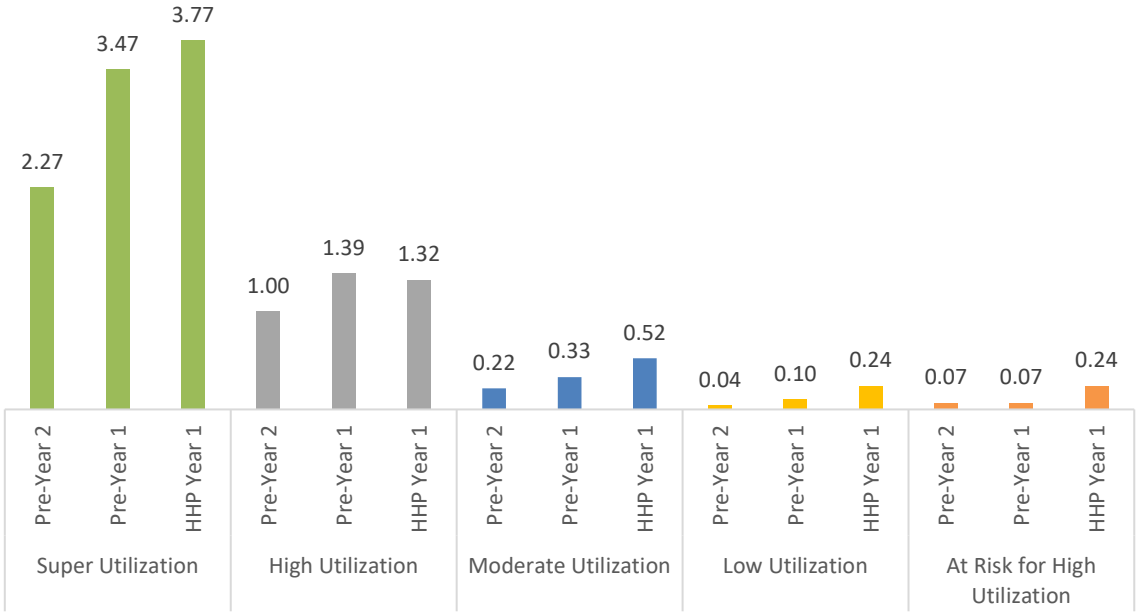
Exhibit 52: Admissions to a Long-term Care Facility Resulting in a Medium-Term Stay per 1,000 Member Months from Before to During HHP Enrollment by Acute Care Utilization Group



Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Medium-term stay is defined as 21 to 100 days. Service rates are unadjusted. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 53 shows trends in the number of admissions to a long-term care facility from the community that resulted in a long-term stay (101 days or more) per 1,000 member months. Long-term stays increased from 2.27 in Pre-Year 2 to 3.77 in HHP Year 1 for enrollees with super utilization, and increased for all other acute care utilization groups except enrollees with high utilization.

Exhibit 53: Admissions to a Long-term Care Facility Resulting in a Long-Term Stay per 1,000 Member Months from Before to During HHP Enrollment by Acute Care Utilization Group



Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020.
Notes: Long-term stay is defined as 101 or more days. Service rates are unadjusted. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

HHP Outcomes

This section addresses the following HHP evaluation questions:

1. How did patterns of health care service use among HHP enrollees change before and during HHP implementation?
2. Did rates of acute care services, length of stay for hospitalizations, nursing home admissions and length of stay decline?
3. Did rates of other services such as substance use treatment or outpatient visits increase?
4. How did HHP core health quality measures improve before and after HHP implementation?
5. Did patient outcomes (e.g., controlled blood pressure, screening for clinical depression) improve before and after HHP implementation?

UCLA used Medi-Cal claims data, which included both managed care and fee-for-service encounters, to construct HHP metrics per the HHP Technical Specifications. UCLA measured trends before and during HHP for each metric based on the date of an individual HHP enrollee's enrollment. UCLA did not examine trends in the second year of HHP enrollment because as of September 2020, only 20% of enrollees had enrollment longer than 12 months and 74% of those enrollees had less than six months of enrollment in the second year (further details can be found in Appendix G: Enrollees with More than One Year of HHP Enrollment). UCLA restricted the sample to enrollees with a minimum 1 month of HHP enrollment and calculated all metrics per member month by SPA and overall. UCLA examined trends for all HHP metrics for SPA 1 and SPA 2 per HHP metric specifications and further created and examined the trend for seven optional measures to further describe changes in utilization of services during HHP.

UCLA examined changes in trends before and during HHP using a difference-in-difference (DD) analysis. The DD analyses differed for HHP specified metrics that required one year of observation from metrics that did not require one year of observation and for optional measures. For HHP specified metrics with a one year requirement, the DD analyses measured changes from Pre-HHP Year 2 to Pre-HHP Year 1 for both HHP enrollees and the control group; the change from Pre-HHP Year 1 to HHP Year 1 for both HHP enrollees and the control group; and the difference between the changes for HHP enrollees vs. the control group.

For the remaining metrics and measures, UCLA examined changes in six month increments up to 24 months (1-6, 7-12, 13-18, and 19-24) before HHP enrollment and up to 12 months (1-6 and 7-12) during HHP. For these, the DD analysis measured the change from 19-24 vs. 1-6 months before HHP for both HHP enrollees and the control group; the change during HHP from

1-6 to 7-12 months for both HHP enrollees and the control group; and the difference between the changes in HHP enrollees vs. the control group. The shorter timeframe for examining metrics allowed for a clearer assessment of changes during the early phase of HHP implementation. The findings were not subject to potential seasonality in service utilization due to rolling enrollment throughout the year and measuring change following the date of enrollment per beneficiary. Further details can be found in Appendix A: Data Sources and Analytic Methods.

HHP Utilization Metrics

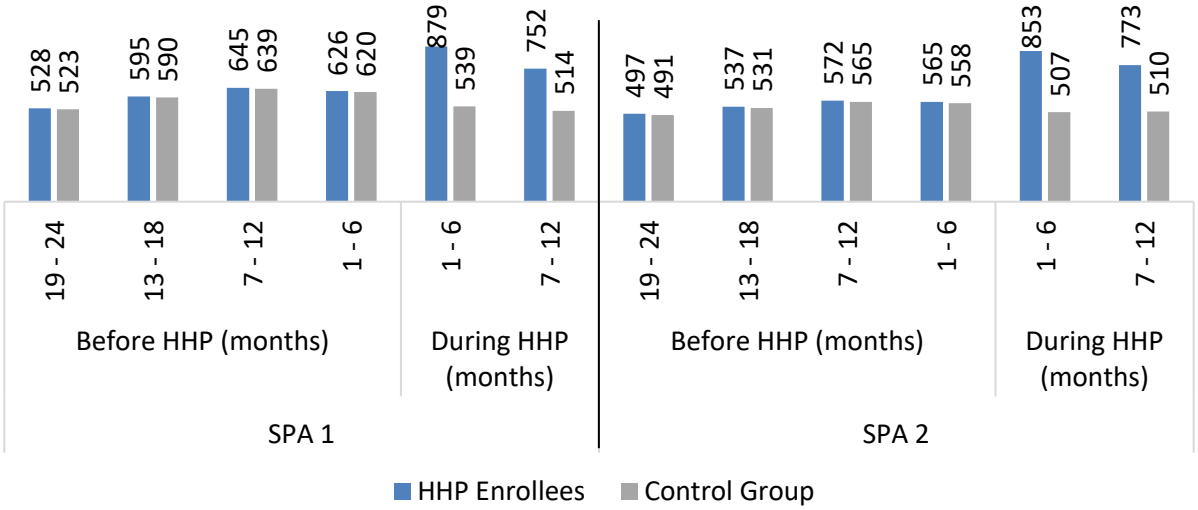
Trends in three HHP specified metrics and six optional measures were examined on a semi-annual basis. Trends in one HHP specified metric were examined on an annual basis.

Outpatient Utilization

Primary Care Services

UCLA calculated the number of primary care services per 1,000 member months as an optional measure of service utilization under HHP. There is no intended direction for this measure. Primary care services are likely to increase due to unmet need and increased access, but this use is likely to decrease once health needs are addressed. Exhibit 54 shows an increase in the number of primary care services before HHP by 33 services per 1,000 member months every 6 months for SPA 1 enrollees. The rate further increased following enrollment and during the first six months of HHP (879 primary care services per 1,000 member months). This rate declined by 126 services per 1,000 member months in the next 6 months but still remained higher than the control group. The decline from before to during HHP was significantly greater for HHP enrollees than the control group by 101 (DD). A similar trend was observed for SPA 2 enrollees.

Exhibit 54: Trends in Primary Care Services per 1,000 Member Months Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	33*	-126*	-159*	
	Control Group	32*	-26*	-58*	-101*
SPA 2	HHP Enrollees	23*	-80*	-102*	
	Control Group	22*	3	-20*	-83*
Overall	HHP Enrollees	31*	-116*	-147*	
	Control Group	30*	-20*	-50*	-97*

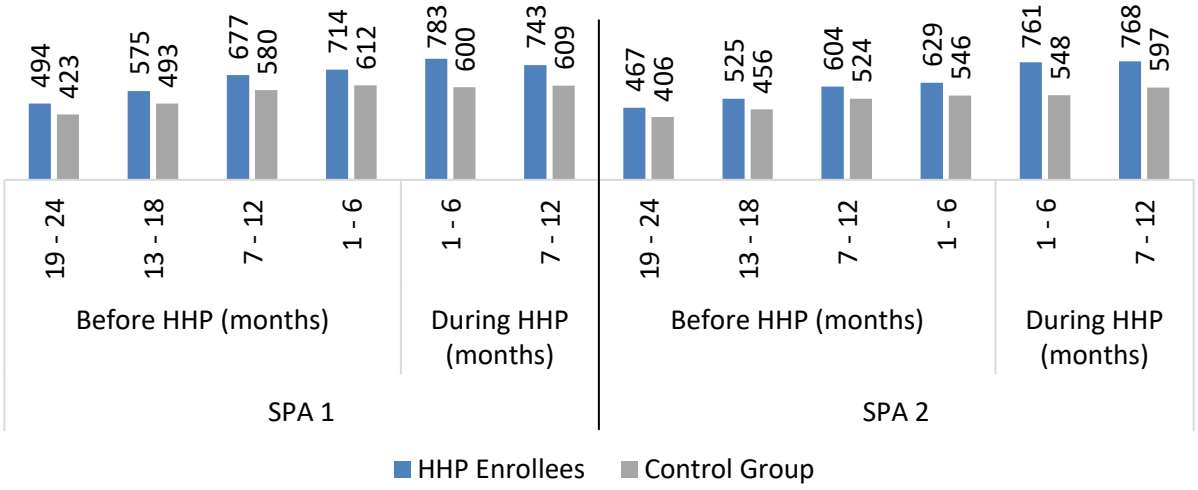
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. Primary care services were identified as services with a primary care physician, physician assistant, or nurse practitioner per NUCC's Taxonomy code set. SPA 1 includes enrollees with chronic

conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Specialty Care Services

UCLA calculated the number of specialty care services per 1,000 member months as an optional measure of service utilization under HHP. There is no intended direction for this measure. Specialty care services are likely to increase due to unmet need and increased access, but this use is likely to decrease once health needs are addressed. Exhibit 55 shows an increase in the number of specialty care services before HHP by 74 services per 1,000 member months every 6 months for SPA 1 enrollees. The rate further increased following enrollment and during the first six months of HHP (714 specialty care services per 1,000 member months). This rate declined by 40 services per 1,000 member months in the next 6 months but still remained higher than the control group. The decline from before to during HHP was significantly greater for HHP enrollees than the control group by 60 (DD). For SPA 2 enrollees, there was no change in specialty service use after its initial increase during HHP but the number of specialty services declined significantly from before HHP and in comparison to the control group (49, DD).

Exhibit 55: Trends in Specialty Services per 1,000 Member Months Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	74*	-40*	-114*	
	Control Group	63*	9*	-54*	-60*
SPA 2	HHP Enrollees	54*	7	-47*	
	Control Group	47*	49*	2	-49*
Overall	HHP Enrollees	69*	-30*	-100*	
	Control Group	60*	17*	-42*	-57*

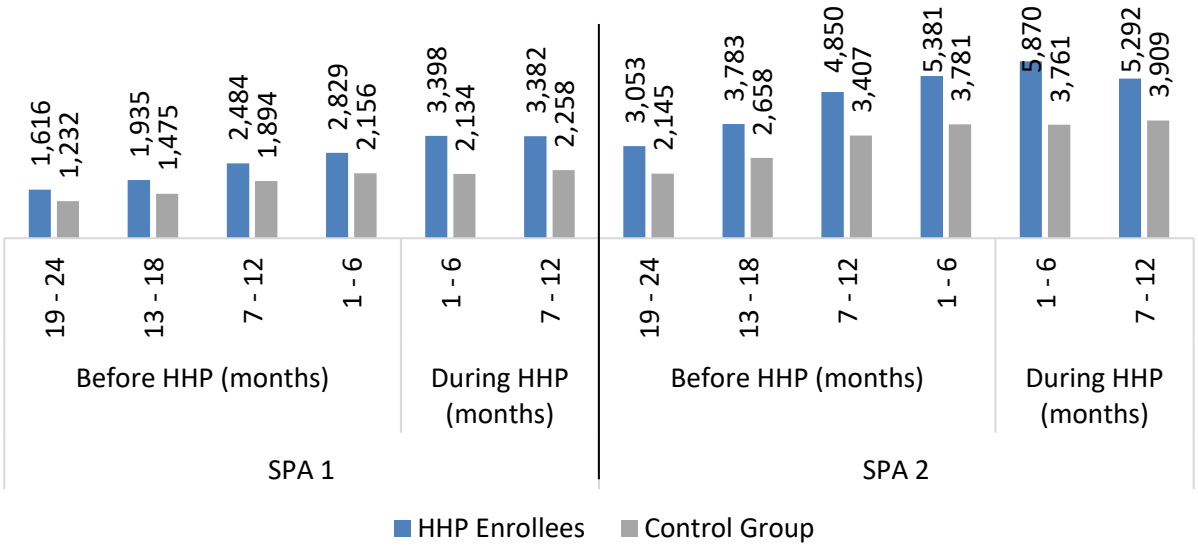
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. Specialty care services were identified as services with a specialty physician, physician assistant, or nurse practitioner per NUCC's Taxonomy code set. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Mental Health Services

UCLA calculated the number of mental health services per 1,000 member months as an optional measure of service utilization under HHP. There is no intended direction for this measure. Mental health services are likely to increase due to unmet need and increased access, but this use is likely to decrease once health needs are addressed. Exhibit 56 shows that mental health services further increased following enrollment for SPA 1 enrollees and remained above the control group, but there was no significant change in the number of mental health services during HHP. Rates were declining by 420 services per 1,000 member months compared to before HHP and the decline was significantly greater for HHP enrollees than the control group by 236 (DD). For SPA 2 enrollees, data show a significant increase before HHP, a significant

decline during HHP (578 services per 1,000 members), and a significantly greater decline from before to during HHP compared to the control group (957 services, DD).

Exhibit 56: Trends in Mental Health Services per 1,000 Member Months Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	404*	-16	-420*	
	Control Group	308*	124*	-184*	-236*
SPA 2	HHP Enrollees	776*	-578*	-1,354*	
	Control Group	545*	148	-398*	-957*
Overall	HHP Enrollees	482*	-133*	-615*	
	Control Group	358*	129*	-229*	-386*

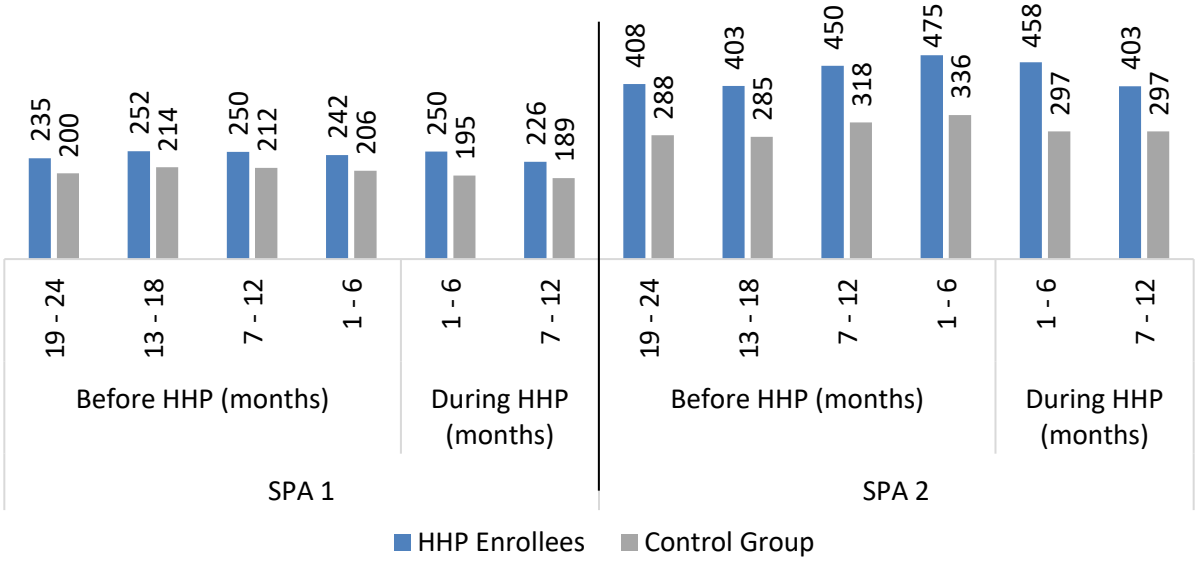
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. Mental health services were identified as services with a mental health procedure code. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Substance Use Disorder Services

UCLA calculated the number of substance use disorder (SUD) services per 1,000 member months as an optional measure of service utilization under HHP. There is no intended direction for this measure. SUD services are likely to increase due to unmet need and increased access, but this use is likely to decrease once health needs are addressed. Exhibit 57 shows a small but significant increase (2 services per 1,000 member months) every 6 months before HHP for SPA 1 enrollees. During HHP this rate declined significantly by 24 services and the change from

before to during HHP was a significantly greater decline for HHP enrollees than the control group by 19 services (DD). A similar pattern was observed for SPA 2 enrollees, though the magnitude of change before and during HHP was greater.

Exhibit 57: Trends in Substance Use Disorder Services per 1,000 Member Months Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	2*	-24*	-26*	
	Control Group	2*	-6*	-8*	-19*
SPA 2	HHP Enrollees	22*	-56*	-78*	
	Control Group	16*	0	-16*	-62*
Overall	HHP Enrollees	7*	-31*	-37*	
	Control Group	5*	-4*	-9*	-28*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SUD services were identified as services with a SUD treatment procedure code or an NDC for pharmacotherapy. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

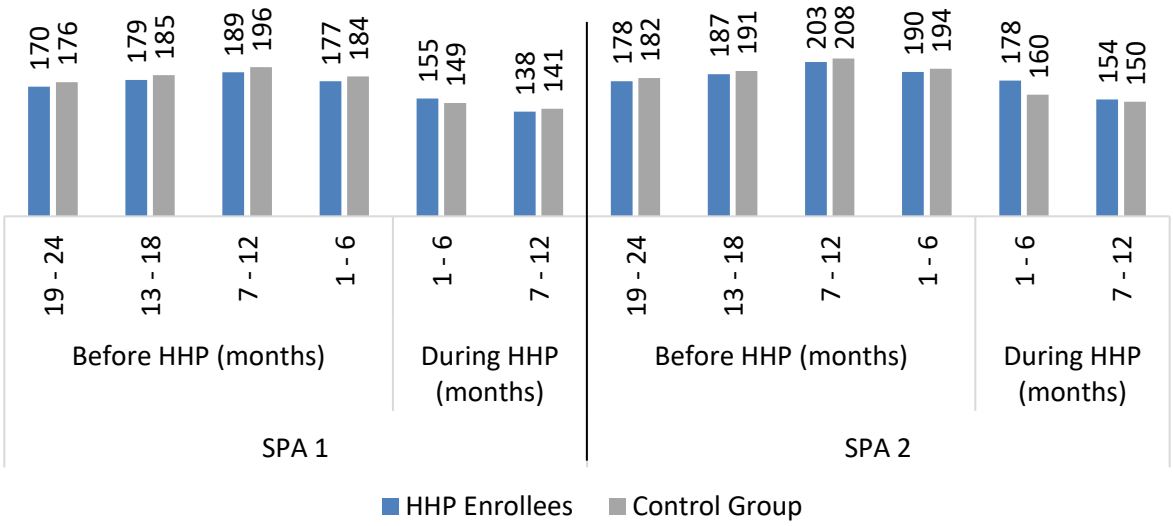
Emergency Department Utilization

Ambulatory Care: Emergency Department Visits

Ambulatory Care: Emergency Department Visits is an HHP core metric that measures the rate of emergency department (ED) visits that do not result in hospitalization per 1,000 member months. The intended direction of the metric and DD is decrease.

Exhibit 58 shows an increase in the number of ED visits before HHP by 2 visits per 1,000 member months every 6 months for SPA 1 enrollees. This rate declined during HHP by 17 visits and the decline from before to during HHP was significantly greater than the control group by 9 visits (DD). A similar trend was observed for SPA 2 enrollees with a greater decline compared to the control group (15 visits, DD).

Exhibit 58: Trends in Ambulatory Care: Emergency Department Visits per 1,000 Member Months Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	2*	-17*	-20*	
	Control Group	2*	-8*	-10*	-9*
SPA 2	HHP Enrollees	4*	-25*	-29*	
	Control Group	4*	-10*	-14*	-15*
Overall	HHP Enrollees	3*	-19*	-22*	
	Control Group	3*	-8*	-11*	-11*

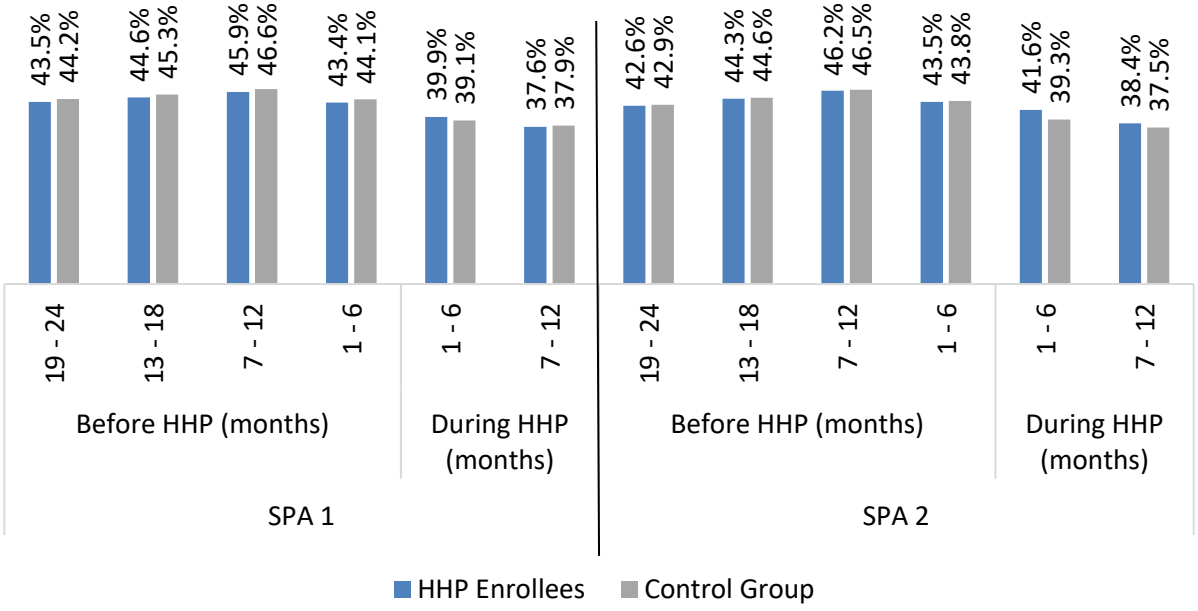
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: Includes ED visits that do not result in hospitalization. * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During

HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Any Emergency Department Visit

UCLA created a second measure to assess the likelihood of any ED visit, which is distinct from the HHP core metric of number of ED visits. The intended direction of the measure and DD is decrease. Exhibit 59 shows a significantly greater decline in the proportion of enrollees with any ED visit during HHP for SPA 1 (2.4%) and SPA 2 (3.2%). For SPA 1 enrollees, the decline in this proportion compared to before HHP was greater than that of the control group by 1.1% (DD).

Exhibit 59: Trends in Percentage of Patients with Any ED Visits Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	0.0%	-2.4%*	-2.3%*	
	Control Group	0.0%	-1.3%*	-1.2%*	-1.1%*
SPA 2	HHP Enrollees	0.3%*	-3.2%*	-3.5%*	
	Control Group	0.3%*	-1.9%*	-2.2%*	-1.3%
Overall	HHP Enrollees	0.0%	-2.5%*	-31.5%*	
	Control Group	0.0%	-1.4%*	-30.8%*	-1.1%*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: Includes ED visits that do not result in hospitalization. * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change

During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

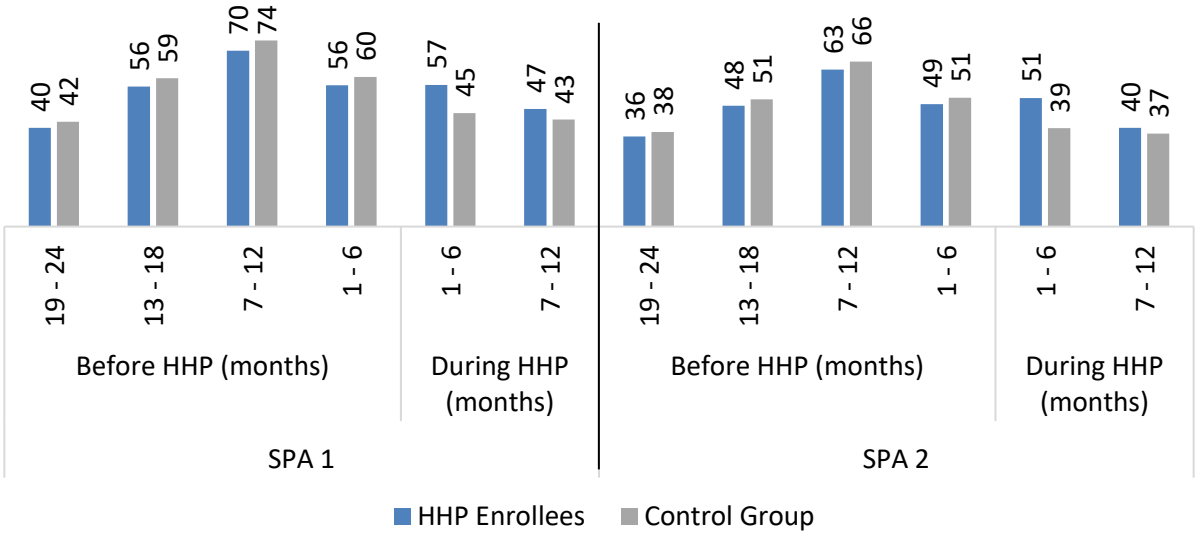
Hospital Utilization

Inpatient Utilization

Inpatient Utilization is an HHP core metric that measures the rate of acute inpatient care and services per 1,000 member months. The intended direction of the metric and DD is decrease.

Exhibit 60 shows an increase in the number of hospitalizations before HHP by 6 stays per 1,000 member months every 6 months for SPA 1 enrollees. During HHP, this rate declined by 10 stays and the decline from before to during HHP was significantly greater for HHP enrollees than the control group by 7 (DD). A similar trend was observed for SPA 2 enrollees.

Exhibit 60: Trends in Inpatient Utilization per 1,000 Member Months Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	6*	-10*	-15*	
	Control Group	6*	-3*	-9*	-7*
SPA 2	HHP Enrollees	4*	-12*	-16*	
	Control Group	5*	-2	-7*	-10*
Overall	HHP Enrollees	5*	-10*	-15*	
	Control Group	6*	-2*	-8*	-7*

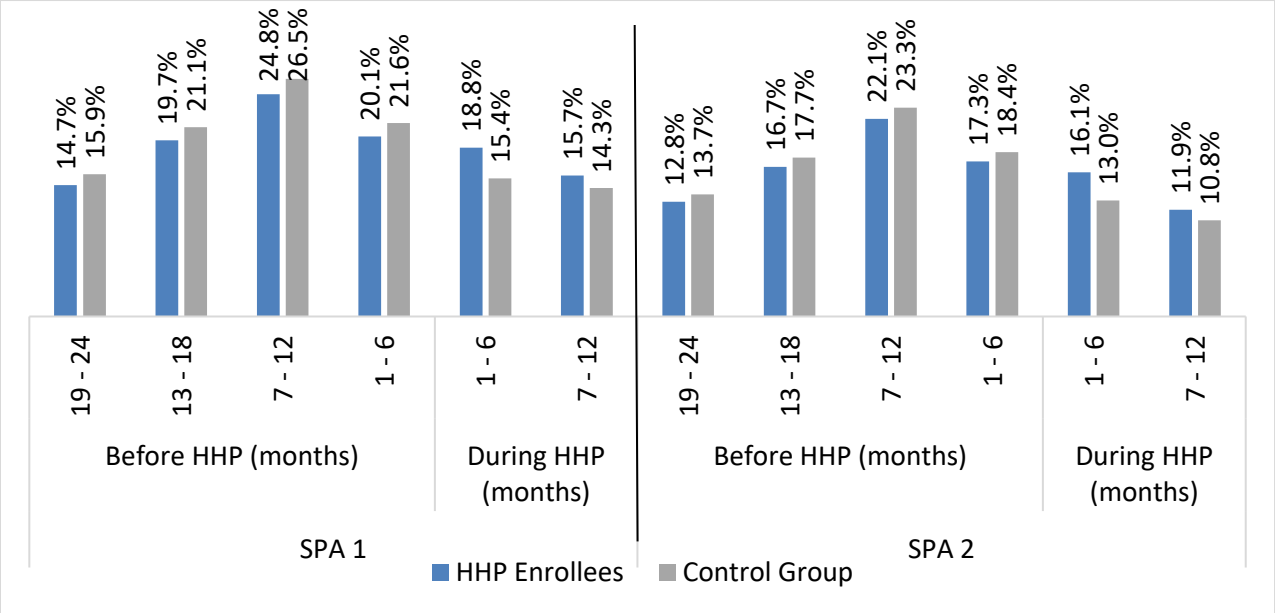
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before

HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Any Hospitalization

UCLA created a second measure to assess the likelihood of any hospitalization, which is distinct from the HHP core metric of number of hospitalizations. The intended direction of the measure and DD is decrease. Exhibit 61 shows a significantly greater decline in the proportion of enrollees with any hospitalization during HHP for SPA 1 (3.1%) and SPA 2 (4.2%). The decline in this proportion compared to before HHP was greater than that of the control group by 1.9% (DD) for both SPA 1 and SPA 2 enrollees.

Exhibit 61: Trends in Percentage of Patients with Any Hospitalization Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	1.8%*	-3.1%*	-4.9%*	
	Control Group	1.9%*	-1.1%*	-3.0%*	-1.9%*
SPA 2	HHP Enrollees	1.5%*	-4.2%*	-5.7%*	
	Control Group	1.6%*	-2.2%*	-3.8%*	-1.9%*
Overall	HHP Enrollees	1.8%*	-3.3%*	-18.1%*	
	Control Group	1.8%*	-1.3%*	-17.1%*	-1.9%*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.

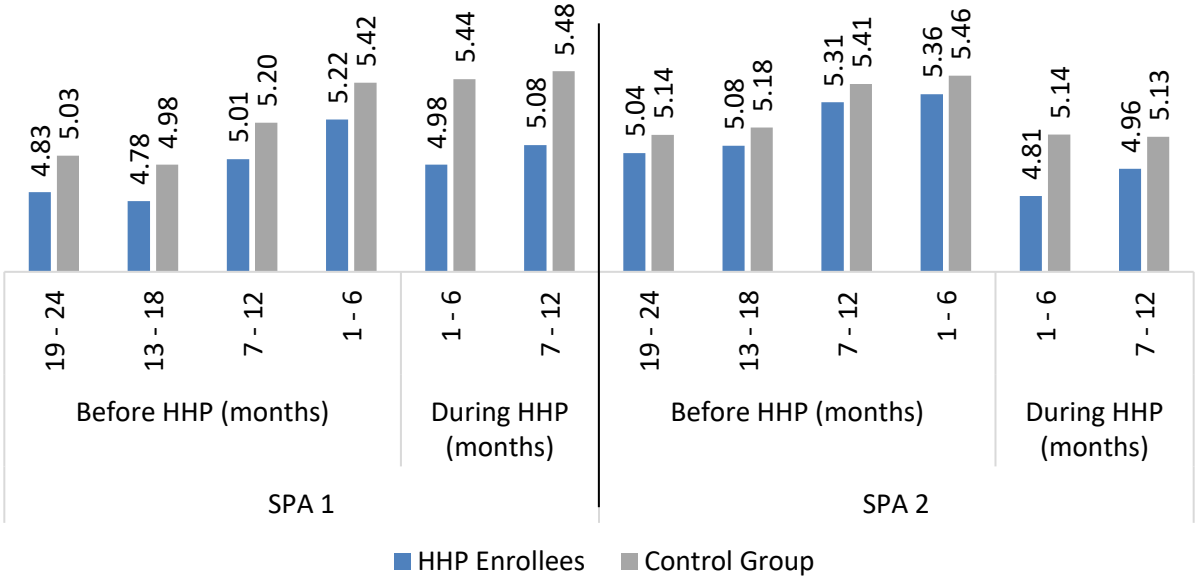
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6

months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Inpatient Length of Stay

Inpatient Length of Stay is an HHP core metric that measures the average length of stay per hospitalization. The intended direction of the metric and DD is decrease. Exhibit 62 shows that lengths of stay were increasing before HHP for both SPA 1 and SPA 2, but these rates did not change during HHP, and the trends were similar with the control group.

Exhibit 62: Trends in Inpatient Length of Stay Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	0.13*	0.11	-0.03	0.06
	Control Group	0.13*	0.04	-0.09	
SPA 2	HHP Enrollees	0.11*	0.15	0.04	0.16
	Control Group	0.11*	-0.01	-0.12	
Overall	HHP Enrollees	0.13*	0.11	-0.01	0.08
	Control Group	0.13*	0.03	-0.09	

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Institution Utilization

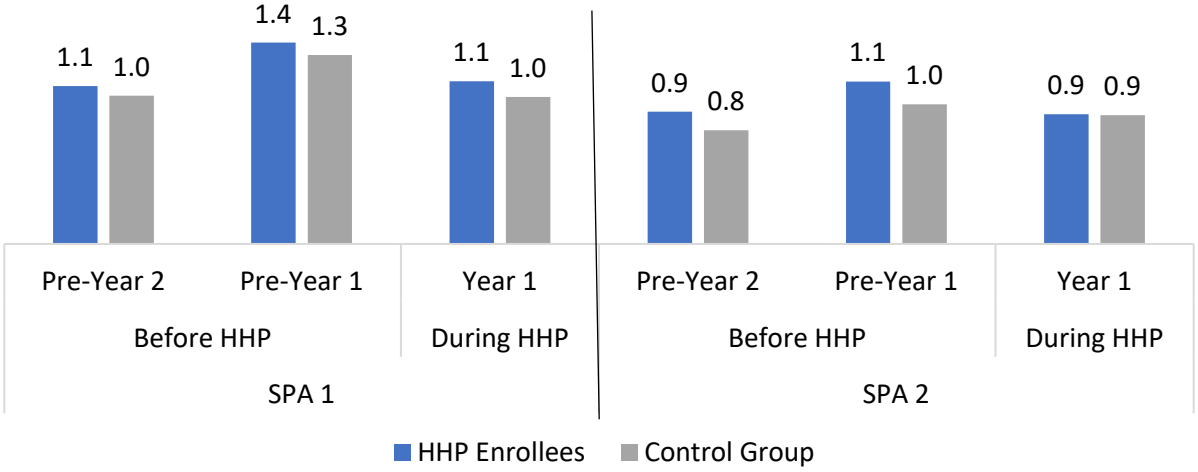
Admission to an Institution from the Community

Admission to an Institution from the Community is an HHP core metric that measures the number of admissions to an institutional facility among individuals age 18 and older residing in the community for at least one month. The rate is reported for short stays (<20 days), medium stays (21-100 days) and long stays (>100 days). The criteria that determines whether admissions come from the community requires a full year of data. The intended direction of the metric and DD is decrease.

Short Term

Exhibit 63 shows a significant decrease in short-term admissions between the change before HHP and the change Pre-Year 1 to HHP Year 1 for SPA 1 enrollees (0.6 admissions per 1,000 member months) and SPA 2 enrollees (0.4 admissions), but these trends were similar to that of the respective control groups.

Exhibit 63: Trends in Admissions to an Institution from the Community (Short-Term Stay) Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	0.3*	-0.3*	-0.6*	
	Control Group	0.3*	-0.3*	-0.6*	0.0
SPA 2	HHP Enrollees	0.2*	-0.2	-0.4*	
	Control Group	0.2*	-0.1	-0.3	-0.2
Overall	HHP Enrollees	0.3*	-0.3*	-0.5*	
	Control Group	0.3*	-0.2*	-0.5*	0.0

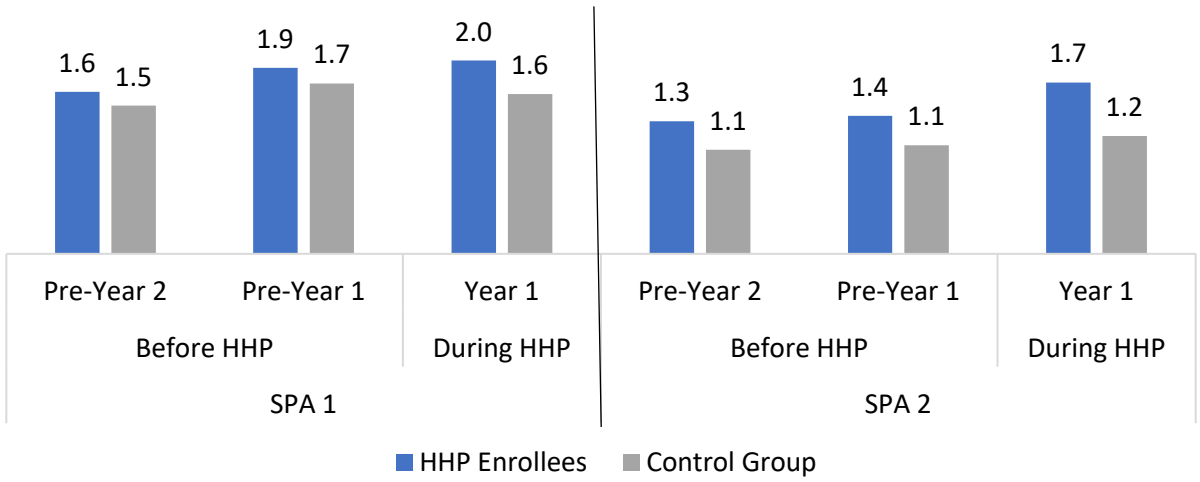
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.

Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Medium Term

Exhibit 64 shows no significant changes in medium-term admissions from Pre-Year 1 to HHP Year 1 for HHP SPA 1 and SPA 2 enrollees and the trends between HHP enrollees and their respective control groups were similar.

Exhibit 64: Trends in Admissions to an Institution from the Community (Medium-Term Stay) Before and During HHP by SPA as of September 30, 2020



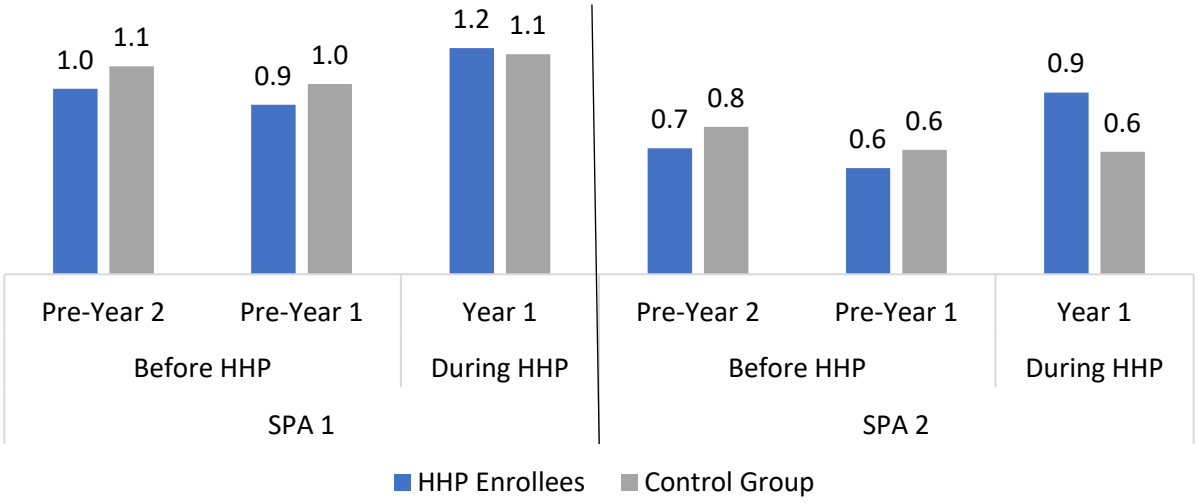
		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	0.2*	0.1	-0.2	
	Control Group	0.2*	-0.1	-0.3*	0.2
SPA 2	HHP Enrollees	0.1	0.3	0.3	
	Control Group	0.0	0.1	0.1	0.2
Overall	HHP Enrollees	0.2*	0.1	-0.1	
	Control Group	0.2*	-0.1	-0.3*	0.2

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Long term

Exhibit 65 shows a small but significant increase in long-term admissions from Pre-Year 1 to HHP Year 1 for HHP SPA 1 (0.3 admissions per 1,000 member months) and SPA 2 (0.4 admissions) enrollees. The change from before to during HHP among SPA 1 HHP enrollees was similar to the control group but among SPA 2 enrollees was significantly greater than the control group by 0.4 admissions (DD).

Exhibit 65: Trends in Admissions to an Institution from the Community (Long-Term Stay) Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	-0.1	0.3*	0.4*	
	Control Group	-0.1	0.2	0.2*	0.1
SPA 2	HHP Enrollees	-0.1	0.4*	0.5*	
	Control Group	-0.1	0.0	0.1	0.4*
Overall	HHP Enrollees	-0.1*	0.3*	0.4*	
	Control Group	-0.1*	0.1	0.2*	0.2*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

HHP Process Metrics

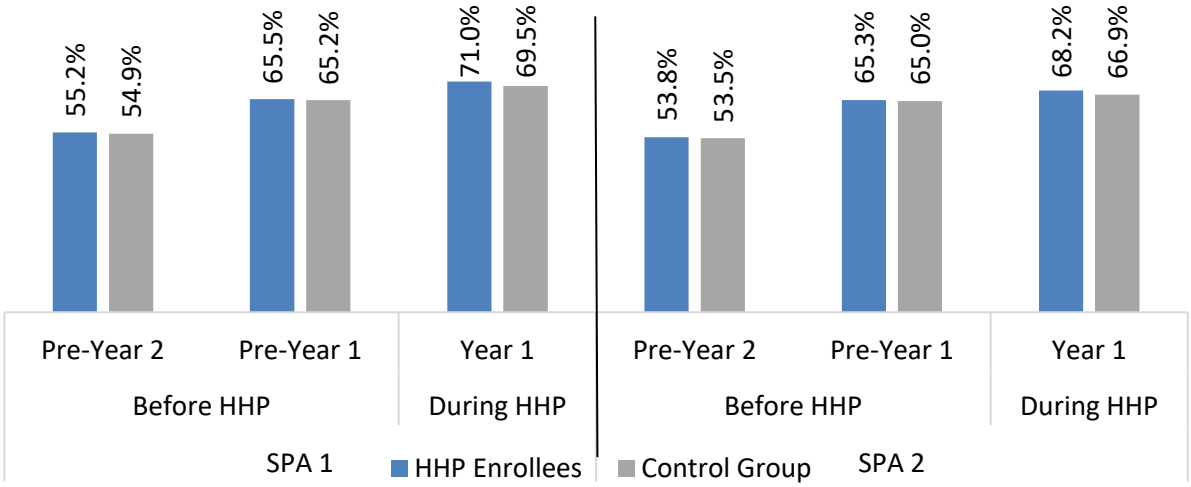
Trends in six HHP specified metrics were examined on an annual basis.

Adult Body Mass Index Assessment

Adult Body Mass Index Assessment is an HHP core metric that measures the percentage of beneficiaries between the ages of 18 and 74 who had an outpatient visit and whose body mass index (BMI) was documented during the measurement year or the year prior to the measurement year. The intended direction of this metric and DD is increase.

Exhibit 66 shows a significant increase in documented BMI from Pre-Year 1 to HHP Year 1 for HHP SPA 1 enrollees (5.4%) and the control group (4.3%). These were slower rates of increase for both groups compared to the changes before HHP (10.3% for both HHP enrollees and the control group). However, the decline in BMI screening for the HHP enrollees was significantly smaller than the control group (1.1%, DD). The same pattern was observed for SPA 2 enrollees.

Exhibit 66: Trends in Adult Body Mass Index Assessment Before and During HHP by SPA for HHP Enrollees and the Control group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	10.3%*	5.4%*	-4.9%*	
	Control Group	10.3%*	4.3%*	-6.0%*	1.1%*
SPA 2	HHP Enrollees	11.4%*	2.9%*	-8.5%*	
	Control Group	11.4%*	2.0%*	-9.5%*	1.0%*
Overall	HHP Enrollees	10.5%*	4.9%*	-5.6%*	
	Control Group	10.5%*	3.8%*	-6.7%*	1.1%*

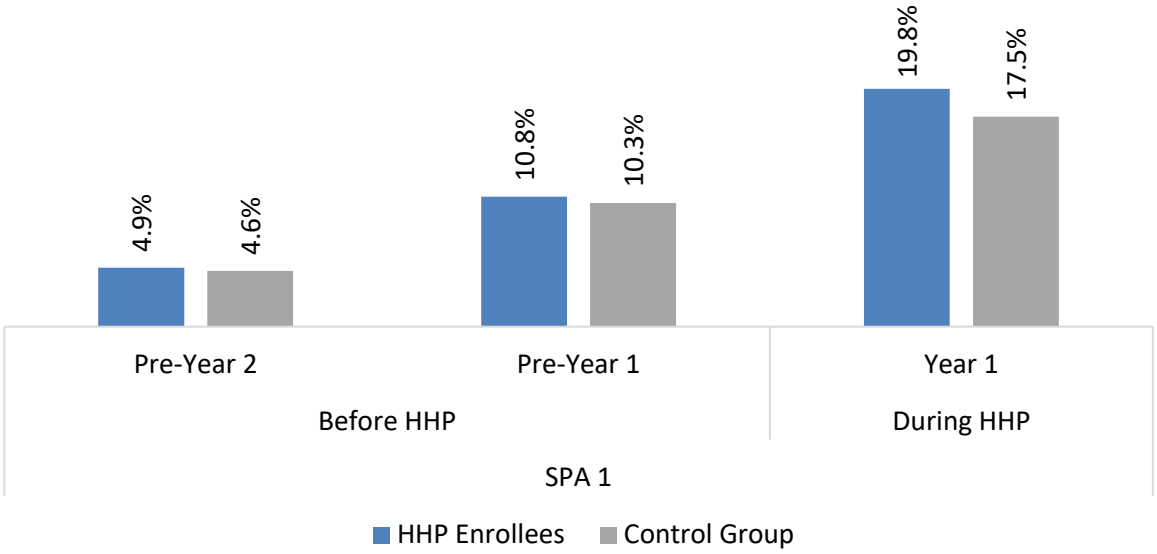
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Screening for Depression and Follow-Up Plan

Screening for Depression and Follow-Up Plan is an HHP core metric that measures the percentage of beneficiaries age 12 and older with an outpatient visit in the measurement year who were screened for depression and had a documented follow-up plan on the date of the positive screen. This metric was not reported for SPA 2 because the metric specifications excludes enrollees with an active diagnosis of depression or bipolar disorder, which were very common conditions among the SPA 2 enrollees. An increase in this metric and DD is intended.

Exhibit 67 shows a significant increase in this metric from Pre-Year 1 to HHP Year 1 for both HHP SPA 1 enrollees (9.0%) and the control group (7.2%). These increases were greater for both groups compared to before HHP (5.9% for HHP enrollees and 5.7% for the control group). This rate of increase was significantly greater (1.6%, DD) for HHP enrollees than the control group.

Exhibit 67: Trends in Screening for Depression and Follow-Up Plan Before and During HHP for SPA 1 HHP Enrollees and the Control group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	5.9%*	9.0%*	3.1%*	
	Control Group	5.7%*	7.2%*	1.5%*	1.6%*

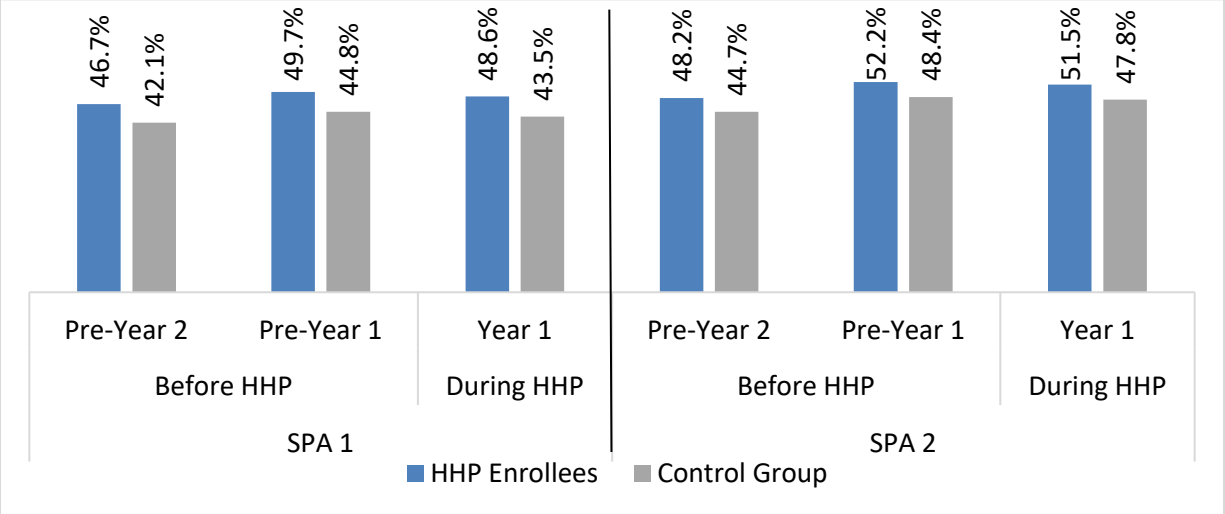
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Follow-Up After Hospitalization for Mental Illness

Follow-Up After Hospitalization for Mental Illness is an HHP core metric that measures the percentage of beneficiaries age 6 and older who were hospitalized for treatment of selected mental illness in the measurement year and who had a follow-up visit within 7 and 30 days with a mental health practitioner. The intended direction of the metric and DD is increase.

Exhibit 68 shows that the trends for 7-day follow-up did not change significantly for SPA 1 or SPA 2 enrollees during HHP or between HHP enrollees and the control group.

Exhibit 68: Trends in Follow-Up After Hospitalization for Mental Illness within 7 Days Before and During HHP by SPA for HHP Enrollees and the Control group as of September 30, 2020

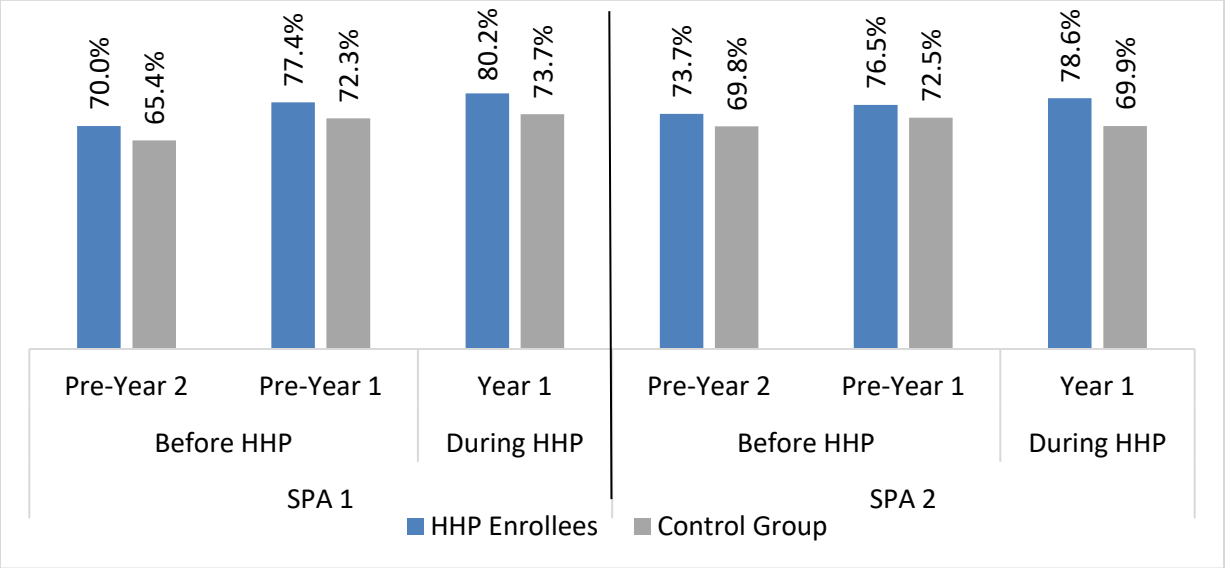


		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	3.0%	-1.1%	-4.0%	
	Control Group	2.7%	-1.2%	-3.9%	-0.1%
SPA 2	HHP Enrollees	4.0%	-0.6%	-4.6%	
	Control Group	3.7%	-0.6%	-4.3%	-0.3%
Overall	HHP Enrollees	3.5%*	-0.8%	-4.3%	
	Control Group	3.2%*	-0.9%	-4.1%	-0.2%

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Exhibit 69 shows that that the trends for 30-day follow-up also did not change significantly for SPA 1 or SPA 2 enrollees during HHP or between HHP enrollees and the control group.

Exhibit 69: Trends in Follow-Up After Hospitalization for Mental Illness within 30 Days Before and During HHP by SPA for HHP Enrollees and the Control group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	7.4%*	2.8%	-4.6%	
	Control Group	7.0%*	1.3%	-5.6%	1.0%
SPA 2	HHP Enrollees	2.8%	2.1%	-0.7%	
	Control Group	2.7%	-2.6%	-5.3%	4.6%
Overall	HHP Enrollees	5.1%*	2.4%	-2.6%	
	Control Group	4.8%*	-0.7%	-5.4%*	2.8%

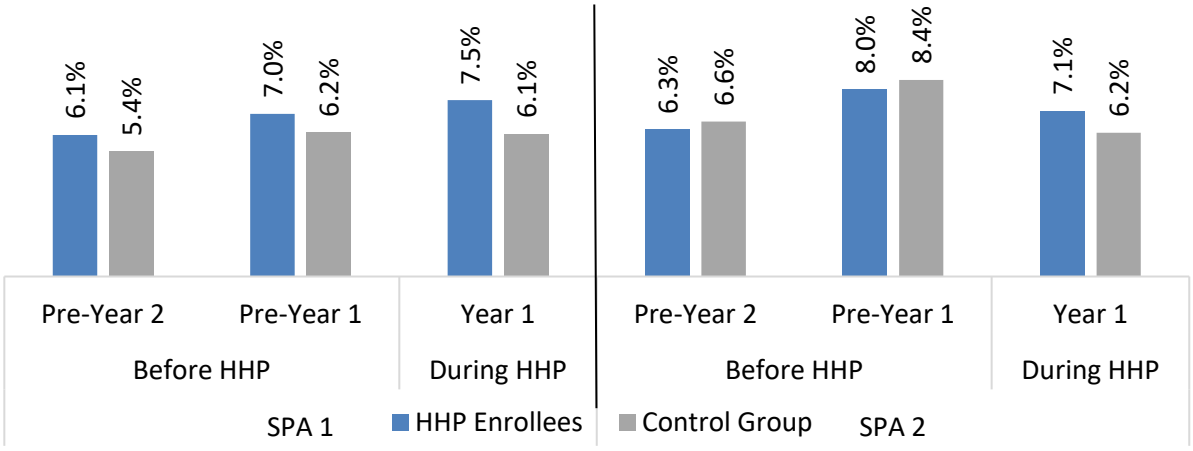
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence

Follow-Up after Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence is an HHP core metric that measures the percentage of emergency department (ED) visits in the measurement year among individuals age 13 and older with a principal diagnosis of alcohol and other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence. The measure is reported for follow-up within 7 days and within 30 days. The intended direction of the metric and DD is increase.

Exhibit 70 shows that no significant trends were observed for follow-up after ED visit for AOD abuse or dependence within 7 days during HHP for HHP enrollees and no difference in trends with the control group in SPA 1 or SPA 2.

Exhibit 70: Trends in Follow-Up After ED Visit for Alcohol and Other Drug Abuse and Dependence within 7 Days Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020

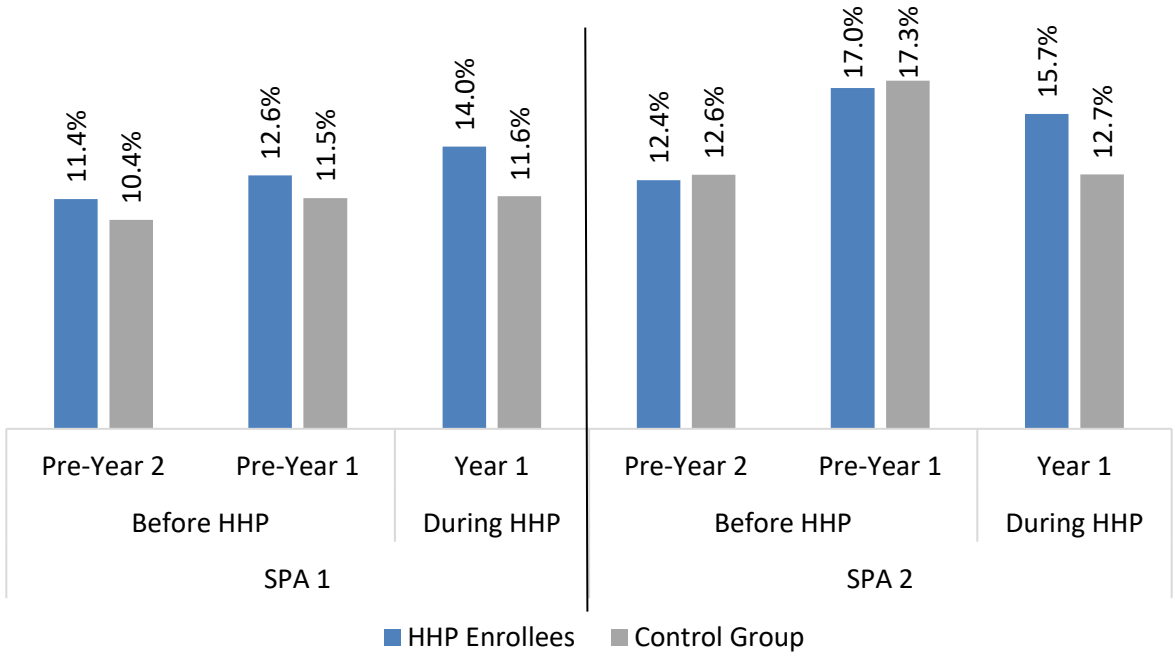


		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	0.9%	0.6%	-0.3%	
	Control Group	0.8%	0.0%	-0.9%	0.5%
SPA 2	HHP Enrollees	1.7%	-0.9%	-2.6%	
	Control Group	1.8%	-2.3%	-4.1%*	1.4%
Overall	HHP Enrollees	1.2%*	0.0%	-1.2%	
	Control Group	1.2%*	-0.8%	-2.0%	0.8%

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Exhibit 71 shows that no significant trends were observed for follow-up after ED visit for AOD abuse or dependence within 30 days during HHP for HHP enrollees and no difference in trends with the control group in SPA 1 or SPA 2.

Exhibit 71: Trends in Follow-Up After ED Visit for Alcohol and Other Drug Abuse and Dependence within 30 Days Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	1.2%	1.4%	0.2%	
	Control Group	1.1%	0.1%	-1.0%	1.2%
SPA 2	HHP Enrollees	4.6%*	-1.3%	-5.9%	
	Control Group	4.7%*	-4.7%*	-9.3%*	3.5%
Overall	HHP Enrollees	2.4%*	0.4%	-2.0%	
	Control Group	2.4%*	-1.6%	-4.0%*	2.0%

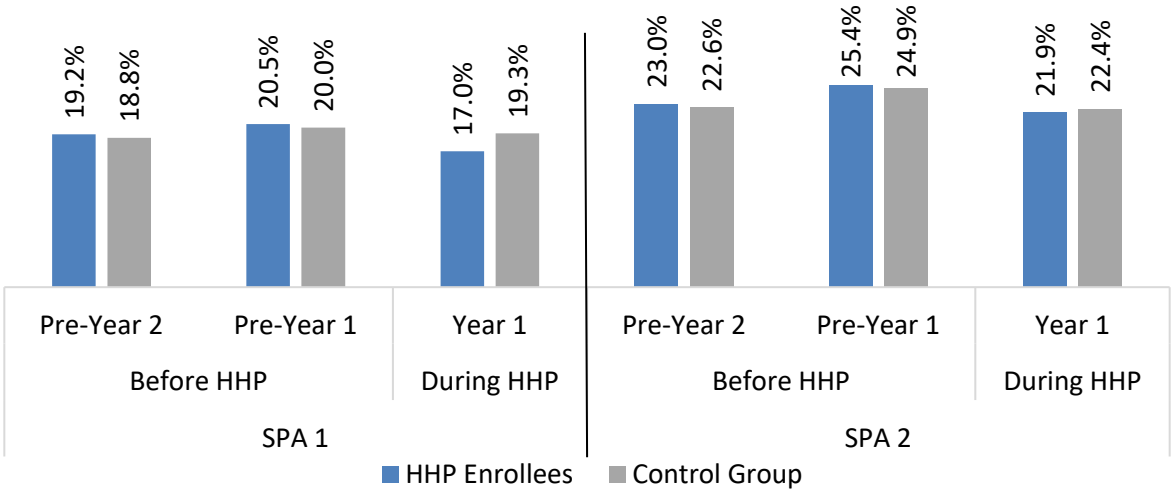
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment

Initiation of AOD Abuse or Dependence Treatment is an HHP core metric that measures the percentage of individuals age 13 and older with a new episode of AOD abuse or dependence in the measurement year who received initiation of treatment within 14 days of the diagnosis. The intended direction of this metric and DD is increase.

Exhibit 72 shows that initiation of AOD treatment declined significantly for SPA 1 HHP enrollees Pre-Year 1 to HHP Year 1 (3.4%) after increasing before HHP (1.3%). While the change in initiation rates also declined for the control group, the decline was larger for HHP enrollees (2.7%, DD). SPA 2 HHP enrollees also experienced a decline of 3.4% during HHP and after an increase of 2.4% before HHP enrollment but this decline was not significantly larger than that of the control group.

Exhibit 72: Trends in Initiation of Alcohol and Other Drug Abuse or Dependence Treatment Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



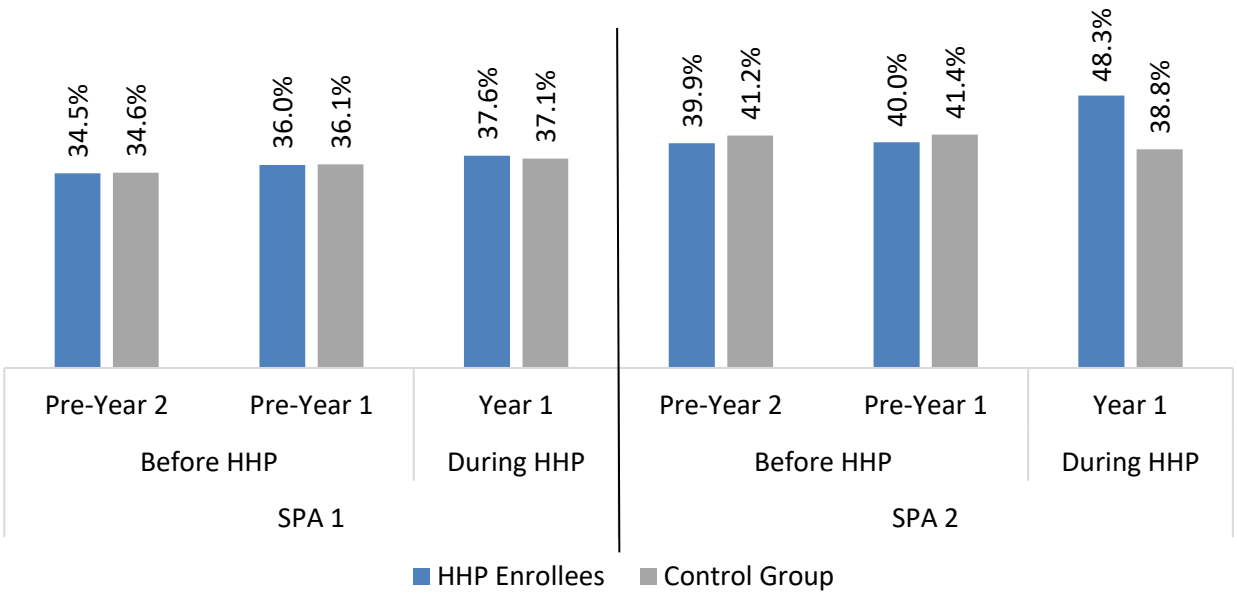
		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	1.3%*	-3.4%*	-4.7%*	
	Control Group	1.3%*	-0.7%	-2.0%*	-2.7%*
SPA 2	HHP Enrollees	2.4%*	-3.4%*	-5.8%*	
	Control Group	2.3%*	-2.5%*	-4.9%*	-0.9%
Overall	HHP Enrollees	1.6%*	-3.4%*	-5.0%*	
	Control Group	1.6%*	-1.2%	-2.8%*	-2.2%*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Engagement of AOD Abuse or Dependence Treatment is an HHP core metric that measures the percentage of beneficiaries age 13 and older that initiated AOD abuse or dependence treatment and who were engaged in ongoing treatment within 34 days of the initiation visit. The intended direction of the metric and DD is increase.

Exhibit 73 shows that trends engagement in AOD treatment did not change for SPA 1 or the control group. However, trends increased for SPA 2 from Pre-Year 1 to HHP Year 1 by 8.3% after no significant increase before HHP and the increase in engagement compared to before HHP was significantly larger (10.9%, DD) in comparison to the control group.

Exhibit 73: Trends in Engagement of Alcohol and Other Drug Abuse or Dependence Treatment Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	1.5%	1.6%	0.1%	
	Control Group	1.5%	1.0%	-0.5%	0.6%
SPA 2	HHP Enrollees	0.2%	8.3%*	8.1%	
	Control Group	0.2%	-2.6%	-2.8%	10.9%*
Overall	HHP Enrollees	1.1%	3.7%	2.7%	
	Control Group	1.1%	-0.1%	-1.2%	3.9%

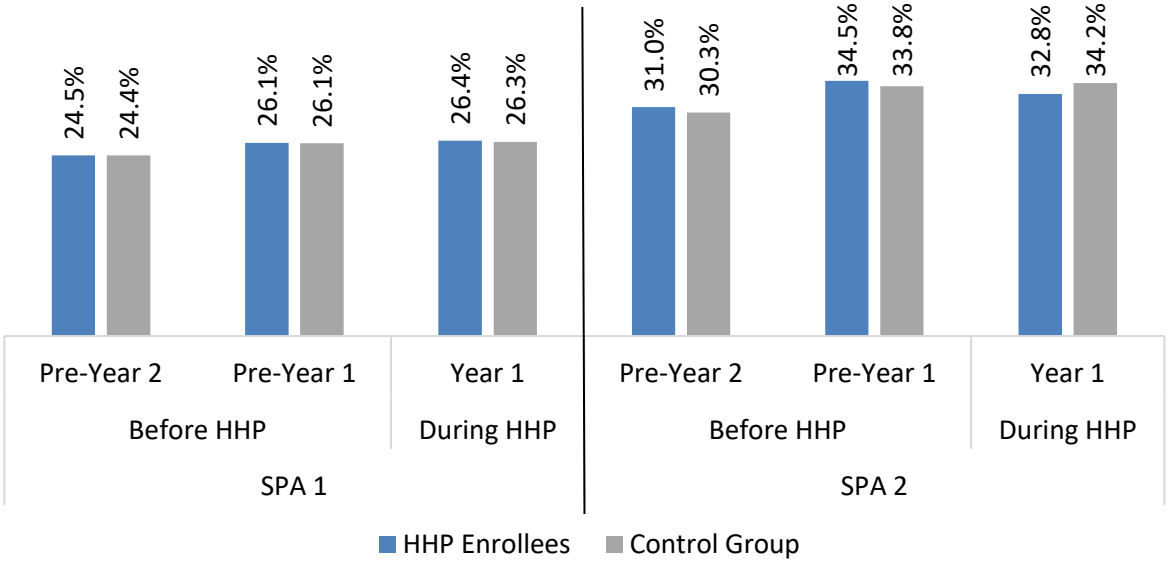
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Use of Pharmacotherapy for Opioid Use Disorder

Use of Pharmacotherapy for Opioid Use Disorder is an HHP core metric that measures the percentage of beneficiaries aged 18 to 64 with an opioid use disorder (OUD) who filled a prescription or were administered a medication for the disorder during the measurement year. The intended direction of the metric and DD is increase.

Exhibit 74 does not show a change in this metric for SPA 1 enrollees and their control group during HHP. There was a significant decline in the rate of pharmacotherapy from before HHP for SPA 2 enrollees (5.3%) but there was no significant difference in change with the control group.

Exhibit 74: Trends in Use of Pharmacotherapy for Opioid Use Disorder Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	1.7%*	0.3%	-1.4%	
	Control Group	1.7%*	0.2%	-1.5%	0.1%
SPA 2	HHP Enrollees	3.6%*	-1.8%	-5.3%*	
	Control Group	3.5%*	0.4%	-3.1%*	-2.2%
Overall	HHP Enrollees	2.2%*	-0.3%	-2.4%*	
	Control Group	2.2%*	0.2%	-1.9%*	-0.5%

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

HHP Outcome Metrics

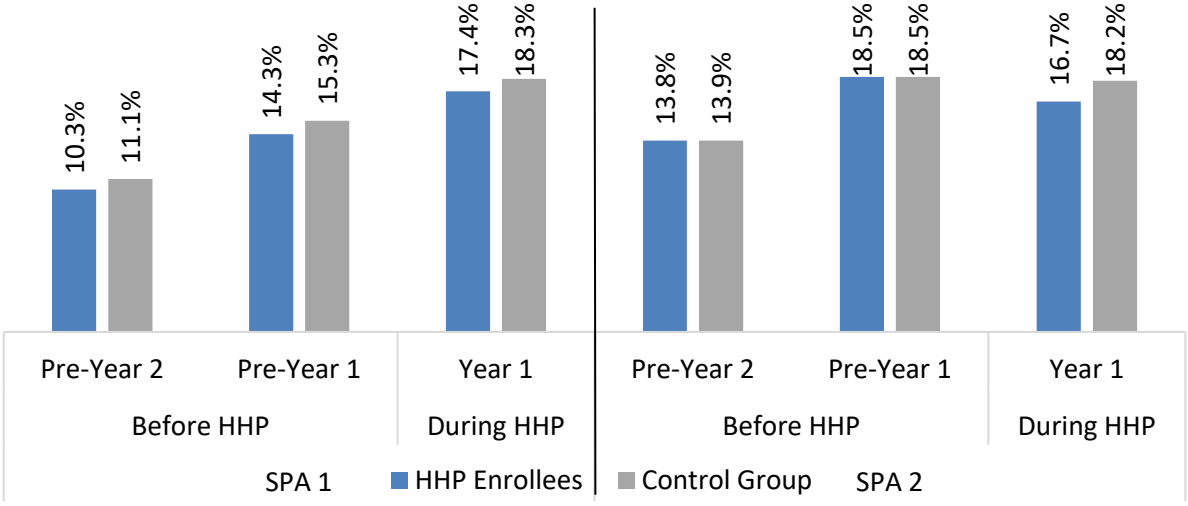
Trends in three HHP specified metrics were examined on an annual basis.

Controlling High Blood Pressure

Controlling High Blood Pressure is an HHP core metric that measures the percentage of beneficiaries aged 18 to 85 who had a diagnosis of hypertension and whose blood pressure was adequately controlled during the measurement year. The intended direction is increase.

Exhibit 75 shows that there was a significant increase in SPA 1 HHP enrollees with controlled high blood pressure both before HHP (4.0%) and from Pre-Year 1 to HHP Year 1 (3.1%), however the latter increase was significantly less than the increase before HHP by 0.9%. The decline was not significantly different from a similar decline observed in the control group. SPA 2 enrollees had a significant decline (1.8%) in the percentage of enrollees with controlled high blood pressure from Pre-Year 1 to HHP Year 1 after an increase (4.6%) before HHP, but the decline did not significantly differ from the control group.

Exhibit 75: Trends in Controlling High Blood Pressure Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	4.0%*	3.1%*	-0.9%*	
	Control Group	4.2%*	3.0%*	-1.2%*	0.3%
SPA 2	HHP Enrollees	4.6%*	-1.8%*	-6.4%*	
	Control Group	4.6%*	-0.3%	-4.9%*	-1.5%
Overall	HHP Enrollees	4.1%*	2.3%*	-1.8%*	
	Control Group	4.3%*	2.5%*	-1.8%*	0.0%

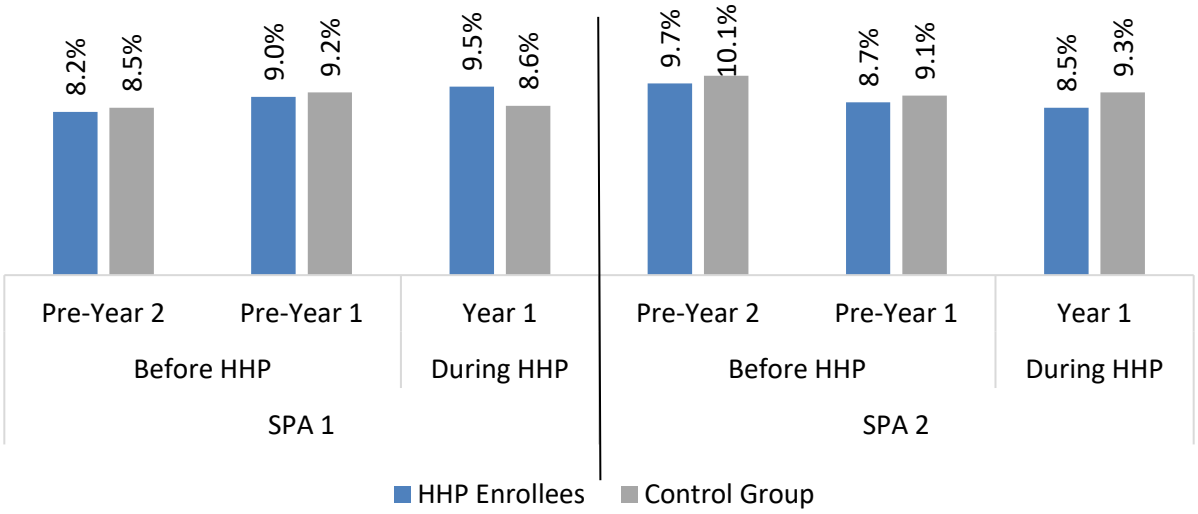
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Plan All-Cause Readmission

Plan All-Cause Readmission is an HHP core metric that measures the percentage of acute inpatient and observation stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days for beneficiaries ages 18 to 64. The intended direction is decrease.

Exhibit 76 shows that readmission rates did not significantly change from Pre-Year 1 to HHP Year 1 and the change in rate from before HHP was not significantly different for SPA 1 or SPA 2 enrollees. However, SPA 1 enrollees had a significantly greater increase in the rates from before to during HHP than the control group by 1.2% (DD) more readmissions.

Exhibit 76: Trends in Plan All-Cause Readmission Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	0.8%*	0.5%	-0.2%	
	Control Group	0.8%*	-0.7%*	-1.5%*	1.2%*
SPA 2	HHP Enrollees	-1.0%*	-0.3%	0.7%	
	Control Group	-1.0%*	0.2%	1.2%	-0.5%
Overall	HHP Enrollees	0.4%*	0.4%	-0.1%	
	Control Group	0.4%*	-0.5%	-1.0%*	0.9%*

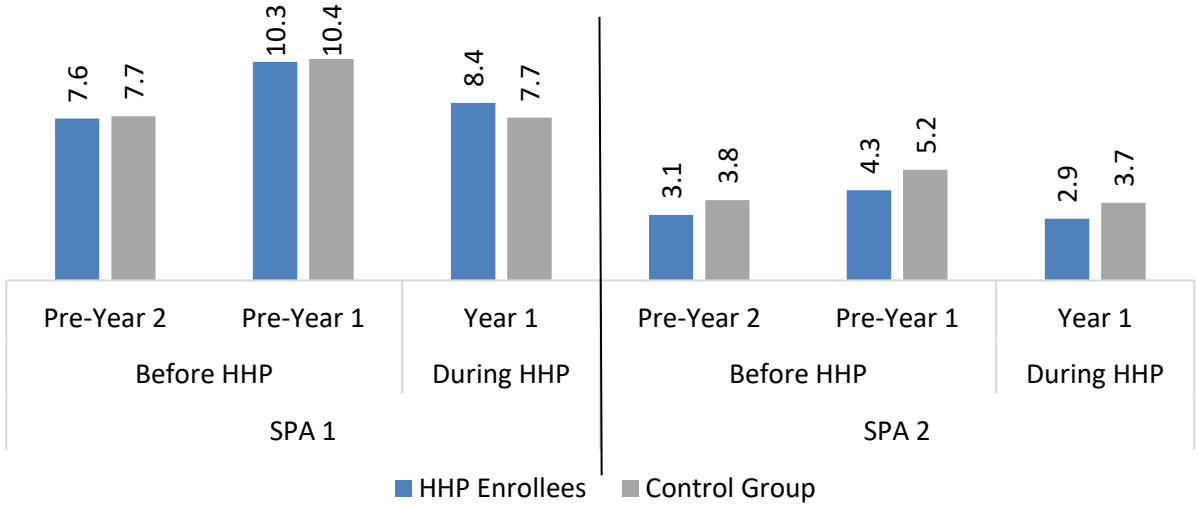
Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Prevention Quality Indicator (PQI) 92: Chronic Conditions Composite

PQI 92 is an HHP core metric that measures the number of inpatient hospital admissions for ambulatory care sensitive chronic conditions per 100,000 member months for individuals age 18 and older. The intended direction of the metric and DD is decrease.

Exhibit 77 shows that PQI was significantly increasing before HHP in SPA 1 (2.7) and SPA 2 (1.2) enrollees. The rates then declined significantly from Pre-Year 1 to HHP Year 1 for both SPA 1 (1.9) and SPA 2 (1.3), but SPA 1 rates declined less from before to during HHP compared to the control group (0.9, DD).

Exhibit 77: Trends in Prevention Quality Indicator (PQI) 92: Chronic Conditions Composite Before and During HHP by SPA for HHP Enrollees and the Control Group as of September 30, 2020



		Change Before HHP	Change Pre-Year 1 to HHP Year 1	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	2.7*	-1.9*	-4.6*	
	Control Group	2.7*	-2.8*	-5.5*	0.9*
SPA 2	HHP Enrollees	1.2*	-1.3*	-2.5*	
	Control Group	1.4*	-1.6*	-3.0*	0.5
Overall	HHP Enrollees	2.4*	-1.8*	-4.2*	
	Control Group	2.4*	-2.5*	-4.9*	0.8*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (Pre-Year 1 – Pre-Year 2). Change Pre-Year 1 to HHP Year 1 is calculated as: (Year 1 – Pre-Year 1). Difference between changes is calculated as: (Change Pre-Year 1 to HHP Year 1 –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Estimated Medi-Cal Payments among HHP Enrollees and HHP Costs

This section addresses the following HHP evaluation questions:

1. Did Medi-Cal expenditures for health services decline after HHP implementation?
2. Did Medi-Cal expenditures for needed outpatient services increase?

UCLA calculated estimated payments for all services provided to HHP enrollees and the control group before HHP and during HHP using Medi-Cal claims and encounter data. Payments were estimated by creating mutually exclusive categories of service and attributing a fee to each Medi-Cal claim in that category (Appendix A: Attributing Estimated Medi-Cal Payments to Claims). This methodology allowed UCLA to estimate payments for HHP enrollees and the control group before each enrollee's HHP enrollment and during HHP and assess if payments for HHP enrollees declined more than for the control group using the DD methodology. UCLA developed DD models to measure changes in total estimated payments and in specific categories of services including ED visits, hospitalizations, outpatient medication, and outpatient services.

UCLA examined changes in six month increments up to 24 months (1-6, 7-12, 13-18, and 19-24) before HHP enrollment and up to 12 months (1-6 and 7-12) during HHP. The DD analysis measured the change from 19-24 vs. 1-6 months before HHP for both HHP enrollees and the control group; the change during HHP from 1-6 to 7-12 months for both HHP enrollees and the control group; and the difference between the changes in HHP enrollees vs. the control group. The shorter timeframe for examining payments allowed for a clearer assessment of change during the early phase of HHP implementation. The findings were not subject to potential seasonality in service utilization due to rolling enrollment throughout the year and measuring change following the date of enrollment per beneficiary.

The payment amounts reported in this section are estimates and are not equivalent to overall Medi-Cal expenditures for multiple reasons, including significant differences between this attribution methodology vs. per member per month payments to managed care plans for enrolled beneficiaries. These estimated payments are primarily intended to compare change in trends between HHP enrollees and the control group. See (Appendix A: Attributing Estimated Medi-Cal Payments to Claims) for further detail and limitations.

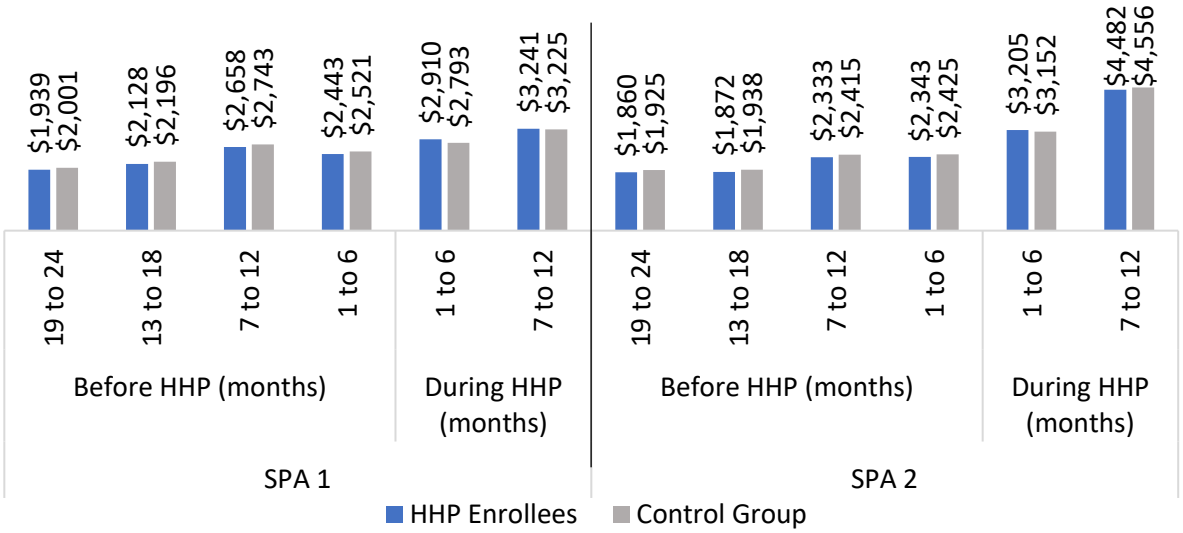
Estimated Payments for HHP Services

Total Estimated Medi-Cal Payments

UCLA measured total estimated Medi-Cal payments before and during HHP. The payment estimates were generated using the methodology described above and detailed further in Appendix A: Data Sources and Analytic Methods. These estimates are intended for measuring whether HHP led to efficiencies and do not represent actual Medi-Cal expenditures for HHP enrollees. Examples of Medi-Cal expenditures include inpatient and outpatient services, pharmaceuticals, imaging and laboratory services, behavioral health services, and long-term care stays.

The intended direction of the measure and DD is decrease. Exhibit 78 shows that total estimated payments were significantly increasing for SPA 1 ($168 per enrollee per six month) and for SPA 2 ($161) before HHP. The total estimated payments continued to increase during HHP by $331 and $1,277 for SPA 1 and SPA 2 enrollees, respectively. However, payments from before HHP to during HHP increased significantly less than the control groups by $96 (DD) for SPA 1 enrollees and $121 (DD) for SPA 2 enrollees.

Exhibit 78: Trends in Total Estimated Payments Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	$168*	$331*	$163*	
	Control Group	$173*	$432*	$259*	-$96*
SPA 2	HHP Enrollees	$161*	$1,277*	$1,116*	-$121*

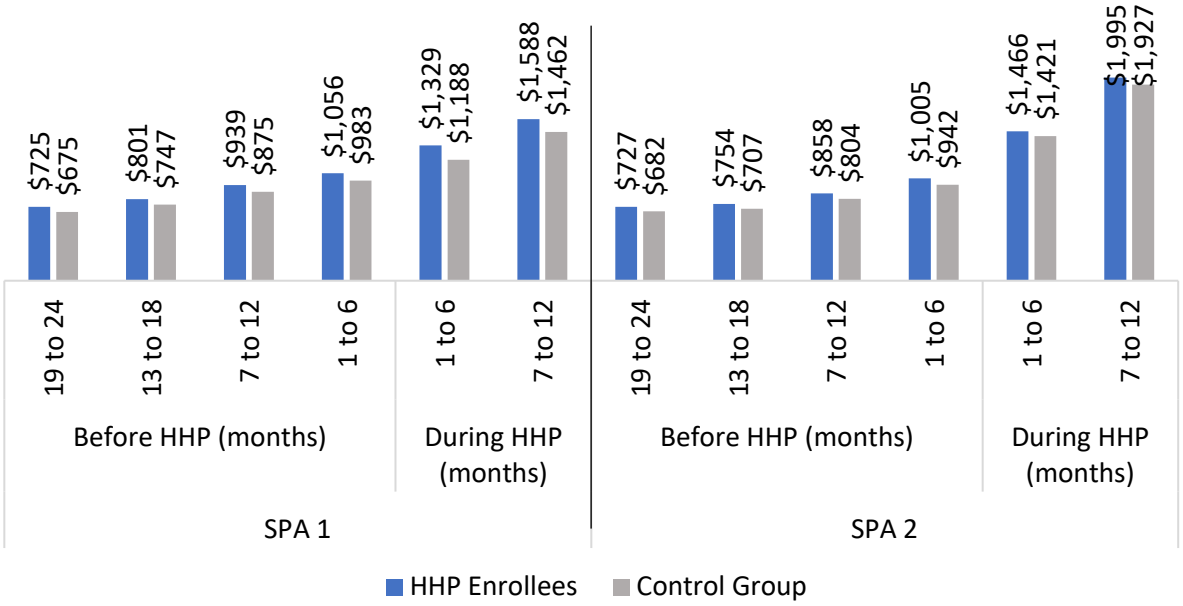
	Control Group	$167*	$1,404*	$1,237*	
Overall	HHP Enrollees	$167*	$528*	-$1,253*	
	Control Group	$172*	$634*	-$1,205*	-$101*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Estimated Payments for Outpatient Services

UCLA estimated Medi-Cal payments for outpatient services. There is no intended direction for this measure. Payments for outpatient services are likely to increase due to unmet need and increased access to these services, but payments are likely to decrease once health needs are addressed and service use declines. Exhibit 79 shows that after an initial increase in estimated payments at the start of HHP, estimated payments continued to increase significantly for SPA 1 and SPA 2 enrollees during HHP. Compared to control groups, the increase from before HHP to during HHP was significantly smaller for SPA 1 ($23, DD) and significantly greater for SPA 2 ($18, DD) per HHP enrollee per six months.

Exhibit 79: Trends in Payments for Outpatient Services Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	$110*	$258*	$148*	
	Control Group	$103*	$274*	$172*	-$23*

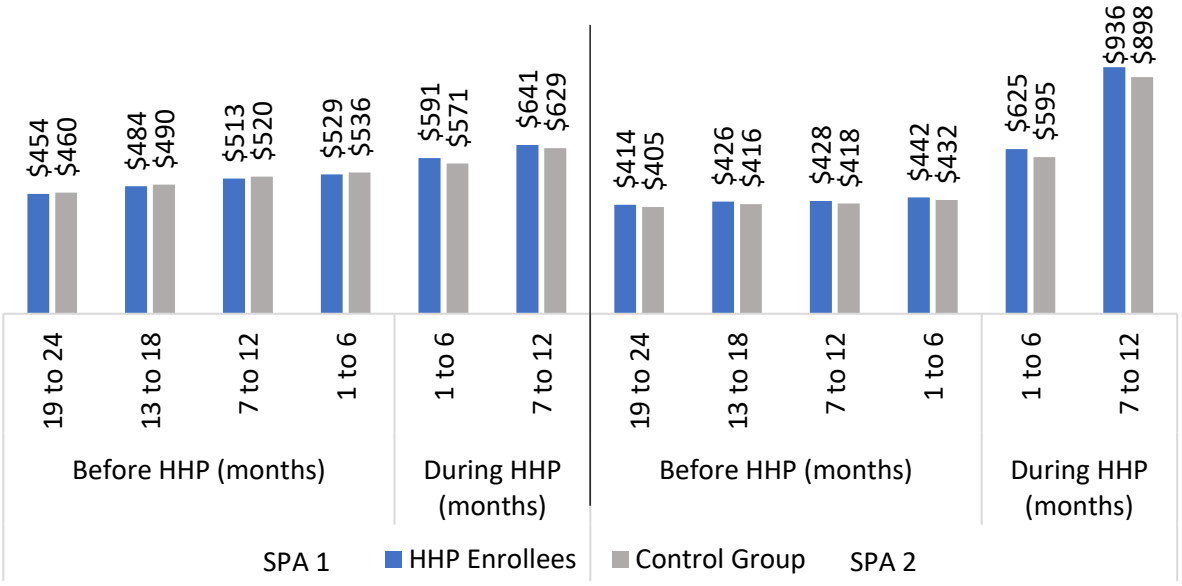
SPA 2	HHP Enrollees	$93*	$529*	$436*	
	Control Group	$87*	$506*	$419*	$18*
Overall	HHP Enrollees	$107*	$315*	-$489*	
	Control Group	$99*	$322*	-$427*	-$15*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Estimated Payments for Outpatient Medication

UCLA estimated Medi-Cal payments for outpatient medication. There is no intended direction for this measure. Payments for outpatient medication are likely to increase due to unmet need and increased access to these medications, but payments are likely to stabilize or decrease once health needs are addressed. Exhibit 80 shows a significant increase in estimated payments during HHP for both SPA 1 and SPA 2. Compared to their respective control groups, the change in estimated payments from before HHP to during HHP increased significantly less for SPA 1 ($7, DD) per HHP enrollee per six months and was not significant for SPA 2.

Exhibit 80: Trends in Outpatient Medication Payments Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	$25*	$50*	$25*	
	Control Group	$25*	$58*	$32*	-$7*

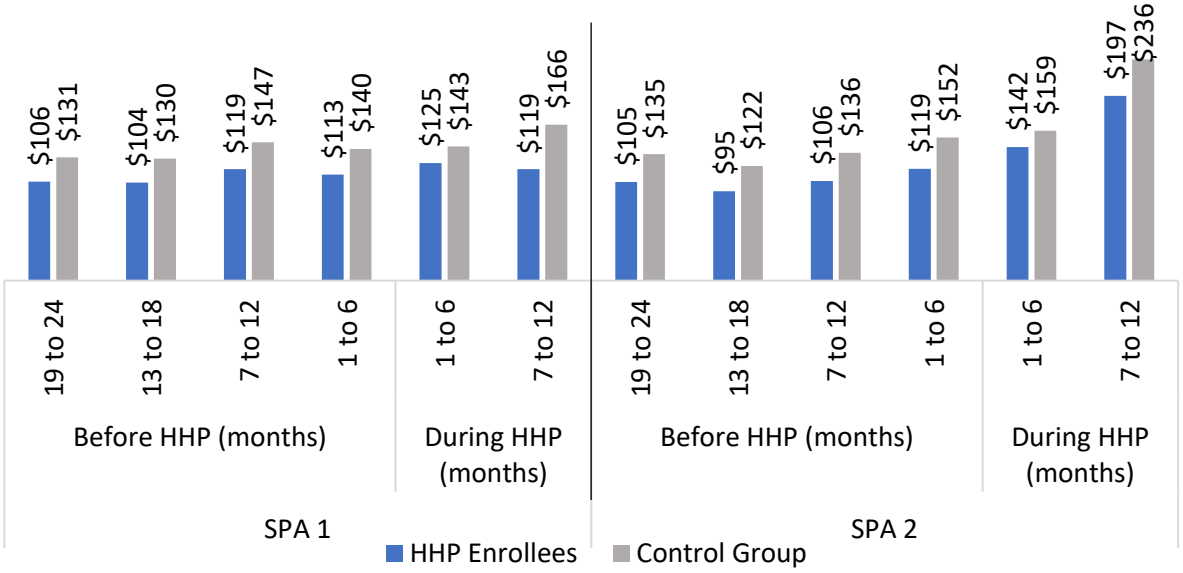
SPA 2	HHP Enrollees	$9*	$311*	$302*	
	Control Group	$9*	$304*	$295*	$7
Overall	HHP Enrollees	$22*	$104*	-$258*	
	Control Group	$22*	$109*	-$256*	-$4*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Estimated Payments for Emergency Department Visits

UCLA estimated Medi-Cal payments for emergency department (ED) visits. The intended direction of the measure and DD is decrease. Exhibit 81 shows that these estimated payments were increasing significantly before HHP for both SPA 1 and SPA 2. During HHP, the estimated payments for ED visits decreased by $7 per SPA 1 enrollee per six months and increased by $55 per SPA 2 enrollee. The decline in the estimates for SPA 1 enrollees from before HHP to during HHP ($9) was significantly greater than the control group by $29 (DD) and the increase for SPA 2 enrollees from before HHP to during HHP ($50) was significantly smaller than the control group by $20 (DD).

Exhibit 81: Trends in Payments for Emergency Department Visit Before and During HHP by SPA as of September 30, 2020



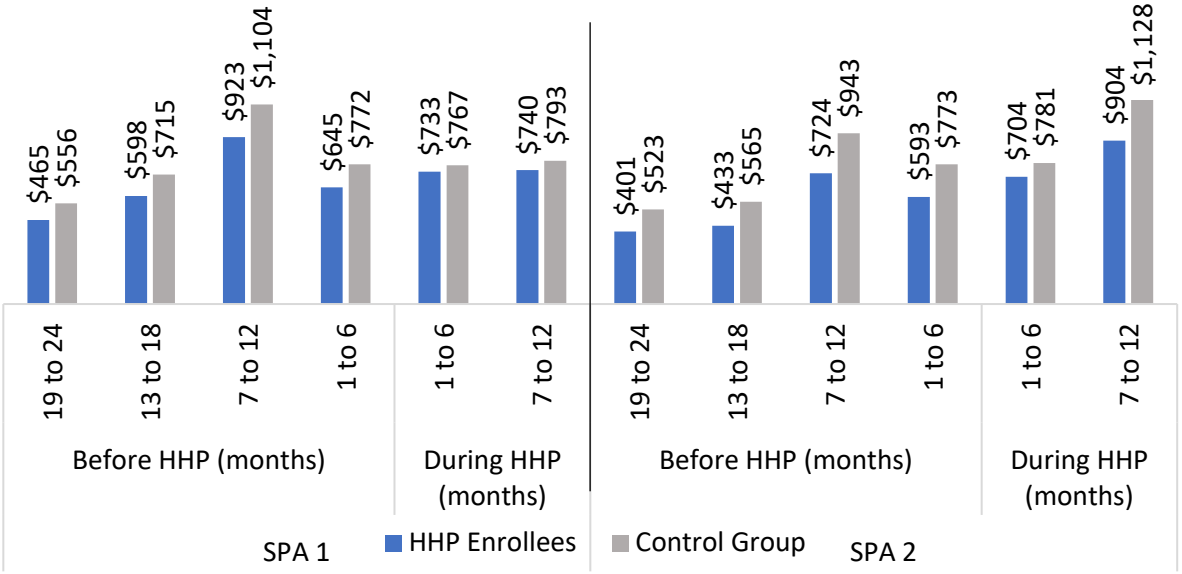
		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	$2*	-$7*	-$9*	
	Control Group	$3*	$23*	$20*	-$29*
SPA 2	HHP Enrollees	$5*	$55*	$50*	
	Control Group	$6*	$76*	$70*	-$20*
Overall	HHP Enrollees	$3*	$6*	-$73*	
	Control Group	$4*	$34*	-$65*	-$27*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

Estimated Payments for Hospitalizations

UCLA estimated Medi-Cal payments for hospitalizations. The intended direction of the measure and DD is decrease. Exhibit 82 shows that the change in estimated payments for hospitalization declined significantly for SPA 1 enrollees and increased significantly for SPA 2 enrollees from before HHP to during HHP. These changes were significantly less for both SPAs compared to the control group ($7 and $127, respectively, per HHP enrollee per six months, DD).

Exhibit 82: Trends in Payments for Hospitalizations Before and During HHP by SPA as of September 30, 2020



		Change Before HHP	Change During HHP	Difference Between Changes	Difference-in-Difference (DD)
SPA 1	HHP Enrollees	$60*	$7*	-$53*	
	Control Group	$72*	$26*	-$46*	-$7*
SPA 2	HHP Enrollees	$64*	$200*	$136*	
	Control Group	$83*	$347*	$264*	-$127*
Overall	HHP Enrollees	$61*	$47*	-$437*	
	Control Group	$74*	$93*	-$496*	-$32*

Source: Medi-Cal claims data from July 1, 2016 through September 30, 2020.
Notes: * Denotes p≤0.05, a statistically significant difference. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Change Before HHP is calculated as: (1 – 6 months before HHP minus 19 – 24 months before HHP divided by 3). Change During HHP is calculated as: (7 – 12 months of HHP minus 1 – 6 months of HHP). Difference between changes is calculated as: (Change During HHP –Change Before HHP). Difference-in-difference is calculated as: (Difference between changes for HHP enrollees – Difference between changes for control group).

HHP Program Expenditures

UCLA examined HHP supplemental payments based on per-member per-month (PMPM) rates to participating MCPs and calculated the estimated total and average per-enrollee HHP expenditures per month from July 1, 2018 to September 30, 2020. PMPM payments varied by MCP and county and were changed each fiscal year. PMPM rates were higher at the start of the program in order to account for anticipated start-up costs, and were lowered as the program went on. Rates were consistently lower for enrollees covered by both Medicare and Medi-Cal (Duals) compared to those covered by Medi-Cal only.

Exhibit 83 shows that total estimated HHP expenditures by September 30, 2020 were $189,737,702 and the average expenditures per enrollee per month was $479. The overall estimated expenditures for duals were lower ($3,237,651) than those covered by Medi-Cal only ($186,500,051), and the average monthly per person expenditures were lower as well ($123 for duals, $504 for Medi-Cal only).

Exhibit 83: Estimated HHP Supplemental Expenditures by Enrollees Type and Implementation Group, as of September 30, 2020

		Total Cumulative Expenditures	Average Expenditure per Enrollee per Month
Total HHP	**Overall**	**$189,737,702**	**$479**
	Group 1	$4,574,677	$396
	Group 2	$64,404,038	$433
	Group 3	$120,758,987	$512
Duals	**Overall**	**$3,237,651**	**$123**
	Group 1	$147,550	$102
	Group 2	$735,532	$122
	Group 3	$2,354,569	$125
Medi-Cal only	**Overall**	**$186,500,051**	**$504**
	Group 1	$4,427,127	$439
	Group 2	$63,668,506	$446
	Group 3	$118,404,418	$545

Source: UCLA Analysis of MCP Enrollment Reports from August 2019 and Quarterly HHP Reports from September 2019 to September 2020. Per-member, per-month rates by MCP and dual-status were provided by the California Department of Health Care Services.

Conclusions

This report has highlighted the continued progress made by MCPs through September 2020 and since the first interim evaluation report. This report contains additional comparisons that highlight the early impact of HHP and updated information on the CB-CME networks. The COVID-19 pandemic and subsequent statewide shelter in place order likely impacted enrollment and the ability of MCPs and their contracted CB-CMEs to provide HHP services, but some of this impact was mitigated by MCP efforts to adapt workflows and increase telehealth capacity.

The findings indicated a substantial growth in CB-CME networks; a notable proportion of enrollees who had super utilization of acute care in emergency departments and hospitals, particularly enrollees who were also experiencing homelessness and had conditions such as chronic kidney disease and depression; improvements in selected metrics that reflected processes and outcomes of care compared to the control group; an initial increase in use of outpatient services soon after enrollment; greater declines in ED visits and hospitalizations than the control group; and a slower growth in estimated payments for ED visits and hospitalization than the control groups.

Collectively, the findings implied challenges of engaging HHP enrollees in treatment and improving outcomes for enrollees with multiple comorbidities. Yet, the findings also implied early success of HHP in achieving reductions in acute services concurrently with provision of more primary, specialty, mental health, and SUD services as well as outpatient medications in the first six months following HHP enrollment to address the needs of enrollees. The next and final evaluation report will include additional data for the final 15 months of HHP, including changes in the HHP core metrics and measures of utilization and estimated Medi-Cal payments.

Appendix A: Data Sources and Analytic Methods

Readiness Documents

UCLA used the readiness documents from 16 MCPs submitted to DHCS to report on MCP implementation of HHP. In these readiness documents, MCPs reported on topics including organizational model, staffing, health information technology, HHP services, HHP network, and HHP operations.

Analytic Methods

UCLA reviewed all readiness documents to answer the UCLA evaluation questions detailed in Exhibit 84. MCPs varied in the level of detail in their documents. UCLA identified and tabulated relevant information to the extent possible given this variation by MCP. Information from readiness documents were cross-checked with other data including MPC Quarterly HHP Reports to improve accuracy when possible.

Exhibit 84: Evaluation Questions and Data Sources

Evaluation Question	Location in Readiness Documents
1. Which HHP network model was employed?	Organizational Model
2. What was the composition of HHP networks?	Organizational Model MCP Duties/Responsibilities
3. What types of staff provide HHP services?	Organizational Model Staffing
4. What was the data sharing approach?	Health Information Technology/Data and Information Sharing
5. What was the approach to targeting patients for enrollment into HHP?	Member Engagement Member Notices Risk Grouping Housing Services

Source: UCLA Health Homes Program Evaluation Design, 2019.

Limitations

The MCP readiness documents represented MCP plans for HHP implementation and may not reflect the final implementation approach by MCPs. Several MCPs submitted periodically revised readiness documents during HHP implementation. These documents included drafts, revisions, and communications with DHCS regarding further revisions and/or clarifications. In addition, MCPs provided variable amounts of detail on planned implementation, which may have led to a limited understanding of MCPs' final approach.

The MCPs maximum estimated HHP enrollment overall and by CB-CME in readiness documents and their responsibilities are unlikely to align with actual quarterly enrollment data.

Enrollment Reports and MCP Quarterly Reports

UCLA used MCP Enrollment Reports and Quarterly HHP Reports to analyze HHP enrollment. Enrollee-level HHP enrollment data was only available in MCP Enrollment Reports prior to July 2019. All four MCPs (Anthem Blue Cross of California Partnership Plan, San Francisco Health Plan, Inland Empire Health Plan, and Molina Healthcare of California Partner Plan) that implemented HHP by July 2019 submitted an Enrollment Report to DHCS in August 2019, covering the period of July 1, 2018 to June 30, 2019. All MCPs submitted Quarterly HHP Reports during the time they had implemented HHP from July 1, 2018 to September 30, 2020. Starting in July 2019, MCP Quarterly HHP Reports included enrollee-level data on both enrollment, homelessness, and housing status.

These two data sources had some differences, which resulted in UCLA only being able to analyze enrollment at a monthly level. Staggered implementation of the program by county resulted in MCPs with different reporting lengths. Homeless and housing statuses on an enrollee-level were examined quarterly, from July 1, 2019 when enrollee-level homeless data was first reported, through September 30, 2020.

Analytic Methods

Exhibit 85 shows the enrollment data obtained from these reports. Monthly enrollment data from the MCP Enrollment Reports and Quarterly HHP Reports were combined to determine monthly enrollment status by individual enrollee. If there were conflicting data for individual enrollees between the two data sources, UCLA used the more recent data from the Quarterly HHP Reports. Forty-three enrollees that switched counties or plans during their enrollment were excluded from further analysis. Beneficiaries who were enrolled on any date during a given month were considered enrolled for the whole month. Beneficiaries that were disenrolled for less than 30 days in between enrolled months were considered enrolled in the program for that month. However, 1,439 beneficiaries who were only enrolled for less than 31 days were excluded from the analyses of enrollment patterns.

UCLA used the MCP Quarterly HHP Reports to analyze data on enrollee's housing status and housing service utilization. Enrollee-level housing services data were included in the Quarterly HHP Reports starting in July 2019, which limited the analysis of housing services to July 1, 2019 through September 30, 2020.

Exhibit 85: Beneficiary-Level Variables

Data Elements	Definitions
SPA	Enrolled in SPA 1 vs. SPA 2.
Dual Status	Ever enrollee in both Medicare and Medi-Cal during HHP enrollment.
County	County in which enrollee is enrolled.
Monthly Enrollment Status	Indicator for HHP enrollment status for a particular month.
Enrollment Date	The date an enrollee starts to enroll in HHP. Enrollment date reported prior to 2019 Quarter 3 always begins on the first day of the initially enrolled month. Enrollment date reported after June 30, 2019 is the exact date.
Disenrollment Date	The date an enrollee disenrolled from HHP. Disenrollment date reported prior to July 1, 2019 is the last day of the month. Disenrollment date reported after June 30, 2019 is an exact date.
Number of Times Disenrolled	The number of times each enrollee disenrolled from the MCP throughout their enrollment.
Length of Enrollment	The differences between disenrollment date and enrollment date. If an enrollee enrolls in and disenrolls from HHP on the same date, the length of enrollment will be one day. Day count was divided by 30 to estimate length of enrollment in months.
Ever Homeless during HHP	Data only available from Quarterly HHP Reports. Indicates whether enrollee was ever homeless during HHP enrollment.
Homeless or at Risk for Homelessness	Data only available from Quarterly HHP Reports. Enrollee is homeless or at risk for homelessness from July 1, 2019 to September 30, 2020.
Received Housing Services	Data only available from Quarterly HHP Reports. Enrollee received housing services from July 1, 2019 to September 30, 2020.
Housed by September 2019	Data only available from Quarterly HHP Reports. Indicator of whether enrollee was housed by September 30, 2020.

Notes: Data from MCP Enrollment Reports from July 1, 2018 to September 30, 2020 and MCP Quarterly HHP Reports from July 1, 2019 to September 30, 2020.

From the MCP Quarterly HHP Reports, UCLA reported on CB-CMEs by organization type as of September 2020. MCPs reported individual CB-CMEs, identified by the National Plan and Provider Enumeration System (NPPES) NPI, serving HHP enrollees and the projected capacity of each CB-CME. UCLA used the NPI Registry to identify characteristics of unique CB-CMEs in MCP networks.

In addition, UCLA reported on the percentage of eligible beneficiaries by implementation group excluded from HHP for seven exclusion rationales defined by DHCS and reported in the MCP Quarterly Reports.

Limitations

UCLA analyzed the enrollment data provided by MCPs. Given that enrollee-level data in the MCP Quarterly Report were not required until July 2019, UCLA had to combine these data with MCP Enrollment Reports from July 1, 2018 to June 30, 2019 to examine enrollment and enrollment patterns. These two data sources had some differences, which resulted in UCLA only being able to analyze enrollment at a monthly level. Staggered implementation of the program by county resulted in MCPs with different reporting lengths.

Medi-Cal Enrollment and Claims Data

UCLA used Medi-Cal enrollment and claims data from July 1, 2016 to September 30, 2020 to create demographic health status indicators, health care utilization indicators, and preliminary metrics used in this report. Claims data included both managed care and fee-for-service encounters.

Analytic Methods

HHP Services

HHP services were reported for all MCPs, although reporting varied by MCP. Kaiser reported that none of their enrollees received services while Alameda Alliance reported that 98% of their enrollees received services. All MCPs reported that less than 100% of their enrollees received any HHP service, although every HHP enrollee should have received at least one service. Exhibit 86 displays indicators of utilization of HHP services reported by MCPs in Medi-Cal claims data.

Exhibit 86: HHP Service Utilization Indicators

Indicators	Definitions
Proportion of enrollees that ever received an HHP service	The percent of enrollees that ever received the service.
Proportion of enrolled months that services were provided per enrollee	The percent months with services received out of the number of months enrolled in HHP among HHP enrollees that have ever received the service.
Average number of units of service per enrollee per month during months that services were provided	The average of each HHP enrollee's monthly average number of service units for the received service each month among HHP enrollees that have ever received the service. Units of service are defined as 15-minutes of service; multiple units of service are possible.
Median number of units of service per enrollee during months that service was provided	The median of each HHP enrollee's monthly number of service units for the received service each month among HHP enrollees that have ever received the service. Units of service are defined as 15-minutes of service; multiple units of service are possible.

UCLA used the HHP designated HCPCS codes and modifiers to identify encounters that included HHP services, defined in Exhibit 87. HCPCS code G0506 and modifier codes U1 to U7 were used July 1, 2018 through September 30, 2018, and HCPCS code G9008 and modifier codes U1 to U7 were used October 1, 2018 through September 30, 2020.

Exhibit 87: HHP Services

Provider Type	Modifier	Modality	Definition
Engagement Services			
Provider Type Not Specified	U7	Not specified	Active outreach such as direct communications with member (e.g., face-to-face, mail, electronic, and telephone), follow-up if the member presents to another partner in the HHP network or using claims data to contact providers the member is known to use. Providers must show active, meaningful, and progressive attempts at member engagement each month until the member is engaged. Examples of acceptable engagement include: (1) letter to member followed by phone call to member; (2) phone call to member, outreach to care delivery partners and social service partners; (3) and street level outreach, including, but not limited to, where the member lives or is accessible.
Core Services			
Provided by Clinical Staff	U1	In-person	Comprehensive care management, care coordination, health promotion, comprehensive transitional care, individual and family support services, and referral to community and social supports
	U2	Telehealth	
Provided by Non-Clinical Staff	U4	In-person	
	U5	Telehealth	
Other Services			
Provided by Clinical Staff	U3	Not specified	Case notes, case conferences, tenant supportive services, and driving to appointments
Provided by Non-Clinical Staff	U6	Not specified	

Demographic Indicators

Exhibit 88 displays demographic indicators created by UCLA using Medi-Cal monthly enrollment data. UCLA calculated age based on an enrollee's HHP enrollment date. On the rare occasion enrollment data included more than one birthday for an enrollee, UCLA used the latest birthday reported. While not common, if the Medi-Cal enrollment data contained conflicting data for gender, race, or language for an HHP enrollee, UCLA used the most frequently reported category.

Exhibit 88: Demographic Indicators

Indicators	Definitions
Age	Enrollee's final age in years at the time of HHP enrollment.
Gender	Indicates whether an enrollee is male or female.
Race	The race label for an enrollee: White, Hispanic, African American, Asian American and Pacific Islander, American Indian and Alaska Native, other, or unknown.
English as Primary Language	Indicating whether an enrollee's primary language is English or not.
Number of Months with Full Scope Coverage	Full scope coverage is defined as at enrollment in at least one dental MCP and another non-dental MCP during the eligible date period. The number of months that an enrollee is full scope is reported for the year prior to the enrollee's initial enrollment in HHP.

Health Status Indicators

UCLA used Medi-Cal claims data from July 1, 2016 to September 30, 2020 to assess health status of HHP enrollees prior to their enrollment in HHP. UCLA followed chronic condition and acuity eligibility criteria developed by DHCS for HHP as described in the HHP Program Guide (Exhibit 89). According to these criteria, chronic conditions were present if an enrollee had two or more services on different dates for the specified condition during the two years prior to HHP enrollment. UCLA also used the criteria set by CMS's Chronic Condition Warehouse to obtain a complete list of chronic condition and potentially chronic or disabling condition categories.

Exhibit 89: Health Status Indicators

Indicators	Definition
Chronic Conditions	
Chronic Condition Criteria 1: Two specific conditions and SUD	The percentage of enrollees that meet chronic condition criteria 1. An enrollee satisfies chronic condition criteria 1 if the enrollee has at least two of the following HHP eligible chronic conditions: chronic obstructive pulmonary disease (COPD), chronic kidney disease (CKD), diabetes, traumatic brain injury, chronic or congestive heart failure, coronary artery disease, chronic liver disease, dementia, substance use disorder.
Chronic Condition Criteria 2: Hypertension and another specific comorbidity	The percentage of enrollees that meet chronic condition criteria 2. An enrollee satisfies chronic condition criteria 2 if the enrollee has hypertension and one of the following HHP eligible chronic conditions: chronic obstructive pulmonary disease, diabetes, coronary artery disease, chronic or congestive heart failure.
Chronic Condition Criteria 3: Serious Mental Illness (SMI)	The percentage of enrollees that meet chronic condition criteria 3. An enrollee satisfies chronic condition criteria 3 if the enrollee has one of the following HHP eligible chronic conditions: major depression disorders, bipolar disorder, psychotic disorders (including schizophrenia.
Chronic Condition Criteria 4: Asthma	The percentage of enrollees that meet chronic condition criteria 4. An enrollee satisfies chronic condition criteria 4 if the enrollee has the HHP eligible chronic condition asthma.
Acuity	
Acuity Criteria 1: Three or more chronic conditions	The percentage of enrollees that meet acuity criteria 1. An enrollee satisfies acuity criteria 1 if the enrollee has at least three of the following HHP eligible chronic conditions: chronic obstructive pulmonary disease (COPD), chronic kidney disease (CKD), diabetes, traumatic brain injury, chronic or congestive heart failure, coronary artery disease, chronic liver disease, dementia, substance use disorder.

Indicators	Definition
Acuity Criteria 2: One or more Hospitalizations	The percentage of enrollees that meet acuity criteria 2. An enrollee satisfies acuity criteria 2 if the enrollee has at least one inpatient hospital stay during one year prior to HHP enrollment.
Acuity Criteria 3: Three or more ED Visits	The percentage of enrollees that meet acuity criteria 3. An enrollee satisfies acuity criteria 3 if the enrollee has at least three or more emergency department visits during one year prior to HHP enrollment.
Chronic Condition Warehouse (CCW) Conditions	The percentage of enrollees meeting each of the CCW condition category criteria in the period prior to HHP enrollment.
CDPS (Chronic Illness and Disability Payment System Risk Score)	The mean, median, and standard deviation of CDPS among all enrollees. The CDPS is calculated based on the International Classification of Diseases (ICD) diagnosis codes in Medi-Cal claims data.

Healthcare Utilization Indicators

UCLA also created healthcare utilization indicators using Healthcare Effectiveness Data and Information Set (HEDIS) 2019 Volume 2 definitions, National Uniform Claim Committee taxonomy designations, the Chronic Conditions Warehouse, and the American Medical Association's Current Procedure Terminology (CPT) Codebook. Exhibit 90 displays these indicators.

Exhibit 90: Healthcare Utilization Indicators

Indicators	Definitions	Improvement Measured by Increase or Decrease
Number of Hospitalizations per 1,000 Member Months	The number of inpatient hospitalization visits during the service month.	Decrease
Length of hospitalization (days)	The total lengths measured in number of total days of all hospitalizations during the service month.	Decrease
Percentage of Enrollees with Any Hospitalizations	The percentage of enrollees who ever had at least one hospitalization	Decrease
Percentage of Enrollees with Any ED Visits Resulting in Discharge	The percentage of enrollees who ever had at least one ED visit resulting in discharge	Decrease
Number of Primary Care Services per 1,000 Member Months	The number primary care provider services during the service month.	Increase or Decrease
Number of Specialty Services per 1,000 Member Months	The number of specialty services during the service month.	Increase or Decrease
Number of Mental Health Services per 1,000 Member Months	The number of mental health services during the service month.	Increase or Decrease
Number of Substance Use Disorder Services per 1,000 Member Months	The number of substance use disorder services during the service month.	Increase or Decrease

HHP Metrics and Additional Mesures

HHP metrics were calculated based on HHP metric specifications in CMS's Core Set of Health Care Quality Measures for Medicaid Health Home Programs. HHP metrics were grouped by whether they measured process of care delivery or patient outcomes. All metrics were reported in the aggregate and included data for two years prior to and one year following each individual's enrollment in HHP when possible. UCLA assessed any length of enrollment or required number of months of enrollment on Medi-Cal enrollment rather than HHP enrollment in order to be consistent between HHP enrollees and the control group. A limited number of metrics were reported semi-annually rather than annually in order to calculate the change in the measure during HHP when there was only one year of data. Exhibit 91 includes descriptions of all HHP metrics and how changes in the metric are to be interpreted.

Exhibit 91: HHP Core Metrics, Definitions, and Reporting Status

Metric	Description	Improvement Measured by Increase or Decrease
Adult Body Mass Index (BMI) Assessment	Percentage of Health Home enrollees ages 18 to 74 who had an outpatient visit and whose body mass index (BMI) was documented during the measurement year or the year prior to the measurement year.	Increase
Follow-Up After Hospitalization for Mental Illness within 30 days	Percentage of discharges for Health Home enrollees age 6 and older who were hospitalized for treatment of selected mental illness diagnoses and who had a follow-up visit with a mental health practitioner within 30 days.	Increase
Follow-Up After Hospitalization for Mental Illness within 7 days	Percentage of discharges for Health Home enrollees age 6 and older who were hospitalized for treatment of selected mental illness diagnoses and who had a follow-up visit with a mental health practitioner within 7 days.	Increase
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 days	Percentage of ED visits for Health Home enrollees age 13 and older with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence with 7 days.	Increase
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 days	Percentage of ED visits for Health Home enrollees age 13 and older with a principal diagnosis of alcohol or other drug (AOD) abuse or dependence who had a follow-up visit for AOD abuse or dependence with 30 days.	Increase

Metric	Description	Improvement Measured by Increase or Decrease
Screening for Depression and Follow-Up Plan	Percentage of Health Home enrollees age 12 and older screened for clinical depression on the date of the encounter, and if positive, a follow-up plan is documented on the date of the positive screen.	Increase
Initiation of Alcohol and Other Drug Abuse or Dependence Treatment	Percentage of enrollees who initiate treatment through within 14 days of the diagnosis.	Increase
Engagement of Alcohol and Other Drug Abuse or Dependence Treatment	Percentage of enrollees who initiate treatment and who had two or more additional AOD services or MAT within 34 days of the initiation visit.	Increase
Controlling High Blood Pressure	Percentage of Health Home enrollees ages 18 to 85 who had a diagnosis of hypertension (HTN) and whose blood pressure (BP) was adequately controlled during the measurement year.	Increase
Plan All-Cause Readmissions	For Health Home enrollees ages 18 to 64, the number of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days and the predicted probability of an acute readmission.	Decrease
Prevention Quality Indicator (PQI) 92: Chronic Conditions Composite	Number of inpatient hospital admissions for ambulatory care sensitive chronic conditions per 100,000 member months for Health Home enrollees age 18 and older. This measure includes adult hospital admissions for diabetes with short-term complications, diabetes with long-term complications, uncontrolled diabetes without complications, diabetes with lower extremity amputation, chronic obstructive pulmonary disease, asthma, hypertension, or heart failure without a cardiac procedure.	Decrease
Ambulatory Care: Emergency Department (ED) Visits	Rate of emergency department (ED) visits resulting in discharge per 1,000 member months among Health Home enrollees.	Decrease

Metric	Description	Improvement Measured by Increase or Decrease
Inpatient Utilization	Rate of acute inpatient care and services (total, maternity, mental and behavioral disorders, surgery, and medicine) per 1,000 member months among Health Home enrollees	Decrease
Inpatient Length of Stay	All approved days from admission to discharge.	Decrease
Use of Pharmacotherapy for Opioid Use Disorder	Percentage of enrollees ages 18 to 64 with an opioid use disorder who received buprenorphine, oral naltrexone, long-acting injectable naltrexone, or methadone for the disorder.	Increase
Admission to an Institution from the Community (Short-Term Stay)	The number of admissions to an institutional facility (skilled nursing facility or intermediate care facility) from the community that result in a short-term stay (1 to 20 days) during the measurement year per 1,000 member months.	Decrease
Admission to an Institution from the Community (Medium-Term Stay)	The number of admissions to an institutional facility (skilled nursing facility or intermediate care facility) from the community that result in a medium-term stay (21 to 100 days) during the measurement year per 1,000 member months.	Decrease
Admission to an Institution from the Community (Long-Term Stay)	The number of admissions to an institutional facility (skilled nursing facility or intermediate care facility) from the community that result in a long-term stay (more than 100 days) during the measurement year per 1,000 member months.	Decrease

Source: Detailed information for each metric is available in HHP Metric Specifications.

Control Group Construction

UCLA obtained administrative Medi-Cal monthly enrollment and claims data from July 2016 to September 2020 for 48,925 individuals reported as enrolled into HHP and for 802,670 individuals that were potentially eligible for HHP on a targeted engagement list (TEL). The TEL was produced bi-annually and UCLA used all TELs through May 2020. These data included two years prior to the start of HHP enrollment (July 2016 to June 2018) and up to the first 27 months of HHP enrollment (July 2018 to September 2020).

UCLA used 48 variables indicating demographic, health status, service utilization, and cost to select the control group (Exhibit 92). Demographic variables were constructed from Medi-Cal enrollment data. Health status variables were constructed from claims data and reflected the HHP chronic condition eligibility criteria and measures of chronic health conditions (e.g., asthma, diabetes, hypertension, chronic kidney disease). The chronic condition eligibility criteria and indicators were constructed following the specifications developed to create the TEL by DHCS (HHP Program Guide). UCLA created and included a measure of acute care utilization by grouping enrollees based on their number of ED visits and hospitalizations. Slopes and intercepts in monthly utilization of ED visits and hospitalizations were also included in the model. Cost variables include estimated Medi-Cal payments, overall and for specific categories of service, and indicators of trends in those payments.

Exhibit 92: Variables Used to Select the Control Group

Indicator	Description
Demographics (9 indicators and variables)	
Age Group	Age at the start of HHP enrollment (0-17, 18-34, 35-49, 50-64, or 65+ years)
Gender	Reported Gender in Medi-Cal Enrollment (Male or Female)
Race/Ethnicity	Reported Race/Ethnicity in Medi-Cal (White, Hispanic, Black, Asian or Pacific Islander, or Native American/Other/Unknown)
Language	English as the preferred language
Homelessness	UCLA developed indicator that uses address-based and claim-based indicators to predict homelessness
WPC enrollment	Indicator of whether or not individual was ever enrolled in Whole Person Care
County	County of residence
Managed Care Plan	Medi-Cal Managed Care Plan
Full Scope Months in Medi-Cal	Number of months in the reported as having full-scope Medi-Cal coverage
Health Status (4 indicators)	
HHP Chronic Condition Eligibility Criteria 1	At least two of the following: Chronic Obstructive Pulmonary Disease (COPD), Chronic Kidney Disease (CKD), Diabetes, Traumatic Brain Injury, Chronic or Congestive Heart Failure, Coronary Artery Disease, Chronic Liver Disease, Dementia, Substance Use Disorder.
HHP Chronic Condition Eligibility Criteria 2	Hypertension and one of the following: COPD, Diabetes, Coronary Artery Disease, Chronic or Congestive Heart Failure.
HHP Chronic Condition Eligibility Criteria 3	One of the following: Major Depression Disorders, Bipolar Disorder, or Psychotic Disorders (including Schizophrenia).
HHP Chronic Condition Eligibility Criteria 4	Asthma
Service Utilization (20 indicators and variables)	
Acute Care Utilization Groups (5 indicators)	UCLA created indicators that groups individuals by their baseline emergency department and hospital utilization: super utilization, high utilization, moderate utilization, low utilization or at-risk-for high utilization

Average Number of Hospitalizations and Emergency Department Visits (2 variables)	Average annual number of service use in the baseline period, normalized by the number of months enrolled in Medi-Call: Hospitalization and Emergency Department Visits
Utilization Slopes (4 variables)	Slope of monthly service utilization in the baseline period for emergency department visits, hospitalizations, primary care services and specialty care services.
Utilization Intercepts (4 variables)	Intercept of monthly service utilization in the baseline period for emergency department visits, hospitalizations, primary care services and specialty care services.
Primary Care Organization type (3 variables)	Number of primary care services by organization type: health centers, group organizations, and individual practices
Behavioral Health Services (2 indicators)	Use of behavioral health services in the baseline period: mental health and substance use disorder
Cost (15 variables)	
Estimated Medi-Cal Payments (5 variables)	Estimated payments for total costs, emergency department visits, hospitalizations, outpatient services, and outpatient prescriptions.
Estimated Payment Slopes (5 variables)	Slope of monthly estimated Medi-Cal payments in the baseline period for total costs, emergency department visits, hospitalizations, outpatient services, and outpatient prescriptions.
Estimated Payment Intercepts (5 variables)	Intercept of monthly estimated Medi-Cal payments in the baseline period for total costs, emergency department visits, hospitalizations, outpatient services, and outpatient prescriptions.

Due to the phased implementation of HHP, UCLA grouped HHP enrollees into nine cohorts based on the quarter in which they enrolled and selected a potential pool of control beneficiaries for each cohort. This method ensured that the control group beneficiaries had a similar baseline period to their matched enrollee.

To select the final matched control group, UCLA first estimated a propensity score in generalized additive models for modeling non-linear effect and avoiding overfitting including the variables in Exhibit 92. HHP enrollees and two control beneficiaries were further matched within each MCP and county based on a combination of nearest neighborhood match and exact match, including propensity scores, acute care utilization groups, and HHP chronic condition eligibility criteria.

UCLA used sampling with replacement due to unavailability of similar matches per MCP. The final control group to HHP enrollee ratio was 1.47. To balance the sample, each control group beneficiary was matched to multiple HHP enrollees. Exhibit 93 shows the characteristics of the final control group for the largest HHP SPA 1 enrollee cohort (cohort 5; n=8,595), which consisted of those enrolled from July to September 2019 from Groups 1, 2, and 3 for SPA 1.

Data show that the control group was similar to the HHP enrollees for all indicators and measures.

Exhibit 93: Comparison of Select Characteristics of HHP SPA 1 Cohort 5 Enrollees (Enrolled July to September 2019) and Matched Control Beneficiaries

		SPA 1 HHP Enrollees in Cohort 5	After Match Control Group
Age (at time of enrollment)	% 0-17	6%	5%
	% 18-34	13%	13%
	% 35-49	25%	26%
	% 50-64	49%	51%
	% 65+	6%	5%
Gender	% male	41%	42%
Race/Ethnicity	% White	21%	19%
	% Latinx	44%	46%
	% African American	20%	21%
	% Asian	6%	6%
	% Other or Unknown	9%	9%
Language	% English proficient	73%	73%
Medi-Cal full-scope months year prior to enrollment	Average number of months	11.5	11.5
Homelessness	UCLA-constructed indicator	23%	25%
WPC enrollment	Any enrollment in WPC through September 2020	6%	6%
HHP Chronic Condition Criteria	Two specific conditions (Criteria 1)	44%	43%
	Hypertension and another specific condition (Criteria 2)	60%	60%
	Serious mental health conditions (Criteria 3)	41%	40%
	Asthma (Criteria 4)	31%	30%
Select Chronic Conditions	Hypertension	72%	70%
	Diabetes	53%	52%
	Major Depressive Disorders	35%	33%
	Substance Use Disorders	9%	10%
Emergency Department Visit Utilization	Normalized Annual Rate	2.9	3.0
	ED Intercept	0.23	0.23
	ED Slope	0.005	0.004
Hospitalization Utilization	Normalized Annual Rate	0.7	0.7
	Hospitalization Intercept	0.05	0.05
	Hospitalization Slope	0.004	0.004
Outpatient Services Utilization	PCP slope	0.05	0.03
	PCP intercept	0.59	0.56
	Specialty slope	0.06	0.04
	Specialty intercept	0.47	0.38
Estimated Med-Cal Payment Trends	ED cost slope	0.06	0.05
	ED cost intercept	3.1	2.8
	Hospitalization cost slope	0.29	0.23
	Hospitalization cost intercept	3.8	3.4
	Outpatient cost slope	0.52	0.46
	Outpatient cost intercept	6.9	6.1

UCLA developed unique matched control groups by different outcomes. For metrics that restricted the sample to specific subpopulations, such as follow-up after hospitalization for mental illness, UCLA developed a control group within groups based on whether individuals met the denominator criteria (i.e., hospitalized for mental illness) before HHP, during HHP or is both time periods. In addition, the match models for utilization metrics and measures did not include slopes and intercepts for costs due to collinearity of those variables with utilization indicators. Similarly, the match models for cost measures did not include slopes and intercepts for utilization variables.

Difference-in-Difference Models

UCLA assessed the impact of HHP for the overall HHP population and for SPA 1 and SPA 2 separately, using the difference-in-difference (DD) modeling approach. All models were controlled for demographics (gender, age, race/ethnicity, primary language, months of Medi-Cal enrollment), utilization indicators (acute care utilization group), and health status indicators (baseline CDPS risk scores and HHP chronic condition eligibility criteria). The model additionally included an indicator for having at least one primary or secondary diagnosis of COVID-19 in the claims data and the number of months spent enrolled in HHP during the pandemic. The models predicted changes in metrics before and during HHP for HHP enrollees and the matched control group and differences in these differences. The baseline and enrollment periods for each HHP enrollee and their matched controls were based on their enrollee's date of enrollment, and the sample included only HHP enrollees with at least one years of baseline data and at least one month of enrollment in HHP.

UCLA used logistic regression models for binary metrics (e.g., Controlling High Blood Pressure) and a zero-inflated count model with Poisson distribution for count metrics (e.g., Primary Care Visits per 1,000 Member-Months, Specialty Care Visits per 1,000 Members-Months) and HHP estimated Medi-Cal payments. The exposure option within a Generalized Linear Model (GLM) was used to adjust for different number of months of Medi-Cal enrollment and the subsequent different lengths of exposure to HHP. All analyses of individual-level metrics were analyzed based on Medi-Cal member months.

The DD analyses differed for HHP specified metrics that required one year of observation from metrics that did not require one year of observation and for optional measures. For HHP specified metrics that required one year of observation, the DD analyses measured changes from the Pre-HHP Year 2 to Pre-HHP Year 1 for both HHP enrollees and the control group; the

change from Pre-HHP Year 1 to the HHP Year 1 for both HHP enrollees and the control group; and the difference between the changes for HHP enrollees vs. the control group.

For the remaining metrics and measures, UCLA examined changes in six month increments up to 24 months (1-6, 7-12, 13-18, and 19-24) before HHP enrollment and up to 12 months (1-6 and 7-12) during HHP. For these, the DD analysis measured the change from 19-24 vs. 1-6 months before HHP for both HHP enrollees and the control group; the change during HHP from 1-6 to 7-12 months for both HHP enrollees and the control group; and the difference between the changes in HHP enrollees vs. the control group. The shorter timeframe for examining metrics allowed for a clearer assessment of changed during the early phase of HHP implementation. The findings were not subject to potential seasonality in service utilization due to rolling enrollment throughout the year and measuring change following the date of enrollment per beneficiary.

Limitations

One of the acuity criteria set by DHCS in the HHP Program Guide was chronic homelessness. However, Medi-Cal Enrollment and Claims data do not provide sufficient data to identify individuals that experience chronic homelessness. As a result, UCLA could not report on this acuity criteria. The data in this report are restricted to September 2020 due to a minimum lag of six months for relatively complete claims data. The identification of chronic conditions relied on the primary and secondary diagnoses associated with each service. Any error in original reporting of these diagnoses by providers may have resulted in under or over reporting of chronic conditions. HHP services may have been underreported due to missing HCPCS code modifiers by MCPs. MCPs that did not report any encounters with the HHP HCPCS code included Aetna Better Health of California, UnitedHealthcare Community Plan of California, Community Health Group Partnership Plan, and Kaiser Permanente.

Attributing Estimated Medi-Cal Payments to Claims

Background

The great majority of services under Medi-Cal are provided by managed care plans that receive a specific capitation amount per member per month and do not bill for individual services received by Medi-Cal beneficiaries. While managed care plans are required to submit claims to Medi-Cal, these claims frequently include payment amounts of unclear origin that are different from the Medi-Cal fee schedule. A small and unique subset of Medi-Cal beneficiaries are not enrolled in managed care and receive care under the fee-for-service (FFS) reimbursement methodology and have claims with actual charges and paid values. FFS claims are reimbursed

primarily using fee schedules developed by Medi-Cal. The capitation amounts for managed care plans are developed using the same fee schedules by Mercer annually, using complex algorithms and other data not included in claims.

To address the gaps in reliable and consistent payment data for all claims, UCLA estimated the amount of payment per Medi-Cal claim under HHP using various Medi-Cal fee schedules for services covered under the program. The methodology included (1) specifying categories of service observed in the claims data, (2) classifying all adjudicated claims into these service categories, (3) attributing a dollar payment value to each claim using available fee schedules and drug costs, and (4) examining differences between these and available external estimates. UCLA estimated payments for both managed care and FFS claims to promote consistency in payments across groups and to avoid discrepancies due to different methodologies.

The payment estimates generated using this methodology are not actual Medi-Cal expenditures for health care services delivered during HHP. Rather, they represent the estimated amount of payment for services and are intended for measuring whether HHP led to efficiencies by reducing the total payments for HHP enrollees before and after the program, and in comparison to a group of comparison patients in the same timeframe.

Service Category Specifications

Data Sources

UCLA used definitions from multiple sources to categorize and define different types of services. These sources included Medi-Cal provider manuals, HEDIS value set, DHCS 35C File, American Medical Association's CPT Codebook, National Uniform Code Committee's taxonomy code set, and other available sources.

- DHCS's Medi-Cal provider manuals included billing and coding guidelines for provider categories and some services.
- The HEDIS Value Set by the National Committee for Quality Assurance used procedure codes (CPT and HCPCS), revenue codes (UBREV), place of service codes (POS), and Systematized Nomenclature of Medicine-Clinical Terms (SNOMED CT) to define value sets that measure performance in health care. For example, the HEDIS value set "ED" is a combination of procedure codes that describe emergency department services and revenue codes specifying that services were provided in the emergency room.
- DHCS Paid Claims and Encounters Standard 35C File (DHCS 35C File) provided specifications to managed care plans on how claims must be submitted and contained detailed information about claims variables and their meaning and utility, such as vendor codes describing the location of services and taxonomy codes describing the type of provider and their specializations.
- The American Medical Association's Current Procedure Terminology (CPT) Codebook contained a list of all current procedural terminology (CPT) codes and descriptions that are used by providers to bill for services.
- The National Uniform Claim Committee's (NUCC's) Health Care Provider Taxonomy code set identified provider types such as Allopathic and Osteopathic Physician and medical specialties such as Addiction Medicine defined by taxonomy codes.

UCLA also used other resources to address gaps in definitions. For example, hospice codes that were used in claims submitted before 2016 were not included in the Medi-Cal provider manual, but UCLA collected the pre-2016 hospice codes from other DHCS guidelines.

Methods

UCLA constructed eighteen mutually exclusive categories of service (Exhibit 94). Available claims data included managed care, fee-for-service, and Short-Doyle. Some categories were defined using complementary definitions from more than one source.

UCLA assigned claims to only one of the eighteen service categories to avoid duplication when calculating total estimated HHP payments. The outpatient services category may include claims included in other categories and therefore is not included in calculation of the total estimated payment in this report. UCLA assigned claims to the first service category a claim meets the criteria for as ordered in Exhibit 94. All services, apart from primary care visits, provided on the day of an ED visit were grouped as part of the ED visit to represent the total cost of the visit. For example, patients may have received transportation to an emergency department and laboratory tests during the emergency department visit, and these services were included in the ED category rather than the transportation or laboratory services categories. This approach may have included lab or transportation services in the ED category that were not part of the ED visit, and may have undercounted lab and transportation in their respective categories. However, this was necessary because claims data lacked information on the specific time of day when services were rendered. Similarly, all claims for services received during a hospitalization were counted as part of the same stay and were excluded from other categories of service, except for primary care visits on the day of admission. Other categories were identified solely by the procedure code or place of service and were not bundled with other services occurring on the same day, such as long-term care, home health/ home and community-based services, community-based adult services, FQHC services, labs, imaging, outpatient medication, transportation, and urgent care.

Some claims lacked the information necessary to be categorized and were classified under an "Other Services" category. These frequently included physician claims without a defined provider taxonomy and durable medical equipment codes that were billed separately and could not be associated with an existing category.

Exhibit 94: Description of Mutually Exclusive Categories of Service*

Order	Service category	Definition source	Description
1	Emergency Department Visits (ED)	HEDIS	Place of service is hospital emergency room and procedure code is emergency service
2	Hospitalizations	DHCS 35C File	Place of service is inpatient and admission and discharge dates are present and are on different days

Order	Service category	Definition source	Description
3	Hospice Care	DHCS 35C File, HEDIS, and DHCS Medi-Cal Provider Manuals	Provider is hospice or procedure code is hospice service
4	Long-Term Care (LTC) Stays	DHCS 35C File	Claim is identified as LTC or provider is LTC organization; stays one day apart are counted as one visit, stays two or more days apart are separate stays
5	Home Health and Home and Community-Based Services (HH/HCBS)	DHCS 35C File and DHCS Medi-Cal Provider Manuals	Provider is a home health agency or home and community-based service waiver provider, procedure is home health or home and community-based service
6	Community-Based Adult Services (CBAS)	DHCS 35C File and DHCS Medi-Cal Provider Manuals	Provider is adult day health care center or procedure code is community-based adult service, which are health, therapeutic and social services in a community-based day health care program
7	Federally Qualified (FQHC) and Rural Health Center (RHC) Services	DHCS 35C File	Provider is an FQHC or RHC
8	Laboratory Services	DHCS 35C File	Claim is identified as clinical laboratory, laboratory & pathology services, or laboratory tests
9	Imaging Services	DHCS 35C File	Claim is identified as portable x-ray services or imaging/ nuclear medicine services
10	Outpatient Medication	DHCS 35C File	Claim is identified as pharmacy
11	Transportation Services	DHCS 35C File	Claim is identified as medically required transportation
12	Primary Care Services	National Uniform Claim Committee	Provider is allopathic and osteopathic physician (with specialization in adult medicine, adolescent medicine, or geriatric medicine, family medicine, internal medicine, pediatrics, or general practice), or physician assistant or nurse practitioner (with specialization in

Order	Service category	Definition source	Description
			medical, adult health, family, pediatrics, or primary care)
13	Specialty Care Services	National Uniform Claim Committee	Provider is allopathic and osteopathic physician or physician assistant or nurse practitioner (with all specializations not captured in the Primary Care Services category)
14	Outpatient Facility Services	DHCS 35C File	Claim is identified as outpatient facility
15	Dialysis Services	DHCS 35C File and CPT Codebook	Provider is a dialysis center and procedure is dialysis
16	Therapy Services	DHCS Medi-Cal Provider Manual	Procedure code is occupational, physical, speech, or respiratory therapy
17	Urgent Care Services	National Uniform Claim Committee	Provider is ambulatory urgent care facility
18	Other Services	N/A	Provider, procedure, or place of service is not captured above
N/A	Outpatient Services	HEDIS	Claim type is outpatient and procedure code, revenue code, or place of service code is outpatient

Source: UCLA Methodology.
Notes: * indicates categories are mutually exclusive except for outpatient services category

UCLA examined four of the above categories that made up 69% of total payments for HHP claims in 2019 (Exhibit 95).

Exhibit 95: Percentage of 2019 Total Estimated Payments by Category of Service for HHP Medi-Cal Claims

Category of Service	Percentage of Total Estimated Payment
All Categories	**100%**
Outpatient Services	22%
Outpatient Medication	17%
Emergency Department Visits	5%
Hospitalizations	25%
All other categories	31%

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020

Attributing Payments to Specific Services

To attribute payments to each category of service, UCLA developed methods to calculate an estimated payment for each category based on available data. Exhibit 96 displays the categories of service and what is included in the calculation of estimated payments for each category.

Exhibit 96: Category of Service and Payment Descriptions

Category of Service	Calculation of Estimated Payment
Emergency Department Visits (ED)	Payments for all services taking place in the emergency department of a hospital, including services on the same day of the ED visit, excluding services by PCPs and FQHCs and RHCs. Two sub-categories are reported: ED visits followed by hospitalizations and all other ED visits that are followed by discharge.
Hospitalizations	Payments for all services that take place during a hospitalization, excluding visits with primary care providers on the first or last day of the stay, FQHC visits on the first or last day of the stay, or ED visits that preceded hospitalization
Hospice Care	Payments for hospice services in an LTC facility or Home Health setting, excluding hospice services rendered during a hospitalization
Long-Term Care (LTC) Stays	Institutional fees billed by LTC facilities; the per diem rate includes supplies, drugs, equipment, and services such as therapy
Home Health and Home and Community-Based Services (HH/HCBS)	Payments for services provided by a home health agency (HHA) and services provided through the home and community-based services (HCBS) waiver
Community-Based Adult Services /(CBAS)	Payments for community-based adult services and for services rendered at an adult day health care center
Federally Qualified (FQHC) and Rural Health Center (RHC) Services	Payments for all services provided in an FQHC or RHC
Laboratory Services	Payments for laboratory services, except those provided during a hospitalization or ED visit
Imaging Services	Payment for imaging services, except those provided during a hospitalization, ED visit, or LTC stay

Category of Service	Calculation of Estimated Payment
Outpatient Medication	Payments for outpatient drug claims, excluding prescriptions filled on the same day as an ED visit or on the day of discharge from a hospitalization
Transportation Services	Payments for medically required transportation, excluding transportation on the same day as an inpatient admission or an emergency department visit
Primary Care Services	Payments for services provided by a primary care physician
Specialty Care Services	Payments for services provided by a specialist, excluding services provided during an inpatient stay or an emergency department visit, and excluding facility fees
Outpatient Facility Services	Facility fees paid to hospital outpatient departments and ambulatory surgical centers
Dialysis Services	Payments for dialysis services rendered in a dialysis center
Therapy Services	Payments for occupational, speech, physical, and respiratory therapy services
Urgent Care Services	Payments for services provided in an urgent care setting
Other Services	Payments for services not captured above
Outpatient Services	Payments for all services delivered in an outpatient setting

Source: UCLA Methodology.

UCLA used all available Medi-Cal fee schedules and supplemented this data with other data sources as needed. Payment data sources, brief descriptions, and the related categories of services they were attributed to are provided in Exhibit 97.

Exhibit 97: Payment Data Sources

Source	Description	Applicable Service Categories
Medi-Cal Physician Fee Schedule Annual files 2013 to 2020 inflated/ deflated to 2019	Contains rates set by DHCS for all Level I procedure codes that are reimbursable by Medi-Cal for services and procedures rendered by physicians and other providers	ED, Hospitalizations, Hospice, LTC, HH/HCBS, CBAS, Imaging, Transportation, Primary Care, Specialty Care, Dialysis, Urgent Care, Other, and Outpatient Services
Durable Medical Equipment (DME) Fee	Contains rates set by CMS for Level II procedure codes for durable medical	ED, Hospitalizations, Hospice, LTC, HH/HCBS,

Source	Description	Applicable Service Categories
Schedule Annual files 2017 to 2020 inflated/ deflated to 2019	equipment such as hospital beds and accessories, oxygen and related respiratory equipment, and wheelchairs	CBAS, Transportation, Primary Care, Specialty Care, Dialysis, Urgent Care, and Other
Medical Supplies Fee Schedules October 2019	Contains rates set by DHCS for supplies such as needles, bandages, and diabetic test strips	ED, Hospitalizations, Hospice, LTC, HH/HCBS, CBAS, Transportation, Primary Care, Specialty Care, Dialysis, Urgent Care, and Other
Average Sales Price Data (ASP) for Medicare Part B Drugs Annual files 2014 to 2020 inflated/ deflated to 2019	Contains rates set by CMS for procedure codes for physician-administered drugs covered by Medicare Part B	ED, Hospitalizations, Hospice, LTC, Primary Care, Specialty Care, and Other
CMS MS-DRG grouping software, DHCS's APR-DRG Pricing Calculator 12/1/2019	Contains Diagnostic Related Grouping (DRG) codes used for hospitalizations (CMS), base rate per DRG (DHCS) and DRG weights (CMS)	Hospitalizations, LTC
FQHC and RHC Rates 12/19/2018 inflated to 2019	Contains rates set by DHCS for services provided by FQHCs and RHCs	FQHC and RHC
Hospice per diem rates 9/28/2020 deflated to 2019	Contains rates set by DHCS for hospice stays and services	Hospice
Nursing Facility Level A per diem rates 8/1/2019	Contains per diem rates set by DHCS per county for Freestanding Level A Nursing Facilities	LTC, Hospice
Distinct Part Nursing Facilities, Level B 8/1/2019	Contains per diem rates set by DHCS for nursing facilities that are distinct parts of acute care hospitals	LTC, Hospice

Source	Description	Applicable Service Categories
Home Health Services Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for procedure codes reimbursable by home health agencies	Home health
Home and Community-Based Services Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for the home and community-based services program	Home and community-based services
Community-Based Adult Services Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for community-based adult services	Community-based adult services
National Average Drug Acquisition Cost (NADAC) File 12/30/2019	Contains per unit prices for drugs dispensed through an outpatient pharmacy setting based on the approximate price paid by pharmacies, calculated by CMS	Outpatient medication
Clinical Laboratory Fee Schedule 12/30/2019	Contains rates set by CMS for clinical lab services	Laboratory
Therapy Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for physical, occupational, speech, and respiratory therapy	Therapy
Ambulatory Surgical Center (ASC) Fee Schedule January 2019	Contains billing codes and reimbursement rates set by CMS for facility fees for ASCs	ED, Hospitalizations, Outpatient Facility
Outpatient Prospective Payment System (OPPS) File October 2019	Contains billing codes and reimbursement rates set by CMS for facility fees for hospital outpatient departments	ED, Hospitalizations, Outpatient Facility

Payments were attributed based on available service and procedures codes included in each claim. A specific visit may have included a physician claim from the providers for their medical

services and a facility claim for use of the facility and resources (e.g., medical/ surgical supplies and devices) where service was provided.

The Medi-Cal Physician Fee Schedule contained monthly updated rates for all procedures that were reimbursable by Medi-Cal to providers and hospital outpatient departments. Each procedure code had multiple rates that varied based on provider type (e.g. physician, podiatrist, hospital outpatient department, ED, community clinic) and patient age. UCLA distinguished between these rates, but the paid amount for FFS still varied within the same procedure code, likely due to the directly negotiated rates between the providers and DHCS. For the purpose of HHP cost evaluation, UCLA used the procedure code with the most expensive rate when adequate information was lacking.

UCLA also included a payment augmentation of 43.44% for claims for physician services provided in county and community hospital outpatient departments following DHCS guidelines. UCLA did not include any other reductions or augmentations that may have been applied by Medi-Cal due to limited information in claims data. Some procedures such as those performed by a qualified physical therapist in the home health or hospice setting did not have a fee in the Medi-Cal physician fee schedule but had fees in the Medi-Cal Provider Manual and UCLA used these fees when applicable.

A number of claims lacked procedure codes but had a revenue code such as “Emergency Room-General” or “Freestanding Clinic- Clinic visit by member to RHC/FQHC”. UCLA obtained documentation from DHCS that enabled identification of a price using outpatient revenue codes alone.

CMS’s Durable Medical Equipment (DME) Fee Schedule included billing codes that are reimbursable by Medi-Cal for DMEs such as hospital beds and accessories, oxygen and related respiratory equipment, and wheelchairs. Rates for other medical supplies such as needles, bandages, and diabetic test strips were found in DHCS’s Medical Supplies Fee Schedules.

FQHCs and RHCs consist of a parent organization with one or more clinic sites and are paid a bundled rate for all services during a visit. DHCS publishes FQHC and RHC Rates for each clinic within the parent organization.

Payments for outpatient medication claims were calculated using the national drug acquisition cost (NADAC), which contains unit prices for drugs. UCLA calculated the drug cost by multiplying the unit price by the number of units seen on the claim. Drugs administered by physicians were priced using CMS’s Average Sales Price Data (ASP) for Medicare Part B drugs.

Facility fees were priced based on the ambulatory surgical center (ASC) fee schedule or the outpatient prospective payment system (OPPS) depending on whether the billing facility was an ASC or an outpatient department.

Medi-Cal paid most LTC institutions such as nursing and intermediate care facilities for the developmentally disabled on a per-diem rate, while long-term care hospital stays were reimbursed via diagnosis related group (DRG) payments. Per diem rates for LTC facilities were obtained directly from DHCS's long-term care reimbursement webpage, and these rates varied by type of facility. Rates for hospice services were based on DHCS's hospice care site and hospice room and board rates were based on the Nursing Facility/ Intermediate Care facility fee schedule. UCLA lacked some variables in claims data that were needed to calculate some LTC and hospice payments, such as accommodation code which specifies different rates for each nursing facility depending on the type of program including the "nursing facility level B special treatment program for the mentally disordered" or "nursing facility level B rural swing bed program". In these cases, UCLA used the rates associated with accommodation code 1: "nursing facility level B regular", which were higher than other accommodation code rates.

Hospitalizations are paid based on diagnosis related groups (DRGs), a bundled prospective payment methodology that is inclusive of all services provided during a hospitalization, except for physician services. Identification and pricing of DRGs varies by payers such as Medi-Cal and Medicare. In California, DHCS uses 3M's proprietary APR-DRG Core Grouping Software to assign DRGs and 3M's APR-DRG Pricing Calculator to calculate prices for Medi-Cal DRG hospitals. APR-DRGs have more specific DRGs for Medicaid populations such as pediatric patients and services such as labor and delivery, and incorporate four levels of illness severity.

However, UCLA did not have access to this software and used 3M's publicly available CMS MS-DRG grouping software for the Medicare population, which includes Medicare-Severity DRGs (MS-DRGs) and their corresponding weights. MS-DRGs only include two levels of severity of illness, with complications or without complications. UCLA used this software to assign a DRG to each hospitalization based on procedure code, diagnosis, length of stay, payer type, patient discharge status, and patient age and gender. Although CMS uses the Inpatient Prospective Payment System to assign hospital prices based on the MS-DRGs, UCLA used available data and publicly available prices for DHCS's APR-DRG Pricing Calculator to calculate payments for each DRG. DHCS's APR-DRG Pricing Calculator used multiple hospital and patient-level variables to calculate the final payment for hospitals, and UCLA incorporated some of these variables into the estimated payment (such as patient age and hospital status of rural vs. urban) but could not incorporate other modifiers due to data limitations (such as other health coverage and whether or not the hospital was an NICU facility).

UCLA calculated the estimated payment by starting with the base rate from DHCS's APR-DRG Calculator, which was $12,832 for rural hospitals and $6,507 for urban hospitals. This base rate was multiplied by the weight assigned to each MS-DRG, which modified the base rate to account for resources needs for a given DRG. For example, more severe hospitalizations such as "Heart Transplant or Implant of Heart Assist System with major complications" had a high weight of 25.4241 but "Poisoning and Toxic Effects of Drugs without major complication" had a lower weight of 0.7502. This rate was further modified by one available policy adjuster, which increased the payment amount by patient age and was higher for those under 21 (1.25) than those 21 and older (1). Overall payment for a hospitalization was calculated by adding the estimated payments for physician specialist services that occurred during the hospitalization.

When no fees were found for procedure codes in any payment data sources, UCLA used the most frequent paid amount seen in fee-for-service claims for the procedure code. These included procedures such as tattooing/ intradermal introduction of pigment to correct color defects of skin and excision of excessive skin. When outlying units of service were found on the claim, UCLA used the 90th percentile value of units for the procedure code rather than the observed units. All claims were included in a category of service and were assigned a price.

For dual beneficiaries, Medi-Cal is the secondary payer (payer of last resort) and covers a portion of the costs of the service. However, UCLA lacked information on percentage of services paid for by Medi-Cal for dual managed care beneficiaries. Therefore, UCLA used Medi-Cal claims data to calculate payments for these dual beneficiaries using the same methodology as non-dual managed care beneficiaries. Dual beneficiaries made up 6% of the managed care population and 4% of the FFS population in 2019.

For the purpose of evaluation, all payments were calculated using the 2019 fee schedules when available. In the absence of 2019 data, UCLA inflated or deflated payment amounts using the paid amounts for similar FFS claims in available data. Using the 2019 fees removed the impact of inflation and pricing changes in subsequent analyses.

Comparison of Estimated Payments with Medi-Cal Paid Amounts

UCLA examined the potential bias that may have resulted due to the methodology used to estimate payments by comparing the estimated FFS payments with Medi-Cal paid amounts in FFS claims. Exhibit 98 shows that the estimated FFS payments were 6% higher than paid amounts for all services. There was underlying variation by category of services. For example, ED payments were 9% higher while estimated payments for hospitalizations were 9% lower.

Exhibit 98: Comparison of Estimated Fee-for Service Payments and Paid Amounts for 2019 HHP Medi-Cal Claims

Category of Service	Difference Between Estimated Payment and Medi-Cal Payment
All Categories	**6%**
Outpatient Services	9%
Outpatient Medication	-1%
Emergency Department Visits	9%
Hospitalizations	-9%
All other categories	16%

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020

UCLA further compared the difference in estimated payments for FFS and managed care claims and found that managed care payments were 12% lower than the FFS claims ($224 vs $197; Exhibit 99).

Exhibit 99: Comparison of Average Fee- for-Service and Managed Care Payments per Claim for 2019 HHP Medi-Cal Claims

Average Medi-Cal Payment per Claim for FFS Claims	Average Estimated Payment per Claim for Managed Care Claims	Estimated Payment Compared to Medi-Cal Payment
$224	$197	-12%

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2018 to September 30, 2020

Limitations

There were three types of limitations associated with UCLA's cost analysis including the availability of needed variables in the claims data and access to fee schedules and other pricing resources. The goal of the cost analysis was not to calculate exactly what DHCS paid for claims, but rather to calculate estimated payments and measure the impact of HHP by comparing changes in estimated payments over time. The limitations below describe why UCLA results may be different from DHCS reimbursements for certain services and categories.

The first limitation was related to estimating payments for hospitalizations. First, the MS-DRG relative weights reflected Medicare payments, which were higher than Medi-Cal. This likely led to higher estimated payments for hospitalization. Second, MS-DRG only identified those levels of severity, with and without complication, but APR-DRG includes four severity levels. Third, DHCS uses multiple criteria to adjust hospital payments but UCLA was only able to adjust for urban and rural rates.

A second limitation was related to availability of fee schedules for accurate pricing. The HHP evaluation required analysis of multiple years of claims data and UCLA used all available fee schedules to price procedures, supplies, and facilities from multiple years and inflated prices to 2019 dollars whenever necessary. UCLA always used the most recent rate for a procedure. The inflation rates used were based on medical care Consumer Price Index provided by US Bureau of Labor Statistics without adjusting for regional-specific inflation rates. Not all procedures that appeared in the claims data had corresponding rates in all the available fee schedules. Procedures that required Treatment Authorization Requests (TARs) lacked a fee-schedule and are frequently more expensive than covered services. Some specific procedures had no fees in the Medi-Cal fee-schedule. When fee schedules were missing, UCLA attributed the most frequently observed price from the paid amount for a similar FFS claim. If the procedure did not appear in any FFS claims, UCLA assigned the median allowed amount from all managed care claims for the given procedure code.

A third limitation was related to outlier values for service units, some of which were extremely high. UCLA attributed the 95th percentile value instead of the original value in the claim, potentially underestimating payments for some claims.

HHP Rates

UCLA used the Medi-Cal Health Homes Program Rate Range Summary, which provided per member per month (PMPM) HHP rates, to calculate total expenditures per quarter and average per enrollee expenditures. Rates varied by MCP and County, and whether the enrollee was dual (covered by Medi-Cal and Medicare) or non-dual (covered only by Medi-Cal).

Appendix B: UCLA HHP Evaluation Design

Introduction

The Health Homes Program (HHP) is created and implemented under the statutory authority of California AB 361. The legislation authorizes the California Department of Health Care Services (DHCS) to create HHP under the Section 2703 of the 2010 Patient Protection and Affordable Care Act. Section 2703 allows states to create Medicaid health homes to coordinate the full range of physical health, behavioral health, and community-based long-term services and supports needed by members with chronic conditions. The program is subject to cost-neutrality requirements regarding the State General Funds and federal financial participation. AB 361 requires an evaluation of the program. AB 361 also required that DHCS submit a report to the Legislature within two years after implementation of the program.

The overarching goal of HHP is to achieve the Triple Aim of Better Care, Better Health, and Lower Costs. These goals are to be achieved by providing (1) comprehensive care management, (2) care coordination, (3) health promotion, (4) comprehensive transitional care, (5) individual and family support services, and (6) referrals to community and social support services. The program is implemented by Medi-Cal managed care plans (MCPs) to their members. MCPs form contractual or non-contractual relationships with Community-Based organizations or entities, forming an HHP network for delivery of services. HHP is scheduled to be implemented in 14 California counties, with four groups of counties implanting HHP in five consecutive time periods. In addition to staggered implementation by county, MCPs incorporate the subset of patients with serious mental illness (SMI) and serious emotional disturbance (SED) six months after the program start date (phase 2) for other eligible populations with program criterion of physical health/substance use disorder (SUD) (phase 1). The first county has implemented the first phase of the program in July 2018 and the last counties will implement the second phase in July 2020.

The target population of the program is a small subset (3-5%) of the state's Medi-Cal population. This subset requires an intensive set of services and the highest levels of care coordination. Eligibility for HHP includes having chronic conditions that fit one of several predetermined categories and evidence of high acuity/complexity. There are program exclusions criteria for those receiving care management such as: (1) hospice recipients and skilled nursing home residents, (2) enrollees in specialized MCPs (e.g., Program of All-Inclusive Care for the Elderly (PACE), Senior Care Action Network (SCAN) and AIDS Healthcare Foundation (AHF)), (3) MCP members sufficiently well managed through self-management or

another program, and (4) members determined to be more appropriate for alternative care management programs, etc.

HHP Evaluation Conceptual Framework and Questions

The UCLA Center for Health Policy Research (UCLA) is the evaluator of the HHP program. UCLA has developed a conceptual framework for the evaluation of HHP (Exhibit 100). According to the framework, better care is achieved when HHP network providers establish the necessary infrastructure and deliver HHP services. Delivery of HHP services will in turn lead to better health indicated by reduced utilization of health care services that are associated with negative health outcomes as well as improvements in population health indicators. Better care and better health will lead to lower overall health care expenditures.

Exhibit 100: Evaluation Conceptual Framework

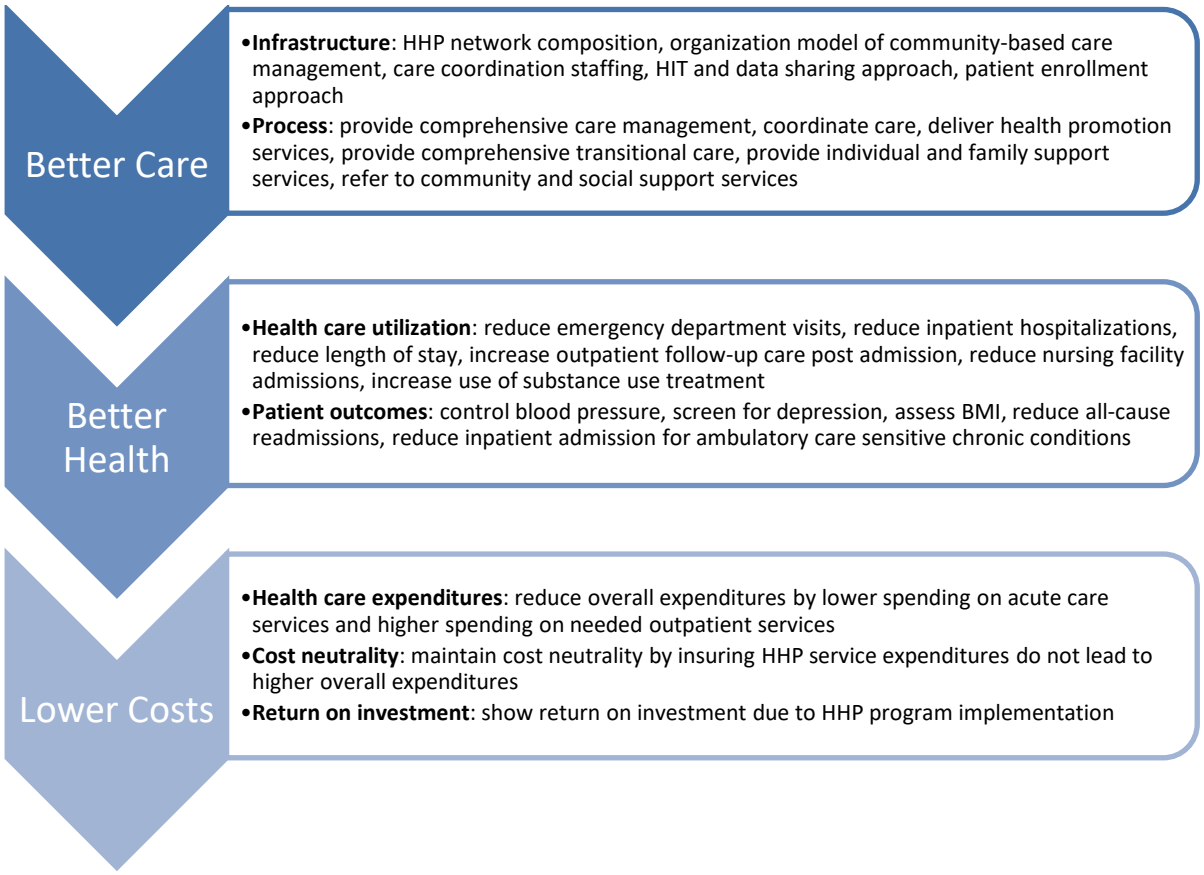


Exhibit 101 displays the evaluation questions and data sources that will be used to answer those questions. The evaluation questions are aligned with the components of the conceptual framework. Questions 1-7 examine the infrastructure established by HHP networks, population enrolled, and the services delivered. Questions 8-13 examine the impact of HHP service delivery

on multiple indicators of healthcare service utilization as well as patient health indicators. Question 14-17 examine the impact of HHP on lowering costs or cost savings for the Medi-Cal program.

Exhibit 101: Evaluation Questions and Data Sources

Evaluation Questions	Data Sources
Better Care	
Infrastructure	
16. What was the composition of HHP networks? 17. Which HHP network model was employed? 18. When possible, what types of staff provided HHP services? 19. What was the data sharing approach? 20. What was the approach to targeting patients for enrollment per HHP network?	MCP Reports
Process	
21. What were the demographics of program enrollees? What was the acuity level of the enrollees including health and health risk profile indicators, such as aggregate inpatient, ED, and rehab SNF utilization? What proportion of eligible enrollees were enrolled? How did enrollment patterns change over time? What proportion of enrollees are homeless?	MCP Reports TEL: demographic and eligibility criteria of targeted MCP members Medi-Cal Claims and Encounter Data: demographics and service use Quarterly HHP Enrolled CIN File: HHP enrollees
22. Were Health Home services provided in-person or telephonically? Were Health Home services provided by clinical or non-clinical staff? How many enrollees received engagement services? How many homeless enrollees received housing services?	
Better Health	
Health care utilization	
23. How did patterns of health care service use among HHP enrollees change before and after HHP implementation?	TEL: demographic and eligibility criteria of targeted MCP members
24. Did rates of acute care services, length of stay for hospitalizations, nursing home admissions and length of stay decline?	Medi-Cal Claims and Encounter Data: demographics and service use
25. Did rates of other services such as substance use treatment or outpatient visits increase?	
Patient outcomes	
26. How did HHP core health quality measures improve before and after HHP implementation?	MCP Reports: core measures Medi-Cal Claims and Encounter Data: conditions and service use
27. Did patient outcomes (e.g., controlled blood pressure, screening for clinical depression) improve before and after HHP implementation?	
28. How many homeless enrollees were housed?	
Lower Costs	
Health care expenditures	

Evaluation Questions	Data Sources
Evaluation Questions	**Data Sources**
29. Did Medi-Cal expenditures for health services decline after HHP implementation?	Medi-Cal Claims and Encounter Data: conditions and service use
30. Did Medi-Cal expenditures for needed outpatient services increase?	HHP Payment Files: HHP services and payments for those services
Cost neutrality	
31. When possible, did HHP have the opportunity during the time period studied to achieve cost neutrality in the delivery of HHP services, in that the overall Medi-Cal expenditures after HHP implementation remained in line with the expected patterns of growth in utilization and cost prior to HHP program implementation?	Medi-Cal Claims and Encounter Data: Service use and expenditures HHP Payment Files: HHP services and payments for those services
Return on Investment	
32. When possible, did HHP program operations lead to cost savings? What was the ratio of program expenditures to cost savings?	Medi-Cal Claims and Encounter Data: Service use and expenditures HHP Payment Files: HHP services and payments for those services

Notes: TEL is Targeted Engagement List.

Data Sources

As indicated in Exhibit 101, UCLA will receive four data sources from DHCS including (1) reports filed by each MCP, (2) TEL (Targeted Engagement List) created every six months by DHCS, (3) Medi-Cal Claims and Encounter Data for all program beneficiaries and comparison group, and (4) monthly HHP payments files submitted by MCPs. These data sources allow for a qualitative and quantitative approach to the HHP evaluation. The ability of UCLA to address the evaluation questions is dependent on the content of these datasets and the type of analyses will be dependent on availability of data.

MCP reports include the readiness deliverables and required quarterly reporting. The readiness deliverables include HHP policies and procedures describing infrastructure, services, network and operations, engagement plans, and HHP network composition. The quarterly reporting will include aggregate semi-annual and annual health outcome measures. The quarterly reports will also identify enrollees that are experiencing homelessness and whether or not they received housing services and were successfully housed.

TEL is created every six months by DHCS to identify enrollees of participating MCPs who are potentially eligible for enrollment in HHP based on the HHP inclusion and exclusion criteria. These data include patient demographics and health status indicators.

Medi-Cal fee-for-service (FFS) claims and managed care encounter data include comprehensive information on use of services by eligible and enrolled HHP patients. UCLA will receive two years of data prior to implementation of HHP to establish baseline trends, and a minimum of one year of data during HHP implementation. These data include diagnoses, service use, and provider payments for fee-for-service (FFS) claims.

HHP payment files will be submitted monthly by the MCPs to DHCS. They are expected to include enrollment lists, the enrollee's State Plan Amendment (SPA) assignment, enrollee's status as a dual-enrollee and monthly DHCS payments to MCPs.

UCLA will maintain all data in a secure environment. UCLA anticipates receiving a preliminary enrollment and encounter data from DHCS within six months of program implementation to evaluate the data for completeness and accuracy and to conduct preliminary analyses. The final and complete data for the first year of the program are anticipated no later than six months after the end of the first year of program implementation.

Methods

UCLA will analyze all available data to evaluate HHP impact. The evaluation will include a quantitative assessment of program impact on enrollment, health care utilization, and cost indicators. In addition, the evaluation will also include a qualitative assessment of HHP infrastructure and implementation process through analysis of the HHP readiness deliverables.

The quantitative analyzes will range from more descriptive analyses of enrollees, enrollment trends, self-reported metrics, and health outcomes, to advanced methods to assess changes in utilization and costs. The descriptive analyses will use descriptive statistics to examine basic enrollee demographics, health conditions and acuity, and healthcare utilization both historically and during the period of the program. The advanced methods include use of regression models and quasi-experimental analytic design including pre-post, intervention-comparison group design and difference-in-difference (DD) methodology when possible. The quasi-experimental design is desirable due to its rigor in isolating the impact of HHP services. In order to study the impact of the HHP by county and MCP, the evaluation will use small area estimation to stratify all relevant outcomes by county and MCP combinations. This will be accomplished by including MCP and county as random effects in the models, thereby allowing for the measurement of these factors on the overall estimate even among small counties and MCPs. The final measures will be presented for the overall program and stratified by these groups.

Selection of the comparison group is necessary for the quasi-experimental design and allows for elimination of the impact of contextual determinants of health care utilization and costs. UCLA has identified two possible methods of identifying a comparison group including: 1)

participating MCP members that are on the TEL but either were not targeted or yet to be targeted by MCPs or did not opt-in; and 2) MCP members in counties not implementing HHP that fit the TEL criteria. As enrollment in HHP will change over the course of the program and inclusion on the TEL will also change over time, the comparison group will have to be created during multiple time points during the course of the evaluation. If needed to create a sufficiently large enough group, the comparison group may be composed of individuals from both methods.

Both methods to identify the comparison group have significant limitations. HHP enrollment among the eligible beneficiaries is not random as MCPs target beneficiaries based on additional criteria and their knowledge of patient utilization and costs. In addition, HHP enrollees have to choose to opt-in and those who do not are likely to have different characteristics. Therefore, the first comparison group is subject to selection bias. UCLA will be unable to identify which members on the TEL chose not to opt-in versus those that were not contacted. The second comparison group is not subject to selection bias, but there are potential differences in health system characteristics, population demographics, and patterns of health care utilization in other counties. For both comparison groups, HHP eligible patients may be enrolled in the Whole Person Care pilot programs which provides a number of similar services to HHP. Enrollment in WPC will not be known among either the treatment or comparison group members. UCLA will create these comparison groups and will closely examine the size and characteristics of each group to assess the utility of each group for the DD analyses, in addition to exploring modeling tools that account for selection bias.

If an appropriate comparison group is not possible, an alternative strategy to assess the impact of HHP is to compare pre- and post-trends in health care utilization and expenditures for HHP enrollees, using regression models to project trends in the post period assuming no HHP services are provided (counterfactual trends), and measure the change between the observed and projected trends in the post period. The difference in these trends will estimate the potential reduction in utilization or expenditures that can be attributed to HHP.

The Medi-Cal managed care encounter data used for assessing HHP impact does not have enough information on expenditures, which will be needed to demonstrate potential savings, cost neutrality and return-on-investment. Possible methods that UCLA will use to attribute expenditures to managed care encounters include using FFS expenditure data and the Medi-Cal Fee Schedule. If possible, the Medi-Cal fee schedule will be used to attribute a fee to each service provided during managed care encounters. UCLA will also compare the fee schedule to the FFS claims to assess the accuracy of using the fee schedule. If the fee schedule does not have sufficient information, ULCA will examine the patterns of care among FFS beneficiaries and managed care HHP enrollees to assess whether the FFS claims will be suitable for

estimating expenditures. UCLA anticipates population and health care use differences between the two groups. UCLA's ability to estimate cost neutrality and return-on-investment is dependent on being able to estimate expenditures for managed care encounters. If the FFS data and fee schedule do not provide all necessary estimated expenditures, UCLA will calculate the individual acuity factors over time based on the prospective Medicaid Rx model for the HHP enrollees and derive change over time to draw inference on how HHP works. UCLA will collaborate with DHCS to examine the HHP encounter submissions.

UCLA will use the DD analytic technique when available to measure potential reduction in total expenditures that can be attributed to HHP. Total expenditures will include the HHP payments. The potential reduction in expenditures will represent the savings associated with delivery of HHP services. UCLA will then calculate the return on investment by assessing the amount of savings per each dollar spent on the HHP program.

In addition to calculating changes in HHP enrollee utilization and expenditures, UCLA will independently assess changes in self-reported HHP metrics during the program when possible. UCLA will also independently assess the CMS recommended Core Set of health care quality measures for HHP using Medi-Cal data whenever possible. These measures include both health outcome and utilizations measures that are endorsed by organizations such as National Quality Forum (NQF), Agency for Healthcare Research and Quality (AHRQ), National Committee for Quality Assurance (NCQA), and/or CMS that have detailed measure specifications.

The evaluation will further focus on creating metrics and utilization measures that are likely to be the outcome of HHP services. For example, care coordination and wrap around services are likely to reduce hospital and emergency department visits because of availability of timely and appropriate outpatient care. Therefore, UCLA will assess the changes in the annual rates of emergency department and hospital visits in the pre- and post-periods and compare these changes to the comparison groups or the counterfactual trends. Alternatively, care coordination services are likely to increase use of outpatient medical and substance use services for some enrollees. Therefore, UCLA will examine the change in delivery of these services using the same methodology. HHP interventions to improve care transitions are expected to increase the rate of post-admission outpatient follow up and reduce readmissions. Thus, UCLA will assess the delivery of outpatient follow up post-discharge, number of hospital readmissions, and potential association of outpatient follow ups on readmissions.

UCLA will also create additional measures that are specific to common subpopulations in HHP when possible. For example, many of the HHP enrollees will have common chronic conditions such as diabetes or asthma or will be homeless. UCLA will use Medi-Cal data to create measures that evaluate the program impact on subgroups with conditions such as asthma or diabetes or

the homeless. Examples of the measures may include frequency of HbA1c lab tests among patients with diabetes and the rate of asthma prescriptions filled among patients with asthma. UCLA will also create metrics and measures for homeless patients including the most common conditions and service use patterns among the homeless. Other subpopulations of interest may include pediatric patients, SPA groups and recent Medi-Cal enrollees.

Limitations

External contextual factors may impact individual MCP results, such as other local or state initiatives that were ongoing or newly embarked on in the geographic areas that are served by HHP networks. These challenges will be met through use of DD analyses and comparing the HHP enrollee results with selected comparison groups or the counterfactual trends.

There are limitations to UCLA's ability to independently assess all HHP self-reported metrics. UCLA anticipates that metrics such as all-cause hospitalizations and emergency department visits can be independently assessed using Medi-Cal enrollment and claims data. However, measures of use of some services such as screening for clinical depression are only available in self-reported data. Similarly, information on implementation of care coordination policies and procedures are limited to self-reported data.

UCLA anticipated some error in attributing expenditures to managed care encounters due to anticipated differences in characteristics of FFS and managed care enrollees, systematic differences in health care delivery, and potential lack of detailed encounter data or fee schedule data. These limitations will lead to under or overestimates of actual expenditures attributed to encounter data but do not negatively impact estimates of changes in utilizations or savings. This is because the error in attributing expenditures is consistently and systematically applied to all encounters.

Due to the staggered rollout of the program, with the majority of counties implementing SPA 2 in January 2020, UCLA anticipates that enrollment numbers will be low for the initial June 2020 report and that there will be insufficient time to observe the comprehensive impact of the program. Furthermore, due to a lag of at least six months in adjudicated Medi-Cal claims data, the data available for the first evaluation report will be limited to the first county to implement the program, San Francisco County. Two additional reports will follow this first report (Exhibit 102), which allows for all counties to implement HHP and an adequate time period to observe an impact of HHP on health and utilization trends and outcomes. For some of the outcomes of interest, UCLA anticipates that HHP's impact may not be realized during the evaluation timeframe.

Timeline

Exhibit 102 indicates the evaluation deliverables and anticipated dates.

Exhibit 102: Evaluation Timeline and Deliverables

Deliverable	Description	Due Date(s)
Draft evaluation design and methods	Draft evaluation methodology for managed care plan/stakeholder review and comment	September 30, 2018
Revised evaluation design and methods	Revised evaluation methodology	November 16, 2018
Final evaluation design and methods	Final evaluation methodology	December 31, 2018
First draft interim evaluation report	First draft interim evaluation report to be completed after the first 18 months of HHP implementation	May 22, 2020
Final first interim evaluation report	Final first interim evaluation report	June 20, 2020
Second draft interim evaluation report	Second draft interim evaluation report to be completed after 30 months of HHP implementation	August 22, 2021
Final second interim evaluation report	Final second interim evaluation report	September 30, 2021
Draft Final Evaluation Report	Draft final evaluation report	May 1, 2023
Final Evaluation Report	Final evaluation report	June 23, 2023

Appendix C: HHP Enrollees Enrolled Less Than 31 Days

There were 1,439 HHP enrollees enrolled for less than 31 days due to unsuccessful engagement among other unknown factors. This group was reported exclusively in this appendix. MCPs received PMPM payments for one month for these enrollees, but payments ceased if those individuals could no longer be enrolled in the program. MCPs did not provide other services to this group. Comparison of these enrollees with those enrolled for longer than 30 days during the first interim evaluation report indicated these groups had similar demographics, health status, and health care utilization prior to HHP (data not shown). Of the 1,439 HHP enrollees enrolled for less than 31 days, 1,072 came from SPA 1 and 367 came from SPA 2.

Appendix D: Homeless Enrollment by Group

Exhibit 103 displays the date of HHP enrollment for individuals reported as ever homeless during HHP by Group, using data available in the Q3 2019 – Q3 2020 Quarterly Reports.

Exhibit 103: Unduplicated Monthly Cumulative Enrollment of HHP Homeless Enrollees by Group, July 1, 2018 to September 30, 2020

	Group 1	Group 2	Group 3	Group 4
18-Jul **Group 1 Implementation**	-	-	-	-
18-Aug	-	-	-	-
18-Sep	-	-	-	-
18-Oct	<11	-	-	-
18-Nov	<11	-	-	-
18-Dec	<11	-	-	-
19-Jan **Group 2 Implementation**	<11	>110	-	-
19-Feb	<11	<170	-	-
19-Mar	<11	<243	-	-
19-Apr	<11	<300	-	-
19-May	<11	<365	-	-
19-Jun	<11	<423	-	-
19-Jul **Group 3 Implementation**	<11	470	>153	-
19-Aug	12	519	325	-
19-Sep	<23	559	>481	-
19-Oct	<23	595	>670	-
19-Nov	33	635	813	-
19-Dec	<44	672	>922	-
20-Jan **Group 4 Implementation**	45	717	1,117	15
20-Feb	<56	754	1,315	>38
20-Mar	<56	785	1,498	>68
20-Apr	58	839	1,696	87
20-May	58	864	1,881	98
20-Jun	<69	886	>2,030	<109

	Group 1	Group 2	Group 3	Group 4
20-Jul	<69	910	>2,194	115
20-Aug	<69	946	2,367	>120
20-Sep	<69	966	>2,627	136

Source: UCLA analysis of MCP Quarterly HHP Reports. Enrollment was limited to available data for the period between July 2018 and September 2020.
Notes: Those enrolled for less than 31 days were excluded from this analysis. SPA 1 includes enrollees with chronic conditions and substance use disorders. SPA 2 includes enrollees with severe mental illness. Excludes HHP enrollees that were designated as homeless and were disenrolled prior to Q3. Includes homeless enrollees that were recorded in Q3 HHP Quarterly Report as "ever homeless during HHP".

Appendix E: Survey: COVID-19 Impact on the Health Homes Program (HHP)

In the late fall of 2020, the UCLA Center for Health Policy Research conducted the following survey on HHP MCPs. The brief survey focused on (1) how HHP infrastructure and integrated care delivery approaches may have helped with local response to COVID-19, and (2) the potential impact of the COVID-19 pandemic on HHP. The survey instrument is included in this appendix.

1) On a scale of 0-10, please rate the impact of the COVID-19 pandemic on your organization's (or your contracted CB-CME's) ability to perform the following HHP-related activities. Please briefly describe the changes and impact.

Process/Procedure/ Policy	Process/procedure/ policy changed?	Degree of Impact											Briefly describe the changes and impact
		0 = Not at all Impacted	1	2	3	4	5 = Somewhat Impacted	6	7	8	9	10 = Extremely Impacted	
a. Identifying eligible HHP enrollees (e.g., administrative data, referrals)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
b. Engagement and enrollment of eligible beneficiaries into HHP (e.g., outreach)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
c. Communications with HHP enrollees (e.g., telephonic, telehealth, in-person)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
d. Frontline staffing policies and procedures (e.g.,	SPA 1 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Process/Procedure/ Policy	Process/procedure/ policy changed?	Degree of Impact											Briefly describe the changes and impact
		0 = Not at all Impacted	1	2	3	4	5 = Somewhat Impacted	6	7	8	9	10 = Extremely Impacted	
shift to telework, protocols for in-person visits and use of PPE, recruitment or retention policies and practices)	SPA 2 – Yes / No												
e. Delivery of comprehensive care management by frontline staff (e.g., frequency, modality, location in which provided)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
f. Delivery of care coordination by frontline staff (e.g., implementation of Health Action Plan, case conferences)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Process/Procedure/ Policy	Process/procedure/ policy changed?	Degree of Impact											Briefly describe the changes and impact
		0 = Not at all Impacted	1	2	3	4	5 = Somewhat Impacted	6	7	8	9	10 = Extremely Impacted	
g. Ability to provide health promotion and individual/family support services (e.g., effective health education, referrals to resources such as smoking cessation)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
h. Comprehensive transitional care (e.g., admission notifications, coordinating with hospital discharge planners, transportation)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
i. Housing and homeless support services	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Process/Procedure/ Policy	Process/procedure/ policy changed?	Degree of Impact											Briefly describe the changes and impact
		0 = Not at all Impacted	1	2	3	4	5 = Somewhat Impacted	6	7	8	9	10 = Extremely Impacted	
j. Referral by MCP and/or CB-CMEs to community and social supports (e.g., housing, food resources)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
k. Contracts with CB-CMEs (e.g., challenges contracting with new CB-CMEs, revisions to existing CB-CME contracts in response to policy/process changes)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
l. Reporting (e.g., delays in receiving data from CB-CMEs, accuracy or comprehensiveness of data)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Process/Procedure/ Policy	Process/procedure/ policy changed?	Degree of Impact											Briefly describe the changes and impact
		0 = Not at all Impacted	1	2	3	4	5 = Somewhat Impacted	6	7	8	9	10 = Extremely Impacted	
m. MCP monitoring and oversight of CB-CMEs	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
n. Other (please specify: _____)	SPA 1 – Yes / No SPA 2 – Yes / No	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

2) Did COVID-19 impacts on HHP processes, procedures, and/or policies ***vary by County***?

☐Yes

☐No

☐Not applicable

If yes, please briefly explain:

3) Briefly describe COVID-19 impact on your plan's ability to achieve desired HHP outcomes.

4) Please comment on if and how HHP helped with your plan's overall COVID-19 response and in what ways.

5) Are you using telehealth to deliver HHP services in response to COVID-19?

☐Yes

☐No

Please describe the type of services telehealth is used for and the effectiveness of these strategies.

6) In addition to telehealth, what other mitigation strategies (e.g., street medicine) has your organization used to respond to COVID-19? Please list and briefly describe the effectiveness of any strategies used.

7) Have there been any unexpected positive impacts due to COVID-19 (e.g., ability to use telehealth or other mitigation strategies, changing utilization patterns, or changes to your policies or your arrangements with CB-CMEs)? Please describe.

8) Are there any mitigation strategies or other changes that you are considering maintaining after the COVID-19 emergency ends? (e.g., increased use of telehealth, etc.) Please describe.

9) Is there anything we haven't asked that you think is important to know about your experience with the COVID-19 pandemic? Please denote N/A if not applicable.

Appendix F: MCP-Level Descriptives and Unadjusted HHP Core Metrics

UCLA used HHP Quarterly Reports from July 1, 2018, to September 30, 2020 and Medi-Cal enrollment and claims data from July 1, 2016 to September 30, 2020 to create descriptives and outcomes by MCP at the County- and SPA-level in the following areas:

- HHP Implementation and Enrollee Demographics
- Health Status and Utilization
- HHP Metric Trends
- Estimated Medi-Cal Payment Trends

The following exhibits are broken up by MCP:

- Exhibits 105 - 108: Aetna, Alameda Alliance, Blue Shield, and CA Health and Wellness
- Exhibits 109 - 112: Anthem Blue Cross
- Exhibits 113 - 116: LA Care, Community Health Group, Kern Health Systems, and CalOptima
- Exhibits 117 - 120: Inland Empire Health Plan and Kaiser
- Exhibits 121 - 124: Molina Healthcare Plan
- Exhibits 125 - 128: Health Net
- Exhibits 129 - 132: San Francisco Health Plan, Santa Clara Family Health Plan, and United Healthcare

Exhibit 104: HHP Implementation and Enrollee Demographics for Aetna, Alameda Alliance, Blue Shield, and CA Health and Wellness as of September 30, 2020

MCP	Aetna				Alameda Alliance		Blue Shield		CA Health & Wellness	
Group	Group 3				Group 3		Group 3		Group 3	
County	Sacramento		San Diego		Alameda		San Diego		Imperial	
SPA	1	2	1	2	1	2	1	2	1	2
Program Implementation and Enrollment										
Implementation Date	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20
Total Enrollment (9/2020)	104	20	80	37	466	24	864	207	169	43
% of enrollees from TEL	74%		60%		74%		72%		98%	
Avg Length of Enrollment (Days)	208	145	187	115	247	139	182	110	55	60
Enrollee Demographics										
% 0-17	--	--	--	--	0.0%	0.0%	3.1%	--	--	0.0%
% 18-34	--	--	--	32.4%	6.7%	--	10.6%	>25.1%	14.2%	>41.9%
% 34-49	30.8%	--	23.8%	--	21.9%	--	15.9%	29.5%	23.1%	0.0%
% 49-64	50.0%	55.0%	51.3%	35.1%	49.4%	>54.2%	46.4%	33.3%	53.3%	32.6%
% 65+	--	0.0%	--	0.0%	22.1%	--	24.0%	6.8%	--	--
% male	48.1%	--	51.3%	43.2%	44.6%	--	45.4%	33.3%	34.3%	--
% White	34.6%	--	22.5%	--	10.5%	--	33.2%	34.3%	--	--
% Hispanic	11.5%	--	31.3%	29.7%	22.3%	--	26.4%	16.4%	85.8%	>74.4%
% African American	20.2%	--	--	--	33.5%	--	10.9%	>11.6%	--	--
% Asian American and Pacific Islander	11.5%	0.0%	--	--	16.5%	--	>4.8%	--	0.0%	0.0%
% American Indian and Alaskan Native	--	0.0%	0.0%	0.0%	--	0.0%	--	--	0.0%	0.0%
% Other	>11.5%	--	21.3%	40.5%	12.4%	--	17.6%	25.6%	--	0.0%
% Unknown	--	--	--	--	>2.4%	--	5.9%	6.8%	--	--
% speak English	84.6%	100.0%	81.3%	83.8%	73.0%	91.7%	75.2%	86.5%	46.7%	67.4%
Medi-Cal full-scope months baseline year 1	11.87	11.75	11.70	11.81	11.78	11.96	11.89	11.85	11.96	11.60
# Enrollees with Homeless Information Available	104	20	80	37	466	24	864	207	169	43
Proportion ever homeless during HHP enrollment	0.0%	--	--	0.0%	18.0%	--	22.3%	30.0%	--	--

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 105: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for Aetna, Alameda Alliance, Blue Shield, and CA Health and Wellness as of September 30, 2020

MCP	Aetna				Alameda Alliance		Blue Shield		CA Health & Wellness	
Group	Group 3				Group 3		Group 3		Group 3	
County	Sacramento		San Diego		Alameda		San Diego		Imperial	
SPA	1	2	1	2	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment										
Two specific conditions (criteria 1)	29%	--	36%	--	64%	46%	54%	26%	52%	--
Hypertension and another specific condition (criteria 2)	51%	--	44%	--	72%	--	60%	24%	72%	--
Serious mental health condition (criteria 3)	48%	85%	41%	95%	38%	92%	51%	92%	32%	91%
Asthma (criteria 4)	31%	--	33%	--	24%	46%	25%	15%	36%	--
Average number of ED visits	4.6	3.3	4.5	3.3	9.1	7.3	5.2	5.9	4.6	6.5
Average number of hospitalizations	1.0	0.5	1.2	0.7	2.5	2.3	1.3	1.2	0.7	0.9
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment										
Super Utilization Group	<12.6%		<12.5%		14.1%		6.9%		<8.1%	
High Utilization Group	>12.6%		>10.2%		21.2%		11.7%		>9.9%	
Moderate Utilization Group	>27.4%		>30.5%		31.4%		35.5%		>38.6%	
Low Utilization Group	>29.6%		>28.9%		21.6%		35.4%		>30.9%	
At Risk for High Utilization Group	>17.8%		>18.0%		11.6%		10.6%		>12.6%	
HHP Services Delivered to HHP Enrollees										
Total number of units of service provided	949	225	139	53	13,124	431	19,591	5,081	55	-
Average number of units of service per enrollee	2.4	2.6	2.1	2.4	4.2	5.7	4.2	6.2	5.0	N/A
Median number of units of service per enrollee	2.0	2.0	2.0	2.0	2.0	2.0	3.0	5.0	5.0	N/A
Average number of engagement services provided	1.1	1.3	1.3	1.7	1.7	2.4	2.2	2.3	1.5	N/A
Average number of core services provided	1.9	1.9	1.3	1.1	2.9	3.0	2.3	2.7	3.7	N/A
Average number of other HHP services provided	1.4	1.4	1.3	1.1	2.6	3.2	2.5	3.4	1.6	N/A
Average number of in-person services provided	1.1	1.0	1.0	N/A	1.6	1.9	1.3	1.0	N/A	N/A
Average number of phone/ telehealth services provided	1.8	1.8	1.3	1.1	2.6	2.4	2.2	2.7	3.7	N/A
Average number of services provided by clinical staff	1.0	N/A	N/A	N/A	3.3	N/A	2.1	1.9	N/A	N/A
Average number of services provided by non-clinical staff	2.3	2.3	2.0	1.7	3.4	5.0	3.3	5.1	4.7	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 106: Trends in HHP Metrics for Aetna, Alameda Alliance, Blue Shield, and CA Health and Wellness as of September 30, 2020

MCP	Aetna				Alameda Alliance		Blue Shield		CA Health & Wellness	
Group	Group 3				Group 3		Group 3		Group 3	
County	Sacramento		San Diego		Alameda		San Diego		Imperial	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Outcomes										
Adult BMI Assessment										
Pre-Year 2	49%	--	47%	50%	33%	--	54%	49%	87%	90%
Pre-Year 1	65%	--	58%	63%	41%	55%	58%	54%	94%	93%
HHP Year 1	73%	--	58%	48%	38%	--	53%	46%	86%	86%
Follow-Up After Hospitalization for Mental Illness within 30 Days										
Pre-Year 2	N/A	N/A	N/A	N/A	--	--	N/A	--	N/A	--
Pre-Year 1	N/A	N/A	N/A	--	--	--	N/A	--	N/A	--
HHP Year 1	N/A	N/A	N/A	N/A	--	N/A	N/A	N/A	N/A	N/A
Follow-Up After Hospitalization for Mental Illness within 7 Days										
Pre-Year 2	N/A	N/A	N/A	N/A	--	--	N/A	--	N/A	--
Pre-Year 1	N/A	N/A	N/A	--	--	--	N/A	--	N/A	--
HHP Year 1	N/A	N/A	N/A	N/A	--	N/A	N/A	N/A	N/A	N/A
Screening for Depression and Follow-Up Plan										
Pre-Year 2	--	N/A	--	N/A	--	--	--	N/A	--	--
Pre-Year 1	--	N/A	--	N/A	--	--	--	N/A	--	--
HHP Year 1	--	N/A	--	--	--	N/A	9%	N/A	--	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days										
Pre-Year 2	N/A	N/A	N/A	N/A	--	N/A	--	N/A	N/A	N/A
Pre-Year 1	N/A	N/A	N/A	N/A	--	--	--	N/A	N/A	N/A
HHP Year 1	N/A	N/A	N/A	N/A	--	--	--	N/A	N/A	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days										
Pre-Year 2	N/A	N/A	N/A	N/A	--	N/A	--	N/A	N/A	N/A
Pre-Year 1	N/A	N/A	N/A	N/A	--	--	--	N/A	N/A	N/A
HHP Year 1	N/A	N/A	N/A	N/A	--	--	--	N/A	N/A	N/A
Initiation of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	N/A	N/A	N/A	N/A	--	N/A	--	--	--	--
Pre-Year 1	--	--	N/A	--	--	--	--	--	--	--
HHP Year 1	N/A	N/A	N/A	--	--	N/A	--	--	--	N/A
Engagement of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	N/A	N/A	N/A	N/A	N/A	N/A	--	--	N/A	--
Pre-Year 1	N/A	N/A	N/A	N/A	--	--	--	--	N/A	N/A
HHP Year 1	N/A	N/A	N/A	N/A	--	N/A	N/A	N/A	N/A	N/A
Use of Pharmacotherapy for Opioid Use Disorder										
Pre-Year 2	N/A	N/A	--	--	--	N/A	--	--	--	N/A
Pre-Year 1	N/A	N/A	--	--	--	N/A	--	--	--	N/A
HHP Year 1	N/A	N/A	--	N/A	--	N/A	--	--	--	N/A
Controlling High Blood Pressure										
Pre-Year 2	--	--	--	--	--	--	10%	--	--	--
Pre-Year 1	--	--	--	--	--	--	10%	--	24%	--
HHP Year 1	--	--	--	--	--	--	--	--	--	--
All-Cause Readmission										

MCP	Aetna				Alameda Alliance		Blue Shield		CA Health & Wellness	
Group	Group 3				Group 3		Group 3		Group 3	
County	Sacramento		San Diego		Alameda		San Diego		Imperial	
SPA	1	2	1	2	1	2	1	2	1	2
Pre-Year 2	N/A	N/A	N/A	N/A	--	N/A	--	--	N/A	--
Pre-Year 1	N/A	N/A	N/A	N/A	--	N/A	--	--	--	--
HHP Year 1	N/A	N/A	N/A	N/A	--	N/A	--	--	N/A	N/A
Admission to an Institution from the Community Short-Term Stay										
Pre-Year 2	--	--	--	--	3.31	--	1.40	--	--	--
Pre-Year 1	--	--	--	--	6.02	--	2.02	--	--	--
HHP Year 1	--	--	--	--	4.38	--	1.39	--	--	--
Admission to an Institution from the Community Medium-Term Stay										
Pre-Year 2	--	--	--	--	--	--	1.94	--	--	--
Pre-Year 1	--	--	--	--	2.92	--	2.93	--	--	--
HHP Year 1	--	--	--	--	2.47	--	--	--	--	--
Admission to an Institution from the Community Long-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	1.21	--	--	--
HHP Year 1	--	--	--	--	--	--	1.17	--	--	--
Emergency Department Visits										
Before HHP (19-24 mos.)	144	125	83	131	278	165	177	152	167	288
Before HHP (13-18 mos.)	156	120	148	126	303	257	175	223	198	276
Before HHP (7-12 mos.)	159	212	150	138	329	285	174	280	193	160
Before HHP (1-6 mos.)	123	92	111	100	323	236	164	200	117	171
During HHP (1-6 mos.)	157	--	130	111	306	190	126	124	87	160
During HHP (7-12 mos.)	94	--	89	--	211	--	86	--	N/A	N/A
Hospitalizations										
Before HHP (19-24 mos.)	33	--	--	--	69	--	63	29	39	--
Before HHP (13-18 mos.)	53	--	62	--	78	--	77	56	26	--
Before HHP (7-12 mos.)	37	--	50	--	99	76	74	64	31	--
Before HHP (1-6 mos.)	36	--	35	--	151	125	66	44	27	--
During HHP (1-6 mos.)	40	--	42	--	130	--	63	45	--	--
During HHP (7-12 mos.)	39	--	--	--	82	--	76	--	N/A	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 107: Trends in Estimated Payments for Aetna, Alameda Alliance, Blue Shield, and CA Health and Wellness as of September 30, 2020

MCP	Aetna				Alameda Alliance		Blue Shield		CA Health & Wellness	
Group	Group 3				Group 3		Group 3		Group 3	
County	Sacramento		San Diego		Alameda		San Diego		Imperial	
SPA	1	2	1	2	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees										
Total Estimated Payments										
Before HHP (19-24 mos.)	$1,239	$874	$1,586	$1,522	$2,527	$1,632	$1,974	$1,569	$2,034	$4,081
Before HHP (13-18 mos.)	$1,668	$1,018	$1,735	$2,201	$2,667	$1,674	$2,194	$2,176	$2,324	$2,932
Before HHP (7-12 mos.)	$976	$1,079	$1,422	$3,610	$2,864	$2,896	$2,514	$2,643	$2,303	$1,761
Before HHP (1-6 mos.)	$1,306	$1,160	$1,529	$2,093	$3,906	$4,595	$2,400	$2,292	$1,941	$2,116
During HHP (1-6 mos.)	$1,442	$1,774	$1,722	$2,781	$4,397	$2,761	$2,712	$3,061	$4,365	$4,303
During HHP (7-12 mos.)	$1,580	$2,020	$1,654	$4,852	$4,378	$6,352	$3,595	$8,661	N/A	N/A
Estimated Emergency Department Payments										
Before HHP (19-24 mos.)	$87	$53	$75	$127	$218	$112	$215	$93	$145	$474
Before HHP (13-18 mos.)	$60	$31	$130	$113	$220	$112	$120	$124	$146	$173
Before HHP (7-12 mos.)	$87	$67	$95	$70	$220	$197	$123	$164	$171	$87
Before HHP (1-6 mos.)	$79	$34	$84	$73	$207	$163	$115	$160	$78	$119
During HHP (1-6 mos.)	$58	$30	$157	$267	$260	$148	$118	$161	$141	$258
During HHP (7-12 mos.)	$68	$31	$67	$112	$236	$790	$81	$150	N/A	N/A
Estimated Hospitalization Payments										
Before HHP (19-24 mos.)	$421	$159	$502	$138	$695	$407	$576	$349	$499	$1,160
Before HHP (13-18 mos.)	$951	$150	$1,074	$783	$844	$524	$659	$693	$474	$675
Before HHP (7-12 mos.)	$322	$231	$762	$1,036	$958	$884	$928	$861	$498	$515
Before HHP (1-6 mos.)	$493	$389	$454	$232	$1,606	$1,372	$838	$509	$447	$520
During HHP (1-6 mos.)	$481	$124	$458	$634	$1,292	$639	$785	$781	$787	$231
During HHP (7-12 mos.)	$396	--	$422	$842	$1,287	$494	$909	$1,484	N/A	N/A
Estimated Outpatient Medication Payments										
Before HHP (19-24 mos.)	$261	$234	$758	$270	$466	$424	$440	$413	$724	$486
Before HHP (13-18 mos.)	$300	$458	$210	$227	$473	$292	$495	$458	$763	$324
Before HHP (7-12 mos.)	$226	$204	$196	$415	$452	$231	$476	$482	$802	$357
Before HHP (1-6 mos.)	$321	$72	$325	$241	$537	$378	$469	$482	$653	$431
During HHP (1-6 mos.)	$419	$117	$321	$501	$630	$399	$568	$594	$1,584	$760

MCP	Aetna				Alameda Alliance		Blue Shield		CA Health & Wellness	
Group	Group 3				Group 3		Group 3		Group 3	
County	Sacramento		San Diego		Alameda		San Diego		Imperial	
SPA	1	2	1	2	1	2	1	2	1	2
During HHP (7-12 mos.)	$461	$771	$476	$237	$665	$452	$723	$2,707	N/A	N/A
Estimated Payments for Outpatient Services										
Before HHP (19-24 mos.)	$336	$396	$145	$739	$934	$483	$509	$587	$560	$1,908
Before HHP (13-18 mos.)	$187	$353	$257	$882	$910	$640	$660	$746	$847	$1,684
Before HHP (7-12 mos.)	$233	$547	$304	$1,889	$979	$1,314	$709	$954	$721	$759
Before HHP (1-6 mos.)	$282	$641	$581	$1,380	$1,237	$2,380	$720	$970	$646	$980
During HHP (1-6 mos.)	$381	$1,448	$723	$1,214	$1,857	$1,244	$941	$1,348	$1,588	$2,922
During HHP (7-12 mos.)	$607	$1,187	$640	$3,383	$1,595	$3,415	$1,342	$3,736	N/A	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 108: HHP Implementation and Enrollee Demographics for Anthem Blue Cross as of September 30, 2020

MCP	Anthem Blue Cross Partnership Plan									
Group	Group 1		Group 3							
County	San Francisco		Alameda		Sacramento		Santa Clara		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Program Implementation and Enrollment										
Implementation Date	7/1/18	1/1/19	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20
Total Enrollment (9/2019)	88	11	61	15	700	285	239	93	576	216
% of enrollees from TEL	61%		74%		68%		51%		66%	
Avg Length of Enrollment (Days)	397	281	287	114	235	138	258	166	259	146
Enrollee Demographics										
% 0-17	--	0.0%	0.0%	0.0%	10.6%	--	9.6%	--	8.5%	--
% 18-34	--	0.0%	--	--	19.9%	>22.5%	13.4%	24.7%	16.8%	>22.7%
% 34-49	>17.1%	--	24.6%	--	24.6%	28.4%	17.2%	18.3%	24.0%	31.9%
% 49-64	47.7%	--	52.6%	--	34.1%	40.4%	31.8%	43.0%	40.1%	40.3%
% 65+	22.7%	--	--	--	10.9%	4.9%	28.0%	--	10.6%	--
% male	67.0%	--	57.9%	--	39.7%	33.0%	39.3%	26.9%	36.3%	25.0%
% White	20.5%	--	21.1%	--	25.9%	43.2%	19.2%	41.9%	28.1%	31.0%
% Hispanic	--	--	19.3%	--	19.6%	10.2%	44.8%	30.1%	60.4%	50.9%
% African American	21.6%	--	38.6%	--	26.7%	20.7%	4.6%	--	1.9%	5.6%
% Asian American and Pacific Islander	27.3%	--	--	--	7.1%	--	19.2%	--	--	--
% American Indian and Alaskan Native	--	0.0%	0.0%	0.0%	--	--	0.0%	--	--	--
% Other	12.5%	--	--	--	14.9%	16.5%	>7.5%	--	5.4%	>7.4%
% Unknown	--	--	--	--	>4.3%	5.6%	--	--	2.3%	--
% speak English	71.6%	100.0%	80.7%	80.0%	81.7%	91.9%	60.7%	88.2%	72.4%	79.6%
Medi-Cal full-scope months baseline year 1	11.86	12.00	11.86	11.87	11.90	11.86	11.88	11.88	11.91	11.94
# Enrollees with Homeless Information Available	74	11	57	15	700	285	239	93	576	216
Proportion ever homeless during HHP enrollment	--	--	24.6%	0.0%	--	--	9.2%	15.1%	8.5%	--

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 109: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for Anthem Blue Cross as of September 30, 2020

MCP	Anthem Blue Cross Partnership Plan									
Group	Group 1		Group 3							
County	San Francisco		Alameda		Sacramento		Santa Clara		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment										
Two specific conditions (criteria 1)	49%	--	44%	--	31%	26%	30%	23%	37%	24%
Hypertension and another specific condition (criteria 2)	55%	--	53%	--	42%	31%	44%	32%	51%	38%
Serious mental health condition (criteria 3)	43%	--	49%	--	29%	75%	24%	57%	30%	77%
Asthma (criteria 4)	19%	--	28%	--	34%	19%	26%	--	26%	19%
Average number of ED visits	5.7	3.1	7.6	3.6	6.5	7.6	4.7	4.3	4.6	4.9
Average number of hospitalizations	1.5	0.8	2.5	0.3	1.5	1.3	1.0	0.5	1.2	1.1
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment										
Super Utilization Group	<14.9%		<17.1%		5.6%		4.2%		4.3%	
High Utilization Group	>10.7%		<18.1%		17.3%		8.7%		11.0%	
Moderate Utilization Group	>26.4%		>27.6%		44.2%		37.3%		33.6%	
Low Utilization Group	>33.1%		>20.0%		28.8%		34.3%		40.7%	
At Risk for High Utilization Group	<14.9%		<17.1%		4.2%		15.4%		10.5%	
HHP Services Delivered to HHP Enrollees										
Total number of units of service provided	571	48	503	28	2,153	1,192	795	230	4,422	880
Average number of units of service per enrollee	1.3	1.3	1.4	1.2	1.4	1.7	1.1	1.0	1.2	1.3
Median number of units of service per enrollee	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Average number of engagement services provided	1.2	1.0	N/A	N/A	1.1	1.0	2.0	N/A	1.0	1.0
Average number of core services provided	1.3	1.2	1.3	1.1	1.1	1.4	1.0	1.0	1.1	1.2
Average number of other HHP services provided	1.0	1.0	1.1	1.0	1.0	1.1	1.0	1.1	1.1	1.1
Average number of in-person services provided	1.2	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.1	1.2
Average number of phone/ telehealth services provided	1.2	1.1	1.3	1.1	1.1	1.3	1.0	1.0	1.1	1.1
Average number of services provided by clinical staff	1.2	1.0	2.0	N/A	1.6	3.5	1.0	1.0	1.1	1.1
Average number of services provided by non-clinical staff	1.3	1.3	1.4	1.2	1.3	1.4	1.0	1.0	1.2	1.3

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 110: Trends in HHP Metrics for Anthem Blue Cross as of September 30, 2020

MCP	Anthem Blue Cross Partnership Plan									
Group	Group 1		Group 3							
County	San Francisco		Alameda		Sacramento		Santa Clara		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Outcomes										
Adult BMI Assessment										
Pre-Year 2	14%	--	37%	--	45%	44%	36%	31%	52%	53%
Pre-Year 1	27%	--	45%	--	73%	73%	44%	41%	60%	71%
HHP Year 1	29%	--	42%	--	77%	68%	42%	34%	70%	68%
Follow-Up After Hospitalization for Mental Illness within 30 Days										
Pre-Year 2	--	--	N/A	N/A	N/A	--	--	--	--	83%
Pre-Year 1	--	--	N/A	N/A	N/A	--	--	--	--	71%
HHP Year 1	--	N/A	N/A	N/A	--	N/A	--	--	--	--
Follow-Up After Hospitalization for Mental Illness within 7 Days										
Pre-Year 2	--	--	N/A	N/A	N/A	--	--	--	--	61%
Pre-Year 1	--	--	N/A	N/A	N/A	--	--	--	--	62%
HHP Year 1	--	N/A	N/A	N/A	--	N/A	--	--	--	--
Screening for Depression and Follow-Up Plan										
Pre-Year 2	--	--	--	--	--	--	--	--	3%	7%
Pre-Year 1	--	--	--	--	--	--	--	--	4%	--
HHP Year 1	--	N/A	--	--	--	--	--	--	3%	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days										
Pre-Year 2	--	N/A	--	N/A	--	--	--	--	--	--
Pre-Year 1	--	N/A	--	N/A	--	--	--	--	--	--
HHP Year 1	--	N/A	--	N/A	--	--	--	--	--	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days										
Pre-Year 2	--	N/A	--	N/A	--	--	--	--	--	--
Pre-Year 1	--	N/A	--	N/A	--	--	--	--	--	--
HHP Year 1	--	N/A	--	N/A	--	--	--	--	--	--
Initiation of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	--	--	--	--	--	--	28%	--	19%	--
Pre-Year 1	--	--	--	--	--	--	--	--	18%	22%
HHP Year 1	--	--	--	--	N/A	--	--	--	14%	--
Engagement of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	--	--	--	N/A	N/A	N/A	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	--	--	--	--
HHP Year 1	--	--	--	--	N/A	--	--	--	--	--
Use of Pharmacotherapy for Opioid Use Disorder										
Pre-Year 2	--	--	--	N/A	--	--	--	--	44%	41%
Pre-Year 1	--	--	--	N/A	--	--	--	--	44%	41%
HHP Year 1	--	--	--	N/A	--	--	--	--	44%	58%
Controlling High Blood Pressure										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	20%	38%	--	--	6%	10%
HHP Year 1	16%	--	--	--	35%	--	--	--	5%	--
All-Cause Readmission										
Pre-Year 2	--	--	--	--	--	--	0.12	--	0.09	0.12
Pre-Year 1	0.12	--	--	--	--	--	--	--	0.10	0.11

MCP	Anthem Blue Cross Partnership Plan									
Group	Group 1		Group 3							
County	San Francisco		Alameda		Sacramento		Santa Clara		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Year 1	0.14	--	--	--	--	--	0.16	--	0.11	--
Admission to an Institution from the Community Short-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	1.76	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--	--	--	--	--
Admission to an Institution from the Community Medium-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	4.30	--	2.26	--
HHP Year 1	--	--	--	--	--	--	--	--	1.83	--
Admission to an Institution from the Community Long-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--	--	--	--	--
Emergency Department Visits										
Before HHP (19-24 mos.)	187	--	235	--	223	241	142	124	123	157
Before HHP (13-18 mos.)	197	--	195	202	232	287	177	173	139	174
Before HHP (7-12 mos.)	187	--	204	--	221	271	168	193	163	144
Before HHP (1-6 mos.)	157	--	330	122	219	295	155	201	171	153
During HHP (1-6 mos.)	162	--	181	--	163	187	132	119	134	124
During HHP (7-12 mos.)	165	--	152	--	145	144	87	--	101	128
Hospitalizations										
Before HHP (19-24 mos.)	35	--	68	--	44	53	42	28	39	43
Before HHP (13-18 mos.)	57	--	52	--	65	61	34	--	49	53
Before HHP (7-12 mos.)	102	--	93	--	61	53	51	--	53	45
Before HHP (1-6 mos.)	59	--	129	--	63	43	45	30	51	38
During HHP (1-6 mos.)	48	--	99	--	39	27	33	--	38	25
During HHP (7-12 mos.)	46	--	73	--	35	--	32	--	35	--

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 111: Trends in Estimated Payments for Anthem Blue Cross as of September 30, 2020

MCP	Anthem Blue Cross Partnership Plan									
Group	Group 1		Group 3							
County	San Francisco		Alameda		Sacramento		Santa Clara		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees										
Total Estimated Payments										
Before HHP (19-24 mos.)	$1,972	$2,738	$2,792	$719	$1,772	$2,044	$1,764	$1,727	$1,777	$2,042
Before HHP (13-18 mos.)	$2,624	$1,547	$3,322	$2,038	$2,100	$2,355	$1,697	$1,566	$1,866	$2,342
Before HHP (7-12 mos.)	$3,905	$1,747	$3,375	$2,819	$2,263	$2,277	$1,790	$1,867	$1,918	$1,852
Before HHP (1-6 mos.)	$3,062	$2,091	$3,886	$1,296	$2,258	$1,899	$2,040	$2,299	$1,835	$1,770
During HHP (1-6 mos.)	$3,030	$1,355	$3,271	$1,731	$1,976	$1,543	$1,852	$1,773	$1,986	$2,133
During HHP (7-12 mos.)	$2,398	$1,046	$3,295	$1,902	$1,993	$2,626	$2,080	$4,913	$2,204	$3,872
Estimated Emergency Department Payments										
Before HHP (19-24 mos.)	$102	$21	$187	$32	$127	$152	$80	$55	$82	$139
Before HHP (13-18 mos.)	$151	$37	$118	$160	$155	$153	$81	$74	$93	$115
Before HHP (7-12 mos.)	$148	$70	$160	$65	$141	$177	$72	$87	$94	$102
Before HHP (1-6 mos.)	$93	$41	$258	$30	$143	$160	$81	$96	$102	$95
During HHP (1-6 mos.)	$91	$95	$157	$50	$110	$102	$71	$69	$96	$87
During HHP (7-12 mos.)	$158	$66	$149	--	$79	$148	$44	$213	$92	$201
Estimated Hospitalization Payments										
Before HHP (19-24 mos.)	$321	$1,037	$970	--	$682	$692	$528	$338	$537	$619
Before HHP (13-18 mos.)	$591	$246	$1,722	$1,125	$824	$865	$404	$119	$629	$723
Before HHP (7-12 mos.)	$1,505	$267	$1,392	$641	$877	$736	$587	$255	$796	$498
Before HHP (1-6 mos.)	$872	$394	$1,733	--	$851	$575	$585	$411	$690	$438
During HHP (1-6 mos.)	$803	$302	$1,175	$104	$542	$325	$542	$191	$561	$442
During HHP (7-12 mos.)	$504	$123	$1,203	--	$542	$161	$424	$842	$535	$547
Estimated Outpatient Medication Payments										
Before HHP (19-24 mos.)	$327	$94	$474	$224	$288	$493	$182	$317	$296	$340
Before HHP (13-18 mos.)	$391	$110	$437	$267	$318	$459	$191	$327	$305	$366
Before HHP (7-12 mos.)	$425	$110	$397	$520	$340	$444	$199	$254	$299	$367
Before HHP (1-6 mos.)	$445	$109	$417	$419	$361	$423	$207	$423	$321	$352
During HHP (1-6 mos.)	$423	$76	$498	$306	$372	$449	$208	$520	$365	$515
During HHP (7-12 mos.)	$338	$273	$730	$891	$386	$676	$368	$1,673	$456	$1,359
Estimated Payments for Outpatient Services										

MCP	Anthem Blue Cross Partnership Plan									
Group	Group 1		Group 3							
County	San Francisco		Alameda		Sacramento		Santa Clara		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Before HHP (19-24 mos.)	$995	$1,420	$1,038	$432	$559	$584	$688	$961	$777	$824
Before HHP (13-18 mos.)	$1,354	$1,081	$902	$455	$647	$783	$809	$878	$760	$1,066
Before HHP (7-12 mos.)	$1,737	$1,254	$1,111	$712	$733	$794	$799	$1,092	$629	$822
Before HHP (1-6 mos.)	$1,516	$1,484	$1,193	$691	$744	$645	$969	$1,153	$628	$801
During HHP (1-6 mos.)	$1,396	$853	$1,302	$1,102	$814	$570	$889	$900	$835	$1,004
During HHP (7-12 mos.)	$1,102	$543	$982	$997	$782	$1,348	$1,010	$1,787	$967	$1,401

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 112: HHP Implementation and Enrollee Demographics for LA Care, Community Health Group, Kern Health Systems, and CalOptima as of September 30, 2020

MCP	LA Care		Community Health Group		Kern Health Systems		CalOptima	
Group	Group 3		Group 3		Group 3		Group 4	
County	Los Angeles		San Diego		Kern		Orange	
SPA	1	2	1	2	1	2	1	2
Program Implementation and Enrollment								
Implementation Date	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20	1/1/20	7/1/20
Total Enrollment (9/2019)	13,533	1,308	774	166	3,175	203	664	95
% of TEL enrolled	70%		99%		69%		90%	
Avg Length of Enrollment (Days)	210	121	236	120	317	139	143	40
Enrollee Demographics								
% 0-17	9.0%	4.2%	8.7%	7.2%	0.8%	--	5.4%	--
% 18-34	9.9%	17.1%	7.1%	>16.9%	12.8%	32.0%	11.1%	31.6%
% 34-49	17.5%	22.5%	19.7%	24.7%	27.7%	>25.1%	25.2%	>27.4%
% 49-64	50.2%	49.8%	58.4%	44.6%	52.0%	37.4%	54.4%	29.5%
% 65+	13.4%	6.3%	6.1%	--	6.7%	--	3.9%	0.0%
% male	43.9%	36.8%	31.8%	28.9%	34.7%	28.1%	48.2%	40.0%
% White	11.2%	17.1%	23.1%	31.9%	31.7%	30.5%	28.6%	24.2%
% Hispanic	53.3%	50.9%	40.7%	34.3%	49.5%	56.7%	45.5%	38.9%
% African American	22.3%	21.0%	10.8%	--	10.4%	>7.4%	>3.0%	14.7%
% Asian American and Pacific Islander	7.1%	3.9%	4.3%	--	2.1%	--	6.2%	--
% American Indian and Alaskan Native	0.2%	--	--	0.0%	0.3%	0.0%	--	--
% Other	1.6%	>1.6%	17.3%	20.5%	0.4%	0.0%	9.3%	--
% Unknown	4.4%	5.2%	>2.5%	6.6%	5.5%	--	5.7%	--
% speak English	61.8%	71.9%	63.7%	71.7%	75.5%	78.8%	73.0%	82.1%
Medi-Cal full-scope months baseline year 1	11.84	11.90	11.92	11.95	11.90	11.68	11.92	11.86
# Enrollees with Homeless Information Available	11943	3460	771	166	3175	203	664	95
Proportion ever homeless during HHP enrollment	5.8%	8.0%	6.7%	6.6%	2.1%	--	16.7%	26.3%

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 113: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for LA Care, Community Health Group, Kern Health Systems, and CalOptima as of September 30, 2020

MCP	LA Care		Community Health Group		Kern Health Systems		CalOptima	
Group	Group 3		Group 3		Group 3		Group 4	
County	Los Angeles		San Diego		Kern		Orange	
SPA	1	2	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment								
Two specific conditions (criteria 1)	41%	24%	52%	33%	39%	18%	64%	--
Hypertension and another specific condition (criteria 2)	61%	40%	63%	37%	57%	29%	68%	--
Serious mental health condition (criteria 3)	27%	76%	58%	88%	42%	66%	49%	94%
Asthma (criteria 4)	29%	17%	35%	22%	25%	17%	36%	15%
Average number of ED visits	4.7	5.7	5.0	4.6	4.7	3.7	10.8	9.0
Average number of hospitalizations	1.2	1.3	1.2	1.0	0.9	0.9	3.0	1.9
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment								
Super Utilization Group	4.7%		5.0%		4.4%		17.7%	
High Utilization Group	12.2%		13.2%		10.7%		27.5%	
Moderate Utilization Group	34.7%		34.6%		29.3%		36.2%	
Low Utilization Group	34.1%		31.7%		36.7%		15.5%	
At Risk for High Utilization Group	14.4%		15.5%		19.0%		3.0%	
HHP Services Delivered to HHP Enrollees								
Total number of units of service provided	123,534	24,209	3,320	566	39,964	1,346	6,545	473
Average number of units of service per enrollee	2.3	2.2	1.3	1.3	1.8	1.8	7.6	7.9
Median number of units of service per enrollee	2.0	2.0	1.0	1.0	1.0	1.0	7.0	7.0
Average number of engagement services provided	1.3	1.3	1.0	1.0	1.2	1.0	N/A	N/A
Average number of core services provided	1.7	1.7	1.1	1.2	1.6	1.7	3.4	3.3
Average number of other HHP services provided	1.8	1.8	1.0	1.0	1.2	1.3	4.7	4.9
Average number of in-person services provided	1.2	1.2	1.0	1.0	1.5	1.6	1.9	2.2
Average number of phone/ telehealth services provided	1.6	1.6	1.1	1.2	1.4	1.6	2.9	3.1
Average number of services provided by clinical staff	1.7	1.8	1.0	1.0	1.7	1.7	1.0	N/A
Average number of services provided by non-clinical staff	2.0	1.9	1.3	1.3	1.4	1.4	7.6	7.9

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 114: Trends in HHP Metrics for LA Care, Community Health Group, Kern Health Systems, and CalOptima as of September 30, 2020

MCP	LA Care		Community Health Group		Kern Health Systems		CalOptima	
Group	Group 3		Group 3		Group 3		Group 4	
County	Los Angeles		San Diego		Kern		Orange	
SPA	1	2	1	2	1	2	1	2
HHP Outcomes								
Adult BMI Assessment								
Pre-Year 2	72%	71%	79%	70%	43%	40%	73%	57%
Pre-Year 1	78%	77%	81%	75%	51%	54%	76%	61%
HHP Year 1	75%	67%	71%	62%	51%	53%	66%	49%
Follow-Up After Hospitalization for Mental Illness within 30 Days								
Pre-Year 2	67%	74%	--	N/A	--	N/A	62%	73%
Pre-Year 1	77%	73%	N/A	N/A	N/A	--	69%	76%
HHP Year 1	82%	75%	N/A	N/A	--	N/A	64%	--
Follow-Up After Hospitalization for Mental Illness within 7 Days								
Pre-Year 2	48%	43%	--	N/A	--	N/A	47%	47%
Pre-Year 1	55%	49%	N/A	N/A	N/A	--	46%	49%
HHP Year 1	58%	53%	N/A	N/A	--	N/A	50%	--
Screening for Depression and Follow-Up Plan								
Pre-Year 2	6%	4%	--	N/A	--	--	7%	--
Pre-Year 1	5%	--	--	N/A	--	--	10%	--
HHP Year 1	4%	--	--	N/A	--	--	6%	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days								
Pre-Year 2	--	--	--	--	--	N/A	13%	--
Pre-Year 1	12%	16%	N/A	N/A	--	--	13%	--
HHP Year 1	--	--	--	--	--	N/A	--	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days								
Pre-Year 2	--	--	--	--	--	N/A	--	--
Pre-Year 1	--	--	N/A	N/A	--	--	--	--
HHP Year 1	--	--	--	--	--	N/A	--	--
Initiation of Alcohol and Other Drug Dependence Treatment								
Pre-Year 2	18%	25%	N/A	N/A	--	--	19%	24%
Pre-Year 1	20%	26%	--	--	--	--	23%	25%
HHP Year 1	18%	17%	N/A	--	--	--	21%	--
Engagement of Alcohol and Other Drug Dependence Treatment								
Pre-Year 2	37%	45%	N/A	N/A	--	N/A	30%	--
Pre-Year 1	38%	46%	N/A	N/A	--	N/A	38%	52%
HHP Year 1	37%	--	N/A	N/A	--	N/A	29%	--
Use of Pharmacotherapy for Opioid Use Disorder								
Pre-Year 2	41%	41%	--	--	44%	--	31%	36%
Pre-Year 1	39%	41%	--	--	36%	--	34%	38%
HHP Year 1	43%	54%	--	--	57%	--	36%	--
Controlling High Blood Pressure								
Pre-Year 2	19%	21%	4%	--	4%	--	14%	--
Pre-Year 1	23%	24%	--	--	4%	--	28%	--
HHP Year 1	19%	10%	4%	--	3%	--	19%	--
All-Cause Readmission								

MCP	LA Care		Community Health Group		Kern Health Systems		CalOptima	
Group	Group 3		Group 3		Group 3		Group 4	
County	Los Angeles		San Diego		Kern		Orange	
SPA	1	2	1	2	1	2	1	2
Pre-Year 2	0.08	0.08	N/A	N/A	--	--	0.10	0.13
Pre-Year 1	0.08	0.07	--	--	0.11	--	0.10	--
HHP Year 1	0.10	0.11	--	--	0.12	--	0.15	--
Admission to an Institution from the Community Short-Term Stay								
Pre-Year 2	0.66	0.89	1.84	--	0.63	--	3.84	--
Pre-Year 1	0.78	0.79	--	--	0.86	--	2.68	--
HHP Year 1	0.42	0.50	--	--	0.75	--	--	--
Admission to an Institution from the Community Medium-Term Stay								
Pre-Year 2	0.73	0.99	--	--	0.38	--	2.56	--
Pre-Year 1	0.77	0.71	--	--	0.78	--	3.35	--
HHP Year 1	0.45	0.56	--	--	1.03	--	--	--
Admission to an Institution from the Community Long-Term Stay								
Pre-Year 2	0.27	--	--	--	--	--	--	--
Pre-Year 1	0.30	0.56	--	--	--	--	--	--
HHP Year 1	0.39	0.50	--	--	--	--	--	--
Emergency Department Visits								
Before HHP (19-24 mos.)	152	195	181	130	174	119	326	296
Before HHP (13-18 mos.)	160	202	198	188	171	121	334	324
Before HHP (7-12 mos.)	171	211	180	199	172	154	380	401
Before HHP (1-6 mos.)	158	191	152	147	165	170	315	261
During HHP (1-6 mos.)	126	146	129	138	163	106	252	383
During HHP (7-12 mos.)	102	134	137	--	132	92	345	N/A
Hospitalizations								
Before HHP (19-24 mos.)	43	52	48	19	38	24	115	56
Before HHP (13-18 mos.)	52	55	57	38	38	28	136	53
Before HHP (7-12 mos.)	57	57	52	49	36	41	165	93
Before HHP (1-6 mos.)	56	48	45	45	37	46	117	70
During HHP (1-6 mos.)	45	36	34	34	42	21	114	--
During HHP (7-12 mos.)	39	32	35	--	36	--	156	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 115: Trends in Estimated Payments for LA Care, Community Health Group, Kern Health Systems, and CalOptima as of September 30, 2020

MCP	LA Care		Community Health Group		Kern Health Systems		CalOptima	
Group	Group 3		Group 3		Group 3		Group 4	
County	Los Angeles		San Diego		Kern		Orange	
SPA	1	2	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees								
Total Estimated Payments								
Before HHP (19-24 mos.)	$1,800	$1,980	$2,288	$1,498	$2,103	$1,106	$3,310	$2,639
Before HHP (13-18 mos.)	$2,008	$1,996	$2,427	$1,638	$2,265	$1,275	$3,985	$2,262
Before HHP (7-12 mos.)	$2,125	$2,151	$2,409	$2,147	$2,309	$1,582	$4,537	$2,909
Before HHP (1-6 mos.)	$2,057	$1,956	$2,565	$2,015	$2,359	$1,839	$4,376	$2,572
During HHP (1-6 mos.)	$2,053	$2,376	$2,718	$2,576	$2,634	$1,920	$4,734	$6,970
During HHP (7-12 mos.)	$2,341	$4,110	$2,757	$5,527	$2,331	$4,112	$13,865	N/A
Estimated Emergency Department Payments								
Before HHP (19-24 mos.)	$120	$166	$122	$84	$231	$164	$262	$180
Before HHP (13-18 mos.)	$133	$153	$118	$106	$206	$164	$267	$179
Before HHP (7-12 mos.)	$137	$144	$107	$116	$277	$255	$311	$250
Before HHP (1-6 mos.)	$103	$113	$94	$102	$314	$435	$287	$180
During HHP (1-6 mos.)	$84	$115	$101	$118	$388	$141	$262	$573
During HHP (7-12 mos.)	$80	$200	$112	$156	$224	$213	$843	N/A
Estimated Hospitalization Payments								
Before HHP (19-24 mos.)	$445	$559	$526	$233	$342	$250	$1,152	$529
Before HHP (13-18 mos.)	$580	$588	$631	$293	$317	$517	$1,447	$543
Before HHP (7-12 mos.)	$664	$704	$483	$518	$288	$608	$1,733	$1,031
Before HHP (1-6 mos.)	$665	$605	$403	$338	$311	$415	$1,340	$805
During HHP (1-6 mos.)	$569	$637	$385	$394	$332	$197	$1,285	$1,879
During HHP (7-12 mos.)	$589	$857	$483	$849	$301	$705	$3,123	N/A
Estimated Outpatient Medication Payments								
Before HHP (19-24 mos.)	$432	$493	$634	$495	$457	$277	$616	$288
Before HHP (13-18 mos.)	$453	$509	$644	$454	$487	$198	$724	$314
Before HHP (7-12 mos.)	$449	$478	$707	$579	$549	$185	$715	$443
Before HHP (1-6 mos.)	$430	$425	$782	$652	$551	$278	$766	$563
During HHP (1-6 mos.)	$420	$533	$903	$958	$568	$477	$1,011	$1,256
During HHP (7-12 mos.)	$502	$1,044	$894	$2,333	$491	$778	$2,757	N/A
Estimated Payments for Outpatient Services								
Before HHP (19-24 mos.)	$590	$606	$867	$598	$884	$331	$1,153	$1,446
Before HHP (13-18 mos.)	$626	$578	$892	$645	$1,090	$296	$1,378	$1,004
Before HHP (7-12 mos.)	$659	$653	$972	$775	$1,025	$429	$1,521	$974
Before HHP (1-6 mos.)	$653	$658	$1,160	$836	$1,018	$585	$1,810	$874
During HHP (1-6 mos.)	$762	$876	$1,173	$957	$1,166	$976	$1,965	$2,698

MCP	LA Care		Community Health Group		Kern Health Systems		CalOptima	
Group	Group 3		Group 3		Group 3		Group 4	
County	Los Angeles		San Diego		Kern		Orange	
SPA	1	2	1	2	1	2	1	2
During HHP (7-12 mos.)	$912	$1,443	$1,092	$1,969	$1,153	$2,121	$5,971	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 116: HHP Implementation and Enrollee Demographics for Inland Empire Health Plan and Kaiser as of September 30, 2020

MCP	Inland Empire Health Plan				Kaiser			
Group	Group 2				Group 3			
County	Riverside		San Bernardino		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2
Program Implementation and Enrollment								
Implementation Date	1/1/19	7/1/19	1/1/19	7/1/19	7/1/19	1/1/20	7/1/19	1/1/20
Total Enrollment (9/2019)	5,489	1,270	4,565	1,051	379	188	12	N/A
% of TEL enrolled	84%		83%		93%		0%	
Avg Length of Enrollment (Days)	319	195	303	184	202	116	179	0
Enrollee Demographics								
% 0-17	1.7%	1.3%	6.7%	2.6%	17.4%	>5.9%	--	N/A
% 18-34	11.7%	24.1%	11.7%	22.8%	19.8%	27.7%	--	N/A
% 34-49	22.2%	28.0%	23.7%	30.4%	24.5%	27.7%	--	N/A
% 49-64	59.9%	44.6%	53.8%	41.3%	34.8%	33.0%	--	N/A
% 65+	4.6%	2.0%	4.0%	2.9%	3.4%	--	--	N/A
% male	41.4%	33.6%	38.4%	35.0%	41.7%	29.3%	--	N/A
% White	30.0%	34.9%	24.1%	32.3%	25.3%	33.0%	--	N/A
% Hispanic	47.8%	44.4%	48.7%	42.0%	12.9%	14.4%	--	N/A
% African American	12.1%	10.4%	17.9%	19.1%	40.1%	31.4%	--	N/A
% Asian American and Pacific Islander	2.6%	2.3%	2.8%	--	>5.5%	--	--	N/A
% American Indian and Alaskan Native	0.4%	--	0.4%	--	--	--	0.0%	N/A
% Other	1.0%	--	0.6%	--	9.5%	10.6%	--	N/A
% Unknown	6.1%	6.8%	5.4%	5.0%	3.7%	--	0.0%	N/A
% speak English	77.1%	81.6%	80.9%	86.8%	93.4%	95.7%	--	N/A
Medi-Cal full-scope months baseline year 1	11.84	11.74	11.87	11.76	11.88	11.91	12.00	N/A
# Enrollees with Homeless Information Available	5304	1270	4369	1051	379	188	12	N/A
Proportion ever homeless during HHP enrollment	7.1%	10.1%	7.8%	9.2%	19.8%	23.4%	--	N/A

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 117: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for Inland Empire Health Plan and Kaiser as of September 30, 2020

MCP	Inland Empire Health Plan				Kaiser			
Group	Group 2				Group 3			
County	Riverside		San Bernardino		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment								
Two specific conditions (criteria 1)	49%	18%	48%	16%	33%	19%	--	0%
Hypertension and another specific condition (criteria 2)	68%	25%	65%	25%	35%	26%	--	0%
Serious mental health condition (criteria 3)	41%	87%	38%	86%	21%	96%	--	0%
Asthma (criteria 4)	26%	10%	34%	14%	59%	31%	--	0%
Average number of ED visits	5.8	5.5	7.0	5.8	8.5	8.2	6.1	NA
Average number of hospitalizations	1.4	1.2	1.9	1.2	1.1	1.2	0.7	NA
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment								
Super Utilization Group	6.2%		8.3%		8.5%		<17.9%	
High Utilization Group	14.7%		17.1%		23.1%		<20.9%	
Moderate Utilization Group	34.2%		36.1%		48.0%		<22.4%	
Low Utilization Group	32.2%		28.8%		16.9%		<20.9%	
At Risk for High Utilization Group	12.8%		9.8%		3.5%		<17.9%	
HHP Services Delivered to HHP Enrollees								
Total number of units of service provided	53,317	9,134	49,228	7,474	3	-	-	N/A
Average number of units of service per enrollee	1.7	1.8	1.7	1.8	1.0	N/A	N/A	N/A
Median number of units of service per enrollee	1.0	1.0	1.0	1.0	1.0	N/A	N/A	N/A
Average number of engagement services provided	1.1	1.1	1.1	1.3	1.0	N/A	N/A	N/A
Average number of core services provided	1.7	1.8	1.6	1.7	1.0	N/A	N/A	N/A
Average number of other HHP services provided	1.2	1.2	1.2	1.2	N/A	N/A	N/A	N/A
Average number of in-person services provided	1.3	1.3	1.2	1.2	N/A	N/A	N/A	N/A
Average number of phone/ telehealth services provided	1.6	1.7	1.5	1.7	1.0	N/A	N/A	N/A
Average number of services provided by clinical staff	1.5	1.7	1.5	1.6	1.0	N/A	N/A	N/A
Average number of services provided by non-clinical staff	1.4	1.5	1.4	1.5	N/A	N/A	N/A	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 118: Trends in HHP Metrics for Inland Empire Health Plan and Kaiser as of September 30, 2020

MCP	Inland Empire Health Plan				Kaiser			
Group	Group 2				Group 3			
County	Riverside		San Bernardino		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2
HHP Outcomes								
Adult BMI Assessment								
Pre-Year 2	48%	53%	58%	57%	48%	40%	--	N/A
Pre-Year 1	64%	69%	69%	70%	51%	46%	--	N/A
HHP Year 1	76%	73%	74%	68%	41%	32%	--	N/A
Follow-Up After Hospitalization for Mental Illness within 30 Days								
Pre-Year 2	86%	61%	80%	78%	N/A	--	N/A	N/A
Pre-Year 1	89%	82%	83%	76%	N/A	--	N/A	N/A
HHP Year 1	75%	--	71%	76%	--	--	N/A	N/A
Follow-Up After Hospitalization for Mental Illness within 7 Days								
Pre-Year 2	50%	39%	51%	47%	N/A	--	N/A	N/A
Pre-Year 1	68%	64%	52%	51%	N/A	--	N/A	N/A
HHP Year 1	50%	--	30%	--	--	--	N/A	N/A
Screening for Depression and Follow-Up Plan								
Pre-Year 2	9%	12%	9%	10%	--	--	--	N/A
Pre-Year 1	34%	21%	32%	16%	--	N/A	--	N/A
HHP Year 1	38%	--	38%	27%	--	N/A	--	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days								
Pre-Year 2	--	--	11%	--	--	--	N/A	N/A
Pre-Year 1	--	--	13%	17%	--	--	N/A	N/A
HHP Year 1	20%	--	13%	--	--	--	N/A	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days								
Pre-Year 2	--	--	--	--	--	--	N/A	N/A
Pre-Year 1	--	--	--	--	--	--	N/A	N/A
HHP Year 1	--	--	7%	--	--	--	N/A	N/A
Initiation of Alcohol and Other Drug Dependence Treatment								
Pre-Year 2	21%	25%	16%	21%	N/A	--	N/A	N/A
Pre-Year 1	24%	31%	18%	24%	--	--	N/A	N/A
HHP Year 1	15%	25%	17%	23%	N/A	--	N/A	N/A
Engagement of Alcohol and Other Drug Dependence Treatment								
Pre-Year 2	47%	33%	37%	40%	N/A	--	N/A	N/A
Pre-Year 1	39%	42%	37%	32%	--	--	N/A	N/A
HHP Year 1	43%	48%	34%	50%	N/A	N/A	N/A	N/A
Use of Pharmacotherapy for Opioid Use Disorder								
Pre-Year 2	33%	35%	25%	34%	--	--	N/A	N/A
Pre-Year 1	28%	39%	25%	36%	--	--	N/A	N/A
HHP Year 1	31%	39%	27%	43%	--	N/A	N/A	N/A
Controlling High Blood Pressure								
Pre-Year 2	6%	17%	12%	24%	--	--	--	N/A
Pre-Year 1	11%	15%	16%	25%	--	--	--	N/A
HHP Year 1	11%	13%	15%	15%	--	--	--	N/A
All-Cause Readmission								

MCP	Inland Empire Health Plan				Kaiser			
Group	Group 2				Group 3			
County	Riverside		San Bernardino		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2
Pre-Year 2	0.07	0.13	0.09	0.10	N/A	--	N/A	N/A
Pre-Year 1	0.10	0.09	0.10	0.11	--	--	--	N/A
HHP Year 1	0.11	0.11	0.11	0.11	--	--	N/A	N/A
Admission to an Institution from the Community Short-Term Stay								
Pre-Year 2	1.59	0.96	1.35	--	--	--	--	N/A
Pre-Year 1	1.92	0.82	1.23	1.01	--	--	--	N/A
HHP Year 1	1.34	0.86	1.32	--	--	--	--	N/A
Admission to an Institution from the Community Medium-Term Stay								
Pre-Year 2	1.05	0.96	1.35	0.99	--	--	--	N/A
Pre-Year 1	1.62	1.43	2.41	2.10	--	--	--	N/A
HHP Year 1	2.19	1.86	1.98	2.31	--	--	--	N/A
Admission to an Institution from the Community Long-Term Stay								
Pre-Year 2	0.59	--	0.46	--	--	--	--	N/A
Pre-Year 1	1.04	1.23	1.17	--	--	--	--	N/A
HHP Year 1	0.85	0.79	0.99	--	--	--	--	N/A
Emergency Department Visits								
Before HHP (19-24 mos.)	191	180	216	172	260	297	236	N/A
Before HHP (13-18 mos.)	193	179	223	191	331	325	--	N/A
Before HHP (7-12 mos.)	195	201	224	207	362	325	236	N/A
Before HHP (1-6 mos.)	188	197	219	211	336	274	319	N/A
During HHP (1-6 mos.)	178	200	213	204	269	304	246	N/A
During HHP (7-12 mos.)	152	134	168	175	211	309	--	N/A
Hospitalizations								
Before HHP (19-24 mos.)	41	37	57	38	32	37	--	N/A
Before HHP (13-18 mos.)	49	40	69	42	44	42	--	N/A
Before HHP (7-12 mos.)	61	48	78	53	50	75	--	N/A
Before HHP (1-6 mos.)	69	61	87	67	44	41	--	N/A
During HHP (1-6 mos.)	76	75	92	79	50	45	--	N/A
During HHP (7-12 mos.)	50	39	58	51	22	--	--	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 119: Trends in Estimated Payments for Inland Empire Health Plan and Kaiser as of September 30, 2020

MCP	Inland Empire Health Plan				Kaiser			
Group	Group 2				Group 3			
County	Riverside		San Bernardino		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees								
Total Estimated Payments								
Before HHP (19-24 mos.)	$1,923	$1,744	$1,939	$1,641	$1,267	$1,542	$1,316	N/A
Before HHP (13-18 mos.)	$2,263	$1,778	$2,264	$1,705	$1,370	$1,802	$1,088	N/A
Before HHP (7-12 mos.)	$2,652	$2,046	$2,698	$2,007	$1,882	$2,193	$2,071	N/A
Before HHP (1-6 mos.)	$2,903	$2,321	$2,981	$2,192	$1,898	$1,823	$2,715	N/A
During HHP (1-6 mos.)	$3,276	$2,968	$3,328	$2,981	$2,205	$2,640	$2,473	N/A
During HHP (7-12 mos.)	$2,883	$3,027	$2,865	$2,906	$1,738	$4,539	$3,825	N/A
Estimated Emergency Department Payments								
Before HHP (19-24 mos.)	$97	$102	$115	$98	$118	$131	$196	N/A
Before HHP (13-18 mos.)	$112	$105	$133	$111	$103	$135	$51	N/A
Before HHP (7-12 mos.)	$127	$111	$148	$137	$143	$174	$245	N/A
Before HHP (1-6 mos.)	$133	$126	$162	$154	$197	$140	$144	N/A
During HHP (1-6 mos.)	$138	$160	$175	$179	$164	$270	$244	N/A
During HHP (7-12 mos.)	$117	$135	$132	$165	$154	$485	$137	N/A
Estimated Hospitalization Payments								
Before HHP (19-24 mos.)	$561	$488	$692	$471	$440	$310	$396	N/A
Before HHP (13-18 mos.)	$672	$490	$846	$432	$480	$442	--	N/A
Before HHP (7-12 mos.)	$854	$579	$1,011	$650	$832	$743	$1,033	N/A
Before HHP (1-6 mos.)	$918	$778	$1,136	$757	$565	$417	$691	N/A
During HHP (1-6 mos.)	$988	$941	$1,180	$971	$660	$691	$525	N/A
During HHP (7-12 mos.)	$749	$718	$831	$756	$312	$1,122	$995	N/A
Estimated Outpatient Medication Payments								
Before HHP (19-24 mos.)	$531	$375	$485	$372	$259	$362	$401	N/A
Before HHP (13-18 mos.)	$569	$383	$493	$406	$249	$331	$600	N/A
Before HHP (7-12 mos.)	$584	$376	$544	$388	$290	$262	$359	N/A
Before HHP (1-6 mos.)	$599	$384	$589	$403	$297	$261	$345	N/A
During HHP (1-6 mos.)	$679	$536	$646	$542	$344	$331	$383	N/A
During HHP (7-12 mos.)	$671	$628	$614	$630	$329	$975	$578	N/A
Estimated Payments for Outpatient Services								
Before HHP (19-24 mos.)	$501	$566	$465	$536	$406	$680	$301	N/A
Before HHP (13-18 mos.)	$685	$601	$604	$578	$503	$813	$423	N/A
Before HHP (7-12 mos.)	$876	$751	$800	$621	$564	$952	$408	N/A
Before HHP (1-6 mos.)	$1,045	$800	$890	$666	$761	$939	$1,516	N/A
During HHP (1-6 mos.)	$1,217	$1,028	$1,096	$1,053	$932	$1,256	$1,266	N/A
During HHP (7-12 mos.)	$1,104	$1,104	$1,038	$1,130	$833	$1,845	$1,970	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 120: HHP Implementation and Enrollee Demographics for Molina Healthcare Plan as of September 30, 2020

MCP	Molina Healthcare Plan of California									
Group	Group 2		Group 3							
County	Riverside		San Bernardino		Imperial		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2	1	2
Program Implementation and Enrollment										
Implementation Date	1/1/19	7/1/19	1/1/19	7/1/19	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20
Total Enrollment (9/2019)	692	434	625	300	86	47	391	354	706	753
% of TEL enrolled	72%		70%		79%		83%		81%	
Avg Length of Enrollment (Days)	250	199	268	228	262	127	227	157	132	84
Enrollee Demographics										
% 0-17	22.3%	>9.7%	17.6%	>6.0%	--	--	5.9%	--	22.4%	5.4%
% 18-34	9.1%	24.7%	10.6%	23.0%	--	--	9.0%	>20.3%	9.5%	17.0%
% 34-49	17.9%	30.4%	18.6%	24.3%	22.1%	--	24.6%	25.1%	16.3%	28.0%
% 49-64	44.5%	32.7%	45.3%	43.0%	51.2%	51.1%	54.1%	51.4%	44.2%	46.7%
% 65+	6.2%	--	8.0%	--	--	--	6.4%	--	7.6%	2.8%
% male	51.6%	37.8%	49.1%	41.7%	43.0%	38.3%	47.7%	39.5%	49.9%	34.5%
% White	21.1%	30.9%	13.9%	18.3%	--	--	26.2%	28.2%	20.5%	34.3%
% Hispanic	47.0%	40.6%	50.4%	53.0%	>87.2%	>76.6%	15.6%	12.4%	34.4%	20.7%
% African American	14.0%	14.7%	19.7%	19.3%	--	--	30.5%	39.0%	8.6%	7.6%
% Asian American and Pacific Islander	6.4%	2.5%	8.3%	--	0.0%	0.0%	10.0%	3.4%	6.8%	>2.7%
% American Indian and Alaskan Native	--	--	0.0%	--	0.0%	0.0%	--	--	--	--
% Other	--	--	--	0.0%	0.0%	0.0%	11.5%	10.5%	24.8%	28.2%
% Unknown	10.0%	>8.8%	>5.9%	>5.7%	--	--	>3.3%	>3.4%	>3.3%	5.2%
% speak English	73.6%	83.9%	70.6%	77.0%	38.4%	59.6%	82.1%	92.7%	63.3%	72.4%
Medi-Cal full-scope months baseline year 1	11.82	11.91	11.88	11.93	11.83	11.49	11.91	11.93	11.86	11.94
# Enrollees with Homeless Information Available	661	434	572	300	86	47	390	354	706	753
Proportion ever homeless during HHP enrollment	--	--	2.1%	--	--	0.0%	11.8%	16.4%	6.5%	3.7%

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 121: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for Molina Healthcare Plan as of September 30, 2020

MCP	Molina Healthcare Plan of California									
Group	Group 2		Group 3							
County	Riverside		San Bernardino		Imperial		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment										
Two specific conditions (criteria 1)	38%	19%	42%	20%	50%	30%	46%	32%	46%	31%
Hypertension and another specific condition (criteria 2)	54%	30%	58%	33%	67%	40%	64%	40%	54%	39%
Serious mental health condition (criteria 3)	4%	88%	5%	83%	--	81%	9%	91%	8%	89%
Asthma (criteria 4)	42%	16%	38%	18%	30%	28%	32%	20%	42%	22%
Average number of ED visits	4.7	5.8	4.4	6.3	5.2	4.0	6.6	8.8	4.7	5.4
Average number of hospitalizations	1.0	1.2	1.0	1.5	0.6	0.6	1.4	1.7	1.3	1.1
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment										
Super Utilization Group	5.0%		4.4%		<9.0%		9.8%		4.6%	
High Utilization Group	11.7%		10.3%		>11.8%		19.6%		12.1%	
Moderate Utilization Group	38.5%		37.9%		>35.4%		40.3%		35.1%	
Low Utilization Group	34.1%		35.2%		>27.8%		24.1%		34.7%	
At Risk for High Utilization Group	10.7%		12.1%		>16.0%		6.2%		13.6%	
HHP Services Delivered to HHP Enrollees										
Total number of units of service provided	3,050	879	4,008	1,117	481	--	1,550	1	437	9
Average number of units of service per enrollee	2.0	2.2	2.2	2.5	4.0	N/A	3.1	1.0	2.0	1.5
Median number of units of service per enrollee	2.0	2.0	2.0	2.0	4.0	N/A	2.0	1.0	1.0	1.0
Average number of engagement services provided	1.4	1.5	1.5	1.7	1.7	N/A	1.7	N/A	1.5	1.0
Average number of core services provided	1.8	1.8	2.0	2.1	3.2	N/A	2.3	1.0	1.7	1.0
Average number of other HHP services provided	1.0	1.0	1.0	1.0	1.0	N/A	1.3	N/A	N/A	1.0
Average number of in-person services provided	1.1	1.3	1.1	1.5	1.2	N/A	1.3	N/A	1.6	N/A
Average number of phone/ telehealth services provided	1.7	1.8	1.9	2.0	2.9	N/A	2.0	1.0	1.6	1.0
Average number of services provided by clinical staff	2.3	2.0	2.3	2.7	2.1	N/A	2.5	N/A	2.0	1.0
Average number of services provided by non-clinical staff	1.7	1.8	1.7	1.8	2.5	N/A	2.3	1.0	1.7	1.1

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 122: Trends in HHP Metrics for Molina Healthcare Plan as of September 30, 2020

MCP	Molina Healthcare Plan of California									
Group	Group 2		Group 3							
County	Riverside		San Bernardino		Imperial		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Outcomes										
Adult BMI Assessment										
Pre-Year 2	53%	56%	61%	63%	79%	79%	56%	57%	80%	75%
Pre-Year 1	71%	71%	75%	68%	97%	92%	74%	75%	85%	77%
HHP Year 1	75%	69%	79%	70%	95%	87%	81%	74%	76%	67%
Follow-Up After Hospitalization for Mental Illness within 30 Days										
Pre-Year 2	N/A	72%	--	77%	N/A	N/A	N/A	N/A	N/A	--
Pre-Year 1	N/A	81%	--	75%	N/A	N/A	N/A	N/A	N/A	--
HHP Year 1	--	--	--	80%	N/A	N/A	N/A	N/A	--	--
Follow-Up After Hospitalization for Mental Illness within 7 Days										
Pre-Year 2	N/A	45%	--	55%	N/A	N/A	N/A	N/A	N/A	--
Pre-Year 1	N/A	46%	--	48%	N/A	N/A	N/A	N/A	N/A	--
HHP Year 1	--	--	--	37%	N/A	N/A	N/A	N/A	--	--
Screening for Depression and Follow-Up Plan										
Pre-Year 2	6%	5%	3%	5%	--	--	--	--	6%	--
Pre-Year 1	15%	13%	15%	17%	--	--	--	N/A	10%	--
HHP Year 1	19%	--	21%	--	--	N/A	--	N/A	6%	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days										
Pre-Year 2	--	--	--	--	N/A	N/A	--	N/A	N/A	--
Pre-Year 1	--	18%	--	--	N/A	N/A	N/A	N/A	--	N/A
HHP Year 1	--	--	--	--	N/A	N/A	N/A	N/A	--	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days										
Pre-Year 2	--	--	--	--	N/A	N/A	--	N/A	N/A	--
Pre-Year 1	--	11%	--	--	N/A	N/A	N/A	N/A	--	N/A
HHP Year 1	--	--	--	--	N/A	N/A	N/A	N/A	--	N/A
Initiation of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	15%	20%	19%	17%	N/A	N/A	N/A	--	N/A	--
Pre-Year 1	19%	28%	19%	21%	--	N/A	--	--	--	--
HHP Year 1	23%	24%	18%	21%	N/A	N/A	--	--	N/A	--
Engagement of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	39%	29%	--	41%	N/A	N/A	N/A	--	N/A	--
Pre-Year 1	49%	50%	--	33%	N/A	N/A	N/A	--	--	--
HHP Year 1	38%	40%	--	50%	N/A	N/A	N/A	--	N/A	--
Use of Pharmacotherapy for Opioid Use Disorder										
Pre-Year 2	35%	30%	22%	35%	N/A	--	N/A	--	--	--
Pre-Year 1	28%	38%	21%	32%	N/A	--	N/A	--	--	--
HHP Year 1	33%	38%	25%	35%	N/A	N/A	N/A	--	N/A	--
Controlling High Blood Pressure										
Pre-Year 2	13%	17%	17%	21%	--	--	11%	12%	17%	18%
Pre-Year 1	18%	22%	23%	26%	--	--	34%	40%	16%	14%
HHP Year 1	16%	14%	20%	22%	--	--	24%	19%	6%	--
All-Cause Readmission										
Pre-Year 2	0.08	0.11	0.09	0.07	N/A	--	--	--	--	--
Pre-Year 1	0.09	0.08	0.10	0.09	--	--	--	--	--	--

MCP	Molina Healthcare Plan of California									
Group	Group 2		Group 3							
County	Riverside		San Bernardino		Imperial		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Year 1	0.11	0.13	0.09	0.08	N/A	--	--	--	--	--
Admission to an Institution from the Community Short-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	2.02	1.77
Pre-Year 1	1.78	--	--	--	--	--	--	3.39	--	2.36
HHP Year 1	--	--	--	--	--	--	--	--	--	--
Admission to an Institution from the Community Medium-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--	--	--	--	--
Admission to an Institution from the Community Long-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--	--	--	--	--
Emergency Department Visits										
Before HHP (19-24 mos.)	154	198	137	193	170	187	197	309	137	199
Before HHP (13-18 mos.)	166	200	155	169	129	140	211	281	162	191
Before HHP (7-12 mos.)	163	210	141	221	265	131	240	300	161	194
Before HHP (1-6 mos.)	179	205	160	209	198	146	235	304	146	167
During HHP (1-6 mos.)	140	173	124	214	143	144	200	235	114	179
During HHP (7-12 mos.)	99	168	98	161	40	--	173	219	121	176
Hospitalizations										
Before HHP (19-24 mos.)	29	40	30	54	--	--	38	54	42	47
Before HHP (13-18 mos.)	32	48	37	70	--	--	39	53	51	49
Before HHP (7-12 mos.)	43	60	42	67	24	--	58	62	52	51
Before HHP (1-6 mos.)	50	57	49	76	37	--	66	73	59	44
During HHP (1-6 mos.)	40	47	48	87	--	--	92	90	63	49
During HHP (7-12 mos.)	26	48	33	42	--	--	59	76	57	--

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 123: Trends in Estimated Payments for Molina Healthcare Plan as of September 30, 2020

MCP	Molina Healthcare Plan of California									
Group	Group 2		Group 3							
County	Riverside		San Bernardino		Imperial		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees										
Total Estimated Payments										
Before HHP (19-24 mos.)	$1,302	$1,665	$1,268	$1,691	$2,554	$2,428	$1,519	$1,914	$1,997	$2,003
Before HHP (13-18 mos.)	$1,365	$1,688	$1,404	$1,751	$1,911	$1,931	$1,650	$1,774	$2,176	$2,082
Before HHP (7-12 mos.)	$1,500	$1,780	$1,590	$1,715	$2,345	$2,015	$1,930	$2,105	$2,188	$2,178
Before HHP (1-6 mos.)	$1,590	$1,666	$1,781	$1,805	$2,022	$2,202	$2,081	$2,162	$2,439	$2,281
During HHP (1-6 mos.)	$1,852	$1,959	$1,709	$2,372	$2,892	$2,525	$2,318	$2,944	$3,500	$4,577
During HHP (7-12 mos.)	$1,643	$2,570	$1,772	$2,911	$1,849	$5,542	$2,355	$7,092	$4,118	$10,998
Estimated Emergency Department Payments										
Before HHP (19-24 mos.)	$82	$127	$72	$117	$117	$161	$128	$201	$77	$128
Before HHP (13-18 mos.)	$82	$146	$78	$123	$101	$165	$106	$164	$91	$126
Before HHP (7-12 mos.)	$93	$138	$79	$134	$149	$73	$115	$200	$87	$132
Before HHP (1-6 mos.)	$95	$126	$100	$134	$82	$89	$133	$214	$94	$144
During HHP (1-6 mos.)	$93	$153	$84	$153	$86	$148	$136	$217	$132	$250
During HHP (7-12 mos.)	$71	$219	$68	$121	$32	$208	$131	$622	$184	$993
Estimated Hospitalization Payments										
Before HHP (19-24 mos.)	$427	$551	$368	$730	$326	$236	$492	$635	$659	$580
Before HHP (13-18 mos.)	$464	$543	$385	$676	$210	$240	$550	$597	$826	$569
Before HHP (7-12 mos.)	$590	$572	$633	$689	$442	$387	$822	$699	$653	$603
Before HHP (1-6 mos.)	$622	$533	$749	$718	$424	$437	$992	$959	$746	$558
During HHP (1-6 mos.)	$795	$584	$621	$1,101	$354	$147	$1,028	$1,238	$964	$950
During HHP (7-12 mos.)	$512	$584	$452	$1,644	$298	--	$1,071	$2,815	$1,349	$2,348
Estimated Outpatient Medication Payments										
Before HHP (19-24 mos.)	$315	$343	$279	$378	$596	$764	$368	$459	$460	$552
Before HHP (13-18 mos.)	$353	$384	$310	$387	$503	$531	$319	$414	$438	$537
Before HHP (7-12 mos.)	$336	$348	$279	$307	$460	$602	$272	$369	$434	$545
Before HHP (1-6 mos.)	$321	$342	$325	$310	$500	$666	$256	$322	$410	$573
During HHP (1-6 mos.)	$321	$433	$349	$372	$660	$865	$367	$445	$657	$1,033
During HHP (7-12 mos.)	$387	$421	$374	$371	$549	$2,395	$394	$1,428	$572	$2,034
Estimated Payments for Outpatient Services										

MCP	Molina Healthcare Plan of California									
Group	Group 2		Group 3							
County	Riverside		San Bernardino		Imperial		Sacramento		San Diego	
SPA	1	2	1	2	1	2	1	2	1	2
Before HHP (19-24 mos.)	$363	$522	$438	$361	$676	$1,220	$444	$539	$662	$602
Before HHP (13-18 mos.)	$355	$499	$551	$444	$547	$953	$559	$496	$706	$687
Before HHP (7-12 mos.)	$374	$566	$463	$440	$1,190	$900	$571	$745	$894	$747
Before HHP (1-6 mos.)	$440	$534	$482	$513	$941	$966	$644	$570	$1,084	$865
During HHP (1-6 mos.)	$506	$647	$510	$588	$1,717	$1,266	$603	$806	$1,565	$1,990
During HHP (7-12 mos.)	$502	$1,198	$705	$548	$895	$2,863	$591	$1,615	$1,678	$4,940

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 124: HHP Implementation and Enrollee Demographics for Health Net as of September 30, 2020

MCP	Health Net									
Group	Group 3									
County	Kern		Los Angeles		Sacramento		San Diego		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Program Implementation and Enrollment										
Implementation Date	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20	7/1/19	1/1/20
Total Enrollment (9/2019)	205	93	3,210	313	389	167	100	53	232	83
% of TEL enrolled	96%		89%		99%		97%		97%	
Avg Length of Enrollment (Days)	132	125	239	129	183	137	99	95	175	109
Enrollee Demographics										
% 0-17	11.7%	--	14.6%	>4.2%	4.1%	--	23.0%	--	>9.1%	--
% 18-34	11.7%	>26.9%	11.0%	22.4%	16.5%	31.7%	--	24.5%	12.5%	42.2%
% 34-49	22.4%	32.3%	17.3%	28.4%	22.4%	35.3%	23.0%	22.6%	25.4%	41.0%
% 49-64	48.8%	29.0%	48.4%	41.5%	53.0%	>26.4%	41.0%	>32.1%	48.3%	--
% 65+	5.4%	--	8.6%	--	4.1%	--	--	0.0%	--	0.0%
% male	41.5%	32.3%	43.3%	32.9%	37.5%	27.5%	43.0%	47.2%	37.1%	18.1%
% White	23.9%	35.5%	10.1%	>15.3%	27.8%	43.7%	--	>30.2%	20.3%	>20.5%
% Hispanic	49.3%	40.9%	54.1%	56.9%	18.5%	>13.2%	50.0%	26.4%	67.2%	66.3%
% African American	18.5%	>11.8%	22.0%	16.6%	33.4%	20.4%	--	--	--	--
% Asian American and Pacific Islander	--	--	7.2%	3.8%	>4.4%	--	--	0.0%	--	--
% American Indian and Alaskan Native	0.0%	0.0%	--	--	--	--	0.0%	0.0%	--	0.0%
% Other	--	0.0%	>1.4%	--	10.3%	16.2%	26.0%	22.6%	5.6%	--
% Unknown	>2.9%	--	4.7%	3.8%	2.8%	--	--	--	--	--
% speak English	77.6%	89.2%	62.6%	72.5%	89.5%	95.8%	60.0%	90.6%	62.9%	72.3%
Medi-Cal full-scope months baseline year 1	11.82	11.78	11.90	11.92	11.92	11.90	11.88	11.96	11.96	11.99
# Enrollees with Homeless Information Available	205	93	3203	313	389	167	100	53	232	83
Proportion ever homeless during HHP enrollment	5.4%	--	10.2%	16.0%	11.3%	15.0%	17.0%	--	45.7%	72.3%

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 125: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for Health Net as of September 30, 2020

MCP	Health Net									
Group	Group 3									
County	Kern		Los Angeles		Sacramento		San Diego		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment										
Two specific conditions (criteria 1)	39%	--	41%	14%	40%	8%	42%	--	40%	--
Hypertension and another specific condition (criteria 2)	64%	--	59%	21%	57%	10%	51%	--	60%	--
Serious mental health condition (criteria 3)	36%	91%	33%	86%	37%	92%	21%	89%	37%	94%
Asthma (criteria 4)	44%	--	36%	12%	37%	8%	46%	--	47%	--
Average number of ED visits	5.4	5.2	5.7	4.8	7.7	6.4	6.4	5.4	4.8	7.8
Average number of hospitalizations	1.2	0.6	1.5	1.1	1.3	0.6	1.4	1.3	1.2	1.5
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment										
Super Utilization Group	4.0%		5.7%		7.2%		9.8%		4.4%	
High Utilization Group	15.4%		14.2%		18.2%		13.7%		12.7%	
Moderate Utilization Group	37.9%		37.1%		44.6%		35.3%		39.7%	
Low Utilization Group	32.2%		29.8%		24.6%		32.7%		32.1%	
At Risk for High Utilization Group	10.4%		13.1%		5.4%		8.5%		11.1%	
HHP Services Delivered to HHP Enrollees										
Total number of units of service provided	7	-	4,309	482	30	3	371	230	16	-
Average number of units of service per enrollee	2.3	N/A	1.6	1.6	1.5	1.5	4.3	4.5	1.1	N/A
Median number of units of service per enrollee	2.0	N/A	1.0	1.0	1.0	1.5	3.0	3.0	1.0	N/A
Average number of engagement services provided	N/A	N/A	1.1	1.1	1.0	1.0	1.3	2.0	1.0	N/A
Average number of core services provided	1.3	N/A	1.3	1.3	1.2	1.0	2.9	2.8	1.0	N/A
Average number of other HHP services provided	1.0	N/A	1.5	1.3	1.1	1.0	2.3	2.6	N/A	N/A
Average number of in-person services provided	N/A	N/A	1.1	1.0	1.0	N/A	1.5	1.5	N/A	N/A
Average number of phone/ telehealth services provided	1.3	N/A	1.3	1.3	1.2	1.0	2.8	2.7	1.0	N/A
Average number of services provided by clinical staff	1.0	N/A	1.3	1.2	N/A	N/A	1.3	1.0	1.0	N/A
Average number of services provided by non-clinical staff	2.0	N/A	1.8	2.0	1.5	1.0	4.1	4.1	1.0	N/A

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 126: Trends in HHP Metrics for Health Net as of September 30, 2020

MCP	Health Net									
Group	Group 3									
County	Kern		Los Angeles		Sacramento		San Diego		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Outcomes										
Adult BMI Assessment										
Pre-Year 2	66%	43%	71%	67%	54%	33%	82%	69%	63%	54%
Pre-Year 1	61%	48%	78%	72%	70%	50%	89%	83%	68%	65%
HHP Year 1	49%	40%	73%	61%	69%	50%	73%	73%	72%	63%
Follow-Up After Hospitalization for Mental Illness within 30 Days										
Pre-Year 2	--	70%	74%	73%	N/A	--	N/A	N/A	--	66%
Pre-Year 1	--	84%	76%	82%	N/A	--	N/A	N/A	--	68%
HHP Year 1	N/A	--	81%	62%	--	N/A	N/A	N/A	--	--
Follow-Up After Hospitalization for Mental Illness within 7 Days										
Pre-Year 2	--	--	48%	51%	N/A	--	N/A	N/A	--	40%
Pre-Year 1	--	--	47%	58%	N/A	--	N/A	N/A	--	52%
HHP Year 1	N/A	--	55%	--	--	N/A	N/A	N/A	--	--
Screening for Depression and Follow-Up Plan										
Pre-Year 2	--	--	6%	--	--	--	--	N/A	--	--
Pre-Year 1	10%	--	8%	--	--	--	--	N/A	6%	--
HHP Year 1	--	--	6%	--	--	N/A	--	--	--	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days										
Pre-Year 2	--	--	8%	--	--	--	--	N/A	--	--
Pre-Year 1	--	--	11%	--	N/A	--	N/A	N/A	--	--
HHP Year 1	--	--	--	--	--	N/A	N/A	N/A	--	--
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days										
Pre-Year 2	--	--	--	--	--	--	--	N/A	--	--
Pre-Year 1	--	--	8%	--	N/A	--	N/A	N/A	--	--
HHP Year 1	--	--	--	--	--	N/A	N/A	N/A	--	--
Initiation of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	19%	24%	21%	20%	N/A	--	N/A	N/A	--	--
Pre-Year 1	28%	--	22%	21%	--	--	--	--	--	--
HHP Year 1	--	--	17%	30%	N/A	--	N/A	N/A	--	--
Engagement of Alcohol and Other Drug Dependence Treatment										
Pre-Year 2	--	--	34%	58%	N/A	--	N/A	N/A	--	--
Pre-Year 1	--	--	27%	--	--	--	--	N/A	--	--
HHP Year 1	--	--	36%	68%	N/A	--	N/A	N/A	--	--
Use of Pharmacotherapy for Opioid Use Disorder										
Pre-Year 2	36%	--	35%	27%	--	N/A	--	--	--	--
Pre-Year 1	41%	--	35%	40%	--	N/A	--	--	--	--
HHP Year 1	56%	--	44%	39%	--	--	--	--	--	--
Controlling High Blood Pressure										
Pre-Year 2	--	--	20%	24%	--	--	--	--	--	--
Pre-Year 1	--	--	24%	27%	35%	61%	--	--	8%	--
HHP Year 1	--	--	19%	9%	25%	--	--	--	--	--
All-Cause Readmission										
Pre-Year 2	0.09	--	0.09	0.08	--	--	N/A	N/A	0.10	--
Pre-Year 1	--	--	0.09	0.10	--	--	--	--	0.11	--

MCP	Health Net									
Group	Group 3									
County	Kern		Los Angeles		Sacramento		San Diego		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
HHP Year 1	--	--	0.11	0.11	--	--	N/A	N/A	0.09	--
Admission to an Institution from the Community Short-Term Stay										
Pre-Year 2	--	--	0.36	--	--	--	--	--	--	--
Pre-Year 1	--	--	0.90	--	--	--	--	--	--	--
HHP Year 1	--	--	0.57	--	--	--	--	--	--	--
Admission to an Institution from the Community Medium-Term Stay										
Pre-Year 2	--	--	0.62	--	--	--	--	--	--	--
Pre-Year 1	--	--	0.99	--	--	--	--	--	--	--
HHP Year 1	--	--	0.35	--	--	--	--	--	--	--
Admission to an Institution from the Community Long-Term Stay										
Pre-Year 2	--	--	--	--	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--	--	--	--	--
HHP Year 1	--	--	0.41	--	--	--	--	--	--	--
Emergency Department Visits										
Before HHP (19-24 mos.)	224	280	195	162	302	249	222	210	184	275
Before HHP (13-18 mos.)	207	217	196	168	292	263	237	146	179	305
Before HHP (7-12 mos.)	191	189	188	177	266	236	237	202	144	277
Before HHP (1-6 mos.)	151	122	173	147	225	279	192	145	144	263
During HHP (1-6 mos.)	127	128	139	109	189	186	168	207	91	378
During HHP (7-12 mos.)	N/A	N/A	114	60	168	185	--	--	63	--
Hospitalizations										
Before HHP (19-24 mos.)	61	24	55	44	55	27	57	47	53	88
Before HHP (13-18 mos.)	55	35	63	40	54	30	57	110	50	38
Before HHP (7-12 mos.)	38	38	65	48	57	29	77	66	45	48
Before HHP (1-6 mos.)	37	--	58	36	41	18	50	38	43	36
During HHP (1-6 mos.)	29	--	43	33	45	18	38	64	35	47
During HHP (7-12 mos.)	N/A	N/A	49	--	60	--	--	--	38	--

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 127: Trends in Estimated Payments for Health Net as of September 30, 2020

MCP	Health Net									
Group	Group 3									
County	Kern		Los Angeles		Sacramento		San Diego		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees										
Total Estimated Payments										
Before HHP (19-24 mos.)	$2,055	$1,171	$1,988	$1,714	$1,923	$1,801	$1,979	$2,053	$2,011	$2,005
Before HHP (13-18 mos.)	$1,897	$1,119	$2,127	$1,447	$2,183	$1,650	$2,243	$2,136	$2,917	$1,734
Before HHP (7-12 mos.)	$1,626	$1,427	$2,384	$1,736	$2,159	$1,524	$2,289	$1,678	$1,872	$1,465
Before HHP (1-6 mos.)	$1,426	$1,156	$2,221	$1,474	$1,880	$1,212	$2,341	$2,843	$2,252	$2,147
During HHP (1-6 mos.)	$1,739	$1,203	$2,273	$1,959	$2,677	$1,401	$3,233	$4,249	$2,742	$2,198
During HHP (7-12 mos.)	N/A	N/A	$2,834	$4,018	$3,210	$2,337	$1,654	$13,592	$3,538	$3,581
Estimated Emergency Department Payments										
Before HHP (19-24 mos.)	$138	$167	$184	$136	$210	$134	$146	$167	$111	$194
Before HHP (13-18 mos.)	$130	$113	$175	$113	$173	$123	$118	$102	$98	$167
Before HHP (7-12 mos.)	$101	$130	$141	$105	$166	$123	$139	$126	$79	$157
Before HHP (1-6 mos.)	$112	$57	$154	$79	$120	$153	$100	$94	$162	$186
During HHP (1-6 mos.)	$101	$104	$160	$89	$127	$114	$233	$230	$93	$279
During HHP (7-12 mos.)	N/A	N/A	$171	$143	$148	$299	$108	--	$116	$83
Estimated Hospitalization Payments										
Before HHP (19-24 mos.)	$832	$241	$785	$717	$578	$282	$833	$1,186	$709	$728
Before HHP (13-18 mos.)	$571	$281	$868	$428	$719	$388	$1,077	$1,188	$1,137	$451
Before HHP (7-12 mos.)	$436	$417	$1,059	$672	$635	$299	$1,119	$338	$532	$361
Before HHP (1-6 mos.)	$319	$130	$891	$539	$497	$167	$703	$829	$508	$630
During HHP (1-6 mos.)	$477	$218	$763	$532	$1,047	$231	$640	$1,259	$508	$329
During HHP (7-12 mos.)	N/A	N/A	$876	$883	$1,333	$401	--	$2,726	$1,168	--
Estimated Outpatient Medication Payments										
Before HHP (19-24 mos.)	$463	$243	$458	$375	$574	$280	$412	$221	$504	$238
Before HHP (13-18 mos.)	$475	$247	$507	$363	$661	$242	$441	$326	$546	$292
Before HHP (7-12 mos.)	$518	$268	$496	$376	$704	$262	$409	$316	$563	$290
Before HHP (1-6 mos.)	$517	$283	$493	$298	$608	$261	$434	$341	$564	$289
During HHP (1-6 mos.)	$611	$220	$520	$413	$679	$377	$693	$591	$804	$397
During HHP (7-12 mos.)	N/A	N/A	$578	$759	$929	$652	$740	$816	$1,058	$1,685
Estimated Payments for Outpatient Services										

MCP	Health Net									
Group	Group 3									
County	Kern		Los Angeles		Sacramento		San Diego		Tulare	
SPA	1	2	1	2	1	2	1	2	1	2
Before HHP (19-24 mos.)	$532	$478	$425	$415	$482	$1,063	$458	$345	$620	$734
Before HHP (13-18 mos.)	$628	$420	$480	$459	$538	$826	$462	$359	$1,086	$756
Before HHP (7-12 mos.)	$499	$552	$576	$490	$564	$791	$526	$710	$644	$572
Before HHP (1-6 mos.)	$413	$633	$584	$492	$603	$574	$990	$1,435	$934	$949
During HHP (1-6 mos.)	$493	$607	$727	$787	$748	$610	$1,511	$1,929	$1,205	$1,020
During HHP (7-12 mos.)	N/A	N/A	$1,051	$1,707	$685	$920	$695	$150	$1,023	$1,440

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 128: HHP Implementation and Enrollee Demographics for San Francisco Health Plan, Santa Clara Family Health Plan, and United Healthcare as of September 30, 2020

MCP	San Francisco Health Plan		Santa Clara Family Health Plan		United Healthcare	
Group	Group 1		Group 3		Group 3	
County	San Francisco		Santa Clara		San Diego	
SPA	1	2	1	2	1	2
Program Implementation and Enrollment						
Implementation Date	7/1/18	1/1/19	7/1/19	1/1/20	7/1/19	1/1/20
Total Enrollment (9/2020)	634	377	569	305	53	34
% of enrollees from TEL	93%		77%		74%	
Avg Length of Enrollment (Days)	309	250	216	132	162	108
Enrollee Demographics						
% 0-17	11.5%	--	6.0%	29.2%	--	0.0%
% 18-34	5.2%	11.1%	10.4%	44.3%	20.8%	--
% 34-49	13.2%	23.3%	22.3%	>10.2%	--	52.9%
% 49-64	56.8%	57.6%	45.5%	12.8%	49.1%	--
% 65+	13.2%	>5.0%	15.8%	--	--	--
% male	58.5%	50.7%	46.0%	35.1%	50.9%	--
% White	>8.4%	22.3%	15.8%	15.7%	22.6%	--
% Hispanic	14.4%	>11.1%	37.6%	49.5%	--	--
% African American	25.2%	22.8%	5.8%	4.6%	--	--
% Asian American and Pacific Islander	32.8%	18.3%	26.2%	8.5%	20.8%	--
% American Indian and Alaskan Native	--	--	--	--	0.0%	0.0%
% Other	15.1%	19.6%	9.7%	14.4%	--	--
% Unknown	2.4%	2.9%	>3.0%	>3.6%	--	0.0%
% speak English	60.1%	74.8%	69.1%	70.2%	86.8%	82.4%
Medi-Cal full-scope months baseline year 1	11.89	11.92	11.79	11.86	11.51	11.59
# Enrollees with Homeless Information Available	517	360	569	305	53	34
Proportion ever homeless during HHP enrollment	5.4%	7.5%	12.7%	6.2%	--	--

Source: MCP Enrollment Reports from August 2019, Quarterly HHP Reports from September 2019 to September 2020, and Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 129: HHP Enrollee Health Status and Utilization Prior to Enrollment and Service Delivery for San Francisco Health Plan, Santa Clara Family Health Plan, and United Healthcare as of September 30, 2020

MCP	San Francisco Health Plan		Santa Clara Family Health Plan		United Healthcare	
Group	Group 1		Group 3		Group 3	
County	San Francisco		Santa Clara		San Diego	
SPA	1	2	1	2	1	2
Health Status and Utilization 24 Months Prior to Enrollment						
Two specific conditions (criteria 1)	60%	39%	50%	21%	47%	--
Hypertension and another specific condition (criteria 2)	65%	37%	64%	13%	49%	--
Serious mental health condition (criteria 3)	19%	95%	15%	90%	38%	88%
Asthma (criteria 4)	34%	20%	35%	16%	26%	--
Average number of ED visits	7.8	10.6	5.7	5.8	5.4	4.8
Average number of hospitalizations	2.6	2.0	1.4	1.6	1.9	0.9
Acute Care Utilization Group based on Utilization 24 Months Prior to Enrollment						
Super Utilization Group	12.7%		6.0%		<21.4%	
High Utilization Group	19.5%		16.7%		>17.3%	
Moderate Utilization Group	33.0%		36.5%		>21.4%	
Low Utilization Group	25.0%		32.5%		>28.6%	
At Risk for High Utilization Group	9.8%		8.2%		>11.2%	
HHP Services Delivered to HHP Enrollees						
Total number of units of service provided	######	7,030	3,495	2,128	314	255
Average number of units of service per enrollee	3.2	3.3	1.7	1.8	1.8	2.8
Median number of units of service per enrollee	1.0	2.0	1.0	1.0	1.0	2.0
Average number of engagement services provided	1.7	2.0	1.0	1.2	1.3	1.7
Average number of core services provided	2.4	2.5	1.6	1.6	1.4	1.6
Average number of other HHP services provided	1.8	1.8	1.2	1.2	1.5	1.9
Average number of in-person services provided	1.4	1.5	1.2	1.1	1.1	1.0
Average number of phone/ telehealth services provided	2.1	2.3	1.5	1.5	1.4	1.7
Average number of services provided by clinical staff	1.5	1.4	1.3	1.8	1.5	2.0
Average number of services provided by non-clinical staff	2.6	2.9	1.6	1.5	1.9	2.4

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report. At risk for high utilization is defined as no ED utilization or hospitalizations 24 months prior to enrollment, low utilization is less than 2 ED visits and less than 1 hospitalizations per year, moderate utilization is 2 or more ED visits or 1 or more hospitalizations per year, high utilization is 5 or more ED visits or 2 or more hospitalizations per year, and super utilization is 10 or more ED visits or 4 or more hospitalizations per year.

Exhibit 130: Trends in HHP Metrics for San Francisco Health Plan, Santa Clara Family Health Plan, and United Healthcare as of September 30, 2020

MCP	San Francisco Health Plan		Santa Clara Family Health Plan		United Healthcare	
Group	Group 1		Group 3		Group 3	
County	San Francisco		Santa Clara		San Diego	
SPA	1	2	1	2	1	2
HHP Outcomes						
Adult BMI Assessment						
Pre-Year 2	20%	15%	33%	41%	62%	63%
Pre-Year 1	28%	20%	41%	50%	79%	63%
HHP Year 1	28%	20%	37%	44%	71%	54%
Follow-Up After Hospitalization for Mental Illness within 30 Days						
Pre-Year 2	N/A	83%	--	85%	N/A	N/A
Pre-Year 1	--	77%	--	89%	N/A	N/A
HHP Year 1	--	89%	--	79%	N/A	N/A
Follow-Up After Hospitalization for Mental Illness within 7 Days						
Pre-Year 2	N/A	--	--	56%	N/A	N/A
Pre-Year 1	--	60%	--	72%	N/A	N/A
HHP Year 1	--	--	--	54%	N/A	N/A
Screening for Depression and Follow-Up Plan						
Pre-Year 2	--	--	--	6%	--	N/A
Pre-Year 1	6%	--	3%	--	--	N/A
HHP Year 1	9%	--	--	--	--	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 30 Days						
Pre-Year 2	26%	12%	--	--	N/A	N/A
Pre-Year 1	21%	23%	--	--	N/A	N/A
HHP Year 1	--	23%	--	--	N/A	N/A
Follow-Up After ED Visit for Alcohol and Other Drug Abuse or Dependence within 7 Days						
Pre-Year 2	--	--	--	--	N/A	N/A
Pre-Year 1	--	--	--	--	N/A	N/A
HHP Year 1	--	--	--	--	N/A	N/A
Initiation of Alcohol and Other Drug Dependence Treatment						
Pre-Year 2	21%	31%	21%	25%	N/A	N/A
Pre-Year 1	19%	25%	25%	23%	N/A	N/A
HHP Year 1	15%	24%	14%	25%	N/A	N/A
Engagement of Alcohol and Other Drug Dependence Treatment						
Pre-Year 2	43%	30%	--	--	N/A	N/A
Pre-Year 1	--	42%	39%	--	N/A	N/A
HHP Year 1	--	58%	--	--	N/A	N/A
Use of Pharmacotherapy for Opioid Use Disorder						
Pre-Year 2	48%	48%	--	--	N/A	--
Pre-Year 1	55%	55%	48%	--	N/A	--
HHP Year 1	53%	61%	48%	--	N/A	--
Controlling High Blood Pressure						
Pre-Year 2	5%	--	5%	--	--	--
Pre-Year 1	12%	10%	8%	16%	--	--
HHP Year 1	14%	11%	5%	--	--	--
All-Cause Readmission						
Pre-Year 2	0.08	0.11	0.09	0.11	N/A	N/A
Pre-Year 1	0.11	0.10	0.09	0.10	N/A	N/A

MCP	San Francisco Health Plan		Santa Clara Family Health Plan		United Healthcare	
Group	Group 1		Group 3		Group 3	
County	San Francisco		Santa Clara		San Diego	
SPA	1	2	1	2	1	2
HHP Year 1	0.16	0.09	0.12	--	N/A	N/A
Admission to an Institution from the Community Short-Term Stay						
Pre-Year 2	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--
Admission to an Institution from the Community Medium-Term Stay						
Pre-Year 2	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--
Admission to an Institution from the Community Long-Term Stay						
Pre-Year 2	--	--	--	--	--	--
Pre-Year 1	--	--	--	--	--	--
HHP Year 1	--	--	--	--	--	--
Emergency Department Visits						
Before HHP (19-24 mos.)	199	403	167	171	122	167
Before HHP (13-18 mos.)	236	355	178	239	134	185
Before HHP (7-12 mos.)	267	389	234	228	132	204
Before HHP (1-6 mos.)	259	408	241	230	268	201
During HHP (1-6 mos.)	215	331	191	145	159	237
During HHP (7-12 mos.)	194	314	133	117	--	--
Hospitalizations						
Before HHP (19-24 mos.)	80	56	35	39	--	--
Before HHP (13-18 mos.)	99	77	46	70	88	--
Before HHP (7-12 mos.)	115	101	71	75	132	65
Before HHP (1-6 mos.)	142	91	80	70	80	--
During HHP (1-6 mos.)	111	69	55	43	--	--
During HHP (7-12 mos.)	94	65	44	--	--	--

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Exhibit 131: Trends in Estimated Payments for San Francisco Health Plan, Santa Clara Family Health Plan, and United Healthcare as of September 30, 2020

MCP	San Francisco Health Plan		Santa Clara Family Health Plan		United Healthcare	
Group	Group 1		Group 3		Group 3	
County	San Francisco		Santa Clara		San Diego	
SPA	1	2	1	2	1	2
Estimated Payments for Services for HHP Enrollees						
Total Estimated Payments						
Before HHP (19-24 mos.)	$2,335	$2,811	$1,658	$2,427	$2,076	$1,084
Before HHP (13-18 mos.)	$2,696	$3,301	$1,933	$3,086	$2,330	$999
Before HHP (7-12 mos.)	$3,038	$3,621	$2,436	$3,121	$3,373	$1,506
Before HHP (1-6 mos.)	$3,412	$3,265	$2,793	$3,170	$2,651	$1,651
During HHP (1-6 mos.)	$3,156	$3,256	$2,969	$3,779	$2,172	$2,063
During HHP (7-12 mos.)	$2,699	$3,067	$3,080	$11,989	$5,073	$5,972
Estimated Emergency Department Payments						
Before HHP (19-24 mos.)	$114	$283	$97	$100	$54	$81
Before HHP (13-18 mos.)	$134	$265	$89	$143	$72	$116
Before HHP (7-12 mos.)	$157	$281	$125	$148	$106	$117
Before HHP (1-6 mos.)	$167	$246	$148	$133	$166	$90
During HHP (1-6 mos.)	$152	$219	$130	$109	$129	$166
During HHP (7-12 mos.)	$117	$222	$72	$366	$115	$1,383
Estimated Hospitalization Payments						
Before HHP (19-24 mos.)	$993	$566	$409	$516	$616	$326
Before HHP (13-18 mos.)	$1,154	$755	$575	$744	$895	$297
Before HHP (7-12 mos.)	$1,258	$1,069	$765	$706	$1,873	$513
Before HHP (1-6 mos.)	$1,453	$873	$908	$597	$1,083	$503
During HHP (1-6 mos.)	$1,109	$758	$662	$447	$406	$286
During HHP (7-12 mos.)	$916	$752	$576	$2,012	$2,147	--
Estimated Outpatient Medication Payments						
Pre-Semi-Year 4	$470	$477	$390	$207	$102	$186
Pre-Semi-Year 3	$582	$596	$411	$232	$144	$116
Pre-Semi-Year 2	$598	$510	$422	$308	$206	$188
Pre-Semi-Year 1	$662	$540	$463	$333	$234	$176
Semi-Year 1	$658	$609	$517	$387	$344	$351
Semi-Year 2	$616	$593	$548	$1,029	$808	$1,871
Estimated Payments for Outpatient Services						
Before HHP (19-24 mos.)	$561	$1,292	$641	$1,353	$1,220	$383
Before HHP (13-18 mos.)	$630	$1,570	$728	$1,576	$1,106	$407
Before HHP (7-12 mos.)	$888	$1,633	$979	$1,567	$1,034	$514
Before HHP (1-6 mos.)	$991	$1,471	$1,107	$1,765	$820	$724
During HHP (1-6 mos.)	$1,074	$1,518	$1,515	$2,372	$1,056	$931
During HHP (7-12 mos.)	$842	$1,296	$1,741	$6,996	$1,561	$1,563

Source: UCLA analysis of Medi-Cal Claims data from July 1, 2016 to September 30, 2020.

Notes: -- indicates data is not reported due to small cell size. N/A indicates there are no enrollees to report.

Appendix G: Enrollees with More than One Year of HHP Enrollment

UCLA restricted analysis of HHP metrics and measure during HHP for this interim report to the first year of enrollment due to the limited number of enrollees with more than one year of enrollment. Exhibit 132 shows that 9,485 (24%) of SPA 1 enrollees had 13 or more months of enrollment. Of that 9,485, 73% have less than six months of enrollment in the second year.

Exhibit 132: Count of SPA 1 Enrollees by Number of Months of HHP Enrollment as of September 2020

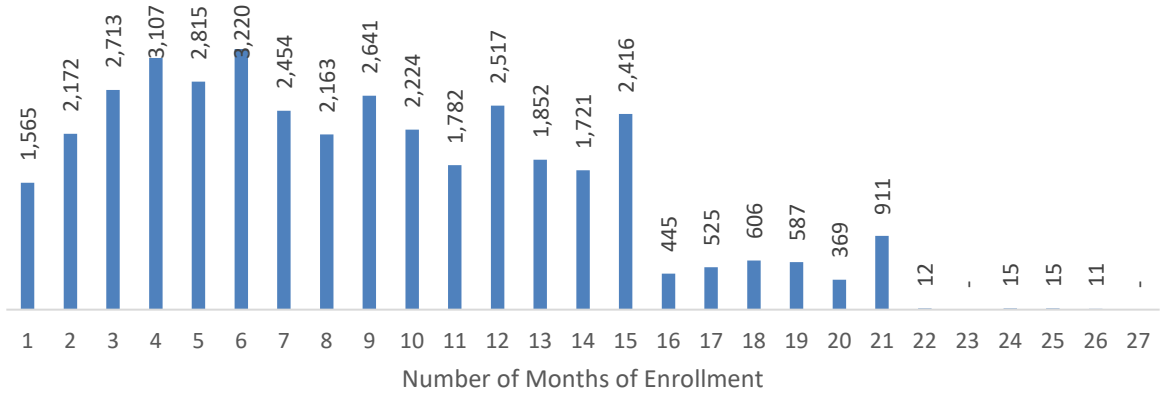
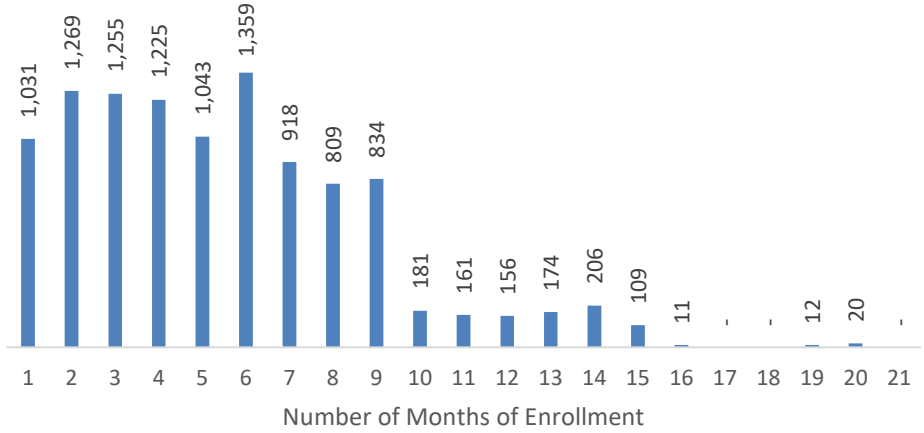


Exhibit 133 shows that 532 (5%) of SPA 2 enrollees had 13 or more months of enrollment. Of that 542, 94% had less than six months of enrollment in the second year.

Exhibit 133: Count of SPA 2 Enrollees by Number of Months of HHP Enrollment as of September 2020



The views expressed in this report are those of the authors and do not necessarily represent the UCLA Center for Health Policy Research, the Regents of the University of California, or collaborating organizations or funders.

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