# Population Needs Assessment July 2020 

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## Executive Summary

Partnership HealthPlan of California (PHC) is a not-for-profit, Medi-Cal managed care plan (MCP), which currently serves fourteen (14) counties in Northern California with a membership size of about 535,309 (as of February, 2020). As one of the six (6) County Organized Health System (COHS) managed care models established by the Counties Board of Supervisors, PHC operates under a contract by the California Department of Health Care Services (DHCS) to provide health services to members in their designated counties. Most Medi-Cal beneficiaries are assigned automatically to PHC, including dual-eligible Medicare-Medicaid, Seniors and Persons with Disabilities (SPDs), California Children's Services (CCS) beneficiaries, and beneficiaries in skilled nursing facilities. PHC provides primary and specialty health services through a contracted network of community physicians, medical groups, an integrated HMO (Kaiser Permanente), Federally-Qualified Health Centers (FQHCs), Rural Health Centers (RHCs), Indian Health Centers, local hospitals (acute and other), pharmacies, and ancillary providers ${ }^{1}$.

The Health Education and Cultural and Linguistic (C\&L) Population Needs Assessment (PNA) is conducted by MCPs to fulfill the contractual obligations of DHCS, Medi-Cal Managed Care Division (MMCD) and concomitant All Plan Letter 19-011². The PNA identifies member health status and gaps in services related to these issues. MCP contractual requirements related to the PNA are based on Title 22 of the California Code of Regulations (CCR), sections 53876(a)(4), 53876(c), 53851(b)(2), 53851(e), 53853(d), and 53910.5(a)(2), and Title 42 of the Code of Federal Regulations (CFR), sections 438.206 (c)(2), $438.330(b)(4), 438.242(b)(2)^{3,4}$.

PHC conducts an annual PNA to assess and identify the health status and needs of the member population in order to continue to provide high quality health care. This PNA looks at primary and secondary quantitative data to investigate the social determinants of health of PHC members, member health status and behaviors, health education and cultural and linguistic needs, health disparities, and gaps in services. The overall goal is to use the results of the PNA to inform PHC's strategy for improving the health outcomes of our members by evaluating their health risks, identifying their health needs, and prioritizing organizational programs and resources to improve health outcomes.

The 2020 PNA provides insight into PHC's key community health issues, which include chronic conditions, poor health maintenance behaviors including very low rates of

[^0]pediatric wellness visits and immunizations, behavioral health concerns including substance use disorder and mental illness, and severe housing problems. The PNA also identified health disparities for PHC's population showing poor access to well-child visits for the Hispanic member population in PHC's Southwest Region, lack of engagement of pregnant members in perinatal care, and a broad knowledge gap both within PHC and throughout the community on the needs and concerns of transgender members.

## Introduction

PHC is a County-Organized Health System (COHS) model of Medi-Cal managed care contracted to provide health care services in Solano, Napa, Yolo, Sonoma, Marin, Mendocino, Lake, Del Norte, and Humboldt, Lassen, Modoc, Shasta, Siskiyou, and Trinity counties. As one of the six (6) County Organized Health System (COHS) managed care models established by the Counties Board of Supervisors, PHC operates under a contract by the California Department of Health Care Services (DHCS) to provide health services to members in their designated counties.

## Membership Profile

PHC currently serves over 530,000 Medi-Cal beneficiaries in these counties. Out of the 535,309 PHC members served in the 14 counties during the assessment period, PHC primarily serves children and adults under age 65 . In 2018, there were $9,261,018$ children living in the state of California. PHC serves $2 \%$ of the state's child population. During the same year, PHC served $56 \%$ of the 216,006 children living in PHC's 14 county service area ${ }^{5}$. Out of the entire PHC member population, approximately $23 \%$ are ages $0-10,18 \%$ are ages $11-19,31 \%$ are ages $20-44,19 \%$ are ages $45-64,10 \%$ are ages 65 and older, and $47 \%$ of all members are male and $53 \%$ are female. There were approximately 4,375 babies born within PHC network during CY 2019. The largest ethnicity categories of our membership are Whites (43\%) and Hispanics (29\%). The graph in Appendix A illustrates the racial and ethnic composition of PHC members as of December 31, 2019, based on enrollment data. The Hispanic membership represents the largest non-White ethnic group across all 14 counties. English continues to be the primary language spoken by members. Currently, $79 \%$ of members identify as Englishspeaking and $18 \%$ of members are identified as Spanish speaking. The other two DHCS threshold languages include Russian (less than $1 \%$ of the population), and Tagalog (1\%). (See Appendix A for PHC Demographics per location)

[^1]FIGURE 1: Map of PHC Counties with Location of Regional Offices


Source: Partnership HealthPlan of California Website, 2020
Service Area
PHC's service area includes Del Norte, Humboldt, Lake, Lassen, Marin, Mendocino, Modoc, Napa, Shasta, Siskiyou, Solano, Sonoma, Trinity and Yolo counties. PHC's four (4) regional offices are centrally located in Fairfield, Redding, Santa Rosa and Eureka.

TABLE 1: PHC Counties with Estimated Members Served in Each County

| Counties | Total Population | PHC Members |
| :--- | :--- | :--- |
| Del Norte | 27,788 | 11,138 |
| Humboldt | 136,373 | 51,652 |
| Lake | 64,562 | 29,330 |
| Lassen | 32,645 | 7,124 |
| Marin | 259,666 | 37,072 |
| Mendocino | 87,606 | 34,686 |
| Modoc | 9,184 | 3,249 |
| Napa | 139,417 | 27,515 |
| Shasta | 178,942 | 57,840 |
| Siskiyou | 45,069 | 16,717 |
| Solano | 434,981 | 103,971 |
| Sonoma | 499,942 | 101,426 |
| Trinity | 13,037 | 4,158 |
| Yolo | 220,408 | 49,431 |

## Distribution of PNA

To satisfy DHCS regulations (APL 19-011, MMCD are required to ensure that the PNA is approved through each Health Plan's internal review committees and by members of their Consumer Advisory Committee (CAC). In keeping with these requirements, this PNA was reviewed and approved by PHC's internal review committees [Internal Quality Improvement Committee (IQI), Quality/Utilization Advisory Committee (Q/UAC), and Physician Advisory Committee (PAC)] from March through May. This report was also shared and approved during PHC quarterly CAC meetings in June.

## Data Sources

Multiple and reliable data sources and methodologies were used to assess the needs of PHC's member population. Data collection began in November 2019. In November, during PHC's bi-annual meeting with Public Health Directors and County Health Officers, the Health Education team reached out to the County Public Health Departments and Critical Access Hospitals (CAH) within our network requesting them to share their most recent Community Health Needs Assessment (CHNA) or Community Health Assessment (CHA). These assessments were utilized to gather county specific information to inform the overall report.

Member feedback was gathered through the health education team focus groups discussion with PHC's Consumer Advisory Committee (CAC) and Family Advisory

Committee (FAC). We also gathered information through key informant interviews at health fairs and county collaborative meetings.

The final element was the 2019 Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey results and the 2018-2019 Health Disparity data which were shared by the Department of Health Care Services (DHCS) based on a state-wide survey.

## PHC Member Enrollment Data

PHC demographic data is based on the Medi-Cal enrollment data received as of January 2019. This data includes the total number of individuals enrolled in Medi-Cal by eligibility group. The Department of Health Care Services (DHCS) submits eligibility and enrollment data to Medi-Cal Managed Care plans monthly based on their service areas. This data reflects the race/ethnicity, age, gender, and language distribution by members. The data was also compared with the 2019 Network Adequacy Report on Providers' Cultural and Linguistic Needs and Preferences.

## PHC Claims and Encounter Data

PHC's analytics department maintains an integrated data set including medical and pharmacy claims data. This data set is gathered from information submitted by health care providers, such as doctors and hospitals, which documents both the clinical conditions they diagnose as well as the services and items delivered to beneficiaries to treat these conditions. PHC utilized this information prepared based on the analysis of data from HEDIS reporting, providing insight into gaps in care.

## CMS Adults and Child Core sets

The Center for Medicare and Medicaid Services (CMS) Adults and Child Core sets are national standardized processes and best practices to improve patient care. These processes are designed to provide the right care at the right time for common conditions such as stroke or childhood asthma. CMS core sets are additional set of care standards which describe the expectations of care provided to patients in both outpatient and inpatient settings. These processes are proven to reduce complications and lead to better patient outcomes. The Joint Commission and the Centers for Medicare and Medicaid Services periodically redefine the core measures based on the latest evidence and nationwide hospital performance. The Joint Commission tracks compliance with core measures and each year recognizes the top performing hospitals for key quality metrics ${ }^{6}$.

[^2]
## Consumer Assessment of Healthcare Providers and Systems (CAHPS)

The Center of Medicare and Medicaid Services (CMS) develops, implements and administers several different patient experience surveys. These surveys inform health care organizations about patients' or their families' experiences with their health care providers and plans, including hospitals, home health agencies, doctors, and health and drug plans, among others. Many of the CMS surveys are embedded in the Consumer Assessment of Healthcare Providers and Systems (CAHPS) family of surveys. The CAHPS surveys are designed to reliably assess the experiences of a large sample of patients and serve as an integral part of CMS efforts to improve healthcare in the United States. All CAHPS surveys are approved by the CAHPS Consortium with oversight from the Agency of Healthcare Research and Quality (AHRQ). This data help health plans understand their members' experiences with receiving care and provide information on key areas to prioritize.

Results from the CAHPS survey in 2019 addressed questions related to getting needed care quickly and timely, shared decision-making, experiences with personal doctors, and availability of specialists when needed. Below is a summary of the PHC key CAHPS survey results.

## FIGURE 2: 2019 CAHPS Results By Demographics

## Measures by Demonrephites

| Demographic | Age |  |  | Race |  |  | Ethnicity |  | Education |  | Health Status |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 18-34 | 35-54 | 55+ | White | African American | All other | Hispanic | NonHispanic | HS Grad or Less | Some College+ | Excellent/ <br> Very Good | Good | Fair/ <br> Poor |
| Sample size | ( $\mathrm{n}=69$ ) | ( $\mathrm{n}=78$ ) | ( $\mathrm{n}=165$ ) | ( $\mathrm{n}=221$ ) | ( $\mathrm{n}=19$ ) | ( $1=95$ ) | (n=66) | (0-242) | (in=150) | ( $\mathrm{n}=153$ ) | ( $\mathrm{n}=113$ ) | ( $\mathrm{n}=89$ ) | (n=105) |
| Composites (\%Always/Usually) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Getting Care Quickly | 81 | 75 | 82 | 82 | 83 | 79 | 80 | 81 | 85 | 76 | 80 | 81 | 80 |
| Shared Decision Making (\% Yes) | 83 | 93 | 85 | 87 | 85 | 91 | 88 | 87 | 88 | 86 | 83 | 87 | 88 |
| How Well Doctors Communicate | 94 | 85 | 93 | 93 | 75 | 90 | 89 | 92 | 95 | 89 | 96 | 91 | 87 |
| Getting Needed Care | 68 | 73 | 83 | 80 | 74 | 76 | 72 | 80 | 85 | 72 | 80 | 74 | 79 |
| Customer Service | 97 | 88 | 90 | 96 | 75 | 91 | 89 | 92 | 87 | 94 | 93 | 87 | 91 |
| Overall Ratings (\% 8,9,10) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Health Care | 70 | 64 | 79 | 73 | 60 | 77 | 78 | 73 | 77 | 70 | 77 | 73 | 68 |
| Personal Doctor | 79 | 80 | 80 | 80 | 77 | 84 | 86 | 79 | 85 | 76 | 85 | 79 | 77 |
| Specialist | 82 | 73 | 87 | 85 | 86 | 81 | 81 | 84 | 83 | 85 | 89 | 78 | 81 |
| Health Plan | 71 | 69 | 75 | 72 | 63 | 77 | 81 | 71 | 77 | 69 | 72 | 73 | 72 |

Source: 2019 CAHPS 5.0 Adult Medicaid Survey, Partnership HealthPlan of California

## Health Disparities Report

The California Department of Health Care Services (DHCS) contracted with Health Services Advisory Group (HSAG) to help assess and improve health disparities in California through a health disparity study. The sole purpose of HSAG is to improve healthcare services in order to achieve the best possible patient outcomes. In order to conduct this study, HSAG utilizes the external accountability set (EAS) performance indicators reported by Medi-Cal managed care health plans for reporting year 2019 with data derived from calendar year 2018. EAS indicators reflect clinical quality, timeliness, and access to care provided by MCPs to their beneficiaries; and each MCP is required to report audited EAS results to DHCS annually. The goal of the health disparity report is to improve health care for Medi-Cal beneficiaries by evaluating health care disparities affecting members enrolled in Medi-Cal MCPs.

## PHC Members' Feedback

PHC conducted a series of focus group discussions with the Consumer Advisory Committee (CAC) and the Family Advisory Committee (FAC) members. The CAC advocates for members by ensuring that PHC is responsive to the diversity of health care needs of all members. One of the responsibilities of this group is to provide feedback on the readability and cultural appropriateness of member newsletters and others educational materials sent to members. The FAC advocates for CCS members based on the Whole Child Model (WCM). These meetings serve as a platform to share information and connect with others members who share similar concerns.

PHC also collects member's feedback and concerns through key informant interviews at health fairs and community baby showers to seek information on member concerns, challenges and barriers to accessing care. Questions used to gather information at health fairs were crafted based on the target populations at these events and the HEDIS measures impacted. Information gathered from the different committee platforms and health fairs are analyzed and results are shared at our regular Population Health Management Committee (PHMC) meetings and strategies are discussed to help address concerns. PHC utilizes the member's feedback to help direct policies and inform programmatic decisions.

## County Health Rankings and Roadmaps

County Health Ranking and Roadmaps program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. The annual County Health Rankings measure vital health factors, including high school graduation rates, obesity, smoking, unemployment, access to healthy food, the quality of air and water, income inequality and teen births. The Rankings are based on a model of population health that emphasizes the many factors that, if improved, can help make communities healthier places to live, learn, work, play and improved the overall wellbeing of an individual. The rankings are determined by the following factors:

Health Outcomes: The overall ranking in health outcomes represent how healthy a county is right now. They reflect the physical and mental well-being of residents within a community through measures representing length of life and quality of life.

Health Factors: The overall ranking in health factors represent many things that influence how well and how long we live. Health factors represent those things we can modify to improve the length and quality of life for residents. They are predictors of how healthy our communities can be in the future.

FIGURE 3: County Health Rankings Model


Source: County Health Rankings, 2019
Community Health Needs Assessment (CHNA)
A Community Health Needs Assessment (CHNA) is a systematic process involving the community to identify and analyze community health needs. The process provides a way for communities to prioritize health needs, and to plan and act upon unmet community health needs. CHNAs are conducted by a variety of organizations. Each Critical Access Hospital (CAH) must conduct a CHNA every three years, as mandated by the Affordable Care Act, enacted on March 23, 2010. Local public health units seeking to gain or maintain accreditation must conduct a Community Health Assessment (CHA) every five years.

## The LGBTQ Divide

The LGBTQ Divide is an interactive report that explores and analyzes the social climate, demographics, economic and health indicators among LGBTQ and non-LGBTQ people. This report highlights the increased disparities that occur in the 29 states without state
non-discrimination laws inclusive of sexual orientation and gender identity ("the nonstate law states") and the South, Midwest and Mountain states. While slightly higher percentages of people identify as LGBTQ in the 21 states with statewide discrimination prohibitions ("the state law states"), in terms of raw numbers, more LGBTQ adults live in the 29 non-state law states and more than six out of 10 LGBTQ Americans live in the South, Midwest and Mountain states. The divide between the 21 state law states and the 29 non-state law states is consistently an indicator of greater disparities in the nonstate law states between LGBTQ people and their non-LGBTQ counterparts across economic, family and health indicators. This report brings to light the disparities that exist within this population and strategies to mitigate its impact with specific emphasis to California.

## Key Data Assessment

## County-Specific Demographics

County-specific demographics described below are based upon county population analyses and publically available documents. In addition, PHC incorporates the countyspecific information into broader based analyses that includes demographic and claims information available for PHC members.

## Del Norte County

Del Norte is a rural county located in the far northwestern region of California, with 27,788 residents ${ }^{7}$ and borders Oregon to the north, the Pacific Ocean to the west, Humboldt County to the south, and Siskiyou to the east. Over $40 \%$ of this population receive Medi-Cal benefits through PHC. The 11,048 members account for $2.1 \%$ of PHC members. Of the PHC member population in this county, $21 \%$ are ages $0-10,17 \%$ are ages $11-19,32 \%$ are ages $20-44,21 \%$ are ages $54-64$, and $9 \%$ are aged 65 and over. Just over $95 \%$ of PHC members in this county primarily speak English, while 3\% are Spanish speaking. The ethnicity for PHC members in this population includes 62\% White, 13\% Hispanic, and 10\% Native American, 1\% African American and 14\% other.

## FIGURE 4: Del Norte County Member Demographics Data

County DEL NORTE

Month
June 2020


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^3]
## Humboldt County

Humboldt County is a mostly rural county located in northwest California, that borders Siskiyou and Trinity counties to the east, Del Norte County to the north, Mendocino County to the south and the Pacific Ocean to the west. According to the US Census Bureau 2018, Humboldt County has 136,373 residents with $38 \%$ of this population receiving Medi-Cal benefits through $\mathrm{PHC}^{8}$. The 51,280 members accounts for $9.7 \%$ of PHC members. Of the PHC member population in this county, $22 \%$ are ages $0-10$, $15 \%$ are ages 11-19, 38\% are ages 20-44, 19\% are ages 54-64, and $7 \%$ are aged 65 and over. $95 \%$ of residents primarily speak English, while 3\% are Spanish speaking. The ethnicity for this population includes $61 \%$ White, $12 \%$ Hispanic, $8 \%$ Native American, 2\% African American, 17\% other, and under 1\% Asian/Pacific Islander.

FIGURE 5: Humboldt County Member Demographics Data

County HUMBOLDT

Month
June 2020


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^4]
## Lake County

Lake County is located in the Southwest region of the counties PHC serves and is bounded by Mendocino and Sonoma counties on the west, Glenn County on the north, Colusa County on the east, and Napa County on the south. This county has 64,562 residents with $45 \%$ of this population receiving Medi-Cal benefits through $\mathrm{PHC}^{9}$. The 29,267 members account for $5.5 \%$ of PHC members. Of the PHC member population in this county, $21 \%$ are ages $0-10,16 \%$ are ages $11-19,30 \%$ are ages $20-44,22 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $88 \%$ of PHC members primarily speak English, while 12\% are Spanish speaking. The ethnicity for this population includes 62\% White, 24\% Hispanic, 3\% Native American, 2\% African American, and 8\% others.

## FIGURE 6: Lake County Member Demographics Data



Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^5]
## Lassen County

Lassen County is a rural county in far northern California. It borders Nevada to the east, Modoc County to the north, Plumas County to the south, and Shasta County to the west. The 2019 Annual PIT report estimate 32,645 residents with $21 \%$ of this population receiving Medi-Cal benefits through PHC ${ }^{10}$. The 7,018 members account for $1.3 \%$ of PHC members. Of the PHC member population in this county, $23 \%$ are ages $0-10$, $16 \%$ are ages $11-19,33 \%$ are ages $20-44,19 \%$ are ages $54-64$, and $8 \%$ are aged 65 and over. $96 \%$ of PHC members in this county primarily speak English, while 3\% are Spanish speaking. The ethnicity for this population includes $67 \%$ White, 12\% Hispanic, 4\% Native American, 2\% African American, and 15\% other.

## FIGURE 7: Lassen County Member Demographics Data

Month
June 2020


RUSSIAN 0\%


ENGLISH 96\%

Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^6]
## Marin County

Marin County is located in the Southwest region of PHC coverage area. The Pacific Ocean lies to the west of Marin County, Sonoma County is to the north, and the San Francisco Bay forms the southern and eastern county boundaries. The county has an estimated population of 259,666 residents with $14 \%$ of this population receiving MediCal benefits through PHC ${ }^{11}$. The 36,624 members account for $6.9 \%$ of PHC members. Of the PHC member population in this county, $21 \%$ are ages $0-10,20 \%$ are ages 11 $19,28 \%$ are ages $20-44,20 \%$ are ages $54-64$, and $11 \%$ are aged 65 and over. $63 \%$ of PHC members in this county primarily speak English, while 37\% are Spanish speaking. The ethnicity within this population includes $46 \%$ Hispanic, $34 \%$ White, 5\% African American, and $14 \%$ other.

FIGURE 8: Marin County Member Demographics Data

County MARIN

Month
June 2020



Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^7]
## Mendocino County

Mendocino County is located in the southwest region of PHC coverage area; Humboldt and Trinity counties are north, to the east are Tehama, Glenn, and Lake counties, and Sonoma county is south of Mendocino. The County has an estimated population of 87,606 with $44 \%$ of this population receiving Medi-Cal benefits through $\mathrm{PHC}^{12}$. The 38,430 members account for $7 \%$ of PHC members. Of the PHC member population in this county, $22 \%$ are ages $0-10,17 \%$ are ages $11-19,32 \%$ are ages $20-44,18 \%$ are ages 54-64, and 10\% are aged 65 and over. $84 \%$ of PHC members in Mendocino County primarily speak English, while $15 \%$ are Spanish speaking. The ethnicity for this population includes 52\% White, 29\% Hispanic, 5\% Native American, and 12\% other.

FIGURE 9: Mendocino County Member Demographics Data

County MENDOCINO

Month
June 2020




Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^8]
## Modoc County

Modoc County is a frontier county (defined as having fewer than 7 persons per square mile) located in far northeastern California, bordering Oregon to the north, Nevada to the east, Siskiyou County to the west, and Lassen County on the south. The County has an estimated population of 9,184 , with $35 \%$ of this population receiving Medi-Cal benefits through $\mathrm{PHC}^{13}$. The 3,230 members account for $0.6 \%$ of PHC members. Of the PHC member population in this county, $22 \%$ are ages $0-10,17 \%$ are ages $11-19,29 \%$ are ages $20-44,22 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $91 \%$ of PHC members in Modoc County primarily speak English, while 8\% are Spanish speaking. The ethnicity for this population includes $59 \%$ White, 20\% Hispanic, $6 \%$ Native American, and $14 \%$ other.

## FIGURE 10: Modoc County Member Demographics Data



Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^9]
## Napa County

Napa County is located in the southeastern region of PHC coverage area, surrounded by Lake county on the north, Yolo and Solano counties on the east and south, and Sonoma county on the west. The county has an estimated population of 139,417, with $19.4 \%$ of this population receiving Medi-Cal benefits through $\mathrm{PHC}^{14}$. The 27,113 Napa County members account for $5.1 \%$ of all PHC members. Of the PHC member population in this county, $24 \%$ are ages $0-10,22 \%$ are ages $11-19,26 \%$ are ages $20-$ $44,16 \%$ are ages $54-64$, and $12 \%$ are aged 65 and over. $58 \%$ of PHC members in Napa County primarily speak English, while $40 \%$ are Spanish speaking and 1\% are Tagalog speaking. The ethnicity for this population includes 57\% Hispanic, 30\% White, 2\% African American, 9\% other, and 3\% Filipino.

## FIGURE 11: Napa County Member Demographics Data

## County

Month
June 2020


NATIVE AMERICAN $0 \%$ FILIPINO $3 \%$


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^10]
## Shasta County

Shasta County is situated in the northern Sacramento valley and surrounded by Trinity County to the west, Siskiyou and Modoc counties to the north, Lassen County to the east, and Plumas and Tehama counties to the south. The county has an estimated population of 178,942 , with $33 \%$ of this population receiving Medi-Cal benefits through PHC ${ }^{15}$. The 59,749 members account for $11 \%$ of PHC members. Of the PHC member population in this county, $23 \%$ are ages $0-10,16 \%$ are ages $11-19,32 \%$ are ages $20-44,20 \%$ are ages $54-64$, and $9 \%$ are aged 65 and over. $96 \%$ of PHC members in the county primarily speak English, while 2\% are Spanish speaking. The ethnicity for this population includes 68\% White, 10\% Hispanic, 2\% African American, 17\% other and $3 \%$ Native American.

## FIGURE 12: Shasta County Member Demographics Data

County SHASTA

Month
June 2020


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^11]
## Siskiyou County

Siskiyou County is a rural county in far northern California, bordered by Del Norte and Humboldt counties on the west, Trinity and Shasta counties to the south, Modoc County to the east, and the Oregon border to the north. The 2019 Siskiyou Well CHNA estimated the county population at 45,069 with $40 \%$ of this population receiving MediCal benefits through $\mathrm{PHC}^{16}$. The 17,474 members account for $3 \%$ of PHC members. Of the PHC member population in this county, $20 \%$ are ages $0-10,16 \%$ are ages 11-19, $32 \%$ are ages $20-44$, $22 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $95 \%$ of residents primarily speak English, while 3\% are Spanish speaking. The ethnicity for this population includes 65\% White, 11\% Hispanic, 2\% African American, 5\% Native American, and 16\% other.

## FIGURE 13: Siskiyou County Member Demographics Data

County
SISKIYOU

Month
June 2020




Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^12]
## Solano County

Solano County is located between two major Northern California cities, Sacramento and San Francisco. Its borders are Napa County to the west, Yolo County to the north, Sacramento County to the east, and the Delta to the south. The county has an estimated population of 434 , 981 , with $24 \%$ of this population receiving Medi-Cal benefits through PHC ${ }^{17}$. The 107,755 members account for $19 \%$ of PHC members. Of the PHC member population in this county, $23 \%$ are ages $0-10,18 \%$ are ages $11-19$, $32 \%$ are ages $20-44,17 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $77 \%$ of PHC members in Solano County speak English while 18\% are Spanish speaking. Tagalog is an identified DHCS threshold language for this county with $2 \%$ of PHC members identifying this as their preferred language. The ethnicity for this population includes 29\% Hispanic, 20\% White, 19\% African American, 25\% other, 6\% Filipino, and 1\% Native American.

## FIGURE 14: Solano County Member Demographics Data



June 2020


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^13]
## Sonoma County

Sonoma County is located in the Southwest region of PHC coverage area, surrounded by Mendocino County to the north, Lake and Napa counties on the east, Marin County on the south, and the Pacific Ocean to the west. This county has an estimated population of 499,942 , with $21 \%$ of this population receiving Medi-Cal benefits through PHC ${ }^{18}$. The 106,237 members account for $19 \%$ of PHC members. Of the PHC member population in this county, $23 \%$ are ages $0-10,20 \%$ are ages $11-19,29 \%$ are ages $20-$ $44,18 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $67 \%$ of PHC members in Sonoma County primarily speak English, while 30\% are Spanish speaking. The ethnicity for this population includes 39\% Hispanic, 32\% White, 2\% African American, 25\% other, and $1 \%$ Native American.

## FIGURE 15: Sonoma County Member Demographics Data

Month
June 2020


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^14]
## Trinity County

Trinity County is a rural county in northern California with Humboldt County to the west, Siskiyou County to the north, Shasta and Tehama counties on the east, and Mendocino County to the south. The County has an estimated population of 13,037 , with $34 \%$ of this population receiving Medi-Cal benefits through PHC ${ }^{19}$. The 4,131 members account for $0.8 \%$ of PHC members. Of the PHC member population in this county, $19 \%$ are ages $0-10,13 \%$ are ages $11-19,33 \%$ are ages $20-44,24 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $98 \%$ of PHC member in this county primarily speak English. The ethnicity for this population includes 75\% White, 5\% Hispanic, 3\% Native American, and $16 \%$ other.

FIGURE 16: Trinity County Member Demographics Data

County TRINITY

Month
June 2020


Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^15]
## Yolo County

Yolo County has 220,408 residents with $22.4 \%$ of this population receiving Medi-Cal benefits through $\mathrm{PHC}^{20}$. It is surrounded by Colusa County on the north, Sutter and Sacramento counties on the east, Solano County on the south, and Napa and Lake Counties to the west. The 48,731 members account for $9.2 \%$ of PHC members. Of the PHC member population in this county, $25 \%$ are ages $0-10,18 \%$ are ages 11-19, $30 \%$ are ages $20-44,16 \%$ are ages $54-64$, and $10 \%$ are aged 65 and over. $69 \%$ of residents primarily speak English, while $23 \%$ are Spanish speaking. Russian is an identified DHCS threshold language for this county with $4 \%$ of PHC members identifying this as their preferred language. The ethnicity for this population includes $41 \%$ Hispanic, 29\% White, 5\% African American, 24\% other, 1\% Native American and 1\% Filipino.

## FIGURE 17: Yolo County Member Demographics Data

County
YOLO

Month
June 2020




Data Updated on 6/10/2020 4:29:14 AM
Source: PHC Members Enrollment Data, 2020

[^16]
## Vulnerable Population

Vulnerable populations are groups and communities at a higher risk for poor health because of the barriers they experience to social, economic, political and environmental resources, as well as limitations due to illness or disability ${ }^{21}$. The vulnerability of these populations can be measured based on racial and ethnic minorities, the uninsured, lowincome children, the elderly, the homeless, those with human immunodeficiency virus (HIV), and those with other chronic health conditions, including severe mental illness.

## Limited English Proficiency (LEP)

Non-English speaking populations are disproportionately among the low socioeconomic status populations, have poor health and disabilities, are often linguistically and culturally isolated, and live with less income and lower education than do their Englishspeaking counterparts. The language barrier makes it difficult for this population to understand, interpret, and implement preventive recommendations. For CY 2019, 309,368 (58\%) of PHC members identified as having an ethnicity other than White. In addition, 116,398 ( $38 \%$ ) of PHC members identified as speaking another language other than English. The HEDIS Measure Exploratory Data, RY 2019 (Appendix B) shows that Spanish speakers consistently receive HEDIS-measured services more frequently than do other populations. The Chinese-speaking population scores $100 \%$ on many HEDIS measures, while scoring less than threshold values in Annual Monitoring for Patients on Persistent Medications and for Comprehensive Diabetes Care. Other non-English speaking populations are below threshold for Childhood Immunization Status, Comprehensive Diabetes Care, and Prenatal/Postpartum Care. Of interest is the observation that the English-speaking population does not score as highly as any nonEnglish speaking group in nearly every measure.

[^17]FIGURE 18: PHC Member Ethnicity and Language Data
Membership Details for February 2020, Reeion: All, County: All

Language
ENGUSH

SPANISH
N/A
TAGALOG
OTHER NON ENGUSH
VIETNAMESE
RUSSIAN
MANDARIN
OTHER
FARSI
HMONG
CANTONESE
ARABIC
LAO
MEN
CAMBODIAN
KOREAN
UNKNOW/N

| 272,378 | 144,961 |
| :--- | :--- |
| 95,427 | 4,275 |
| 2,296 | 990 |
| 2,822 | 28 |
| 2,047 | 140 |
| 1,966 | 93 |
| 1,973 | 27 |
| 664 | 61 |
| 677 | 30 |
| 682 | 9 |
| 64 | 594 |
| 434 | 50 |
| 428 | 13 |
| 245 | 174 |
| 108 | 277 |
| 285 | 18 |
| 253 | 14 |
| 118 | 78 |

Race/Ethnicity


Source: PHC Members Enrollment Data, 2020

## Homelessness

PHC has developed a method of assigning a status of likely homelessness at a member level, based on demographic and claims information. PHC estimated its homeless population in 2019 to be 22,402, with 12,759 male members and 9,643 female members having either a physical address or diagnosis code to indicate homelessness. Of those members identified as homeless 18,615 were adults, and 3,787 were children. Shasta and Humboldt counties had the largest prevalence of homelessness (over 8\%), and 13,988 of these members are white. Appendix C show a graphical presentation of PHC members indicating homelessness in 2019.

There are fewer PHC members facing severe housing problems, characterized as overcrowding, high housing costs, and lack of kitchen or plumbing facilities, than there are in some areas of the state. Nevertheless, $27 \%$ of Mendocino County's population has severe housing problems, which is at the state average, while both Humboldt and Lake Counties have $26 \%$ of their populations facing severe housing problems creeping towards the state average as well. Individuals who live in poor quality or inadequate housing face increased possibility for having issues such as infectious and chronic diseases, injuries, and poor childhood development ${ }^{22}$. In future analyses, PHC intends to stratify HEDIS and CAHPS database with indicators for homelessness to identify specific disparities in care these members may experience.

[^18]
## LGBTQ Community Analysis

PHC does not have health plan-level data on health disparities for individuals who identify as a non-dominant sexual orientation/gender identity, often referred to collectively as Lesbian, Gay, Bisexual, Transgender, Questioning/Queer with additional option identities (LGBTQ). Our larger providers (especially Kaiser and larger federally qualified health centers) have started collecting such data within their electronic health record systems and are addressing the issues they identify with specific sensitivity training and clinical programs.

To get a sense of the disparity landscape for LGBTQ members, we look to state-wide data analysis. California accounts for an estimated 77\% of all LGBTQ adults living in the Pacific states. Overall, California LGBTQ individuals are progressing on indicators such as educational attainment, income, money and healthcare as compared the national estimates. San Francisco and Los Angeles are two large urban areas known to be particularly supportive environments for LGBTQ people. One of the measures used to assess the level of LGBTQ acceptance is the support for same-sex marriage. The 2016 LGBTQ+ Divide in California report states that the Central/Southern farm regions report the lowest level of acceptance for same-sex marriage (40\%), while the Bay area reports the highest $(67 \%)^{23}$.

The Williams Institute 2016 report notes that 218,400 individuals in California identified as Transgender accounting for $0.76 \%$ of the adults in the state; ranking second in the United States ${ }^{24}$. A report from the 2015 Transgender Survey from California respondents indicated disparities/inequalities in access to health care. Twenty-five percent of respondents experienced a problem with their insurance related to being transgender; 33\% also reported having at least one negative experience while accessing care. Twenty-two percent did not see their doctor when they needed to because of fear of being mistreated as a transgender person. And $36 \%$ experienced serious psychological distress, with $13 \%$ reporting that a professional tried to stop them from being transgender ${ }^{25}$. Such bias and discrimination can lead to a physiological toxic stress response, with resulting higher rates of depression, anxiety, substance use disorder, hypertension, diabetes etc.

In 2016, a report was submitted to the US Department for Health and Human Services (HHS) LGBTQ Policy Coordinating Committee addressing policy to prohibit discrimination against LGBTQ individuals and to improve access to healthcare through the Affordable Care Act (ACA). The report proposed improving data collection and

[^19]supporting research on the LGBTQ communities, building the knowledge base, improving cultural competency and expanding the capacity to serve LGBTQ communities ${ }^{26}$. As the state collects such member-level data and conveys it with member eligibility files in the future, it will become possible to analyze the disparities in clinical quality and member experience outcomes for this population in more detail.

PHC has conducted educational programs for providers and PHC staff in order to better understand the LGTBQ population, and follow state policy on transgender-specific care. PHC is currently updating IT systems to collect self-identified gender identity information volunteered by our members, so that PHC staff may address these members correctly when communicating with them. To implement section 1557 of the Affordable Care Act (ACA) and to address health disparity among LGBTQ members, PHC has recognized its lack of direct intervention strategies to improve the health outcomes of their LGBTQ members.

In an effort to promote health equity amongst its staff and members, PHC's Health Equity workgroup, comprised of members from the Population Health team, the Health Education team and Quality department, and executive leadership. This workgroup performed a baseline survey to assess whether PHC Staff have the support needed to express their culture, ethnicity, sexual orientation and gender identity and how comfortable they are in working with members who have these differences. The workgroup recognized that member experience reflects PHC staff attitudes and awareness, and this awareness begins with sensitive interactions between PHC employees. A total of 253 staff participated in the survey, with 250 staff responding to this question "I feel my work environment is supportive of my culture, ethnicity, sexual orientation and gender identity." The goal was to have $60 \%$ of survey respondents to strongly agree/Agree with the survey question.

TABLE 2: Result from Health Equity Survey

|  | Overall \% <br> Strongly <br> Agree / <br> Agree | Overall\% <br> Strongly <br> Disagree/ <br> Disagree | Overall \% <br> N/A / <br> Did Not <br> Understand <br> Question | Goal Met |
| :--- | :---: | :---: | :---: | :---: |
| Survey Question | $48.8 \%$ | $5.2 \%$ | $47 \%$ | NO |
| 4I feel my work environment is <br> supportive of my culture, ethnicity, <br> sexual orientation and gender <br> identity". |  |  |  |  |

[^20]Source: PHC Health Workforce Survey Results, 2020
The results of this survey did not meet the goal of $60 \%$ agreement and highlighted the concern that nearly half the respondents did not understand how to respond to the question. The Health Equity workgroup has identified this as an opportunity for staff education and training.

Seniors and Person with Disabilities (SPD)
There are 101,032 (18.3 \%) Seniors and Persons with Disabilities (SPD) enrolled in PHC's counties. Sonoma, Solano, and Shasta have the highest number of SPD members. Out of the 101,292 SPD members, 32,426 are ages 75 years or older and 68,866 identify as living with a disability. Of the population living with a disability, $73 \%$ meet the federal definition of disability, $1 \%$ requires developmentally disabled services and $1 \%$ of this population are living with the disability of blindness. Of the members living with a disability, $14 \%$ identify as non-English speaking.

The SPD population is at a higher risk of isolation, chronic health conditions and illness, and having a lack of transportation. Some seniors live in long-term care facilities and face additional health concerns, such as impaired mobility or memory loss.

FIGURE 19: PHC Data for Seniors and Persons with Disabilities

## SPD

SPD
Non-SPD
18.3\% (101,032)
$81.7 \%(450,049)$

## Data updated on 6/8/2020 4:26:29 AM

Source: PHC Members Enrollment Data, 2020
Children and Youth with Special Health Care Needs (CYSHCN)
In 2018, there were 5,951 (0.8\%) children with special health care needs enrolled within PHC's 14 counties. In January 2019, PHC added 7,703 California Children's Services (CCS) beneficiaries to PHC's CYSHCN enrollment under DHCS' Whole Child Model (WCM) Program. The WCM shifted responsibility to provide program management, case management, utilization management, and payment for services for the CCS population from counties to PHC. The most common CCS conditions are premature infants requiring NICU stays, diabetes, hearing loss, cerebral palsy, and sickle cell disease ${ }^{27}$.

[^21]
## Serious and Persistent Mental Illness (SPMI)

National data show that individuals with SPMI have a lower life expectancy and higher rates of chronic medical conditions, especially diabetes. Substance use disorder, including tobacco addiction, is more prevalent among those with SPMI. Members having serious and persistent mental illness (SPMI) do not receive care for these conditions through PHC's benefit package. DHCS has assigned care for these conditions to the County Mental Health Plan (CMHP) in the county in which the member lives (see APL 17-018 Medi-Cal Managed Care Health Plan Responsibilities for Outpatient Mental Health Services). To develop greater understanding of PHC's SPMI population, PHC uses filled prescriptions of anti-psychotropic medications as a surrogate measure to approximate the number of members diagnosed with SPMI. In 2019, 15,646 PHC members filled prescriptions for psychotropic medications; $69.3 \%$ of these members were treated in Emergency Rooms, $17.6 \%$ of them were hospitalized, and $44.9 \%$ received care through PHC's contracted provider for mental health services, Beacon. (See Appendix G\&H for 2019 SPMI Data)

Any member with SPMI has access to all other PHC benefits. Upon enrollment into the plan, PHC sends an assessment form to gather information about the member's health status. Each month thereafter, risk stratification and case finding reports identify members with escalating needs or risk levels. PHC engages the member according to the need the reporting tool identified. In the coming year, PHC will look at the rates of screening for diabetes among those members taking second-generation antipsychotic medications, as well as the diabetes control in those individuals with SPMI who have a diagnosis of diabetes to assess the care of members with comorbid SPMI. Furthermore, PHC has identified members with severe eating disorders as having serious emotional disturbance (SED) and comorbid medication complications that often involve frequent hospitalizations. Specialized care teams are engaged when these members are identified to promote communication and care planning between the various agencies supporting the affected member and family.

## Health Profile

The key metric for assessing a population health is based on life expectancy. Life expectancy captures the mortality along the entire life course which is broader than the narrow metric of the infant and child mortality which focuses solely at mortality at a young age. It tells us the average age of death in a population considering multiple factors ${ }^{28}$. Californians live an average of 81.6 years. Life expectancy takes into account the number of deaths in a given time period and the average number of people at risk of dying during that period, allowing a comparison of data across counties with different

[^22]population sizes. Of PHC counties, Marin, Sonoma, Napa, and Yolo have a high life expectancy of $85.4,82.0,81.8$ and 81.6 years of age, respectively. These counties' averages are higher than the State average of $81.6^{29}$.

## Chronic Conditions

Chronic health conditions in a population are a concern not only because they affect the quality of life, but also because they carry significant economic costs. Most of these chronic conditions are preventable. Access to health care, physical activity, and healthy foods can add years to a person's life. With many of our communities being rural, there are some areas with few grocery store options and limited access to farmers' markets, leading people to live on unhealthy foods from convenience stores and fast food restaurants. Despite the structural and environmental barriers prevalent in the region, addressing chronic conditions will increase PHC members' quality of health and preventative care. (See Appendix D for the Prevalence of Pediatric Chronic Conditions in 2019, and Appendix E for the Prevalence of Adult Chronic Conditions in 2019)

## PHC Pediatric Top Chronic Medical Conditions <br> Childhood Obesity

Obesity affects 8,213 PHC children ( 34.7 of every 1,000 ). According to the CDC, the prevalence of obesity is affecting about 13.7 million children and adolescents in the United States (US). Obesity is higher among adolescents aged 12-19 years ${ }^{30}$. Obesity is often associated with lack of exercise and poor nutrition, both of which may have correlation to living in poverty. This is an important health concern as obesity can continue into adulthood and increases the risk of chronic diseases such as type 2 diabetes, cancer, and heart disease. Key prevention opportunities include increasing access to high quality physical activity in schools, increasing high quality nutrition education on a population level, and policy changes including sugar-sweetened beverage taxes.

## Asthma

Asthma affects 3,728 PHC children (21.13 of every 1,000). According to the Centers for Disease Control (CDC), 1 in 14 people have asthma, or about 24 million Americans. This is $7.4 \%$ of adults and $8.6 \%$ of children ${ }^{31}$. Asthma is more common in children than adults and more common in boys than girls. Chronic disorders such as asthma can have a long lasting effect on children. Asthma, which affects the lungs and breathing, can lead to hospitalization and school absenteeism. Asthma has many triggers and can be managed properly with medication and by reducing contact with triggers such as

[^23]animal fur, tobacco smoke, dust, and household cleaners. This health concern reaches across social economic levels affecting the child, their family, peers and school staff. There is much work required at a systems level in order to decrease both hospitalizations and school absenteeism for children with asthma. Opportunities include training providers, schools' staff and community health workers on asthma education and management.

## PHC Adults Top Chronic Medical Conditions

PHC adult members have high prevalence rates of hypertension and obesity. In addition, the regions with a high percentage of residents having hypertension coincide with a high percentage of diabetes cases. In California, heart disease was rated the leading cause of death in 2013. The risk factors that increase heart disease include hypertension, high cholesterol, high blood pressure, diabetes mellitus, smoking, and substance use disorder, all of which are prevalent in PHC members.

## Hypertension

Hypertension affects $27 \%(86,452)$ of adult PHC members. According to the CDC, 1 in 3 US adults have high blood pressure. This health concern raises the risk for heart disease and stroke, which are the leading causes of death in the US ${ }^{32}$.

## Adult Obesity

Obesity affects $14 \%(44,988)$ of adult PHC members. According to the CDC, the prevalence of obesity affected 93.3 million adults in the US in 2015-2016. This is a concern because it increases the risk of diabetes, heart disease, stroke and some cancers. It is also associated with poor mental health outcomes and reduced quality of life.

## Preventive Health Services

## Immunization

A growing health concern among children and adolescents is low immunization rates. PHC has four reporting regions for HEDIS measure: the Northeast (Shasta, Siskiyou, Lassen, Trinity, Modoc) Northwest (Humboldt, Del Norte), Southeast (Solano, Yolo, Napa), and Southwest (Sonoma, Mendocino, Marin, Lake). The HEDIS Childhood Immunization Status (CIS-Combo 3) rates in 2018 Measurement Year (2019 Reporting Year) for children ages $0-2$ who received all recommended immunizations by the time they turned 2 years old were below the National Medicaid Benchmarks of the 25th minimum performance level (MPL) of $65.25 \%$ in the Northeast ( $52.55 \%$ ) and Northwest ( $53.53 \%$ ). The Southwest region (68.86) was below the 50th performance level (70.80\%), and the Southeast Region (73.48) scored above the 50th performance level,

[^24]yet did not achieve the 75th performance level (74.70\%). Adolescents receiving the recommended DTaP and meningococcal vaccines by age 13 was below the MPL (26.28\%) in the Northeast (17.52) and Northwest (25.55) regions. The Southeast (46.96\%) and Southwest (39.42\%) regions met the 90th benchmark for HEDIS 2019 ( $37.71 \%$ ). However, coming HEDIS measures will include the HPV vaccine, resulting in a more challenging vaccination schedule to achieve.

There are many reasons parents choose not to vaccinate their children within PHC's 14 counties. In 2016, PHC held member focus groups to gain a better understanding of vaccine hesitancy. Some reasons to decline immunizations include access, varying opinions, beliefs, values, fears and distrust. PHC also assessed network providers and found that doctors believe parents are hesitant to comply with vaccination schedules due to the anti-vaccination movements. With low immunization rates, children exposed to and infected with preventable illnesses can suffer overwhelming health impacts, such as developing respiratory conditions, compromised immune systems, and damage to internal organs. Partnering with schools, community organizations, and medical providers will help build trusting relationships in the communities and better educate parents in an effort to overcome concerns about immunizations. (See Appendix E for Missed Vaccines in 2019)

## Behavioral Health Concerns

## Mental Health Illness

Mental illness has gained significance in the national landscape of healthcare discussions due to the deleterious effects on an individual's health, relationships, and well-being. As shown in Appendices F and G, mental and behavioral health concerns have greater impact on PHC members than do medical conditions. Both adults and children suffer from mental illnesses that range from those considered mild to moderate (trauma and stressor-related disorders) to neurodevelopmental disorders (such as autism) to diagnoses considered more severe or persistent conditions like schizophrenia. In 2019, 40,414 unique PHC members sought treatment through PHC's delegated managed behavioral healthcare organization, Beacon Health Options, for mild to moderate mental health services resulting in a total of 356,122 visits. Of the members who sought treatment, 11,211 were pediatric members and the remaining 29,353 were adults.

In addition, PHC selected members who filled psychotropic medications as a surrogate measure for identifying members with serious and persistent mental illness (SPMI). Using this proxy, there were 15,646 PHC members who filled prescriptions for psychotropic medications. Of these members presumed to have SPMI, $69.3 \%$ were
treated in Emergency Rooms, 17.6\% of them were hospitalized, and 44.9\% received mental health care through Beacon services.

## Traumatic Events

In 2019, 47,394 members sought treatment for trauma and stressor-related disorders of which 15,816 were children and 31,578 were Adults. Traumatic events can have a lasting affect leading to mental health concerns. There is extensive research into the long- term effects of adverse childhood events (ACEs), and California's newly appointed Surgeon General has made prevention and early intervention for ACEs and toxic stress a priority for the state. Trauma will affect a person with an overpowering threat to wellbeing. Examples of a traumatic event include loss of a loved one, domestic violence, abuse, and natural disasters, to name a few. These events can lead to loss of home, disrupted communities, loss of a business and income, and even loss of life. Such events often lead to various stress-related psychological symptoms such as posttraumatic stress disorder, depression and anxiety, as well as neuroendocrine changes (collectively known as the toxic stress response) that affect the health of the individual both immediately and over time.

Wildfires devastated Sonoma, Napa, and Lake Counties in 2017 as well as Shasta, Lake, and Mendocino Counties in 2018. All of these counties faced destructive wildfires that destroyed homes, buildings, and businesses. Healthcare facilities were lost or shut down due to the impact of the fires, leaving many without healthcare services. The wildfire in Sonoma County destroyed 6,600 structures including 5,130 homes and killed 23 people. The wildfire in Shasta County destroyed 1,079 residences, 22 commercial structures and 503 outbuildings. Other counties faced similar destruction and loss. Even in regions without active fires, the wider PHC population was exposed to high levels of respiratory particulate matter for several weeks, exacerbating and provoking respiratory and allergic symptoms.

As a Health Plan, PHC has the unique opportunity to assist our members to prepare for these natural disasters which have been affecting our counties for the past few years. Emergency preparedness is essential during times of natural disasters such as floods, earthquakes, storm surges, wildfires, severe winter storms and drought. In order to create a resilient community, planning is critical to prepare for, respond to, and recover from these types of emergencies.

Substance Use Disorder (SUD)
PHC experienced 43,069 members who had a claim with at least one code related to SUD in 2019. Of these members, 22,652 were male (with 5.7 average claims per member per year), 20,417 were female (with 5.0 average claims per member per year). Sixty-four percent $(27,637)$ of the members with SUD claims were white, 5,960 were
homeless, and the majority of members ( $58.6 \%$ ) were between 18 and 50 years of age. The substance most frequently used was alcohol, followed by stimulants, opioids, and cannabis. With the legalization of marijuana in California, the state has seen an increase in use among pregnant members; 330 members had an SUD diagnosis during pregnancy in 2019. Research shows that marijuana use during pregnancy may affect the health of the child, including low birth weight, as the substance crosses the placenta. Marijuana may also impact brain development, adversely affecting attention and learning capabilities later in life. SUD has become a serious concern to most residents of California and some cities and communities have started taking steps to address these issues. Recently, the city of Benicia in Solano County passed a law prohibiting the sale of flavored tobacco products, electronic smoking devices and fluid, and instituted stringent measures for eligibility of a tobacco retailer license ${ }^{33}$. Communities with an increase in SUD cases have also seen a rise in drug overdose related deaths and violent crimes ${ }^{34}$. (See Appendix I for PHC data on SUD).

## Access to Care

Access to care is the most important factor in determining health outcomes and includes coverage, physical access, health literacy, and relationships of trust with physicians ${ }^{35}$. The 2019 CAHPS result show that PHC scores $80 \%$ and over with members expressing their satisfaction in getting care quickly, getting an appointment with a specialist and being able to comfortably communicate with their doctors. However, PHC scores poorly with members aged 18-54 expressing their dissatisfaction with getting needed care, getting care quickly (ages $35-54$ ), and the overall rating of health care and health plan.

Access to Primary Care Providers increases the likelihood that community members will have routine checkups and screenings. It is important both for preventive health care and also for identifying the need for specialty care services. Moreover, those with access to primary care are more likely to know where to go for treatment in acute situations. As shown in Appendix I, the counties that have a higher population to primary care provider ratio including Trinity, Lassen, Lake, Humboldt, Del Norte, Shasta; Modoc, Solano and Siskiyou counties are approaching the state average with a ratio of 1,270 patients: 1 provider ${ }^{36}$. Communities that lack a sufficient number of primary care providers typically have members who delay necessary care when sick and conditions can become more severe and complicated. Various workgroups within PHC perform detailed analyses into access challenges for PHC members, and the workgroups report their findings, opportunities, and planned interventions to regulating bodies.

[^25]FIGURE 20: PHC Members to Practitioners Ratio

| Number of Practitioners, Primary Care - Standards and Performance Goals |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Practitioner <br> Type | Provider <br> Count | Membership | Measure: <br> Ratio | Results | Standard/ <br> Performance <br> Goal | Goal <br> Met? |
| Primary Care <br> Provider overall | 1409 | 562,572 | Primary care <br> provider to <br> member (adult <br> and children) | $1: 399$ | $1: \leq 2,000$ <br> (DHCS <br> standard) | MET |
| Family <br> Practice/General <br> Practice | 857 | 562,572 | Family or <br> General <br> practice <br> practitioner to <br> member (adult <br> and children) | $1: 656$ | $1: \leq 2,000$ | MET |
| Pediatrics | 293 | 210,352 | Pediatricians <br> to members <br> (children) | $1: 718$ | $1: \leq 2,000$ | MET |
| Internist | 259 | 352,220 | Internists to <br> members <br> (adult) | $1: 1360$ | $1: \leq 2,000$ | MET |

Source: PHC Network Adequacy report, 2019
Preventable Hospital Days
Members unfamiliar with primary care, or disenfranchised from the health care system, often seek care through a hospital, even though this level of care is preventable.
Healthcare systems use preventable hospital days as a surrogate indicator for the need for good outpatient care, assuming that members access hospitals as a source of primary care. Lassen, Lake, and Solano counties are all higher than the state average of 3,507 preventable hospital stays. Shasta County is also approaching the state average ${ }^{37}$. (See Appendix I for 2019 County Health Rankings Data in PHC Counties).

## Health Disparities

Health disparity is defined as preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially

[^26]disadvantaged populations, and defined by factors such as race, ethnicity, gender, education, income, disability, geographic location or sexual orientation ${ }^{38}$. To better understand the context of disparities, it is important to understand the various social and economic factors that are well known to be strong determinants of health outcomes in communities.

## Index of Disparity

The Index of Disparity summarizes the absolute difference in the average health status between several social groups and a reference group. In assessing the needs of a community, there are critical components to consider which help in identifying barriers and disparities in health care. Identification of barriers and disparities help to inform and direct strategies for addressing and prioritizing health needs for PHC counties.

The table below identifies health indicators with racial/ethnic disparities across PHC counties. This is reference to the 2019 health disparities data received from Health Services Advisory Group (HSAG). Table 4 lists the health indicators showing the greatest, statistically significant race/ethnicity disparities and highlights the groups that are impacted.

TABLE 3: Indicators with Significant Race/Ethnic Disparities, 2018-2019

| SUBGROUPS WITH MOST HEALTH DISPARITIES |  |
| :--- | :--- |
| Health Indicator | Groups with Health Disparities |
| Ambulatory Care | Hispanic, Black/African American, Asian, <br> American Indian/Alaskan Native, Other |
| Avoidance of Antibiotic Treatment in <br> Adults With Acute Bronchitis (AAB) | Hispanic/Latino, Black/African American |
| Annual Monitoring for Patients on <br> Persistent Medications (MPM) | Hispanic/Latino, Black/African American, <br> Asian, American Indian/Alaskan Native, <br> Other |
| HEDIS | Hispanic/Latino, Black/African American, <br> Asian, Other |
| Asthma Medication Ratio (AMR) | Hispanic/Latino, Black/African American, <br> Asian, American Indian/Alaskan Native, <br> Other |
| Breast Cancer Screening (BCS) | Hispanic/Latino, Asian, Other |
| Cervical Cancer Screening (CCS) | Hispanic/Latino, Asian, American <br> Indian/Alaskan Native, Other |
| CIS-3 | (Bask |

[^27]| SUBGROUPS WITH MOST HEALTH DISPARITIES |  |
| :--- | :--- |
| Adolescents Immunization (IMA) | Hispanic/Latino, Black/African American, <br> Asian, American Indian/Alaskan Native, <br> Other |
| Well Child Visits (W34) | Hispanic/Latino |
| Children and Adolescents Access to <br> Primary Care Practitioner (CAP) | Hispanic/Latino, Black/African American, <br> Asian, American Indian/Alaskan Native, <br> Other |
| Comprehensive Diabetes Care (CDC) | Hispanic/Latino, American Indian/Alaskan <br> Native, Other |
| Prenatal and Postpartum Care (PPC) | Hispanic/Latino, American Indian/Alaskan <br> Native, Other |
| Weight Assessment and Counseling for <br> Nutrition and Physical Activity for <br> Children/Adolescents (WCC) | Hispanic/Latino, Black/African American, <br> Other |
| Controlling High Blood Pressure (CBP) | American Indian/Alaskan Native |
| Use of Imaging Studies for Low Back <br> Pain (LBP) | Hispanic/Latino, Black/African American, <br> American Indian/Alaskan Native |
| Plan All-Cause Readmissions (PCR) | Black/African American, Asian, |

TABLE 4: Count of Disparities Per Population Subgroup. 2018-2019

## SUBGROUP WITH MOST DISPARITIES

| Race/Ethnicity | Health Indicator Count |
| :--- | :--- |
| Hispanic/Latino | 14 |
| American Indian/Alaska Native | 11 |
| Other Races | 11 |
| Black/African American | 10 |
| Asian | 9 |

## Social Determinants of Health (SDOH)

Social Determinants of Health (SDOH), also sometimes called "social influencers of health," as defined by the World Health Organization, are "the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics." Examples of SDOH include employment, housing, food security, literacy, access to transportation, and education level ${ }^{39}$. Understanding the

[^28]different social determinants in a service area can lead to identification of drivers or "root cause" of health conditions and potential services that work to improve disparities within that community.

While the highest quality of care is an important contributor to community health, research shows the social influencers of health play a critical role in health outcomes for both populations and individual well-being. PHC's claims data provides little insight into member-level SDOH, except for homelessness. Therefore, PHC identifies other key factors that have an impact on the health of local communities by assessing County Health Rankings, Healthy Places Index, and State data. PHC shares the information gathered with local providers and organizations in order to build collaborative partnerships aimed at addressing health concerns within the population. PHC's role in promoting improvements in SDOH will vary over time, depending on the nature of the program, community priorities, and the relative engagement and involvement of other community stakeholders.

## Social and Economic Factors

## Poverty

In January 2020, the federal poverty guideline was $\$ 25,750$ for a family of four ${ }^{40}$. These guidelines are used for federal assistance programs (or percentage multiples of the guidelines - for instance, 125 percent or 185 percent of the guidelines) in determining eligibility for Head Start, the Supplemental Nutrition Assistance Program (SNAP), the National School Lunch Program, the Low-Income Home Energy Assistance program, Medicaid, and the Children's Health Insurance Program (CHIP).

As shown in figure 20, PHC counties with a higher rate of poverty than the state average of $15.1 \%$ are Yolo (19.9\%), Lake and Mendocino (19.3\%), Humboldt (18.9\%), Shasta (18.3\%), Trinity (17.9\%), Sonoma (15.8\%) and Del Norte, Lassen, Modoc, \& Siskiyou (15.6\%).

FIGURE 20: Percentage of People Living in Poverty 2015-2017

| POVERTY RATES ACROSS PHC COUNTIES |  |  |  |
| :--- | :--- | :--- | :--- |
| County | Poverty rate(\%) | County | Poverty rate (\%) |
| Trinity | 17.9 | Marin | 17.9 |
| Del Norte | 15.6 | Mendocino | 19.3 |
| Lassen | 15.6 | Napa | 15.5 |
| Modoc | 15.6 | Shasta | 18.3 |
| Siskiyou | 15.6 | Solano | 14.6 |

[^29]| Humboldt | 18.9 | Sonoma | 15.8 |
| :--- | :--- | :--- | :--- |
| Lake | 19.3 | Yolo | 19.9 |

## Source: Public Policy Institute of California, 2020

Figure 21 shows the percentage of people living below $100 \%$ poverty level by race and ethnicity. The race/ethnicity group with the greatest percentage of its population living in poverty is the Black/African American population, with 20\%.

FIGURE 21: Percentage of People Living in Poverty Based on Race/Ethnicity 2018

| Location - | White $\uparrow$ | Black $\quad$ - | Hispanic $\uparrow$ | Asian/Native Hawaiian and Pacific Islander | American Indian/Alaska Native |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States ${ }^{1}$ | 9\% | 22\% | 19\% | 11\% | 24\% |
| Alabama | 11\% | 27\% | 34\% | 9\% | 18\% |
| Alaska | 7\% | N/A | 5\% | 21\% | 21\% |
| Arizona | 9\% | 19\% | 19\% | 12\% | 34\% |
| Arkansas | 14\% | 31\% | 26\% | 19\% | 14\% |
| California | 9\% | 20\% | 17\% | 10\% | 16\% |
| Colorado | 7\% | 18\% | 15\% | 10\% | 25\% |
| Connecticut | 6\% | 18\% | 23\% | 9\% | N/A |
| Delaware | 8\% | 18\% | 22\% | 8\% | N/A |
| District of Columbia | 6\% | 27\% | 12\% | N/A | N/A |

Source: Kaiser Family Foundation, 2018

## Children Living in Poverty

According to 2017 data, 18\% of all California children were living in poverty (below $100 \%$ of the federal poverty level). Because California has such a high cost of living, those who live under $138 \%$ of the federal poverty level are considered to be living in extreme poverty. Furthermore, any child covered by Medicaid ( $40 \%$ of California children) is in a low-income household according to Medicaid income thresholds.

California families often spend more than half of their income on housing costs, leaving little money available for healthy food, transportation and medical care. A child growing up in poverty has a greater chance of experiencing health problems from birth, as well as physical and mental health problems throughout their life, due to social and economic inequalities which can negatively impact health and wellbeing outcomes.

Appendix J display the number of children living in poverty in PHC's counties. The counties with the highest child poverty are Del Norte, Modoc, Trinity, and Lake, with an incidence above $30 \%$, well above the state average of $18 \%{ }^{41}$.

## High School Graduation

Educational attainment is one of the key factors that affects the health status of a community. Education influences employment and income, health behavior and health seeking, and determine the ease with which a person can access and navigate the health system. People with lower levels of education are more likely to be unemployed, which can lead to poor health outcomes. Risk for poor health behaviors such as smoking decrease with higher education. Adults with higher education attainment are more likely to exercise and have better physical health. Appendix J displays the percentage of members who are high school graduates or higher. These rates are highest in Shasta, Marin, Napa, Yolo, Modoc, Lassen and Humboldt counties, all above the state average of $81.8 \%$. High school graduation rates in Del Norte, Siskiyou, Trinity, Lake, Solano, and Sonoma counties are below the state average, with the lowest rate of $74 \%$ in Trinity County ${ }^{42}$.

## Chronic School Absenteeism

Chronic School Absenteeism varies between communities and schools with significant disparities based on income, race, and ethnicity. Chronic school absenteeism puts the student at risk for poor school performance as well as unhealthy behaviors, which in turn increases risk for poor health outcomes in adulthood.

Appendix $J$ displays chronic school absenteeism is higher within the African American population in Marin and Solano counties showing 2 in 10 students absent from school. Trinity County shows the Filipino population having 2 in 10 students missing school. Humboldt County shows the Pacific Islander population having 2 in 10 students missing school. American Indian or Alaska Native show a rate of 2 in 10 missing school in Del Norte, Lassen, Modoc, Napa, Shasta, Siskiyou, Sonoma, and Yolo counties. It is important to note that Mendocino and Lake Counties show the American Indian or Alaska Native population having 3 in 10 students missing school, which is the highest rate of absenteeism in the PHC region ${ }^{43}$.

## Employment

Employment is an important determinant of health and wellbeing within the population. A high rate of unemployment has personal and societal effects. Long-term

[^30]unemployment can have a profound effect upon both the mental and physical wellbeing of an individual in many ways. These can include not being able to afford healthy food, lack of economic security, and low quality housing. High unemployment rate places strain on financial support systems, as unemployed persons qualify for unemployment benefits and food assistance programs. Appendix $J$ displays the unemployment rate within PHC's counties. Unemployment is highest in Modoc and Siskiyou Counties being above $7 \%$. Other PHC counties above the state average of $4.8 \%$ are Del Norte, Trinity, Shasta, Lake, Lassen, and Yolo counties ${ }^{44}$.

## Income

Median household income reflects the relative affluence and prosperity of an area. As of January 2020, the Median household income for California residents is situated at $\$ 71$, 228. Areas with higher median household incomes are likely to have greater share of educated residents and lower unemployment rates. The gap between rich and poor is especially wide in California. While California's economy outperforms the nation's economy, its level of income inequality exceeds that of all but five states. Families at the top of the income distribution in California have 12.3 times the income of families at the bottom, measured before taxes and safety net programs. The disparity is present throughout the state. Current government policies substantially narrow the gap between rich and poor. However, Californians expressed grave concern according to the Public Policy Institute of California (PPIC) Statewide Survey, two-thirds of respondents think the gap between rich and poor is expanding, and $52 \%$ think the state government should do more to ensure all Californians have equal opportunities to get ahead ${ }^{45}$.

[^31]FIGURE 22: Compares Income Level of Californians Based On Race/Ethnicity
White and Asian families are overrepresented among the highest incomes in California


Source: Public Policy Institute of California, 2020

## Access to Food

Food Environment Index is a measurement of the food environment, taking into account availability (distance to grocery stores or supermarkets) of healthy foods and income. Another term used to describe the lack of availability of healthy foods is a food desert. With a decreased ability to purchase healthy foods, there is an increased prevalence of overweight, obesity, and premature death. Appendix J displays Napa County's food environment index is higher (9.0) than the state average of 8.9 out of 10 , which indicates members have good access to healthy food choices. Marin, Mendocino, Solano, Sonoma, and Yolo counties are approaching the state average ${ }^{46}$. The remaining PHC counties have fewer choices when it comes to healthy, affordable food making it much more challenging to maintain healthy eating habits.

## Violent Crime

Violent crimes such as sexual assault, robbery, or aggravated assault have socioemotional impact on people. Physical and emotional symptoms can occur such as trouble sleeping, increase in feelings of distress, anger, depression, inability to trust, and significant problems with family, friends or coworkers. Violent crimes can hinder the pursuit of healthy behaviors such as outdoor physical activities. Chronic stress has been associated with violent crimes and increased prevalence of certain illnesses such as upper respiratory illness and asthma. This can have life-long impact on the health of the individual.

[^32]The number of violent crimes reported in PHC counties are above the state average of 421 violent crime offenses per 100,000 population, including Del Norte with 609 per 100,000, Shasta with 726 per 100,000, and Mendocino with 640 per 100,000. Lassen, Modoc, Lake, Solano and Humboldt Counties are also above the state average ${ }^{47}$. (See Appendix J for the Violent Crimes Rate in PHC Counties).

## Injury Deaths

Injury deaths are highest in Lake, Trinity and Modoc Counties, with over 125 per 100,000 in the population. All PHC counties have a higher than state average of 49 per $100,000^{48}$. Research has shown that death due to injury is more common among lowincome families. Injuries are one of the leading causes of death with unintentional injuries being the third leading cause of death. Most injury deaths are preventable through community-wide education and awareness. (See Appendix J for the Injury Deaths Rate in PHC Counties).

## Physical Environment

## Air Pollution

Health also requires that all environments, including homes, schools, communities and worksites, have clean air and water and are free from toxins and physical hazards. A healthy environment gives people the opportunity to make healthy choices and decrease their risk of cancer, low birth weight, premature deaths and respiratory diseases such as asthma.

Air Pollution (average daily density of particulate matter in micrograms per cubic meter) in PHC regions is above the state average of 9.50 per cubic meter in the following counties: Solano, Napa, Marin, Sonoma, Yolo, and Siskiyou ${ }^{49}$.

Over the past 2 years, Northern California has experienced several major forest fires. Smoke from fires, gases emitted from refineries and automobile exhaust, increase the possibility of adverse pulmonary effects such as chronic bronchitis, asthma, and decreased lung function. (See Appendix J for the Air Pollution Rates in PHC Counties).

## Health Behaviors

## Adult Smoking

Cigarettes smoking has an adverse impact on health. As the leading cause of preventable deaths and diseases in the United States, cigarette smoking is responsible for more than 480,000 deaths every year. On average, smokers live 10 years less than non-smokers. Smoking damages nearly every organ and is associated with heart

[^33]disease, stroke, diabetes and respiratory diseases such as chronic obstructive pulmonary disease (COPD) and multiple types of cancer.

Appendix J displays adult smoking is the highest in Del Norte, Humboldt, Siskiyou, Lake, Trinity, Lassen, Shasta, Mendocino, Modoc, Solano, and Yolo Counties, with Napa and Sonoma Counties sitting at the state average of $11 \%$ of adults being current smokers ${ }^{50}$. Exposure to secondhand smoke increases non-smoker's risks to these same conditions. Additional concerns related to vaping and marijuana smoking have increased every year.

## Access to Physical Activity

Physical activity can help reduce multiple health related conditions, such as diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality. Members in Modoc, Lassen, Lake, Mendocino, Siskiyou, Shasta, Humboldt, Trinity, Del Norte, and Napa Counties (ranging from lowest to highest) have less access to exercise opportunities than the state average of $93 \%$; Sonoma County is at the state average of adequate access to locations for physical activity ${ }^{51}$.

Appendix J shows physical inactivity is higher than the state average of $17 \%$ in Solano, Lassen, Lake, Trinity, Shasta, Del Norte, Modoc and Siskiyou counties ${ }^{52}$. This includes adults 20 years of age and older who report no leisure time physical activity. Nationally, physical inactivity is attributed to $11 \%$ of the premature mortality cases.

## Impaired Driving

Driving under the influence is a crime or offense attributed to driving or operating a motor vehicle while impaired by alcohol or other drugs, to a level that renders the driver incapable of operating a motor vehicle safely. Appendix J displays Alcohol-Impaired Driving Deaths is the highest in Modoc, Napa, Shasta, Trinity, Lake, Siskiyou, Sonoma, Humboldt, Lassen, and Solano; with Marin County at the state average of $30 \%$ of driving deaths with alcohol involvement ${ }^{53}$. The total cost of alcohol-involved crashes totals $\$ 44$ billion nationally; $27 \%$ of the drivers of these crashes are between the ages of 21 and $244^{54}$.

## Summary of Findings

The 2020 PNA gives insight into PHC's key community health issues, many of which correlate to living in poverty. PHC members face very challenging social and environmental conditions, such as severe housing problems and traumatic experiences.

[^34]These burdens can easily overwhelm the resiliency of a person, particularly when that individual is also trying to function at or near the federal poverty level. PHC acknowledges that the conditions in which our members live contribute to unhealthy behaviors, such as low rates of pediatric wellness visits and immunizations. For adults, chronic stressors lead to higher rates of chronic conditions, often poorly managed, as well as creating behavioral health concerns including substance use disorder and mental illness. In addition to surveying PHC's entire population needs, the PNA also identified sub-populations within PHC's membership that warranted heightened awareness. The American Indian/Alaska Native population in PHC's Northeast Region had extremely low engagement with providers for basic care needs, such as immunizations, child and adolescent wellness visits, and cervical cancer screens. In PHC's Northern region, Hispanic members did not access well-child care to the same extent as White members. Throughout the entire low-income PHC population, pregnant members have low rates of engagement in perinatal care. Lastly, there is a broad knowledge gap both within PHC and throughout the community on the needs and concerns of the LGBTQ, especially transgender members.

## Health Education, C\&L and Quality Improvement Program Gap Analysis

PHC's annual PNA is the first step in the process of reviewing how PHC's service offerings align with the members' needs. PHC then reviews all activities undertaken in the preceding year and their alignment with the current needs of the membership and updates planned activities for the coming year. As activities are evaluated, so are the resources necessary to perform these activities, including staffing ratios, clinical qualifications, specialized training, interventions, systems infrastructure, and the availability of community resources or partnerships to support the member needs.

In accordance with DHCS direction, PHC offers many programs and services to members. These interventions are aligned with NCQA's four areas of focus for population health management:

- Keeping Members Healthy
- Managing Members with Emerging Risk
- Outcomes Across Settings
- Managing Multiple Chronic Conditions

The Population Health Management (PHM) Work Plan is a separate document that outlines specific interventions identified for focus each year. PHC annually compares the PNA results to the PHM Work Plan along with the Population Health Management Strategy and Program Description in order to align resources appropriately with member needs and to provide executive leadership with insight regarding how well PHC leverages resources and activities on behalf of the population. Historically, PHC has
focused much of its internal efforts and resources on the complex care population who have chronic conditions and/or high utilization rates. Both PHC and state initiatives created programs to manage complex cases and stabilize members who used health care resources inappropriately. While PHC's Complex Case Management program has been adequate to meet the needs of members enrolled in the program, there are many members who are difficult to reach through a telephonic model of case management. PHC actively participates in state workgroup discussions, and recommended consolidation of existing services while adding programs to target the members whose needs are not met by current program offerings.

In 2019, California outlined an ambitious new program to meet the needs of members where social disconnection drives poor access to healthcare and wellness. The new program, called "Enhanced Case Management (ECM)," intends to engage members within their communities, providing a wide range of services that include housing support, dental and vision care, health care, and social services. ECM will be a member benefit starting in 2021. While the state envisions managed care plans will use vendors (such as community-based care management entities (CB-CMEs) or county services) to achieve the program objectives, PHC's leadership recognizes this new initiative will require a heavy investment of organizational resources to be successful. Leaders in the organization are evaluating staffing and knowledge requirements, system supports needed (including means to exchange information securely), and surveying the community landscape for potential partners in this venture.

PHC and hospitals collaborate to support members transitioning across settings, and there are many mandates to ensure PHC supports members transitioning between providers. While these programs remain valuable, they are insufficient to address the needs of the relevant population.

On the other hand, PHC's efforts to keep members healthy or to manage members with emerging risk are most commonly provider-centric. Our organization has developed extensive supports for providers, such as training, incentives, and reimbursement models designed to optimize provider practice on behalf of our members. PHC uses HEDIS scores to monitor the success of provider support. Additionally, county public health departments monitor the wellness of their populations including communicable diseases, childhood wellness measures and county behavioral health services. Counties share their results with PHC through annual reports that highlight both their successes and their ongoing challenges. In semi-annual meetings, PHC's Chief Medical Officer and key PHC leaders meet with County Health Officers to share challenges and best practices and strategically plan for collaborative activities in coming months.

## Identification and Prioritization of Population Health Needs

## Identifying Population Health Needs

For the purposes of the PNA, a health need is defined as a health outcome and/or the related conditions that contribute to a defined health need. Health needs are identified by the comprehensive identification, interpretation, and analysis of a robust set of primary or secondary data.

## Data Analysis

Primary and secondary data were analyzed to identify and prioritize the significant health needs within PHC counties. For an in-depth description of the processes and method used to conduct the PNA, including the secondary data collection, analysis, and results, see the data sources section.

## Prioritization Criteria

- Magnitude and scale of the problem: the health needs affect a large number of people within the community
- Health disparities: the health need disproportionately impacts the health status of one or more vulnerable population or groups
- Severity of the problem: the health need has serious consequences (morbidity, mortality, and/or economic burden)
- Ability to leverage: opportunity to collaborate with existing community partnerships working to address the health need, or to build on current programs and emerging opportunities
- Community assets: the community can make a meaningful contribution to addressing the health need because of its relevant expertise and/or assets as a community and because of an organizational commitment to addressing the need

After review of the data and prioritization criteria, the following health priorities were identified:

- Access to Care
- Child Health
- Mental Health
- Severe Housing Problems

Access to Care
One of the key findings of the PNA is members expressing their dissatisfaction of accessing care when needed. According to the 2019 CAHPS survey result, PHC score less than $74 \%$ on average based on the responses from members on the question of getting needed care. This disparity is very high among the African American and

Hispanic population as compared to the White population. Members between the ages 35-54 also expressed their dissatisfaction of getting care quickly thereby scoring PHC with $75 \%$. California has a benchmark on the timeframe a patient is required to receive needed care and services.

PHC also score less than $80 \%$ based on respondents answer to the question of overall ratings of healthcare and health plan. In an effort to address this, PHC instituted a brief survey with CAC members to get an understanding of their mindset when asked about the overall rating of health care. Ideas were gathered from the Grievance and Appeals report and a list of 10 questions were provided to the CAC members. From the data gathered, the members' overall first three (3) thoughts that come to mind when asked this question were appointment scheduling, care received from provider and Medi$\mathrm{Cal} /$ health benefits.

Analysis from the health disparity report also shows a high disparity in access to ambulatory, prenatal and postpartum care for the Hispanic/Latino, Black/African American, and American Indian/Alaskan native population as compared to the whites.

## Child Health

A primary finding of the PNA is that PHC's pediatric members are not getting the wellness and preventive care they need for optimum health, especially Hispanic members in our Southwest region, and all members of rural counties. The Centers for Medicare and Medicaid Services (CMS) performed an audit of DHCS's oversight of preventive care for children (results released in March 2019) (CMS Core Sets, 2019). The results demonstrated a concerning gap in children's preventive care and early diagnostic testing and screening. This finding aligns with PHC's Health Disparity analysis and HEDIS scores in all four regions where the pediatric population has low rates of attending wellness visits and obtaining immunizations; a finding that indicates that insufficient resources are allocated to supporting pediatric wellness care.

To address this high-priority concern, PHC's Quality Improvement department recruited staffing and budget resources from Health Education, Population Health, Care Coordination, Member Services, Regional Medical Directors, and Provider Relations. Each department has agreed to contribute resources to the effort; however, there are gaps that remain. One such gap is identifying the team that can allocate staff to track and distribute member incentives. Another gap is that PHC lacks the system structure to track and monitor which members are involved with outreach campaigns and how the campaign influenced his/her behavior.

County public health officials within PHC's 14 counties are also concerned with how many of their population lack immunizations and/or preventative screening. Recent legislation requires PHC to engage county public health leaders to explore new ways of
aligning efforts to meet the needs of the membership. For example, PHC is collaborating with county resources and public schools in the Northern Region to expand upon an Adolescent Immunization Poster Contest, first piloted in a middle school in Shasta County in 2017/2018, expanded to four more schools in 2018/2019, and broader implementation planned for 2020. The poster contest is not resourceintensive; however, it does require alignment across many sectors. With the advent of the COVID-19 pandemic, this intervention has been postponed in 2020, as schools have shifted from in-person instruction to online instruction and are prioritizing meeting baseline standards for the school year. As an alternative intervention, PHC staff have performed a series of outreach call campaigns to the parents/guardians of members under 15 months of age, and to adolescents, to remind them of the importance of maintaining well-care visits, staying current with immunizations, and obtaining agerelated screenings. These activities have been in collaboration with public health departments and regional providers.

## Mental Health

PHC contracts with Beacon Health Options to provide care for members with mild to moderate mental illness, and the penetration rate of mental health services in PHC counties is among the highest in the state. However, members with SPMI diagnoses receive care from County Mental Health Plans (CMHPs) in California's trifurcated behavioral health coverage model. Because PHC operates in 14 distinct counties, members experience wide variances in the care they receive and gaps when the responsibility for providing care is not clearly delineated between medical and behavioral needs. For example, members with eating disorders may receive appropriate treatment by a PCP, by a Beacon Health provider, by an acute hospital, by county mental health providers, in a residential treatment facility, or by an intensive outpatient program. The most appropriate treatment location depends upon how severe the member's condition is at any point in time. PHC recently recognized a need to create wrap-around services to support communication for members as their care needs vary. PHC leadership created a Behavioral Health Unit and hired specialized staff (a Behavioral Health Medical Director, Licensed Clinical Social Workers, and Social Workers) to create a program to meet needs of members like those with eating disorders. This program is a pilot in 2020. The resources PHC allocates to this service are sufficient.

Nevertheless, both county and community leaders within PHC's 14 counties agree that current behavioral health resources are insufficient for meeting the needs for behavioral and mental health care. There is a significant shortage of mental health professionals, not only in PHC's service area, but throughout the state. Communities have asked for support educating an appropriate workforce, recruiting and retaining trained staff, and
seeking ways to leverage untrained peer counselors to promote mental wellness. In addition to the provider shortage, there are structural issues that hamper behavioral health, such as poverty, homelessness, and a lack of employment opportunities in many of PHC's counties. These challenges require cross-sector engagement and collaboration; the scope of this problem goes well beyond the mission of a managed care plan. However, California is seeking creative ways to leverage health care dollars to address social influencers of health and is willing to consider creative solutions to these structural problems. In coming years, PHC will collaborate closely with county and community leaders to pool resources and test possible solutions to the issues outlined above.

## Severe Housing Problems

Federal and state regulations currently prohibit managed care plans like PHC from providing housing as a health care benefit or expenditure. Nevertheless, housing problems are a major barrier that prevents members from getting care for their health or even prioritizing health care above more pressing daily needs. The cost of housing in many of our counties is much higher than national averages, and there is a serious shortage of affordable housing in our region. Furthermore, over the past few years, multiple PHC counties experienced wild fires that eliminated hundreds of homes in counties that were already experiencing a lack of affordable housing. The 2019 internal health analytics data defined PHC's homeless population to include, but is not limited to, individuals that have fallen on hard times, veterans, mentally ill, and/or those who suffer from substance use disorders.

No one organization has the resources to make a significant change in this situation. However, in 2017, PHC's Board of Directors approved a one-time grant of $\$ 25$ Million (drawn from financial reserves) allocated to new housing resources to be distributed between the 14 counties that PHC serves. The grant (request for proposal) RFP went out to each county asking for proposals that would work to increase housing services (case management to bricks and mortar) within each county. In 2018, PHC awarded housing grants to multiple agencies within the counties. Grant recipients have allocated most of the funds to purchase land and build supportive housing. There are milestones each grantee must meet to receive funds to support the housing project allocated to them. Since this is a complex, ongoing project spanning multiple years, PHC will continue to assess the impact of this investment annually and update our housing support strategy accordingly. DHCS is exploring means to allow health plans to make some housing-related payments in 2021; the use of these funds are intended "In Lieu of Services" normally covered by health plans, such as inpatient hospital stays.

## Action Plan

The PNA seeks to identify and assist members who are not able to access health care to the same degree as the majority of the membership. This gap in care is known as a health access disparity. In order to gain insight into potential racial disparities of access, PHC's Health Analytics team performed a retrospective claims analysis on members who meet the criteria for the various HEDIS measures to determine if there are noted differences in compliance by race. The results have been further stratified by member region. This analysis has led to the objectives recommended below. There are additional recommendations targeting generalized population needs, such as promoting adherence to asthma control medications and improving access to prenatal care. Furthermore, PHC recognizes that promoting health equity truly begins within our own organization; therefore, there is an objective to promote PHC staff awareness and sensitivity to gender identification and sexual orientation.

It is important to acknowledge the unprecedented event of the COVID-19 virus and recognize this virus has significantly altered how individuals interact with healthcare. Baseline data from non-COVID experience does not set reasonable expectations for current behavior; therefore, the objectives outlined below focus on processes and maintenance activities.

Objective 1: Maintain or improve upon Hispanic/Latino participation in well-care visits for children ages 2 to 5 years of age from 66.67\% baseline in PHC's Northern Region (Del Norte, Humboldt, Siskiyou, Lassen, Shasta, Trinity, and Modoc) as reported in the PHC Health Disparities Data for 2021.
Data Source: (PHC Health Disparities Data, March 2020)

## Strategies

1.) By December 31, 2020, Research best practices with proven evidence of changing members' behaviors that might drive their participation in healthcare.
2.) By January 31, 2021, conduct in-depth focus group discussions or at least 10 member interviews with Hispanic/Latino members to understand their perspectives on attending well child visits. Obtain feedback on research into best practices (see above) to inform implementation strategy
3.) By March 15, 2021, Develop health education materials, resources, a suggested plan for implementation of these best practices to promote the importance of well child visits focused on the Hispanic/Latinos members

## Objective 2:

Maintain or improve upon American Indian/Alaskan Native member participation in breast cancer screening for those members who qualify for HEDIS BCS criteria from baseline of $34.41 \%$ in PHC's Northwestern Region (Del Norte and Humboldt) as reported in the PHC Health Disparities Data of 2021.
Data Source: (PHC Health Disparities Data, March 2020)

## Strategies

1.) By December 31, 2020, conduct an in-depth focus group discussion / member interviews with American Indian/Alaskan Native members to understand their perspectives on receiving Breast Cancer Screening (BCS).
2.) By December 31, 2020, Research best practices with proven evidence of changing members' behaviors that might drive their participation in healthcare.
3.) By March 15, 2021, Develop health education materials, resources and a suggested plan for implementation of these best practices to promote the importance of breast cancer screening focused on the American Indian / Alaskan Native members

Objective 3: By February 2021, maintain or improve the Asthma Medication Ratio (AMR) as defined by the HEDIS AMR metric for pediatric members in the Northern Region (Del Norte, Humboldt, Siskiyou, Lassen, Shasta, Trinity, and Modoc) from 65.31\% baseline as of February 2020 HEDIS Exploratory Data.

Data Source: (PHC HEDIS Exploratory Data (February))

## Strategies

1.) By December 31, 2020, train Health Educators and Healthy Living Coaches on asthma management and home visiting services through the Asthma Management Academy.
2.) By February 28, 2021, use the Health Educators and Healthy Living Coaches to conduct 2 courses (in person or virtually) in order to build the capacity of community based programs to conduct asthma home visiting services, in partnership with regional provider and pharmacy efforts.
3.) By March 31, 2021, engage at least 10 Northern Region PHC parents or guardians to build and establish a care plan for their child/children with asthma utilizing the Healthy Living Tool (HLT) embedded in the PHC Member Portal.

Objective 4: By February 2021, maintain access to timely prenatal care at least 90\% of the time (first visit in the first trimester) for members across all PHC regions.
Data Source: (PHC HEDIS Exploratory Data, February 2020)

## Strategies

1.) Develop, obtain member feedback, and prepare for member distribution at least 5 documents supporting health education, resources and tools on prenatal and postpartum support services that enhance member knowledge on the availability of support services.
2.) By December 31, 2021, launch pilot program to engage pregnant members and make available resources (utilizing mailing services) and tools on self-care for mom and baby. Publish all resources and tools to PHC external website and member portal with an option to be emailed.

Objective 5: Increase the gender sensitivity awareness of PHC staff from $48 \%$ to $80 \%$ thereby creating an environment that is supportive of their culture, ethnicity, sexual orientation and gender identity, as evidenced by responses to equivalent questions to be presented on the 2021 Health Equity Survey specifically targeting gender identity and sexual orientation, assessed independently.
Data Source: (PHC Internal Health Equity Survey Data, 2020)

## Strategies

1.) By February 1, 2021, develop and hold a required annual training on gender sensitivity awareness for all PHC staff via LMS
2.) By March 31, 2021, work with PHC's Human Resources and leadership to create a policy proposal to include of gender sensitive pronouns in the organization signature line
3.) By March 31, 2021, work with PHC's Human Resources and leadership to create policy recommendations for safe spaces to enable staff to express their culture, ethnicity, sexual orientation and gender identity freely while keeping with the organizational regulations.

## Organizational Support

Recognizing both the significance and scope for delivering population health services, PHC created a Population Health department in 2020. The Population Health department's mandate is to identify the wellness needs of PHC's members and align organizational and community efforts to meet these needs, in accordance with DHCS and NCQA requirements. The Population Health department of 2020 includes a director, a manager and supervisory roles, health education, community outreach resources, staff dedicated to member engagement, and administrative support staff.

The Population Health team engages with the community to educate community partners on PHC benefits and services, to learn about resources available within the community, and to promote collaboration of effort/reduce duplication of services. PHC's Population Health staff actively participates in both internal and external workgroups to promote communication and reduce duplication of effort. Through collaborative meetings, the Population Health staff identify community resources that may be of benefit to PHC's members and shares these resources with the organization to promote integration into program offerings and to meet member needs. With the addition of the Population Health department, along with the assigned activities of this department, PHC has allocated sufficient resources to support the inequities described in this document. The Population Health Steering Committee will review resource allocation during monthly meetings as well as annually for future planning needs.

## Community Resources

PHC's Population Health department has designated a team to identify resources within the community, visit these resources, and ensure that they are made available to PHC members. Staff maintain a list of resources on PHC's website (http://www.partnershiphp.org/Community/Pages/Community-Resources.aspx) where members, staff, or providers may have ready reference and access to these supports. There are multiple categories for these member supports, such as food, mental health, utilities, pregnancy, seniors, LGBTQ+, support groups, clothing, etc. The resource pages are updated no less than annually to ensure that the resources are active and contact details are correct. Although there are multiple resources to support many member needs, the managed Medi-Cal population's social influencers of health require a continual influx of funds, support, and resource investment to promote wellness. The community resources identified are sufficient for member needs, aside from the structural supports identified above.

## Stakeholder Engagement

PHC creates multiple modalities to engage stakeholders in meeting the needs of its population. The PNA with proposed actions undergoes review by the Population Health Management (PHM) Steering Committee, PHC's Internal Quality Improvement Committee, PHC's Quality Utilization Advisory Committee, PHC's Physician Advisory Committee, and by PHC's Board of Directors before submission to California's Department of Health Care Services (DHCS) per regulatory requirements. Action items arising from the PNA are integrated into various stakeholder discussions such as semiannual Medical Director meetings, interactions with county public health officials, and stakeholder discussions at county collaborative meetings. The Sr. Health Educator provides a summary report of PNA findings for discussion with CAC/FAC members during their regular meetings in both Northern and Southern regions. The provider
relations education specialist team will conduct on-site visits and training webinars for health care providers, practitioners and allied health care personnel on pertinent information regarding PNA findings and members' needs. The PNA report will also be posted on the PHC website and actionable items for providers will be highlighted under the providers' information page. Stakeholder feedback provides valuable input for future iterations of the PNA.

Appendices
APPENDIX A: PHC MEMBERSHIP DEMOGRAPHICS BY LOCATION
PHC Membership Demographics by Location
Feb'20 Membership:
$\underset{\text { Plan wide }}{535,309}$
151,878
383,431

Select Period From January 2015


County Membership for February 2020 (Click on County for details)


Membership Details for February 2020, Region: All, County: All

| Language |  |  | Race/Ethnicit |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ENGLISH | 272,735 | 144,944 | HISPANIC | 36.5\% (140,045) | 11.2\% (16,991) |
| SPANISH | 95,393 | 4,274 |  |  |  |
| N/A | 2,302 | 995 | WHITE | $32.3 \%(123,718)$ | $64.2 \%(97,558)$ |
| TAGALOG | 2,827 | 30 | OTHER | 14.0\% (53,742) | 2.7\% (4,037) |
| OTHER NON ENGLISH | 2,064 | 139 |  | 7.2\% ( 27,638 ) | 1.6\% ( 2,461 ) |
| VIETNAMESE | 1,960 | 93 | BLACK | 7.2\% ( 27,638 ) | 1.6\% (2,461) |
| RUSSIAN | 1,978 | 27 | UNKNOWN | 5.3\% $(20,463)$ | 13.2\% (20,073) |
| MANDARIN | 666 | 61 | FILIPINO | 2.2\% (8,621) | 0.3\% (396) |
| OTHER | 678 | 28 | - |  |  |
| FARSI | 685 | 9 | NATIVE AMERICAN | 1.3\% (5,076) | 5.4\% (8,132) |
| HMONG | 63 | 593 | ASIAN/PACIFIC I.. | 1.1\% (4,128) | 1.5\% ( 2,230 ) |
| CANTONESE | 428 | 50 | ASIAN/PACIFIC... | 1.1\% (4,128) | 1.5\% (2,230) |
| ARABIC | 430 | 13 |  |  |  |
| LAO | 247 | 175 | Capitation |  |  |
| MIEN | 109 | 280 | Capitated |  | $72.6 \%(388,581)$ |
| CAMBODIAN | 295 | 18 |  |  |  |
| KOREAN | 254 | 14 | Special Member | 12.7\% (68,035) |  |
| UNKNOWN | 124 | 79 | Kaiser | 11.6\% (62,272) |  |
| ASL AMERICAN SIGN LA.. | 138 | 54 |  |  |  |
| OTHER SIGN LANGUAGE | 21 | 2 | Woodland | 3.1\% (16,420) |  |

For questions or comments please contact Liat Vaisenberg at: lvaisenberg@partnershiph..

Appendix B: HEDIS Exploratory Data by Language, RY 2019


## Appendix C: PHC Homeless Population in 2019

PHC Homeless Population in 2019
The Homeless dataset was obtained combining information from claims that had homeless diagnoses (V600, 2590), and from member's physical address data containing keywords that indicate homelessness (e.g., "homeless", "camping", "living in car", "on the streets", "place to place", "friend to friend"). Chronic homeless is defined as homelessness lasting 12 months or more.


Appendix D: PHC Pediatrics Top Chronic Medical Conditions in 2019

What is the Prevalence of Chronic Conditions in Children in the year 2019 ?
TRAUMA AND STRESS
ANXIETY
DEPRESSION
OBESITY
ASTHMA
SUBSTANCE USE
SCHIZOPHRENIA
TOBACCO USE
BIPOLAR DISORDER
HYPERTENSION
CHRONIC KIDNEY DISEAS..
DIABETES MELLITUS
TRAUMATIC BRAIN INJUR.
CHRONIC LIVER DISEASE
CANCER
CONGESTIVE HEART FAIL...
COPD
DEMENTIA
CORONARY ARTERY DISE...


Data Updated on 5/15/2020 3:13:19 PM
Reported by Divya Rupini Gunashekar (dgunashekar@partnershiphp.org)

Appendix E: PHC Adults Top Chronic Medical Conditions in 2019
What is the Prevalence of Chronic Conditions in Adults in the year 2019 ?
HYPERTENSION
TOBACCO USE
ANXIETY
DEPRESSION
OBESITY
SUBSTANCE USE
DIABETES MELLITUS
TRAUMA AND STRESS
SCHIZOPHRENIA
CHRONIC KIDNEY DISEAS..
BIPOLAR DISORDER
CONGESTIVE HEART FAIL..
ASTHMA
COPD
DEMENTIA
CANCER
CHRONIC LIVER DISEASE
CORONARY ARTERY DISE..
TRAUMATIC BRAIN INJUR.


Data Updated on 5/15/2020 3:13:19 PM
Reported by Divya Rupini Gunashekar (dgunashekar@partnershiphp.org)

Appendix F: Pediatrics Missed Vaccines in 2019

| Select Measure <br> Ocanto 3 <br> (0) Combo 10 | CIS Missed Vaccines by Coun Click County column to see list | unty (Comb tofprovider |  | so10) . | ofMem | rs Miss | gat leas | tone Vac | ne as of |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dite Ofith <br> 1/1/20014012131/2020 | Grand Total | Dellorte | Humbolt | lake | Lassen | Main | Mendocino | Modoc | ${ }^{\text {Napa }}$ | Shasta | Siskipu | Solano | Sonoma | Trinity | Yolo |
| and Nul lalues | \%Misising_Titap 34\% | 35\% | 38\% | 46\% | 56\% |  | 41\% |  |  |  |  | 32\% | 26\% | 344\% | 40\% |
|  | \%MVising_ Hep 30\% | 51\% | 35\% | 38\% | 30\% | 17\% | 72\% | 21\% | 12\% | 24\% | 40\% | 26\% | 19\% | 25\% | 41\% |
|  | \%Missing_ Hib $22 \%$ | 20\% | 23\% | 32\% | 41\% | 1\% | 20\% | 25\% | 12\% | 31\% | 27\% | 19\% | 20\% | 29\% | 211\% |
|  | \%Missing_PV $21 \%$ | 20\% | 23\% | 29\% | 31\% | 9\% | 211\% | 23\% | 12\% | 24\% | 37\% | 20\% | 17\% | 22\% | 344\% |
|  | \%Misising_MMR $15 \%$ | 17\% | 21\% | 16\% | 30\% | 8\% | 16\% | 19\% | 1\% | 21\% | 26\% | 12\% | 13\% | 22\% | 122\% |
|  | \%Missing_ Pneum 35\% | 38\% | 40\% | 46\% | 54\% | 19\% | 40\% | 40\% | 21\% | 45\% | 50\% | 33\% | 28\% | 47\% | 42\% |
|  | \%misising vzV 16\% | 18\% | 26\% | 17\% | 32\%\% | \%\% | 17\% | 17\% | 1\% | 23\% | 32\% | 12\% | 15\% | 20\% | 122\% |
| \%Norcompliant | \%Mising._HepA $21 \%$ | 20\% | 32\% | 19\% | 42\% | 10\% | 23\% | 377\% | \% | 31\% | 47\% | 14\% | 19\% | 36\% | 12\% |
| 0\% $\quad 1100$ | \%Missing_ nfuenza 54\% | 82\% | 69\% | 61\% | 92\% | 32\% | 50\% | 77\% | 41\% | 75\% | 71\% | 48\% | 44\% | 83\% | 45\% |
|  | \%Mising_Rota 44\% | 44\% | 52\% | 50\% | 53\% | 23\% | 488\% | 48\% | 33\% | 54\% | 72\% | 38\% | 37\% | 47\% | 51\% |
| Get Info | 0\% $50 \%$ | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | O\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% | 0\% 50\% |

Provider List
Clicka Provider to see list of Members

List of Members missing at least one Combo 10 voccine - with count of missing immunizations as of None

## Appendix G: Mental Health Utilization, 2020

Beacon Services Utilization
Includes all Beacon Claims and Indian Health Mental Health Claims


| diag_desc | Diag Nbr | Visits | Utilizing Mbrs |
| :---: | :---: | :---: | :---: |
| POST-TRAUMATIC STRESS DISORDER, UNSPECIFIED | F4310 | 13,310 | 2,792 |
| GENERALIZED ANXIETY DISORDER | F411 | 12,965 | 2,897 |
| ADJUSTMENT DISORDER <br> WITH MIXED ANXIETY AND .. | F4323 | 7,777 | 1,685 |
| MAJOR DEPRESSIVE DISORDER, RECURRENT, M.. | F331 | 7,488 | 1,951 |
| POST-TRAUMATIC STRESS DISORDER, CHRONIC | F4312 | 6,167 | 1,230 |
| ANXIETY DISORDER, UNSPECIFIED | F419 | 6,020 | 2,063 |
| MAJOR DEPRESSIVE DISORDER, SINGLE EPISOD.. | F329 | 4,500 | 1,559 |
| DYSTHYMIC DISORDER | F341 | 4,176 | 835 |
| ADJUSTMENT DISORDER, UNSPECIFIED | F4320 | 4,171 | 1,088 |
| ADJUSTMENT DISORDER WITH ANXIETY | F4322 | 3,364 | 760 |
| BIPOLAR DISORDER, UNSPECIFIED | F319 | 3,102 | 1,076 |
| MAJOR DEPRESSIVE DISORDER, SINGLE EPISOD.. | F321 | 2,075 | 487 |
| ADJUSTMENT DISORDER WITH DEPRESSED MOOD | F4321 | 2,074 | 577 |
| MAJOR DEPRESSIVE DISORDER, RECURRENT, MI.. | F330 | 2,028 | 532 |
| UNSPECIFIED MOOD <br> [AFFECTIVE] DISORDER | F39 | 2,001 | 861 |
| MAJOR DEPRESSV DISORDER, RECURRENT SEVERE W/O P.. | F332 | 1,774 | 533 |
| ADJUSTMENT DISORDER W MIXED DISTURB OF EMOTIO.. | F4325 | 1,768 | 436 |
| OTHER SPECIFIED ANXIETY DISORDERS | F418 | 1,753 | 618 |
| BIPOLAR II DISORDER | F3181 | 1,588 | 483 |
| attemtina necicit | rom | 三 | $\square$ |

## Appendix H: Members Utilizing PCPs Services for Mental Health Issues

## Members Seeing PCPs for Mental Health Issues

This view shows PHC members who had claims/encounters with their PCP where a mental health diagnosis appears as primary or secondary diagnosis, and the prescriptions for behavioral drugs they filled in the selected period (only carve-in drugs).

Month of Service Jan'17 to Sep'19

Mbr County
All



## Appendix I: Demographics \& Disease Status of Members Diagnosed with Substance Use Disorder

## Demographics \& Disease Status of Members Diagnosed with Substance Use Disorder

```
This view describes the demographic characteristics of PHC members who had claims with any diagnosis or procedure of substance use disorder, and the frequency of major chronic
``` conditions, diagnosis occurrence during pregnancy, and homelessness status at the time of service for those members.
Click on any demographics bar to filter on


\section*{Appendix J: County Health Rankings Data of PHC Counties}


Appendix J: cont'd
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline High school graduation & - & 83\% & 81\% & 86\% & 84\% & 78\% & 87\% & 84\% & 86\% & 87\% & 87\% & 80\% & 81\% & 81\% & 74\% & 87\% \\
\hline Some college & & 65\% & 44\% & 37\% & 67\% & 49\% & 76\% & 57\% & 49\% & 68\% & 64\% & 62\% & 65\% & 66\% & 60\% & 70\% \\
\hline Unemployment & & 4.2\% & 5.5\% & 4.8\% & 3.6\% & 5.2\% & 2.4\% & 3.9\% & 7.5\% & 4.9\% & 2.9\% & 6.7\% & 3.9\% & 2.7\% & 5.7\% & 4.2\% \\
\hline Children in poverty & & 17\% & 27\% & 16\% & 23\% & 26\% & 6\% & 26\% & 27\% & 18\% & 9\% & 24\% & 10\% & 12\% & 31\% & 15\% \\
\hline Income inequality & & 5.3 & 5.1 & 4.6 & 4.8 & 5.4 & 5.7 & 5.0 & 4.1 & 4.8 & 4.5 & 4.5 & 4.2 & 4.5 & 5.1 & 6.1 \\
\hline Children in single-parent households & & 31\% & 34\% & 28\% & 39\% & 39\% & 24\% & 42\% & 23\% & 33\% & 28\% & 35\% & 35\% & 30\% & 39\% & 26\% \\
\hline Social associations & & 5.9 & 4.0 & 5.1 & 9.0 & 6.4 & 8.7 & 7.8 & 0.0 & 8.0 & 7.4 & 10.7 & 5.5 & 7.0 & 5.5 & 6.3 \\
\hline Violent crime & - & 421 & 609 & 587 & 432 & 535 & 178 & 640 & 505 & 726 & 398 & 344 & 476 & 368 & 380 & 332 \\
\hline Injury deaths & & 50 & 103 & 101 & 110 & 154 & 54 & 103 & 122 & 97 & 53 & 119 & 61 & 57 & 142 & 48 \\
\hline \begin{tabular}{l}
Physical \\
Environment
\end{tabular} & & & 9 & 5 & 13 & 28 & 17 & 41 & 3 & 29 & 43 & 12 & 24 & 42 & 8 & 14 \\
\hline Air pollution particulate matter & & 9.5 & 8.5 & 7.4 & 8.8 & 6.9 & 10.3 & 8.8 & 6.6 & 8.4 & 10.6 & 9.6 & 11.0 & 10.1 & 7.8 & 9.8 \\
\hline Drinking water violations & & & No & No & No & Yes & No & Yes & No & Yes & Yes & No & No & Yes & No & No \\
\hline Severe housing problems & & 27\% & 22\% & 16\% & 25\% & 24\% & 22\% & 28\% & 16\% & 22\% & 22\% & 21\% & 21\% & 23\% & 24\% & 23\% \\
\hline Driving alone to work & & 74\% & 74\% & 81\% & 72\% & 71\% & 65\% & 74\% & 69\% & 82\% & 76\% & 75\% & 77\% & 75\% & 67\% & 68\% \\
\hline Long commute driving alone & & 41\% & 10\% & 18\% & 17\% & 42\% & 45\% & 21\% & 14\% & 15\% & 32\% & 22\% & 42\% & 31\% & 23\% & 32\% \\
\hline
\end{tabular}

Appendix K: PHC 2018 Annual HEDIS Exploratory
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\begin{tabular}{l}
HEDIS Annual Explorer \\
This View Contains Annual Sample and Admin Data
\end{tabular}} & \begin{tabular}{l}
Select Chart \\
Table
\end{tabular} & SelectReportView Annual Report-SubRegion & \multicolumn{2}{|l|}{SelectMetric Rate} & \multicolumn{2}{|l|}{Select Row Level Detail None} \\
\hline & & & \begin{tabular}{l}
NORTHEAST \\
MY-2018
\end{tabular} & \begin{tabular}{l}
NORTHWEST \\
MY-2018
\end{tabular} & SOUTHEAST
MY-2018 & \[
\begin{aligned}
& \text { SOUTHWEST } \\
& \text { MY-2018 }
\end{aligned}
\] \\
\hline \multicolumn{3}{|l|}{Annual Monitoring for Patients on Persistent Medications (MPM)-ACE or ARB} & 85.01 & 83.95 & - 90.88 & 88.88 \\
\hline \multicolumn{3}{|l|}{Annual Monitoring for Patients on Persistent Medications (MPM)-Diuretics} & 87.60 & 84.36 & \(6 \quad 90.41\) & 89.82 \\
\hline \multicolumn{3}{|l|}{Asthma Medication Ratio (AMR)-Total 5 to 64 Ratios > 50\%} & 50.90 & 50.20 & - 64.65 & 55.00 \\
\hline \multicolumn{3}{|l|}{Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis (AAB)} & 36.68 & 30.29 & 46.81 & 46.89 \\
\hline \multicolumn{3}{|l|}{Breast Cancer Screening (BCS)} & 53.32 & 47.75 & -60.33 & 56.30 \\
\hline \multicolumn{3}{|l|}{Cervical Cancer Screening (CCS)} & 55.28 & 49.88 & -65.77 & 71.46 \\
\hline \multicolumn{3}{|l|}{Childhood Immunization Status (CIS)-Combo 3} & 52.55 & 53.53 & 7 73.48 & 68.86 \\
\hline \multicolumn{3}{|l|}{Comprehensive Diabetes Care (CDC)-Blood Pressure Control (<140/90)} & 75.18 & 67.40 & - 67.00 & 72.02 \\
\hline \multicolumn{3}{|l|}{Comprehensive Diabetes Care (CDC)-Eye Exam} & 65.94 & 45.26 & - 63.03 & 70.80 \\
\hline \multicolumn{3}{|l|}{Comprehensive Diabetes Care (CDC)-HbA1c Control (<8\%)} & 57.91 & 53.53 & - 54.34 & 54.74 \\
\hline \multicolumn{3}{|l|}{Comprehensive Diabetes Care (CDC)-HbA1c Poor Control (>9\%)} & 32.12 & 31.14 & - 30.77 & 33.82 \\
\hline \multicolumn{3}{|l|}{Comprehensive Diabetes Care (CDC)-HbA1c Testing} & 90.51 & 89.78 & 91.81 & 90.02 \\
\hline \multicolumn{3}{|l|}{Comprehensive Diabetes Care (CDC)-Medical Attention for Nephropathy} & 88.56 & 88.08 & 94.79 & 87.10 \\
\hline \multicolumn{3}{|l|}{Controlling High Blood Pressure (CBP)} & 65.94 & 56.20 & - 63.50 & 59.85 \\
\hline \multicolumn{3}{|l|}{Immunizations for Adolescents (IMA)-Combo 2} & 17.52 & 25.55 & - 46.96 & 39.42 \\
\hline \multicolumn{3}{|l|}{Prenatal and Postpartum Care (PPC)-Postpartum Care} & 59.61 & 69.59 & 76.16 & 79.57 \\
\hline \multicolumn{3}{|l|}{Prenatal and Postpartum Care (PPC)-Timeliness of Prenatal Care} & 84.43 & 87.35 & -86.13 & 91.16 \\
\hline \multicolumn{3}{|l|}{Use of Imaging Studies for Low Back Pain (LBP)} & 76.34 & 81.98 & 82.62 & 83.25 \\
\hline \multicolumn{3}{|l|}{Weight Assessment and Counseling for Nutrition \& Physical Activity (WCC)-Counseling for Nutrition} & 63.50 & 64.06 & -76.90 & 81.92 \\
\hline \multicolumn{3}{|l|}{Weight Assessment and Counseling for Nutrition \& Physical Activity (WCC)-Counseling for Physical Activity} & 61.80 & 64.58 & - 72.51 & 76.84 \\
\hline \multicolumn{3}{|l|}{Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life (W34)} & 62.02 & 63.26 & - 68.37 & 74.24 \\
\hline
\end{tabular}
Below MPL (<25th)
25th
50th
75th
Above HPL (>90th)
Missing Benchmarks```


[^0]:    ${ }^{1}$ (Medi-Cal Managed Care Plan, 2020)
    ${ }^{2}$ (All Plan Letter 19-011, 2019)
    ${ }^{3}$ (California Code of Regulations, 2019)
    ${ }^{4}$ (Code of Federal Regulations, 2011)

[^1]:    ${ }^{5}$ (Child Population, 2018)

[^2]:    ${ }^{6}$ (CMS Core Sets, 2019)

[^3]:    ${ }^{7}$ (Annual PIT Report, 2019)

[^4]:    ${ }^{8}$ (QuickFacts Humboldt County, 2018)

[^5]:    ${ }^{9}$ (Lake County Community Health Needs Assessments, 2019)

[^6]:    ${ }^{10}$ (Annual PIT Report, 2019)

[^7]:    ${ }^{11}$ (QuickFacts Marin County, 2020)

[^8]:    ${ }^{12}$ (QuickFacts Mendocino County, 2020)

[^9]:    ${ }^{13}$ (Annual PIT Report, 2019)

[^10]:    ${ }^{14}$ (QuickFacts Napa County, 2019)

[^11]:    ${ }^{15}$ (Annual PIT Report, 2019)

[^12]:    ${ }^{16}$ (Siskiyou County Community Health Needs Assessment, 2019)

[^13]:    ${ }^{17}$ (Hard to Count Fact Sheet, 2020)

[^14]:    ${ }^{18}$ (QuickFacts Sonoma County, 2020)

[^15]:    ${ }^{19}$ (Hard-to-Count Fact Sheet, 2020)

[^16]:    ${ }^{20}$ (QuickFacts Yolo County, 2020)

[^17]:    ${ }^{21}$ (National Collaborating Centre for Determinants of Health, 2020)

[^18]:    ${ }^{22}$ (County Health Rankings and Roadmaps, 2019)

[^19]:    ${ }^{23}$ (The LGBT Divide in California, 2016)
    ${ }^{24}$ (The LGBT Divide in California, 2016)
    ${ }^{25}$ (US Transgender Survey, 2015)

[^20]:    ${ }^{26}$ (LGBTQ Coordinating Committee Report, 2016)

[^21]:    27 (Department of HealthCare Services, 2019)

[^22]:    28 (Max Roser, 2019)

[^23]:    ${ }^{29}$ (Rober Wood Johnson Foundation, 2016-2018)
    ${ }^{30}$ (Childhood Obesity Facts, 2019)
    ${ }^{31}$ (Most Recent Asthma Data, 2020)

[^24]:    32 (High Blood Pressure, 2020)

[^25]:    ${ }^{33}$ (Benicia Municipal Code, 2019)
    ${ }^{34}$ (Substance Use in California, 2018)
    ${ }^{35}$ (ODFHP, 2019)
    ${ }^{36}$ (County Health Rankings and Roadmaps, 2019)

[^26]:    ${ }^{37}$ (County Health Rankings and Roadmaps, 2019)

[^27]:    ${ }^{38}$ (Center for Disease Control, 2019)

[^28]:    ${ }^{39}$ (WHO, 2020)

[^29]:    ${ }^{40}$ (U.S. Department of Health and Human Services, 2019)

[^30]:    ${ }^{41}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{42}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{43}$ (Chronic Absenteeism Data, 2019)

[^31]:    ${ }^{44}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{45}$ (Sarah Bohn and Tess Thorman, 2020)

[^32]:    ${ }^{46}$ (County Health Rankings and Roadmaps, 2019)

[^33]:    ${ }^{47}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{48}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{49}$ (County Health Rankings and Roadmaps, 2019)

[^34]:    ${ }^{50}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{51}$ (County Health Rankings and Roadmaps, 2019)
    52 (County Health Rankings and Roadmaps, 2019)
    ${ }^{53}$ (County Health Rankings and Roadmaps, 2019)
    ${ }^{54}$ (California Office of Traffic Safety, 2019)

