# SFHSS 2022 Health Plan Risk Scores

April 13, 2023

Risk Score Report Notes

- Diagnostic Cost Groups (DCG) are the foundation of risk-adjusted payment and analysis methodologies. DxCG Risk Adjustment system is the software that implements these methodologies.

- The DCG models are patient classification systems that help forecast healthcare utilization and costs.

- Risk Scores are based on Claims and Utilization Experience and are predictors of resource consumption and cost.

- Models predict 12-month current (concurrent) and future (prospective) risk. The models are based on a commercial population (Medicare will appear high).

- This report contains three consecutive DCG Time periods to trend the time period. The periods are Oct 2019-Sep 2020 (labeled as 2020 in this report), Oct 2020 – Sep 2021 (labeled as 2021 in this report), and Oct 2021 to Sep 2022 (labeled as 2022 in this report).

- Concurrent Models are indicators of the expected relative cost risk of a patient compared to the average, during the DCG Time Period. They measure the current illness burden and include acute and chronic conditions. Age and Gender have little impact since all conditions are known.

- Prospective Model are indicators of the expected relative cost risk of a patient compared to the average, in the year subsequent to the DCG period. Prospective scores measure the chronic condition illness burden since it affects future cost. Prospective scores pay less attention to current acute conditions that will not affect future cost. Prospective scores include expected risk for potential acute or new conditions based on age and gender distribution. Age/gender has a significant impact since future conditions are unknown.

- Relative Concurrent non-rescaled Scores have better predictive power since they are based on existing conditions versus on assumptions based on age and gender.

- Non-rescaled scores are calibrated to the national population. This report utilizes non-rescaled scores.

- **Health Net CanopyCare claims data not available. Reporting for this plan not included in the report.**

- **PPO administration changed from UnitedHealthcare to Blue Shield in the last 3 quarters of this report. UHC PPO enrollment decreased to only mixed Medicare families in a PPO.**

SFHSS DxCG Risk Scores Executive Summary

- Notable decreases were observed in the risk scores for the Non-Medicare retiree population. Research is ongoing to identify the causes. To a lesser degree, a decrease in risk score was also observed for the Medicare population. Non-Utilizers in the Non-Medicare population are contributing to the lower risk score. The prospective risk score for the actives was unchanged from previous year but has increased over the pre-Covid-19 scores.

- Musculoskeletal Disorders are the clinical condition which is the largest driver of the prospective health risk for the Non-Medicare populations. For the Medicare population, Cardiovascular Disorder is the largest driver to prospective risk and Musculoskeletal Disorder is the 2nd largest driver.

- Actual PMPY was greater than expected when adjusting for risk in the PPO plans and the BSC HMO plans. In comparison to previous period, BSC Trio and BSC Access+ experienced the greatest variance of actual to expected costs. The risk scores for early retirees in the PPO has dropped since the change in administration from UHC to BSC. Likely this is a result of individuals who are not yet captured in the data. It is expected that this score will increase as more data becomes available

- Disparities in risk scores amongst SFHSS race groups are evident.

- This version of the annual risk scores report introduces insight to SFHSS populations residing in the CDC defined Socially Vulnerable areas. Utilizing recommendations from the CDC, this data has been cross-walked from census tract to zip code using Housing and Urban Development Data. Drivers of risk for members in these areas are consistent with overall population health risk of Musculoskeletal and Cardiovascular.

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# SFHSS Risk Scores Plan Overview: Concurrent Scores 2019-2022
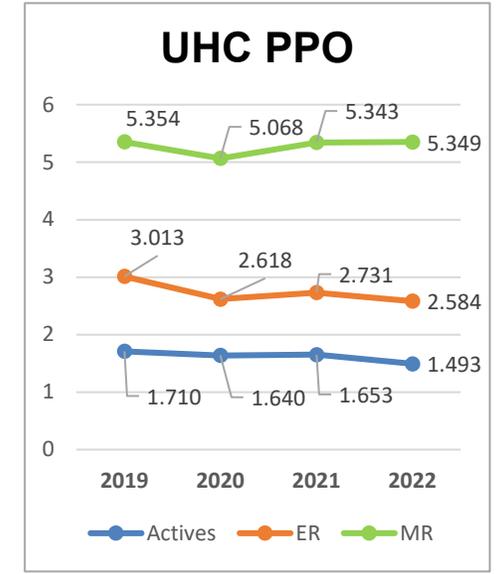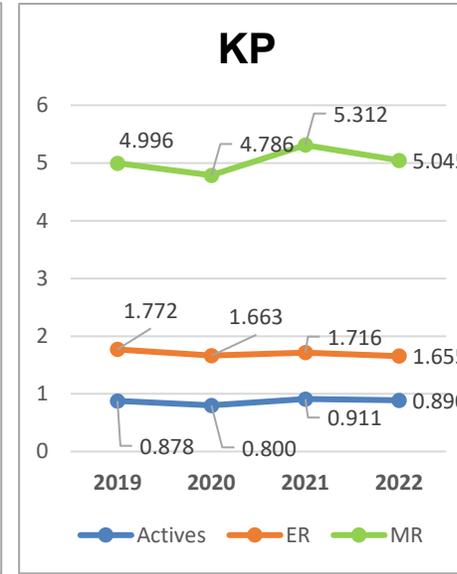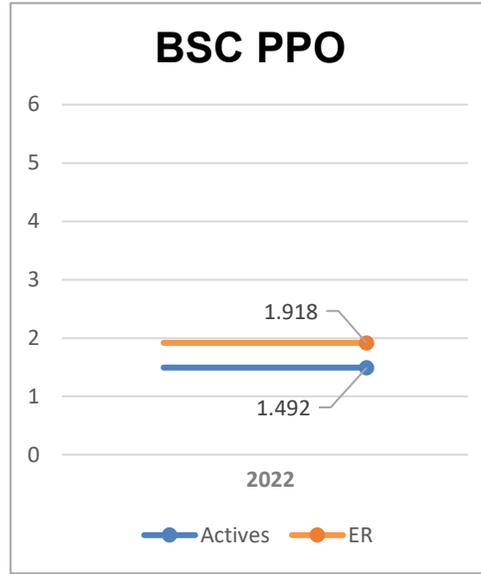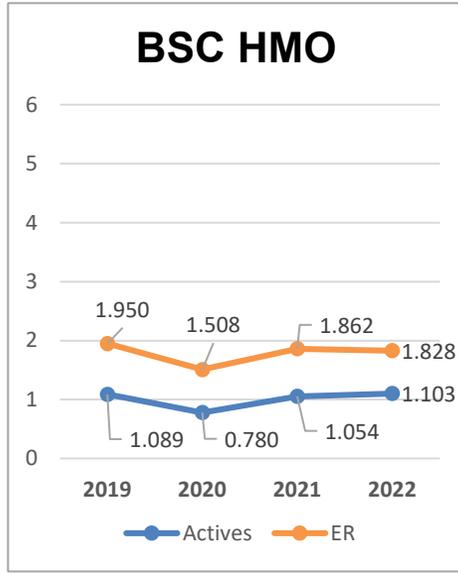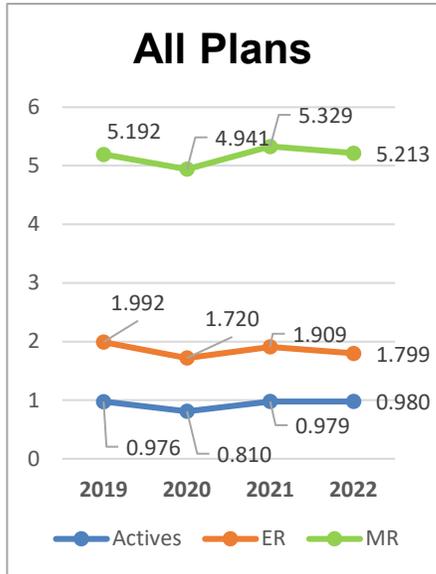
Overall, the SFHSS population experienced decreases in concurrent risk scores except for the Blue Shield HMO Active and the UnitedHealthcare Medicare population whose risk scores increased over previous period.

For 3 quarters of this reporting period, BSC assumed administration for the PPO and has 3 quarters of data represented in this report. The BSC PPO early Retiree risk score is considerably less than the 2021 score when administered by UHC. Previously reported concurrent risk score for the UHC PPO Actives was 1.653 and for Early Retirees was 2.731. Likely this is a result of individuals who are not yet captured in the data. It is expected that this score will increase as more data becomes available. UHC PPO enrollment decreased to 754 lives in mixed Medicare families only.

BSC Actives Current period concurrent risk score for Trio is 1.040 and for Access+ is 1.134. BSC Early Retiree Concurrent risk score for Trio is 1.771 and for Access+ is 1.862

SFHSS Risk Scores Plan Overview: Prospective Scores 2019-2022
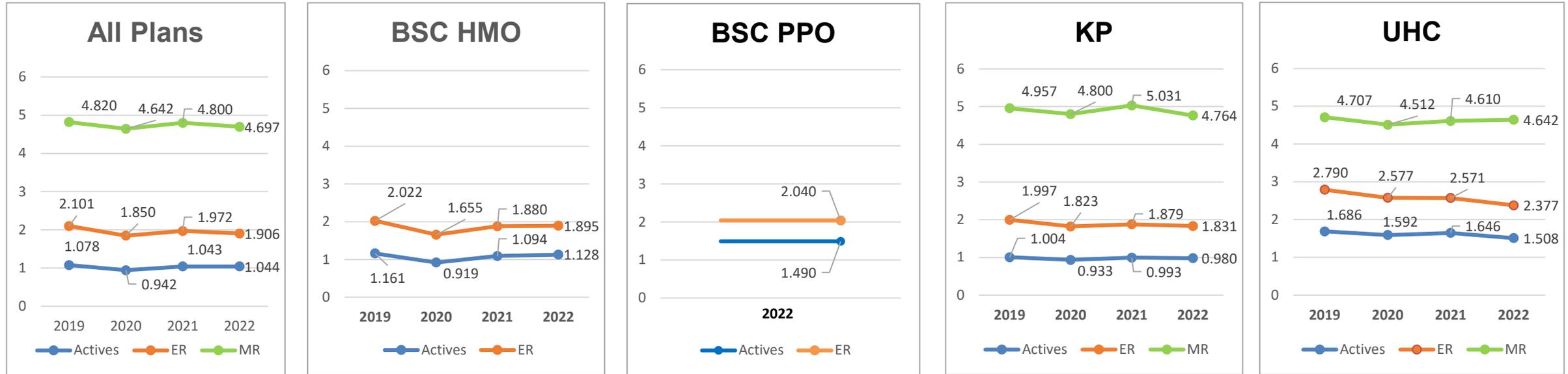
The observations in the prospective scores are consistent with findings for the Concurrent scores. Overall, the SFHSS population experienced decreases in prospective scores except for the Blue Shield HMO Active and the UnitedHealthcare Medicare population whose risk scores increased over previous period.

For 3 quarters of this reporting period, BSC assumed administration for the PPO and has 3 quarters of data represented in this report. Previously reported prospective risk score for the UHC PPO Actives was 1.646 and for Early Retirees was 2.571. Likely this is a result of individuals who are not yet captured in the data. It is expected that this score will increase as more data becomes available. UHC PPO enrollment decreased to 754 lives in mixed Medicare families only.

BSC Actives current period prospective risk score for Trio is 1.110 and for Access+ is 1.136. BSC Early Retiree prospective risk score for Trio is 1.878 and for Access+ is 1.905.

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SFHSS Risk Scores Population Overview: **Concurrent** Scores 2019-2022

Actives

2019	0.976
2020	0.810
2021	0.979
2022	0.978

Early Retirees

2019	1.992
2020	1.720
2021	1.909
2022	1.798

Medicare Retirees

2019	5.192
2020	4.941
2021	5.329
2022	5.213
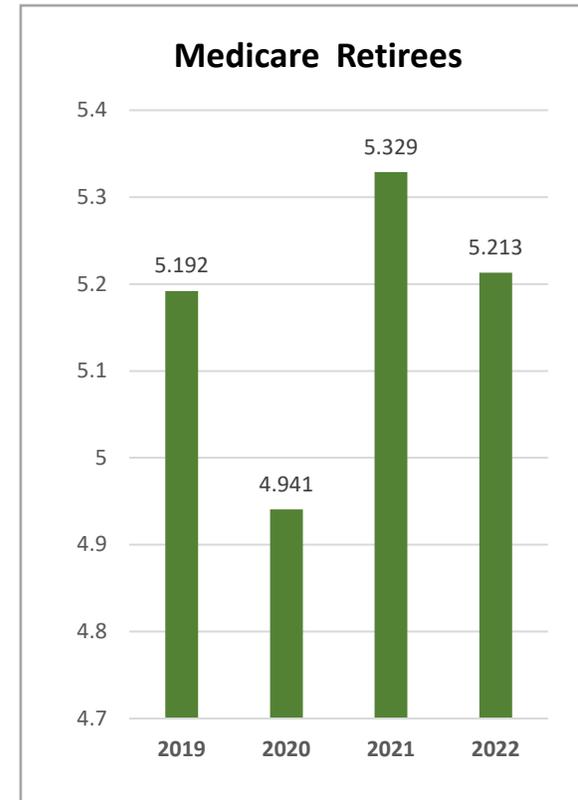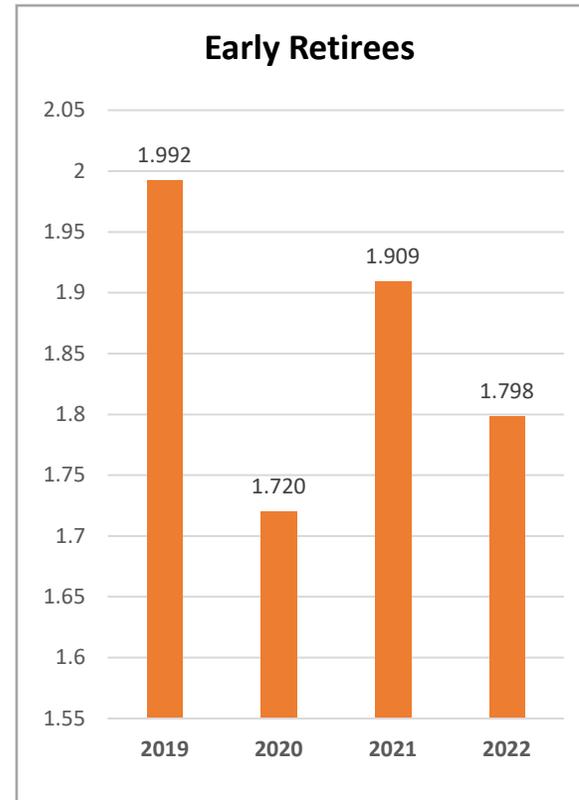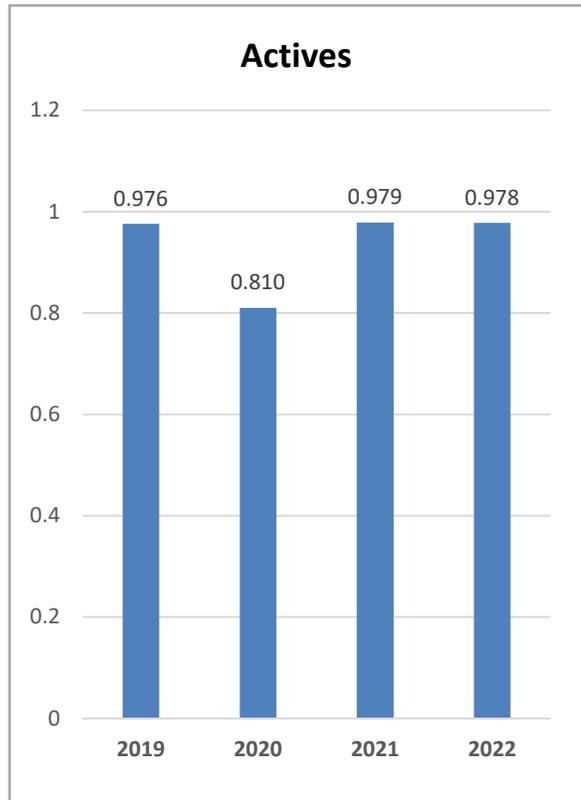
Scores indicate that the Active population risk score decreased marginally over 2021. and is consistent with all non-Covid-19 years (.976 2018, .979 2019)

Early Retirees' risk scores are lower than 2021. Despite increases in claims and patients in 2022 over previous year, the number of non utilizers increased which results in minimal scores for those individuals. The 2022 value is the 2nd lowest score (lowest being Covid-19 claim suppression) since SFHSS began measuring risk of this population

Overall Medicare population risk scores decreased driven by the decreases evidenced in the Kaiser Permanente Medicare population.

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SFHSS Risk Scores Population Overview: **Prospective** Scores 2019-2022

Actives

2019	1.078
2020	0.942
2021	1.043
2022	1.043

Early Retirees

2019	2.101
2020	1.850
2021	1.972
2022	1.906

Medicare Retirees

2019	4.820
2020	4.642
2021	4.800
2022	4.697
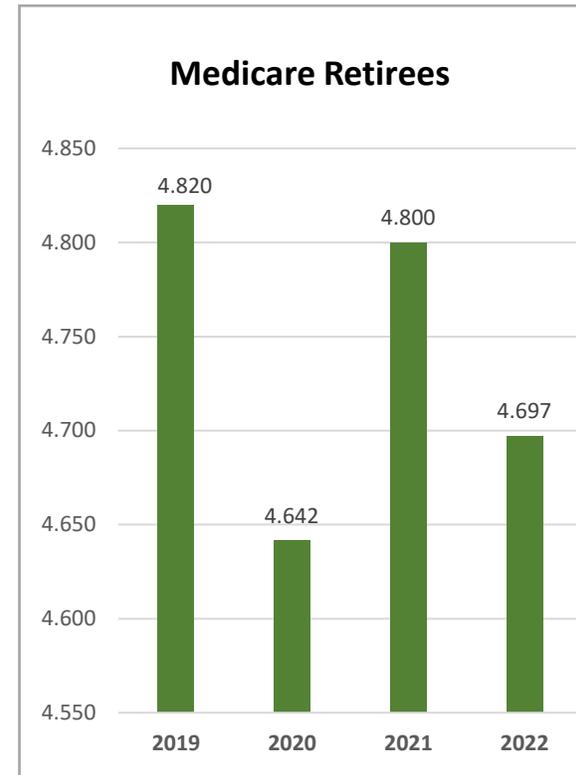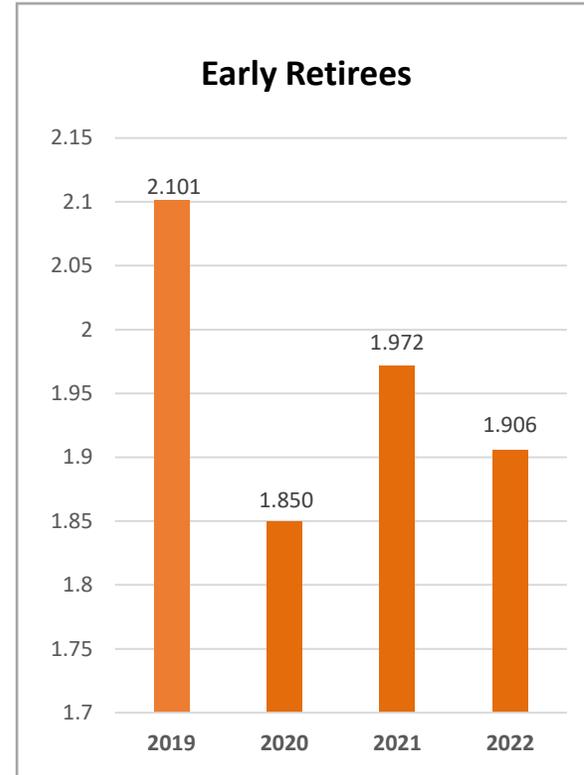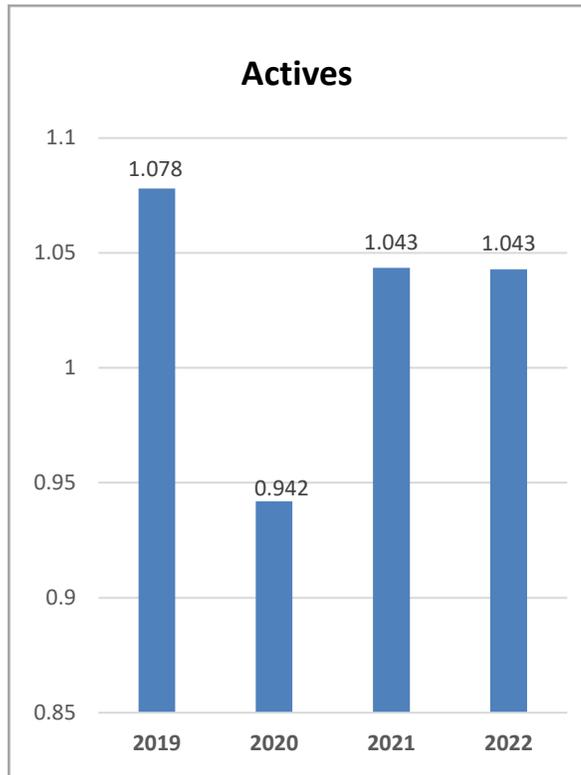
Active population prospective risk scores have remained steady the last two years. Prior to Covid-19, risk scores for this population were at 1.08 so while remaining unchanged over the last two years the risk has increased over time.

The Early Retirees risk score reduced over previous period and is at it's lowest since SFHSS began risk score reporting from the APCD (High value was 2.176 for 2016). The number of non-utilizers increased over prior period which reduces the risk score to age/gender basis.

Medicare Retirees risk scores also improved from previous period and are at the lowest since SFHSS began reporting for this population in 2018 (4.820)

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Members and Cost Distribution By Risk Category
Commercial Population

Risk bands group patients in risk categories from **Healthy** to **In Crisis.**

All Enrolled Members

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

47%
25%
16%
9%
2%

■ In Crisis ■ Struggling ■ At Risk ■ Stable ■ Healthy

Cost Per Member Per Year

100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%

1%
5%
2%
14%
79%

■ In Crisis ■ Struggling ■ At Risk ■ Stable ■ Healthy
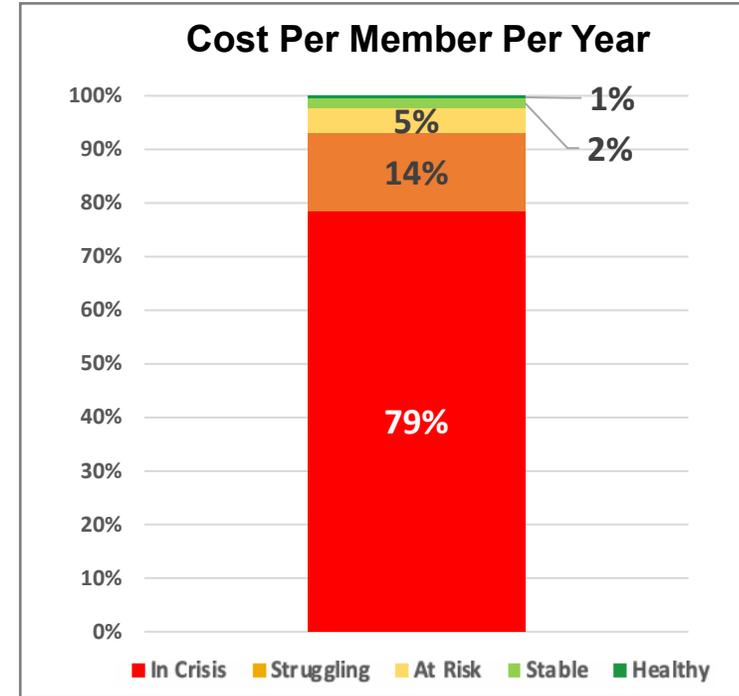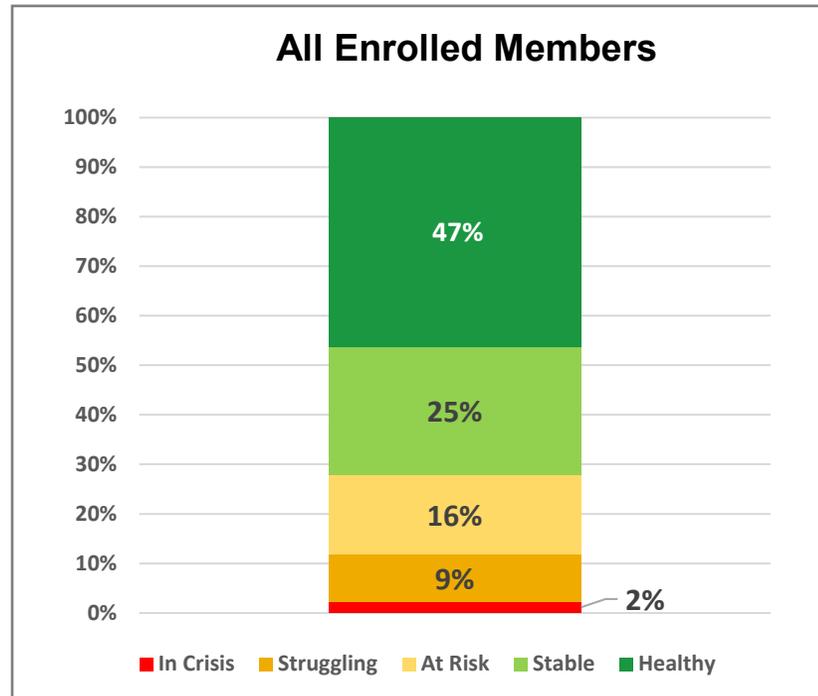
72% of the Commercial population are **Healthy & Stable** and their health costs are around 3%.

In Crisis members are 2% and cost 79%.

Healthy patients are infrequent or non-utilizers being treated for the occasional low-severity acute conditions.
Stable patients are somewhat active utilizers being treated for low-severity acute conditions.
At Risk patients are active utilizers most often being treated for medium severity acute conditions and low severity chronic conditions.
Struggling patients are heavy utilizers most often being treated for high severity acute conditions and medium severity chronic conditions.
In Crisis patients are heavy utilizers most often being treated for multiple severe acute and/or chronic conditions.

Hierarchical Condition Categories: Top 10 Costs
Commercial Population

- Hierarchical condition categories (HCCs) are groups of diagnosis that directly impact how much it may cost to pay for covered care.

- HCCs ensure that the most predictive manifestation of each distinct disease is identified.

- HCC is a category of chronic medical conditions that share similar costs.

- HCCs are used in risk adjustment models.

Top HCC % of Costs

Legend:
- 376 ONC.20 Chemotherapy/Immunotherapy
- 205 RAR.20 Respirator Dependence/Tracheostomy Status
- 388 SPP .35 Other Postsurgical States/Elective Surgery/Aftercare
- 222 CHF .30 Congestive Heart Failure
- 350 LBW .15 Extremely Low Birthweight Neonates (<1,000 grams)
- 267 COP .30 Asthma
- 3 INF .30 HIV/AIDS
- 168 ANG .40 Major Depression
- 10 CAS .20 Secondary Cancers Except Lymph Node/Disseminated Cancer
- 292 CKD .20 End Stage Renal Disease

End Stage Renal Disease and Secondary cancers constitute the highest spend at 4% each of the total cost servicing 0.10% and 0.20% respectively, of members, followed by Major Depression at 2% spend for 2.25% of the membership.

Major Health Conditions and Disorders by Risk Band Profiles
Commercial Population

Percent Risk Contribution is the weighted average percent risk contribution to indicate how much a person's risk is driven by this condition.

Musculoskeletal Disorder contributes to the largest segment of costs (14%), followed by Neoplasms (9%), and then Diabetes, Cardiovascular Disorder, and Psychiatric Disorder each at 7%

Chart values:
- In Crisis (red): 2%
- Struggling (orange): 9%
- At Risk (yellow): 16%
- Stable (light green): 26%
- Healthy (dark green): 47%

Legend: Healthy | Stable | At Risk | Struggling | In Crisis

In Crisis (red):
Neoplasms
Urinary System Disorder
Cardiovascular Disorder
Respiratory Disorder
Neurological Disorder

Struggling (orange):
Musculoskeletal Disorder
Diabetes
Cardiovascular Disorder
Psychiatric Disorder
Neurological Disorder

At Risk (yellow):
Musculoskeletal Disorder
Diabetes
Psychiatric Disorder
Cardiovascular Disorder
Gastrointestinal Disorder

Stable (light green):
Musculoskeletal Disorder
Psychiatric Disorder
Gastrointestinal Disorder
Cardiovascular Disorder
Respiratory Disorder

Healthy (dark green):
Musculoskeletal Disorder
Psychiatric Disorder
Infections
Cardiovascular Disorder
Trauma and Adverse Effects

Hierarchical Condition Categories: Top 10 Prevalence
Medicare Population

- Hierarchical Condition Categories (HCCs) are used to risk adjust payments for Medicare Advantage plans.

- HCCs allow plans to be reimbursed on actual costs of care for each individual beneficiary rather than an average per-capita payment for everyone.

5% of Medicare members have been diagnosed with Diabetes with Renal Manifestation and 4% of Medicare members have Congestive Heart Failure, Diabetes with Ophthalmology Manifestation and Vascular Diseases.

Top HCC by Prevalence

Chart values (top to bottom): 1%, 2%, 2%, 4%, 3%, 4%, 3%, 5%, 3%, 4%
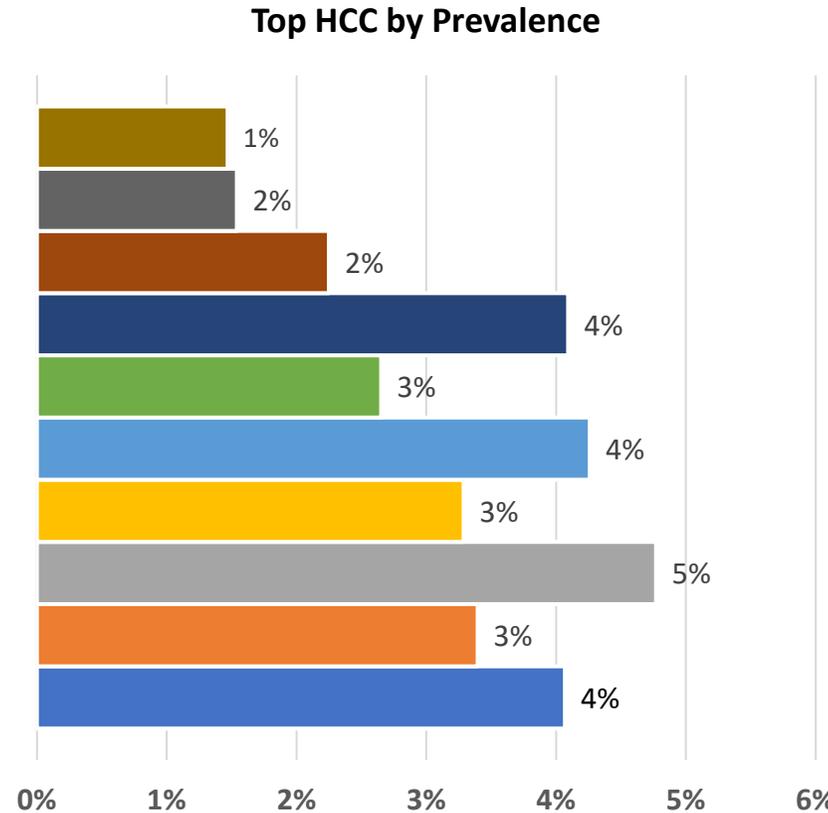
Legend:
- 10 CAS .20 Secondary Cancers Except Lymph Node/ Disseminated Cancer
- 120 MIA .30 Rheumatoid Arthritis and Inflammatory Connective Tissue Disease
- 42 DMC .50 Diabetes with Diabetes with Neurologic or Peripheral Circulatory Manifestation
- 43 DMC .40 Diabetes with Ophthalmologic Manifestation
- 230 ARR .20 Specified Heart Arrhythmias
- 250 VSO .30 Arteriosclerosis/Aneurism/Other Vascular Disease
- 85 KNE .40 Osteoarthritis of Knees
- 41 DMC .30 Diabetes with Renal Manifestation
- 96 BAK .25 Spinal Stenosis, Acquired Spondylolisthesis Lower Back/NOS
- 222 CHF .30 Congestive Heart Failure

Major Health Conditions and Disorders by Risk Band Profiles
Medicare Population

The DCG model creates a Percent Contribution for each person which indicates how much a person's risk is driven by a certain condition.

Cardiovascular Disorder in this population is the largest percent contributor to the risk score (18%).

Musculoskeletal Disorders are prevalent in all risk bands in the Medicare population and is the condition contribution 13% to the risk score. Neoplasms round out the top 3 condition to the Medicare population comprising 11% of the risk score.
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Chart values (bottom to top):
- 6%
- 13%
- 20%
- 27%
- 35%

Legend: Healthy, Stable, At Risk, Struggling, In Crisis

In Crisis (red):
Neoplasms
Cardiovascular Disorder
Urinary System Disorder
Musculoskeletal Disorder
Respiratory Disorder

Struggling (orange):
Cardiovascular Disorder
Musculoskeletal Disorder
Diabetes
Neurological Disorder
Neoplasms

At Risk (yellow):
Cardiovascular Disorder
Diabetes
Musculoskeletal Disorder
Neurological Disorder
Gastrointestinal Disorder

Stable (light green):
Cardiovascular Disorder
Musculoskeletal Disorder
Gastrointestinal Disorder
Metabolic Disorder
Respiratory Disorder

Healthy (green):
Musculoskeletal Disorder
Infections
Metabolic Disorder
Cardiovascular Disorder
Trauma and Adverse Effects

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Relative Commercial Plan Performance – Actual PMPY vs Expected PMPY
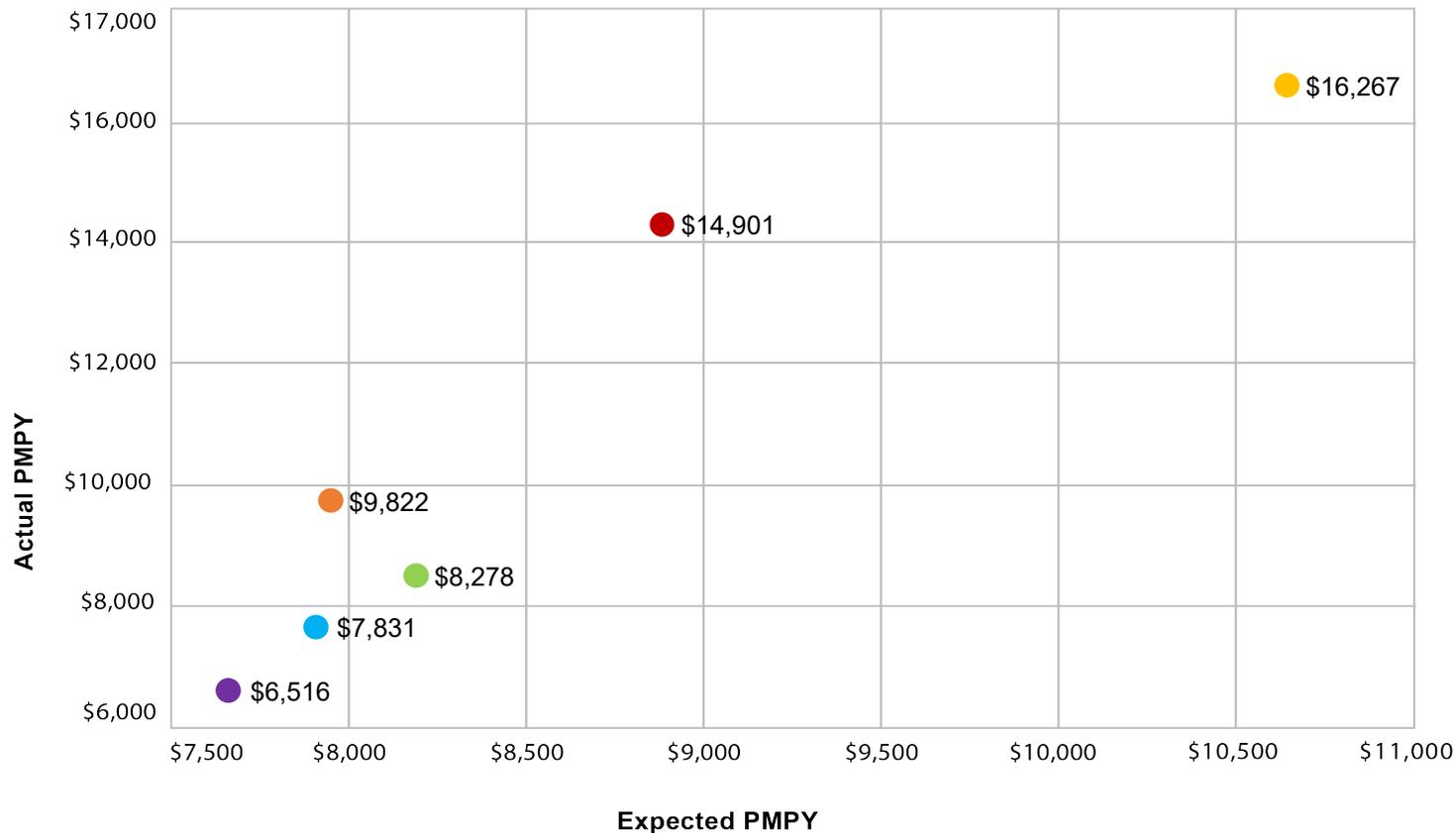
All Plans
Expected PMPY: $7,858
Actual PMPY: $7,831
Current Variance:$-27
Actual Variance $-15

Kaiser Permanente
Expected PMPY: $7,686
Actual PMPY: $6,516
Current Variance:$-1,170
Previous Variance:$-867

BSC Access+
Expected PMPY: $7,919
Actual PMPY: $9,822
Current Variance:$1,903
Previous Variance: $1,040

BSC Trio
Expected PMPY: $8,159
Actual PMPY: $8,278
Current Variance:$119
Previous Variance:$64

BSC PPO
Expected PMPY $9,233
Actual PMPY: $14,901
Current Variance:$5,668
Previous Variance: n/a

UHC PPO
Expected PMPY $10,789
Actual PMPY: $16,267
Current Variance:$5,478
Previous Variance:$7,827

Actual PMPY was greater than expected when adjusting for risk for BSC Access+, BSC Trio, BSC PPO & UHC PPO.
Actual PMPY was less than expected when adjusting for risk for Kaiser Permanente.

BSC PPO data is based on 3 quarters of data. As noted the Early Retiree risk score is lower than the previous period when the PPO was administered by UHC. Since the PPO Risk is lower than expected, likely due to non-utilizers, the expected PMPY which is adjusted for risk is impacted.

SFHSS Employees – Prospective Risk Score by Race / Ethnicity

Actives

Early Retirees

Medicare Retirees

Legend:
- Black
- American Indian/Alaskan Native
- White
- Hispanic
- Filipino
- Multiracial
- Asian
- Native Hawaiian/Pacific Islander
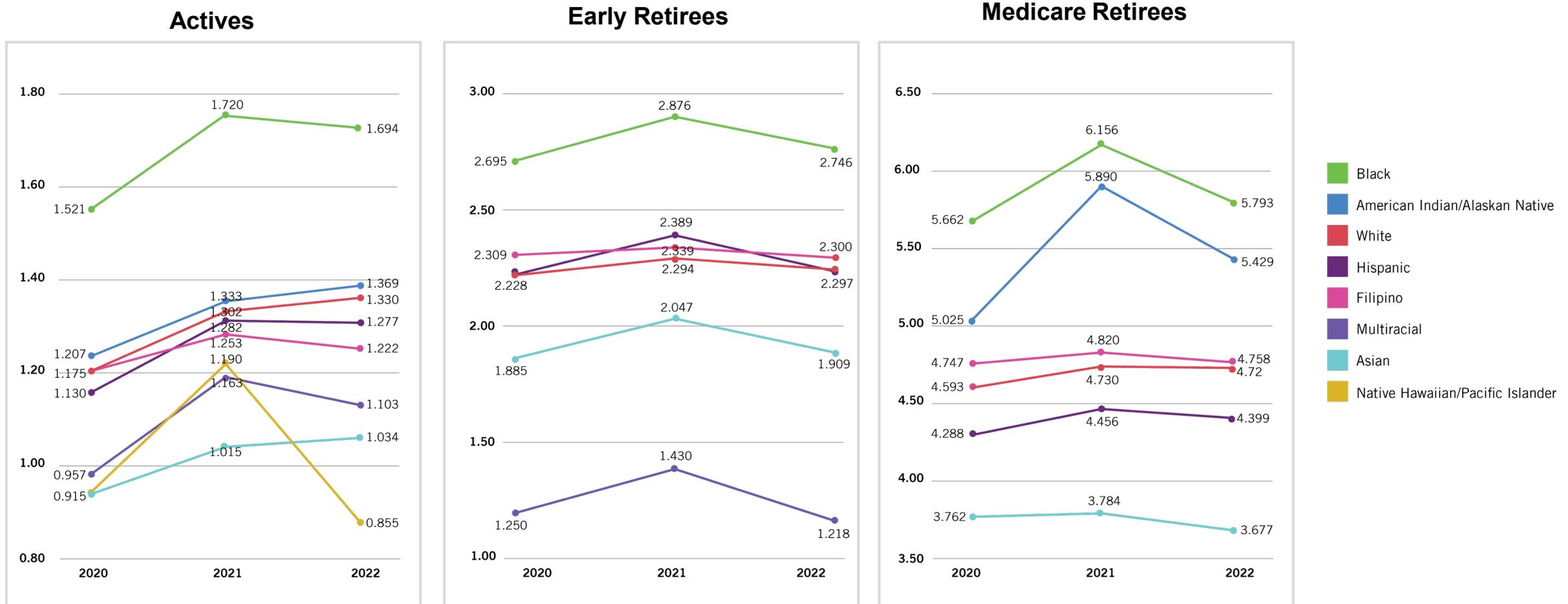
Not all races represented in every population due to population size.

Social Vulnerability Index (SVI)

Socioeconomic Status
- Below 150% Poverty
- Unemployed
- Housing Cost Burden
- No High School Diploma
- No Health Insurance

Household Characteristics
- Aged 65 & Older
- Aged 17 & Younger
- Civilian with a Disability
- Single-Parent Households
- English Language Proficiency

Racial & Ethnic Minority Status
- Hispanic or Latino (of any race)
- Black or African American, Not Hispanic or Latino
- Asian, Not Hispanic or Latino
- American Indian or Alaska Native, Not Hispanic or Latino
- Native Hawaiian or Pacific Islander, Not Hispanic or Latino
- Two or More Races, Not Hispanic or Latino
- Other Races, Not Hispanic or Latino

Housing Type & Transportation
- Multi-Unit Structures
- Mobile Homes
- Crowding
- No Vehicle
- Group Quarters

- SVI has been created for CDC to help identify communities that will need support during a hazardous event.

- SVI indicates the relative vulnerability of every U.S. Census tract. Census tracts are subdivisions of counties for which the Census collects statistical data. SVI ranks the tracts on 16 social factors, including unemployment, racial and ethnic minority status, and disability, and further groups them into four related themes. Thus, each tract receives a ranking for each Census variable and for each of the four themes as well as an overall ranking.

- On CDC's recommendation SFHSS cross walked the Census Tracts in SVI to Zip Codes using HUD USPS ZIP Code Crosswalk Files.

Social Vulnerability Index – San Francisco Map
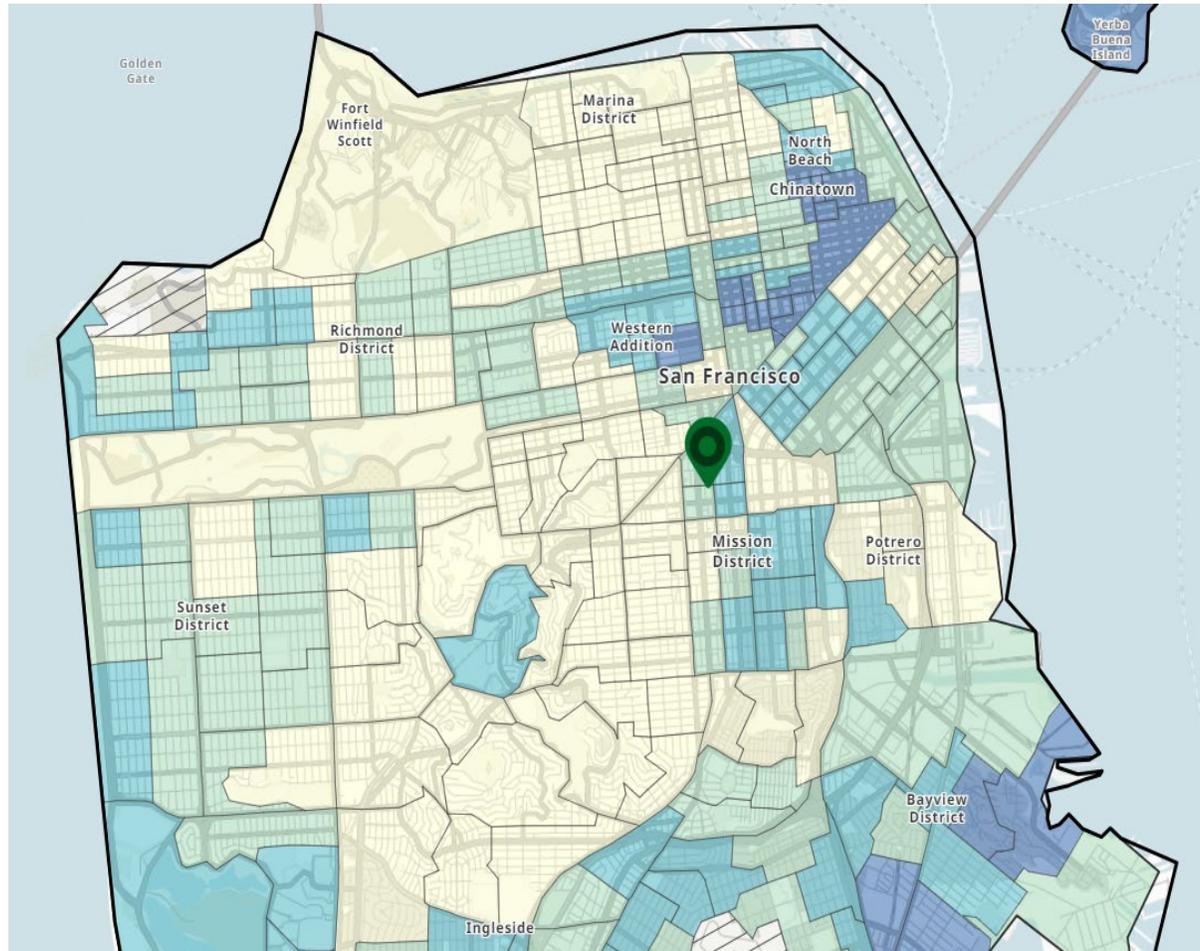
The highest percentage of SFHSS lives reside in San Francisco county. This map ranks the census tracts by the level of vulnerability in the San Francisco area.

The dark blue areas are the most vulnerable communities here.

Level of Vulnerability

- Low
- Low-Medium
- Medium-High
- High

Demographics in High Vulnerability San Francisco Zip Codes – **Commercial**

ZIP CODE: 94102
Risk Score: 1.097, 1.219
No of Lives: 702
Median Age: 40
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.5
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

ZIP CODE: 94108
Risk Score: 0.830, 1.115
No of Lives: 207
Median Age: 43
Largest Ethnic/Race Group : Asian
Dominant Gender: Female
Family Size: 1.5
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

ZIP CODE: 94109
Risk Score: 1-149, 1.241
No of Lives: 853
Median Age: 43
Largest Ethnic/Race Group : White
Dominant Gender: Female
Family Size: 1.4
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder
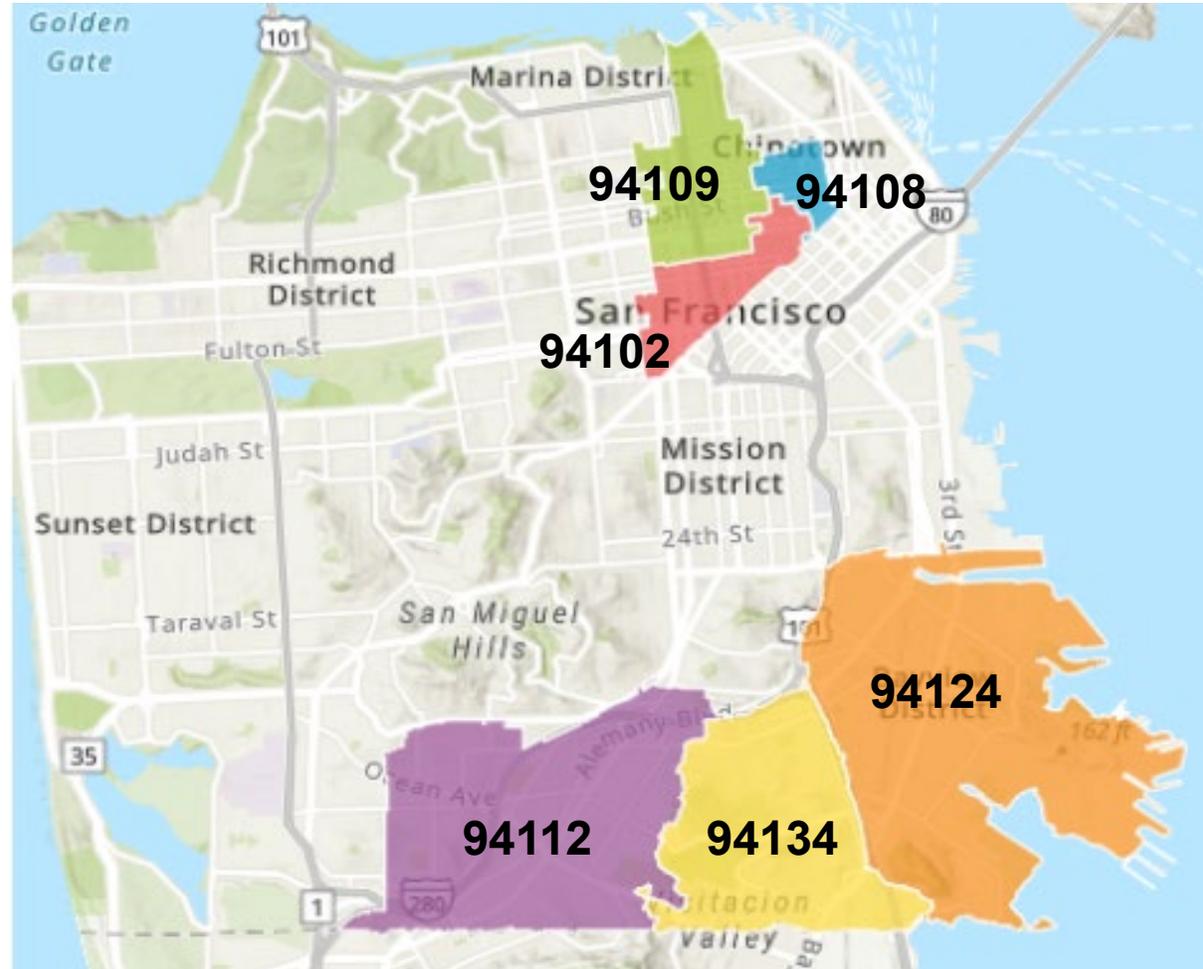
ZIP CODE: 94112
Risk Score: 0.912,1,030
No of Lives: 5559
Median Age: 39
Largest Ethnic/Race Group: Asian
Dominant Gender: Female
Family Size: 1.9
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

ZIP CODE: 94124
Risk Score: 1.158, 1.198
No of Lives: 2660
Median Age: 37
Largest Ethnic/Race Group: Black
Dominant Gender: Female
Family Size: 1.9
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

ZIP CODE: 94134
Risk Score: 0.892, 1.001
No of Lives: 2847
Median Age: 38
Largest Ethnic/Race Group: Asian
Dominant Gender: Female
Family Size: 1.9
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

Demographics in High Vulnerability San Francisco Zip Codes – **Medicare**

ZIP CODE: 94102
Risk Score: 7.176, 6.146
No of Lives: 146
Median Age: 75
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.1
Majority Enrollment: KP
Risk Contributor: Urinary System Disorder

ZIP CODE: 94108
Risk Score: 5.171, 4.581
No of Lives: 51
Median Age: 76
Largest Ethnic/Race Group : Asian
Dominant Gender: Female
Family Size: 1.1
Majority Enrollment: UHC
Risk Contributor: Neoplasms

ZIP CODE: 94109
Risk Score: 5.987, 4.906
No of Lives: 342
Median Age:78
Largest Ethnic/Race Group : White
Dominant Gender: Female
Family Size: 1.1
Majority Enrollment: UHC
Risk Contributor: Cardiovascular Disorder
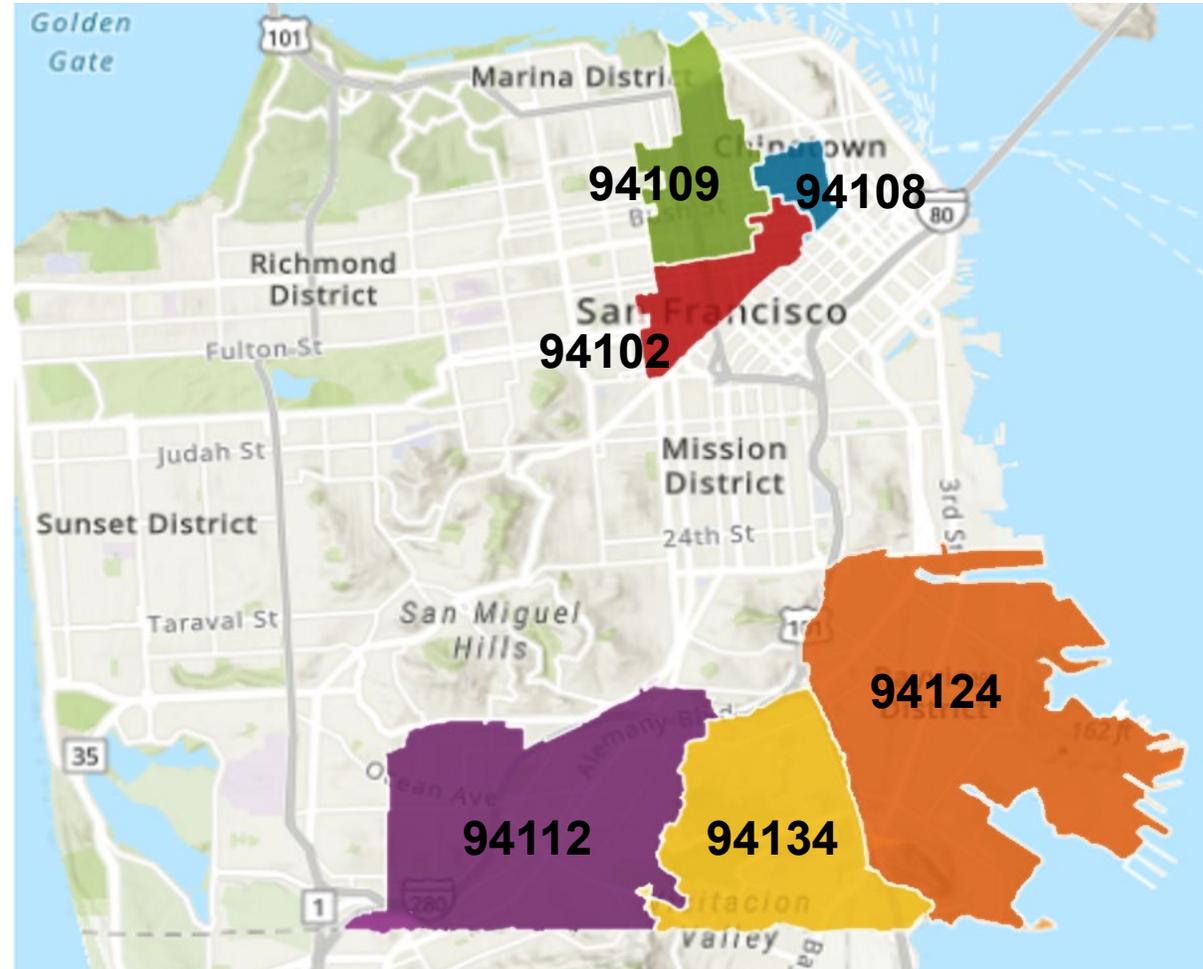
ZIP CODE: 94112
Risk Score: 4.971, 4.573
No of Lives: 1429
Median Age: 75
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.2
Majority Enrollment: UHC
Risk Contributor: Cardiovascular Disorder

ZIP CODE: 94124
Risk Score: 5.776, 5,155
No of Lives: 445
Median Age: 74
Largest Ethnic/Race Group: Black
Dominant Gender: Female
Family Size: 1.1
Majority Enrollment: KP
Risk Contributor: Cardiovascular Disorder

ZIP CODE: 94134
Risk Score: 5.156, 4.918
No of Lives: 607
Median Age: 75
Largest Ethnic/Race Group: Asian
Dominant Gender: Female
Family Size: 1.2
Majority Enrollment: KP
Risk Contributor: Cardiovascular Disorder

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Demographics in High Risk Score Areas outside SF – **Commercial**

ZIP CODE: 95327
Risk Score: 3.877, 3.411
No of Lives: 23
Median Age: 36
Largest Ethnic/Race Group: White
Dominant Gender: Male
Family Size: 2.5
Majority Enrollment: BSC PPO
Risk Contributor: Urinary System Disorder

ZIP CODE: 95758
Risk Score: 3.091, 2.015
No of Lives: 57
Median Age: 40
Largest Ethnic/Race Group: Black
Dominant Gender: Female
Family Size: 2.3
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

ZIP CODE: 95210
Risk Score: 2.733, 2.022
No of Lives: 25
Median Age: 34
Largest Ethnic/Race Group: Black
Dominant Gender: Female
Family Size: 2.4
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder
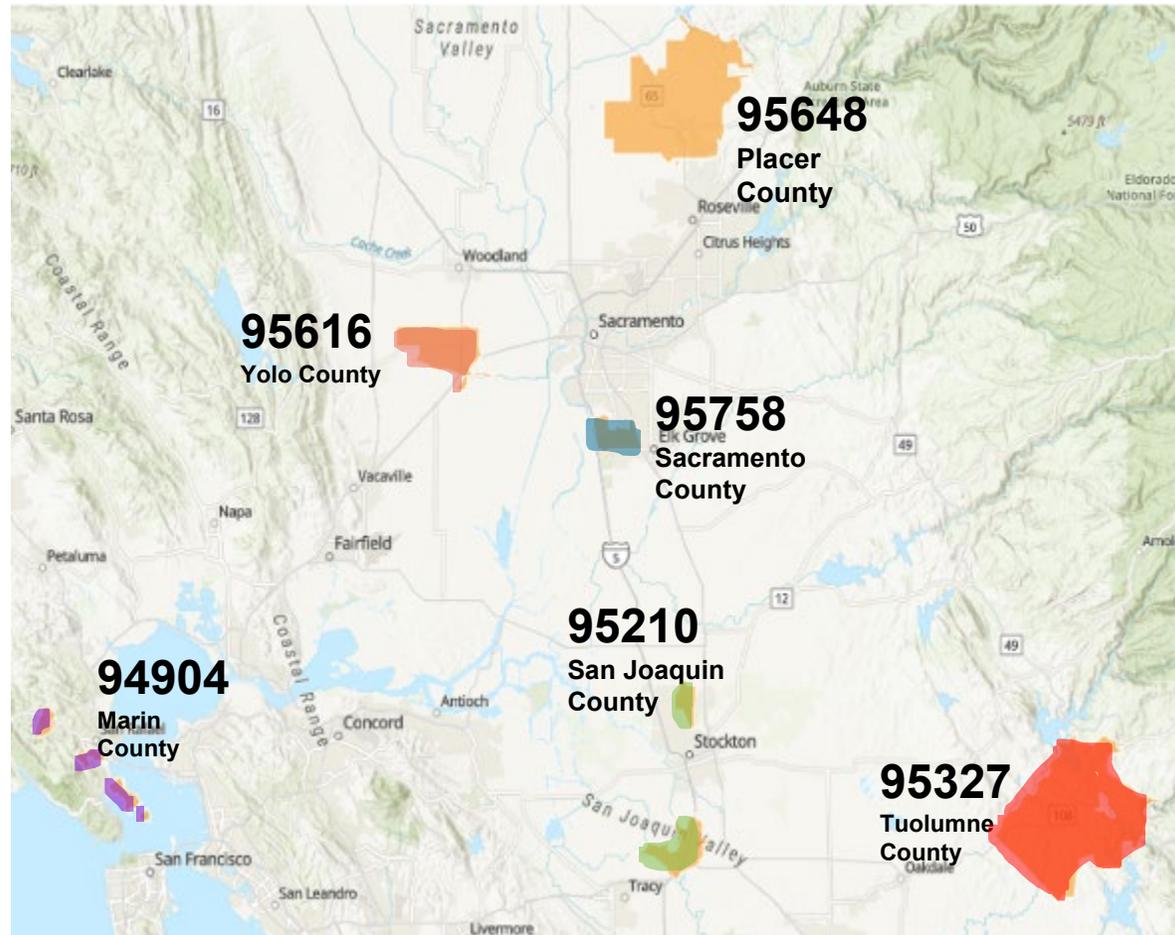
ZIP CODE: 94904
Risk Score: 2.506, 2.043
No of Lives: 84
Median Age: 40
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 2.1
Majority Enrollment: BSC ACCESS+
Risk Contributor: Neoplasms

ZIP CODE: 95616
Risk Score: 2.399, 2.404
No of Lives: 21
Median Age: 31
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 2.6
Majority Enrollment: KP
Risk Contributor: Urinary System Disorder

ZIP CODE: 95648
Risk Score: 2.143, 1.738
No of Lives: 56
Median Age: 38
Largest Ethnic/Race Group: White
Dominant Gender: Male
Family Size: 2.7
Majority Enrollment: KP
Risk Contributor: Musculoskeletal Disorder

95648 Placer County
95616 Yolo County
95758 Sacramento County
95210 San Joaquin County
94904 Marin County
95327 Tuolumne County

Demographics in High Risk Score Areas outside SF – **Medicare**

ZIP CODE: 95327
Risk Score: 9.223 6.951
No of Lives: 24
Median Age: 76
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.3
Majority Enrollment: UHC MA PPO
Largest Risk Contributors: Neoplasms

ZIP CODE: 95758
Risk Score: 7.746 5.707
No of Lives: 60
Median Age: 75
Largest Ethnic/Race Group: Black
Dominant Gender: Female
Family Size: 1.2
Majority Enrollment: KP
Risk Contributor: Cardiovascular Disorder

ZIP CODE: 94920
Risk Score: 6.013 4.461
No of Lives: 43
Median Age: 80
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.4
Majority Enrollment: UHC MA PPO
Risk Contributor: Cardiovascular Disorder
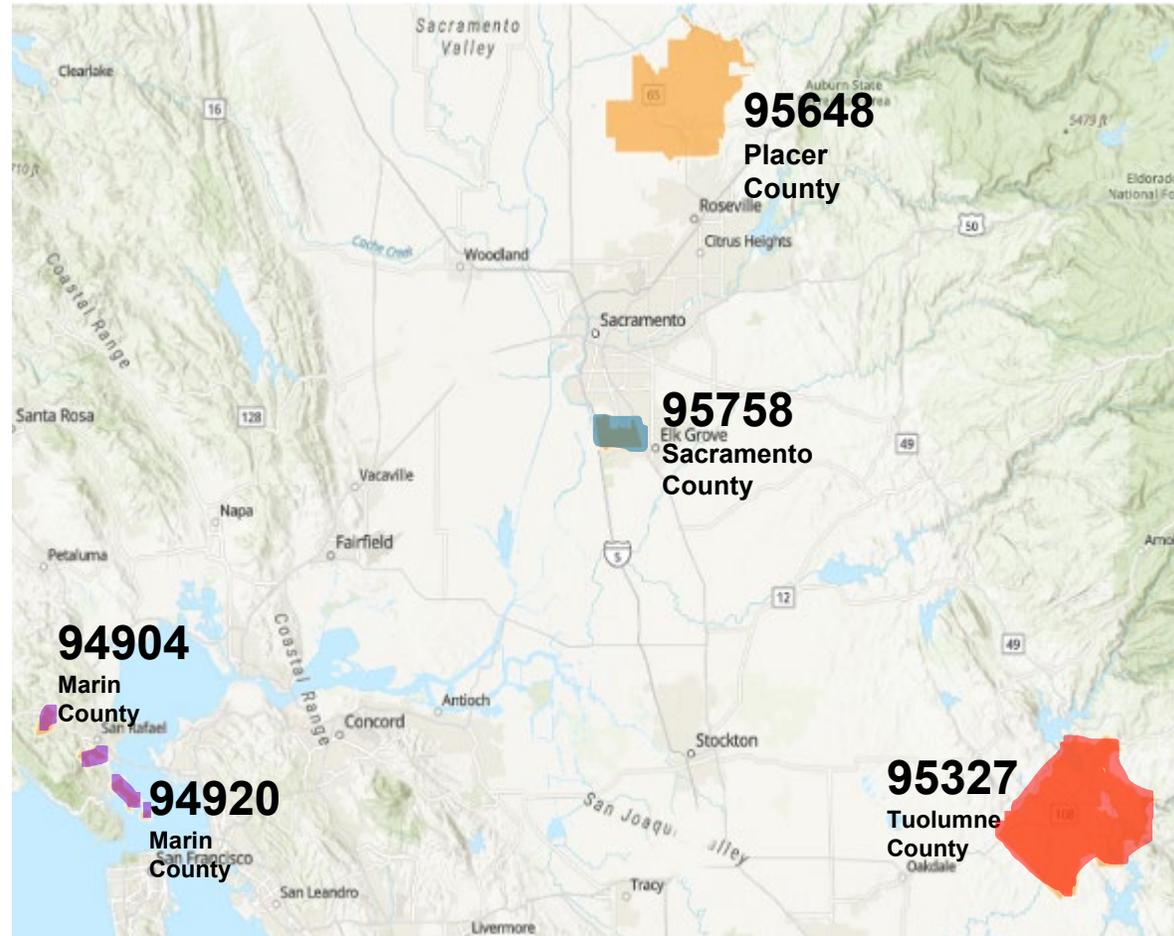
ZIP CODE: 95648
Risk Score: 4.983 5.160
 No of Lives: 72
Median Age: 78
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.3
Majority Enrollment: KP
Risk Contributor: Cardiovascular Disorder

ZIP CODE: 94904
Risk Score: 4.720 4.261
No of Lives: 66
Median Age: 78
Largest Ethnic/Race Group: White
Dominant Gender: Female
Family Size: 1.3
Majority Enrollment: UHC MA PPO
Risk Contributor: Cardiovascular Disorder

95648
Placer County

95758
Sacramento County

94904
Marin County

94920
Marin County
San Francisco County

95327
Tuolumne County

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Workstreams and Next Steps

Summary & Key Findings	Actions & Workstreams
Lower risk scores for the Non-Medicare population, likely driven by low and non utilizers.	▪ Performance guarantees with carriers focus on HEDIS and preventative care ▪ SFHSS Wellbeing & Communications
Disparities in health within SFHSS populations (e.g. Race, Gender, Department).	▪ Racial Equity Action Plan ▪ Population and Social Health Strategies ▪ SFHSS Wellbeing & Communications ▪ Transmission of race information to carriers
Musculoskeletal disorders continue to be the largest contributor to risk scores in the SFHSS population.	▪ Evaluate cost effective methods for treating MSK conditions
ESRD Accounts for 4% of costs	▪ Ensure plans are proactive in seeking Medicare eligibility

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Appendix

Top 10 SF Risk Scores by Zip Code & Population with SVI Category

Commercial Population

1. 94105 – Low to Medium-High
2. 94130 – High
3. 94114 – Low
4. 94115 – Low to High
5. 94124 – High
6. 94109 – High
7. 94123 – Low
8. 94129 – Low-Medium
9. 94102 – High
10. 94131 – Low-Medium to Medium-High

Medicare Retirees

1. 94102 – High
2. 94109 – High
3. 94124 – High
4. 94107 – Low-Medium to Medium High
5. 94115 – Low to High
6. 94110 – Low-Medium to High
7. 94132 – High
8. 94117 – Low-Medium
9. 94108 – High
10. 94134 – High

SVI is assigned based on census tract. Multiple census tracts exist per zip code which can lead to multiple SVI categories when viewing the data by zip code.

Top Risk Scores by Zip Code Outside SF with SVI Category

Commercial Population

1. 95648 – Low to Medium-High
2. 95616 – Low to Low-Medium
3. 95758 – Low to High
4. 94904 – Low to Low-Medium
5. 95210 – Medium-High to High
6. 95327 – Medium-High

Medicare Retirees

1. 95648 – Low to Medium-High
2. 95758 – Low to High
3. 94904 – Low to Low-Medium
4. 94920 – Low to Low-Medium
5. 95327 – Medium-High

SVI is assigned based on census tract. Multiple census tracts exist per zip code which can lead to multiple SVI categories when viewing the data by zip code.

Risk Band Profiles by Age & Gender Cohort

HEALTHY			
Age-Band	Female	Male	Total
	20,159	23,914	44,073
Ages < 1	213	162	376
Ages 1-4	1,187	948	2,135
5-14	3,672	3,725	7,397
15-24	3,453	4,355	7,807
25-34	2,098	2,793	4,891
35-44	3,583	4,339	7,922
45-54	2,917	3,584	6,501
55-64	1,935	2,975	4,910
65+	1,102	1,033	2,135

STABLE			
Age-Band	Female	Male	Total
	15,241	11,940	27,181
Ages < 1	106	108	214
Ages 1-4	433	640	1,073
5-14	920	1,143	2,063
15-24	1,720	1,169	2,888
25-34	1,439	678	2,118
35-44	1,830	1,330	3,161
45-54	2,795	2,115	4,911
55-64	3,523	2,429	5,953
65+	2,474	2,327	4,801

AT RISK			
Age-Band	Female	Male	Total
	13,607	9,704	13,607
Ages < 1	92	141	92
Ages 1-4	76	167	76
5-14	297	461	297
15-24	731	469	731
25-34	792	296	792
35-44	1,454	751	1,454
45-54	2,011	1,402	2,011
55-64	2,806	2,305	2,806
65+	5,348	3,711	5,348

STRUGGLING			
Age-Band	Female	Male	Total
	11,471	8,053	19,524
Ages < 1	28	24	52
Ages 1-4	18	16	33
5-14	45	74	119
15-24	327	215	541
25-34	713	152	865
35-44	1,176	365	1,541
45-54	1,140	706	1,845
55-64	1,695	1,445	3,141
65+	6,329	5,057	11,387

IN CRISIS			
Age-Band	Female	Male	Total
	4,043	4,069	8,112
Ages < 1	8	15	23
Ages 1-4	6	10	16
5-14	16	16	32
15-24	43	49	93
25-34	41	23	65
35-44	115	62	177
45-54	227	203	431
55-64	424	532	955
65+	3,163	3,158	6,320

58 % of SFHSS members are categorized as healthy or stable.

The remaining 42 % are categorized as at risk, struggling, or in crisis.

Clinical Drivers by Zip Code, Allowed Amount & Patient Count
Commercial Population

Zip Code	Clinical Condition	Allowed Amount	Patients
94102	Prevent/Admin Hlth Encounters	$397,690.26	550
94102	Pregnancy without Delivery	$200,291.68	14
94102	Mental Hlth - Depression	$190,762.12	64
94102	Osteoarthritis	$187,891.38	38
94102	Cancer - Cervical	$173,633.60	2
94102	Signs/Symptoms/Oth Cond, NEC	$160,693.93	186
94102	Gastroint Disord, NEC	$155,778.40	77
94102	Arthropathies/Joint Disord NEC	$140,166.15	114

Zip Code	Clinical Condition	Allowed Amount	Patients
94109	Prevent/Admin Hlth Encounters	$478,429.45	669
94109	Cancer - Leukemia	$406,126.82	2
94109	Fracture/Disloc - Ankle/Foot	$259,905.87	15
94109	Gastroint Disord, NEC	$247,027.61	87
94109	Cardiac Arrhythmias	$232,004.42	11
94109	Coronary Artery Disease	$224,125.62	9
94109	Pregnancy without Delivery	$196,534.76	16
94109	Infections, NEC	$167,692.25	375
94109	Mental Hlth - Depression	$145,945.07	63

Zip Code	Clinical Condition	Allowed Amount	Patients
94124	Newborns, w/wo Complication	$3,441,942.64	13
94124	Prevent/Admin Hlth Encounters	$1,320,156.10	1,988
94124	Infections, NEC	$1,205,281.66	904
94124	Pregnancy without Delivery	$1,179,281.73	71
94124	Hematologic Disord, NEC	$855,368.85	35
94124	Cerebrovascular Disease	$847,245.77	24
94124	Signs/Symptoms/Oth Cond, NEC	$815,684.67	661
94124	Gastroint Disord, NEC	$782,376.79	278
94124	Cancer - Breast	$540,311.36	20

Zip Code	Clinical Condition	Allowed Amount	Patients
94108	Infections - Respiratory, NEC	$104,921.29	22
94108	Prevent/Admin Hlth Encounters	$91,664.33	146
94108	Cancer - Leukemia	$77,788.45	1
94108	Infections, NEC	$73,458.45	83
94108	Mental Hlth - Oth Disord, NEC	$58,614.75	8
94108	Cancer - Breast	$47,427.58	2
94108	Chemotherapy Encounters	$41,071.00	1
94108	Pregnancy without Delivery	$35,288.78	1
94108	Mental Hlth - Depression	$33,764.56	14

Zip Code	Clinical Condition	Allowed Amount	Patients
94109	Prevent/Admin Hlth Encounters	$478,429.45	669
94109	Cancer - Leukemia	$406,126.82	2
94109	Fracture/Disloc - Ankle/Foot	$259,905.87	15
94109	Gastroint Disord, NEC	$247,027.61	87
94109	Cardiac Arrhythmias	$232,004.42	11
94109	Coronary Artery Disease	$224,125.62	9
94109	Pregnancy without Delivery	$196,534.76	16
94109	Infections, NEC	$167,692.25	375
94109	Mental Hlth - Depression	$145,945.07	63

Zip Code	Clinical Condition	Allowed Amount	Patients
94134	Prevent/Admin Hlth Encounters	$1,307,265.69	2,203
94134	Infections - Respiratory, NEC	$1,194,962.14	416
94134	Pregnancy without Delivery	$1,066,692.05	73
94134	Nutritional Disorders, NEC	$941,193.78	46
94134	Infections, NEC	$913,107.97	1,034
94134	Signs/Symptoms/Oth Cond, NEC	$639,716.50	642
94134	Cancer - Nonspecified	$524,668.03	8
94134	Fracture/Disloc - Upper Extrem	$443,901.68	71
94134	Coronary Artery Disease	$430,859.08	14

Clinical Drivers by Zip Code and Patient Count
Medicare Population

Zip Code	Clinical Condition	Patients
94102	Prevent/Admin Hlth Encounters	127
94102	Signs/Symptoms/Oth Cond, NEC	80
94102	Diabetes	54
94102	Arthropathies/Joint Disord, NEC	51
94102	Infections, NEC	48
94102	Hypertension, Essential	46
94102	Eye Disorders, NEC	44
94102	Osteoarthritis	37
94102	Respiratory Disord, NEC	37

Zip Code	Clinical Condition	Patients
94109	Prevent/Admin Hlth Encounters	273
94109	Signs/Symptoms/Oth Cond, NEC	181
94109	Infections, NEC	141
94109	Infec/Inflam - Skin/Subcu Tiss	112
94109	Arthropathies/Joint Disord NEC	109
94109	Hypertension, Essential	103
94109	Eye Disorders, NEC	79
94109	ENT Disorders, NEC	73
94109	Respiratory Disord, NEC	73

Zip Code	Clinical Condition	Patients
94124	Prevent/Admin Hlth Encounters	379
94124	Signs/Symptoms/Oth Cond, NEC	226
94124	Hypertension, Essential	169
94124	Diabetes	145
94124	Arthropathies/Joint Disord NEC	126
94124	Eye Disorders, NEC	114
94124	Respiratory Disord, NEC	107
94124	Infections, NEC	105
94124	Osteoarthritis	99

Zip Code	Clinical Condition	Patients
94108	Prevent/Admin Hlth Encounters	39
94108	Signs/Symptoms/Oth Cond, NEC	22
94108	Diabetes	16
94108	Arthropathies/Joint Disord NEC	15
94108	Infec/Inflam - Skin/Subcu Tiss	13
94108	Hypertension, Essential	12
94108	Respiratory Disord, NEC	12
94108	ENT Disorders, NEC	11
94108	Lipid Disorders	11

Zip Code	Clinical Condition	Patients
94112	Prevent/Admin Hlth Encounters	1,269
94112	Signs/Symptoms/Oth Cond, NEC	734
94112	Hypertension, Essential	497
94112	Infections, NEC	465
94112	Diabetes	464
94112	Arthropathies/Joint Disord NEC	387
94112	Eye Disorders, NEC	386
94112	Osteoarthritis	280
94112	Infec/Inflam - Skin/Subcu Tiss	277

Zip Code	Clinical Condition	Patients
94134	Prevent/Admin Hlth Encounters	519
94134	Signs/Symptoms/Oth Cond, NEC	306
94134	Diabetes	217
94134	Hypertension, Essential	208
94134	Eye Disorders, NEC	167
94134	Arthropathies/Joint Disord NEC	160
94134	Infections, NEC	149
94134	Osteoarthritis	125
94134	Respiratory Disord, NEC	125

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Deep Dive: Musculoskeletal Disorders
Commercial Population and Medicare Population

Commercial Population			
Musculoskeletal Groups	# of Patients	Patient Visits	Cost
Total	**21,898**	**128,906**	**$79,912,704**
Osteoarthritis	2,804	26,248	$17,668,976
Fracture	4,058	16,660	$16,421,619
Spinal/Low Back Disorder	5,776	24,444	$12,784,631
Arthropathies/Joint Disorder, NEC	9,392	34,281	$9,156,606
Injury	3,468	8,349	$7,869,764
Rheumatoid Arthritis	253	3,821	$5,713,245
Musculoskeletal Disorder, Congenital	359	1,330	$3,274,758
Bursitis	2,028	9,250	$2,515,184
Musculoskeletal Disorder, Autoimm.	213	2,362	$2,034,459
Hallux Deformities	541	1,412	$1,092,609
Infections - Musculoskeletal	32	193	$461,830
Gout	367	1,510	$393,126
Osteoporosis	393	1,398	$371,490
Cancer - Primary Bone	<26	66	$135,518
Musculoskeletal Disorder, NEC	27	189	$18,890

<26		
Musculoskeletal Groups	# of Patients	Patient Visits
Total	**14,742**	**146,022**
Arthropathies/Joint Disorder, NEC	5,305	28,125
Spinal/Low Back Disorder	5,012	35,087
Osteoarthritis	4,264	43,417
Injury	1,997	5,723
Fracture	1,661	11,424
Osteoporosis	1,519	6,363
Bursitis	1,484	8,569
Hallux Deformities	600	1,615
Gout	441	1,603
Rheumatoid Arthritis	315	4,210
Musculoskeletal Disorder, Autoimm.	205	1,486
Musculoskeletal Disorder, Cogenital	136	732
Musculoskeletal Disorder, NEC	82	456
Infections - Musculoskeletal	68	713
Cancer - Primary Bone	<26	83

Osteoarthritis is the biggest cost driver for the commercial population while Arthropathies and Join Disorders have the largest prevalance.

The top 5 musculoskeletal disorders in both populations are the same: Osteoarthritis, Spinal Low Back, Fracture, Joint Disorder, and Injury.

Deep Dive: Mental Health Disorders
Commercial Population and Medicare Population

Commercial Population			
Mental Health Groups	# of Patients	Patient Visits	Cost
Total	**10,186**	**129,165**	**$38,315,263**
Depression	4,141	46,561	$12,222,024
Substance Abuse	813	7,651	$8,502,401
Autism	377	20,259	$5,049,713
Anxiety Disorder	3,280	25,903	$3,721,892
Bipolar Disorder	366	7,620	$3,093,196
Other Disorder, NEC	2,051	15,661	$2,790,104
Schizophrenia	87	1,512	$1,205,705
Psychoses, NEC	597	1,974	$633,150
Eating Disorders	101	1,177	$625,774
Obsessive-Compulsive Disorder	141	1,446	$325,732
Antisocial Behavior	66	333	$145,573

Medicare Population		
Mental Health Groups	# of Patients	Patient Visits
Total	**2,737**	**15,988**
Depression	832	5,675
Anxiety Disorder	694	3,419
Psychoses, NEC	653	1,138
Other Disorder, NEC	432	1,531
Substance Abuse	307	1,547
Bipolar Disorder	96	1,548
Schizophrenia	47	970
Obsessive-Compulsive Disorder	<26	138
Eating Disorders	<26	48
Autism	<26	71
Antisocial Behavior	<26	48

Depression is most prevalent condition within Mental Health disorders for the commercial population.

In the Medicare population Depression has the highest prevalence of the Mental Health disorders.

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