

SFHSS 2021 DxCG Risk Scores

April 2022



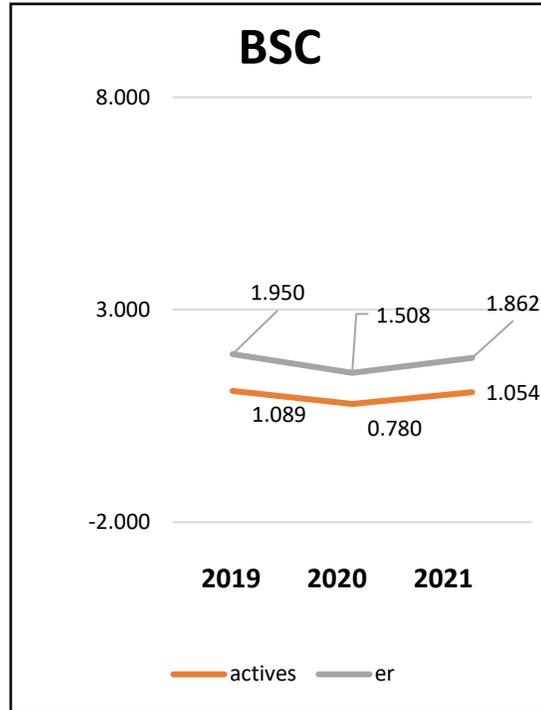
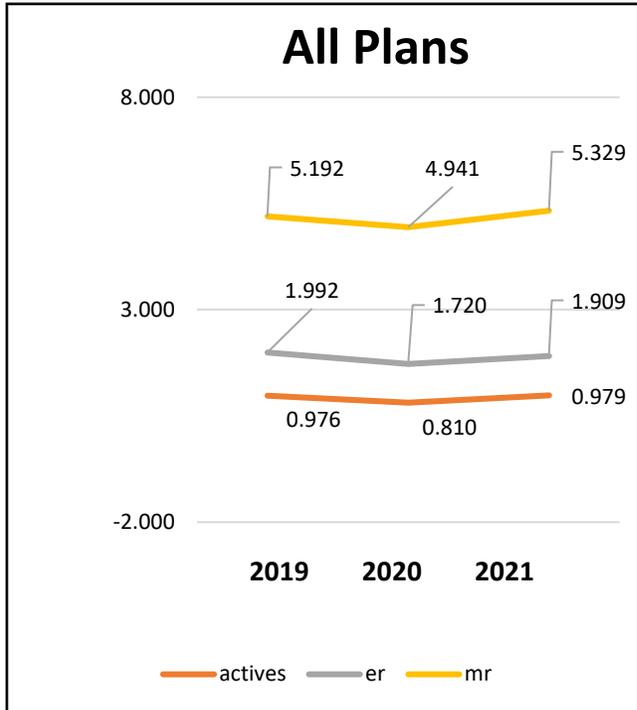
Risk Score Report Notes

- 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 prior to Covid to 2021. The periods are Oct 2018-Sep 2019 (labeled as 2019 in this report), Oct 2019 – Sep 2020 (labeled as 2020 in this report) and Oct 2020 to Sep 2021 (labeled as 2021 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. Concurrent scores
- Non-rescaled scores are calibrated to the national population. This report utilizes non-rescaled scores.
- To meet thresholds for statistical relevance, ethnicities of Indian, Alaskan and Pacific Islanders have been combined.

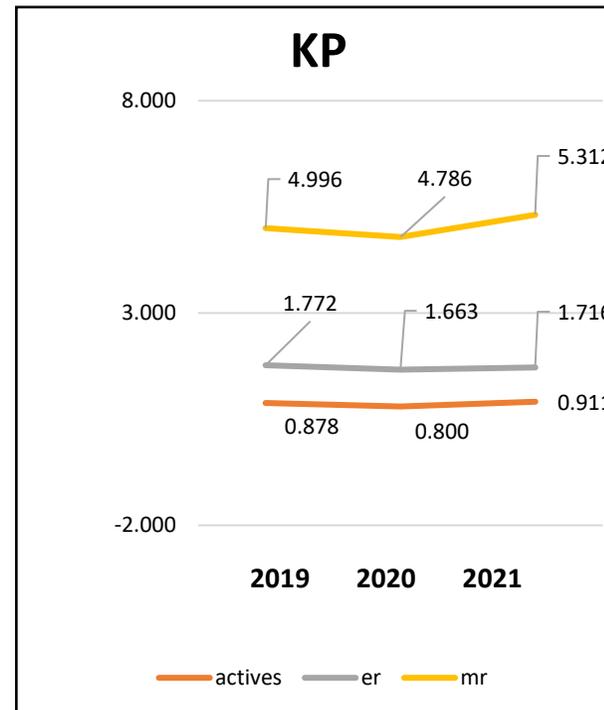
SFHSS DxCG Risk Scores Executive Summary

- In 2020, Risk Scores were artificially lower due to Claims Suppression. The 2021 Risk Scores align more closely to pre-Covid values but there is still evidence of claims suppression impacting risk scores for some populations which are below pre-Covid values.
- Utilization related to Covid-19 diagnosis spiked early in 2021 which was a driver to risk scores.
- Musculoskeletal Disorders are the clinical condition which is the largest driver of the prospective health risk for all populations
- Historically, psychiatric disorders were a main driver of risk in actives in the healthy, stable and at-risk populations. In this most recent report, psychiatric disorders are also now a key driver for risk in the struggling population.
- Disparities in risk scores amongst SFHSS race groups are evident.
- SFHSS active member population with the top 5 risk scores are dispersed throughout the bay area: 3 zip codes in Contra Costa county, 1 zip code in Alameda county and 1 zip code in San Francisco City & County

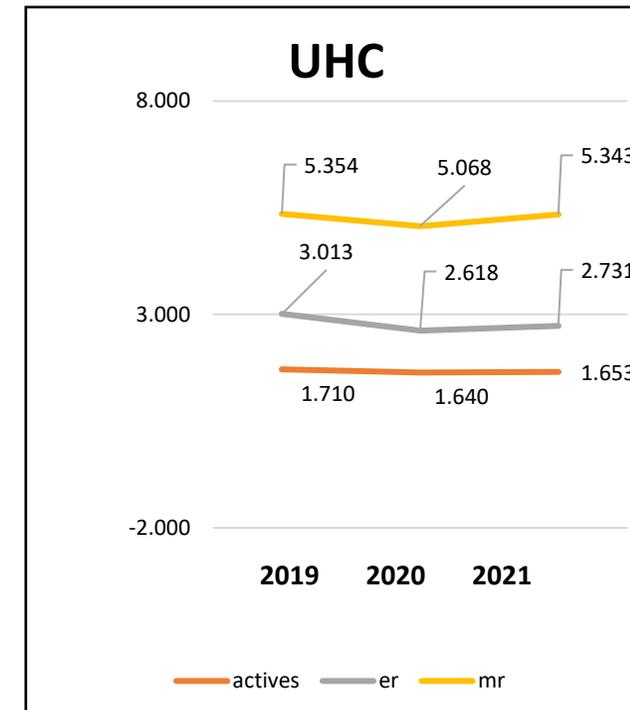
SFHSS Risk Scores Plan Overview: Concurrent Scores 2019-2021



BSC members risk scores are below 2019 pre-COVID values

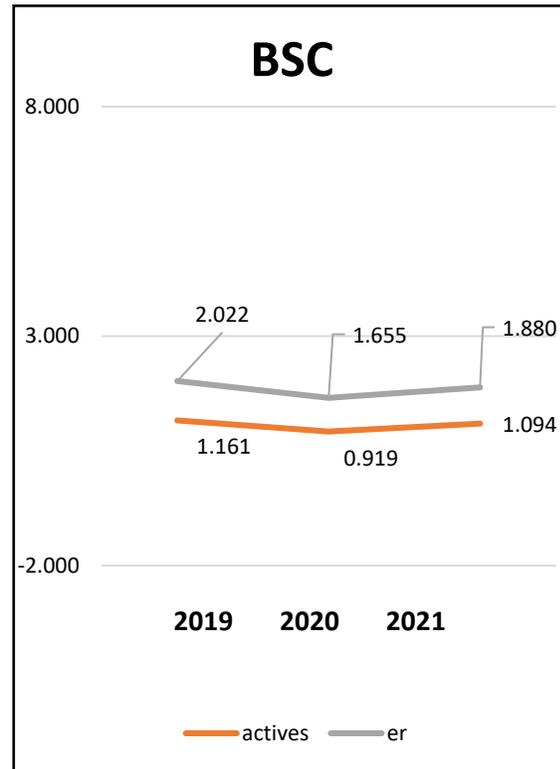
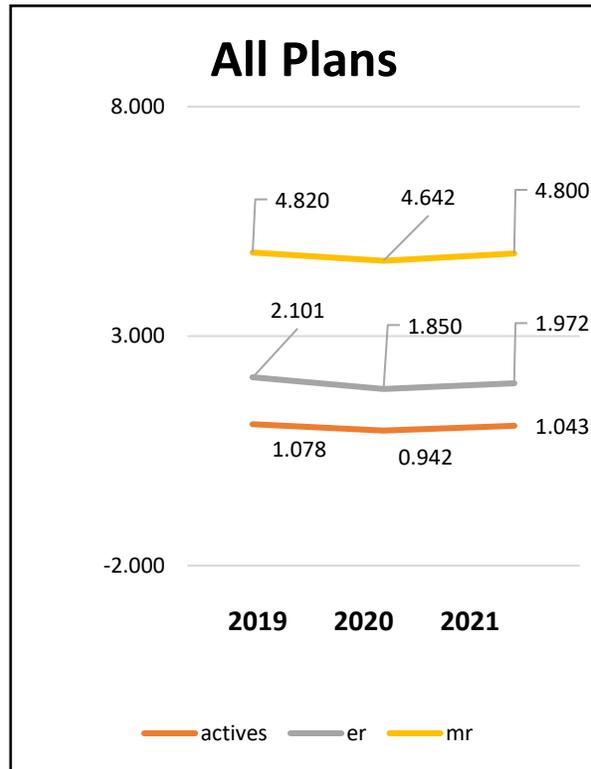


KP members have marginally increased scores since pre-COVID

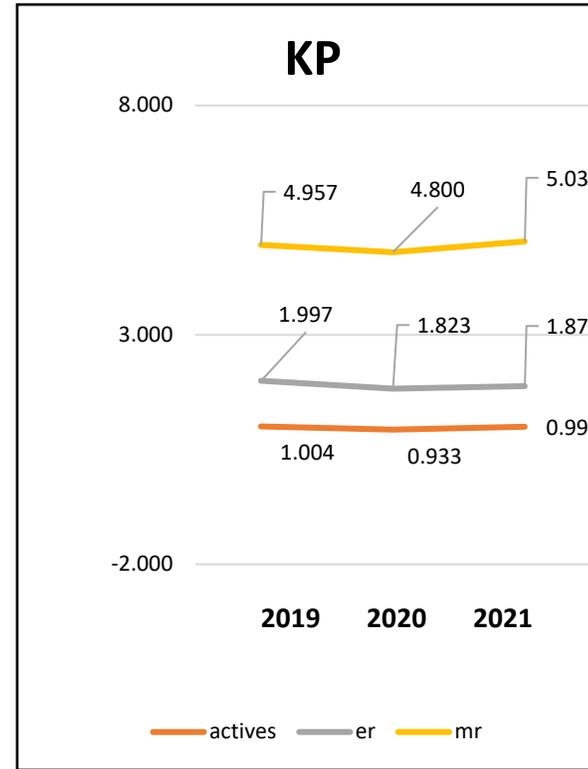


UHC retiree members risk scores are below 2019 pre-COVID values

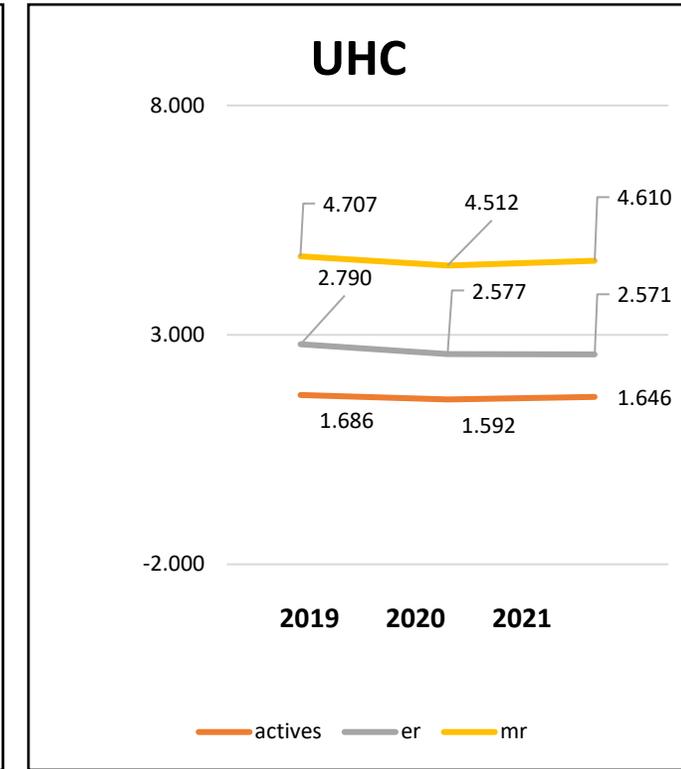
SFHSS Risk Scores Plan Overview: Prospective Scores 2019-2021



BSC members risk scores are below 2019 pre-COVID values

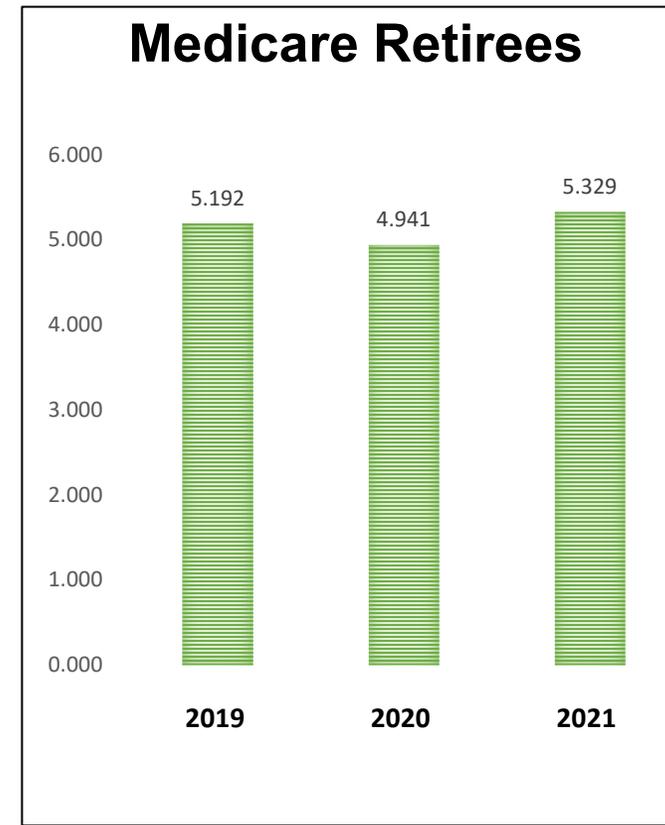
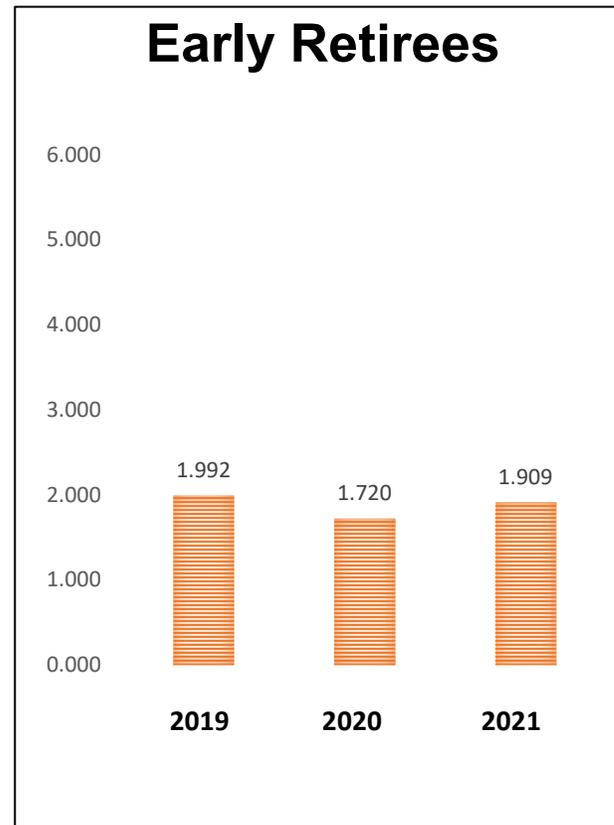
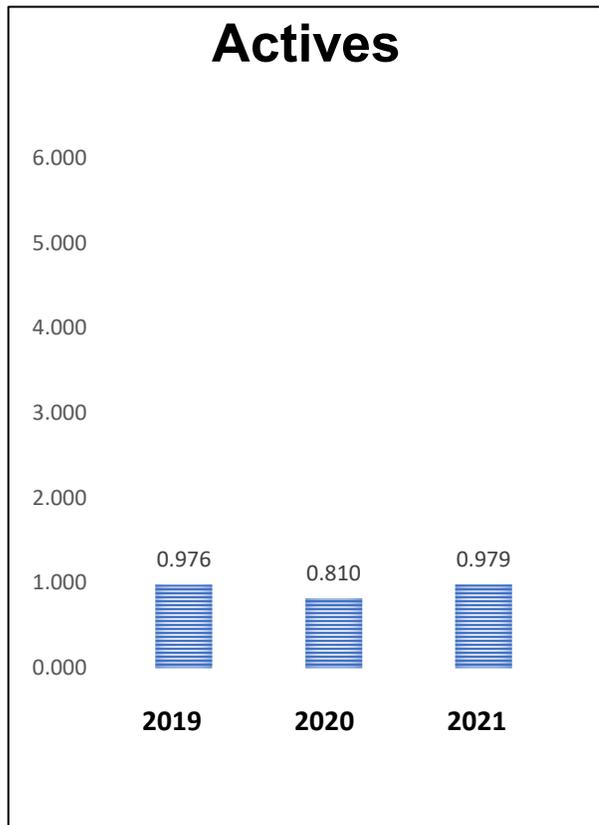


KP commercial members risk scores are below 2019 pre-covid values. Medicare members risk score is higher than 2019.



UHC members risk scores are below 2019 pre-COVID values

SFHSS Risk Scores Population Overview: Concurrent Scores 2019-2021

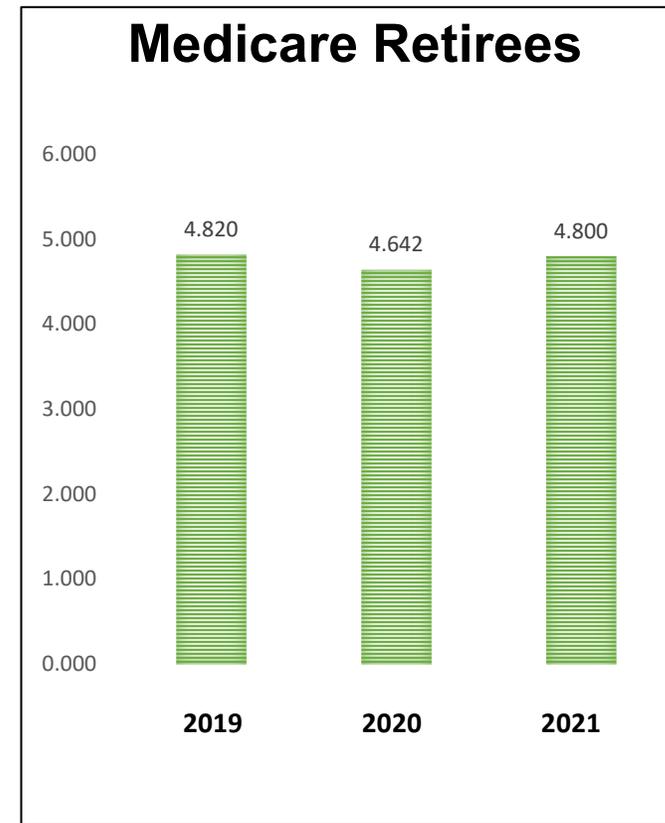
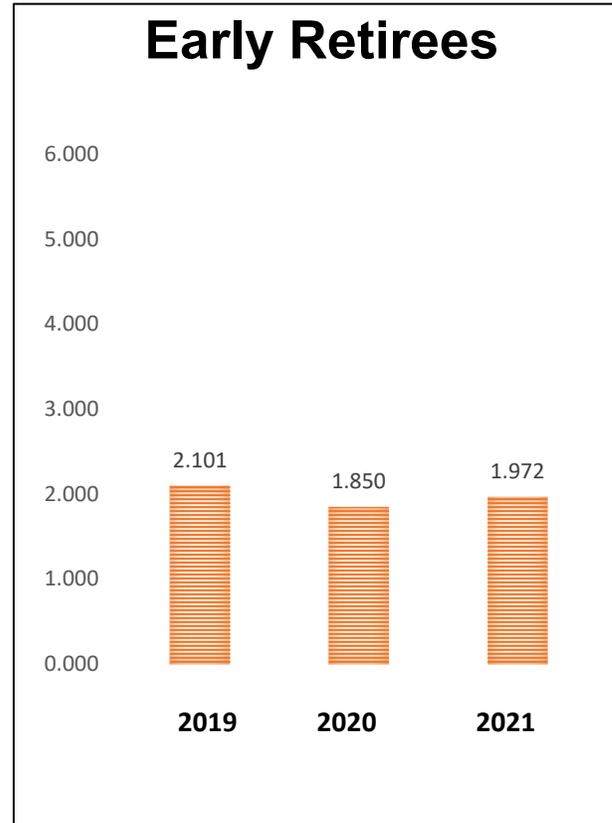
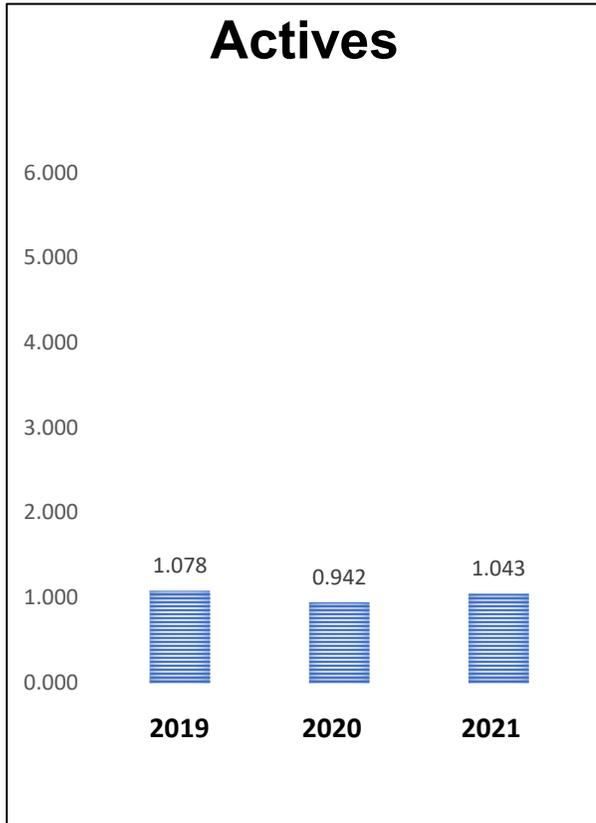


Scores indicate that the Active population has marginally increased risk since 2019

Early Retirees' risk scores are lower than pre-COVID values which could point to ongoing under-utilization or changes in this population based on members aging into Medicare

Risk scores are higher than the pre-COVID period. Utilization shows increases in visits to the ER per 1000 members, increases in services per 1000 Outpatient Med and increases in Days Length of Stay

SFHSS Risk Scores Population Overview: Prospective Scores 2019-2021

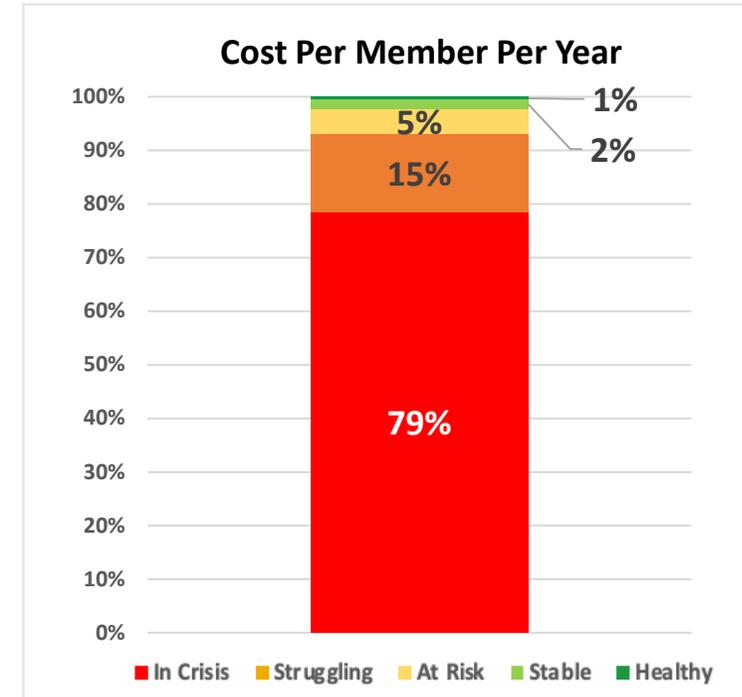
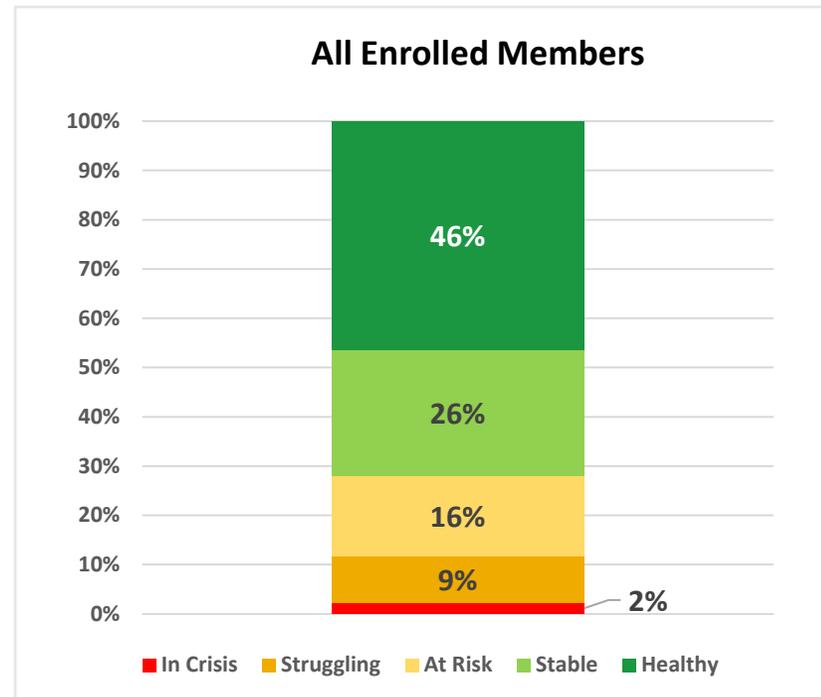


All population prospective risk scores are still below pre-pandemic values although they have increased since 2020. It is believed however that claims suppression continues to artificially lower these scores.

Members and Cost Distribution By Risk Category

Commercial Population

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



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.

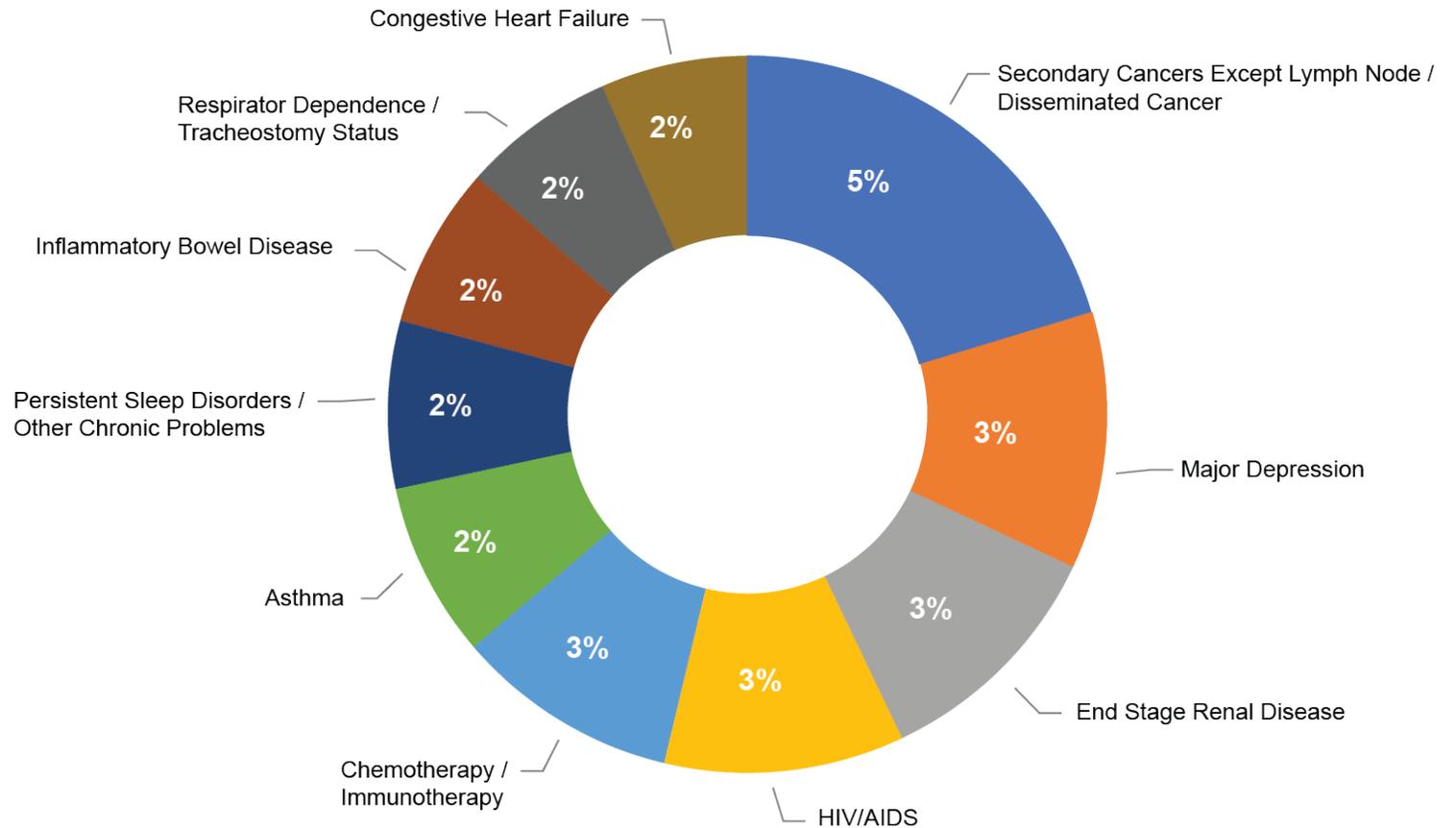
In Crisis patients are heavy utilizers most often being treated for multiple severe acute and/or chronic conditions.

Hierarchical Condition Categories: Percent of Total 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 are limited to illnesses and injuries which affect ongoing health costs such as chronic conditions.
- HCCs are used in risk adjustment models.

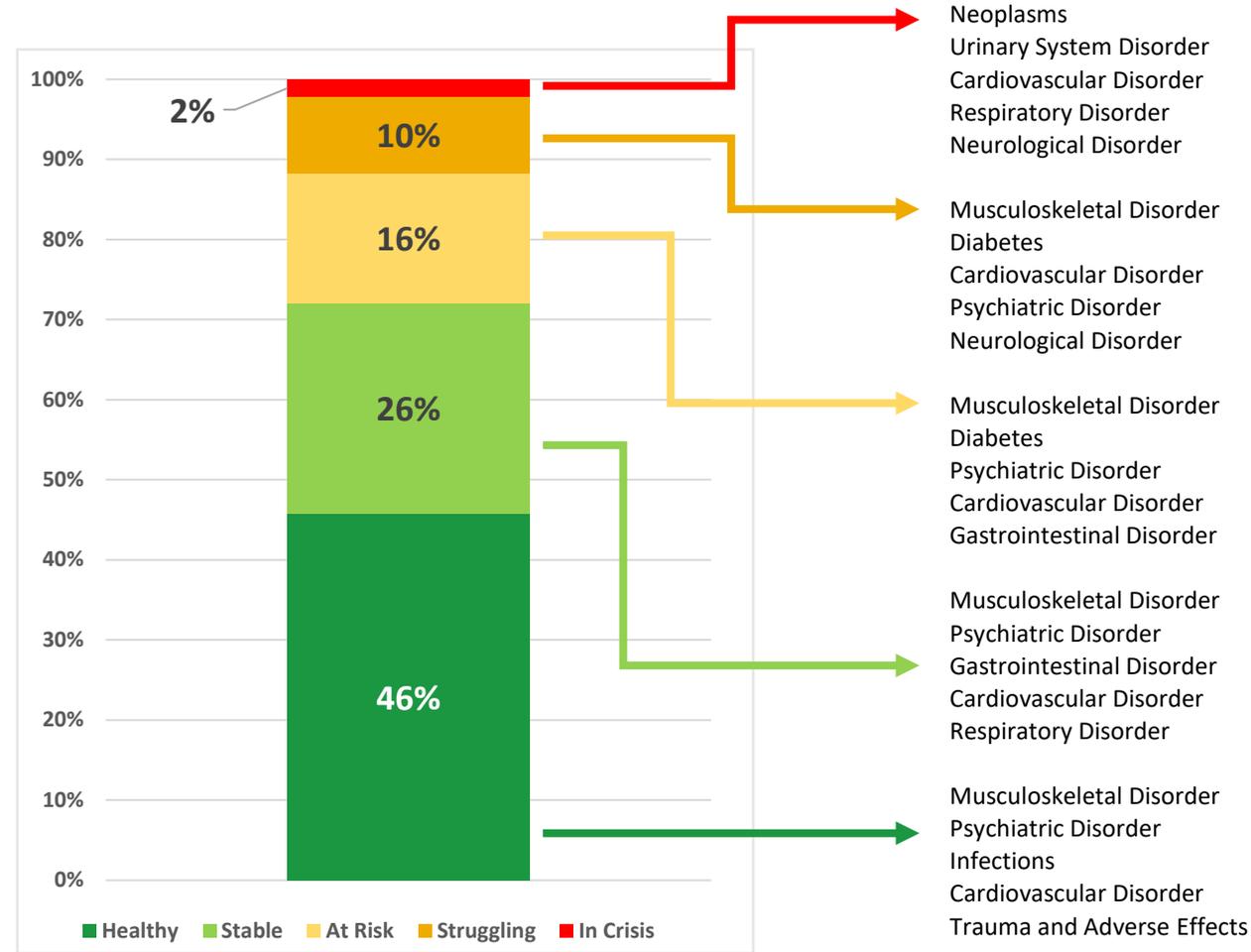
Secondary cancers constitute the highest spend @5% of the total cost servicing 0.32% of members, followed by Major Depression @3% spend for 3% of the membership.



Major Health Conditions and Disorders by Risk Band Profiles

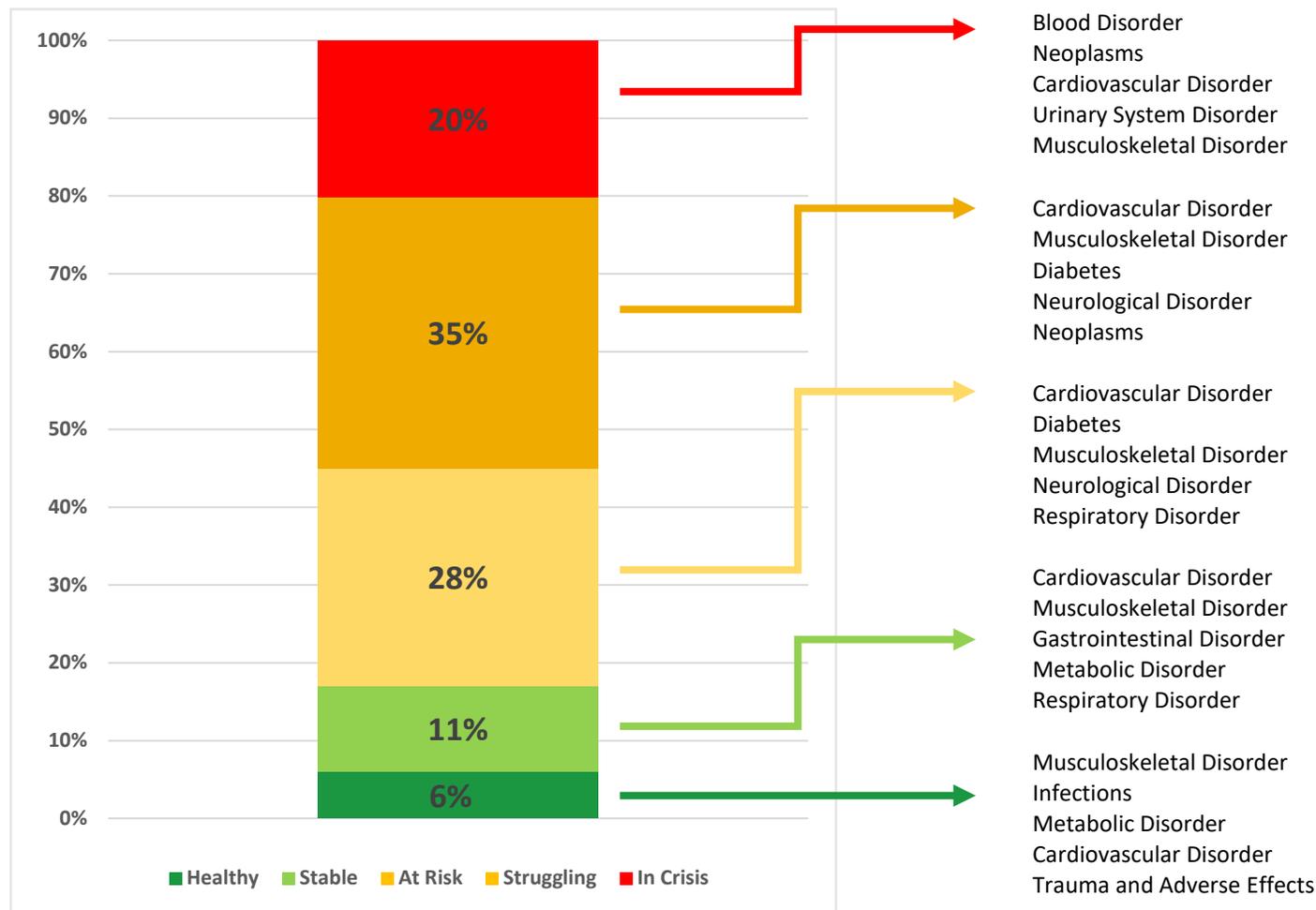
Commercial Population

Cardiovascular Disorder is the common health condition in all risk categories, followed by Musculoskeletal Disorder which has the highest percent contribution in 4 of 5 categories.



Major Health Conditions and Disorders by Risk Band Profiles Medicare Population

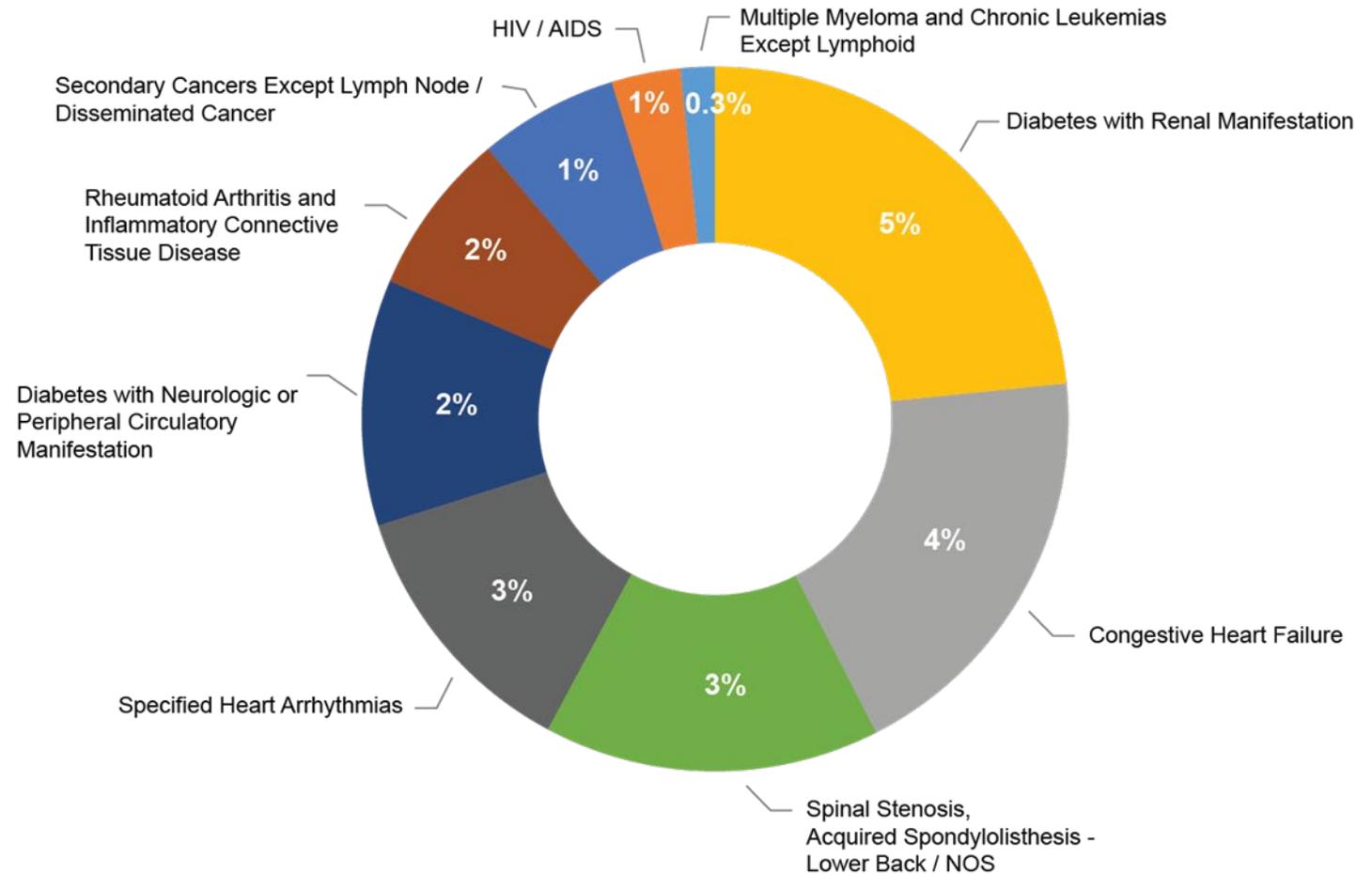
Cardiovascular and Musculoskeletal Disorders are prevalent in all risk bands in the Medicare population.



Hierarchical Condition Categories: Percent of Medicare Members

- 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.

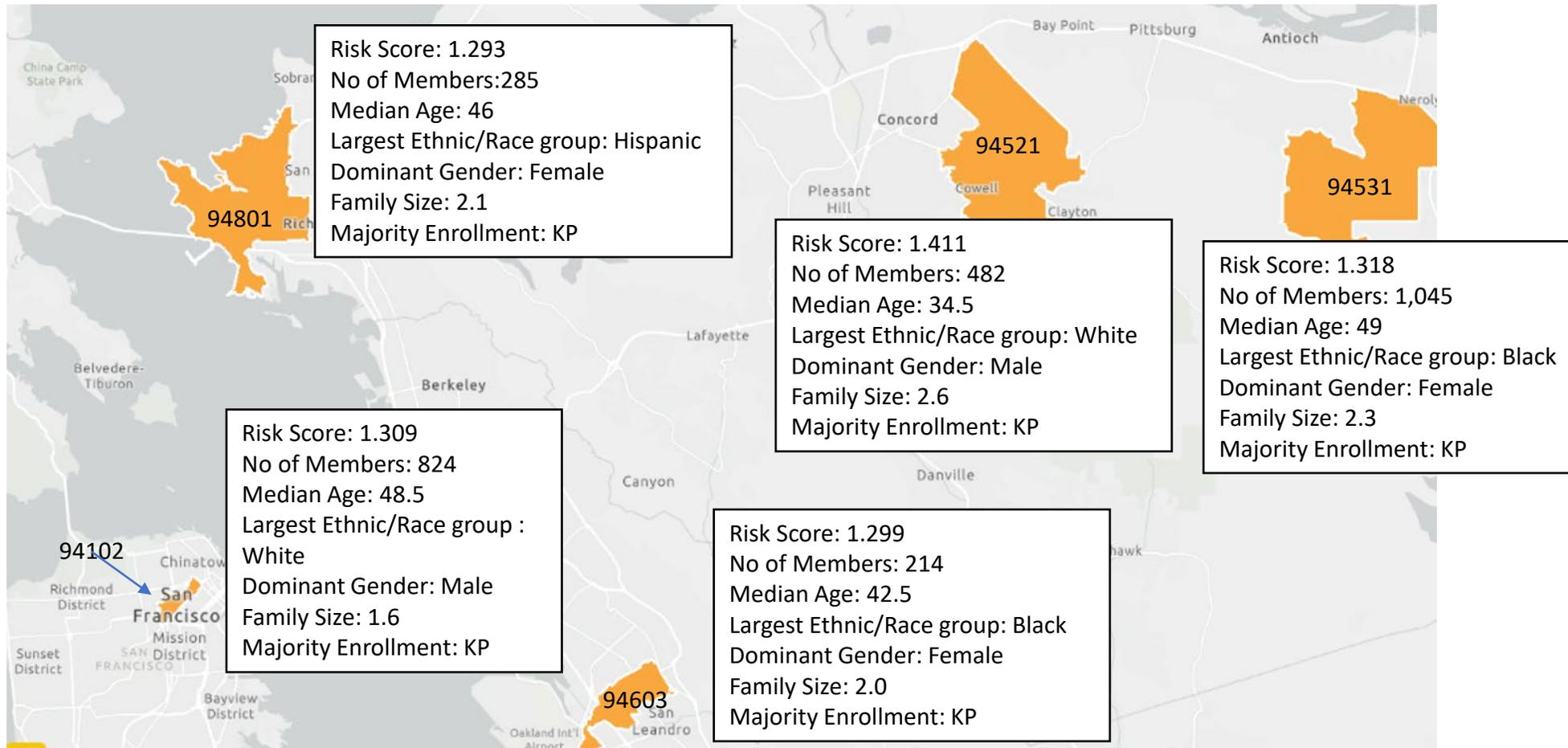


SFHSS Employees – Race / Ethnicity Demographics

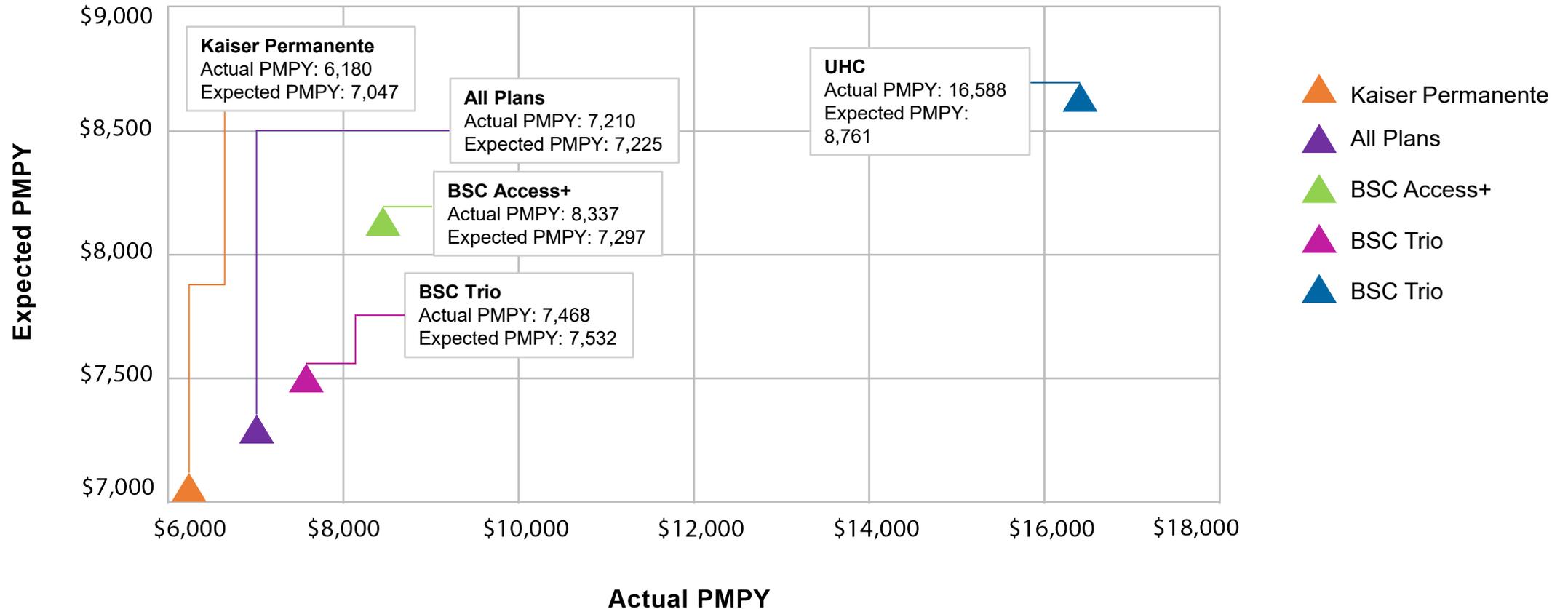


SFHSS Risk Scores Geographic Overview:

Top 5 zip codes by Risk Score for Active Population



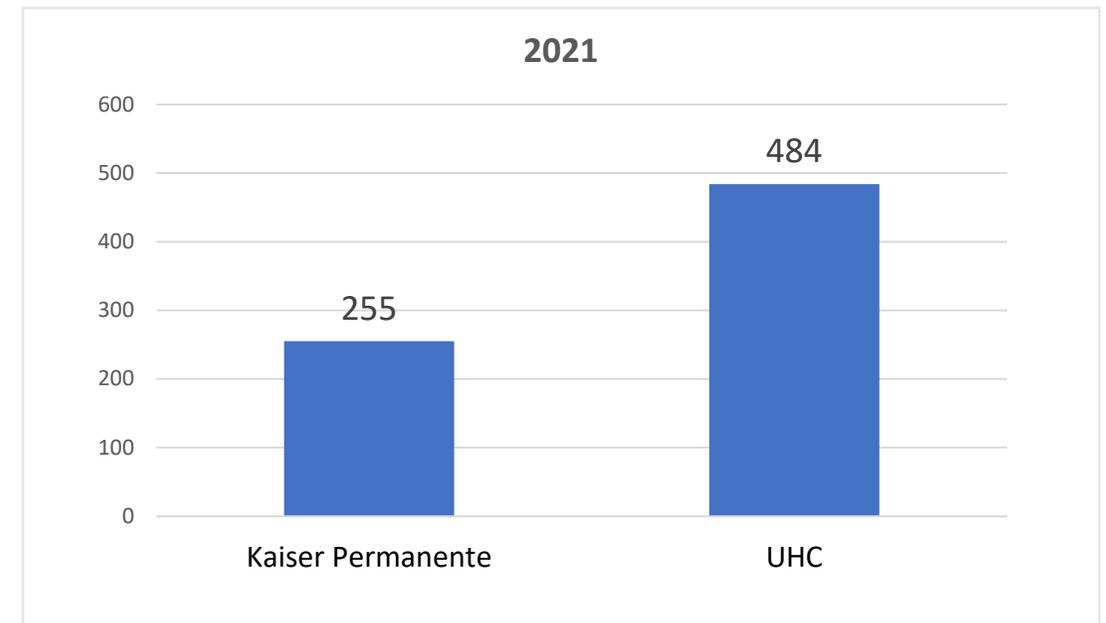
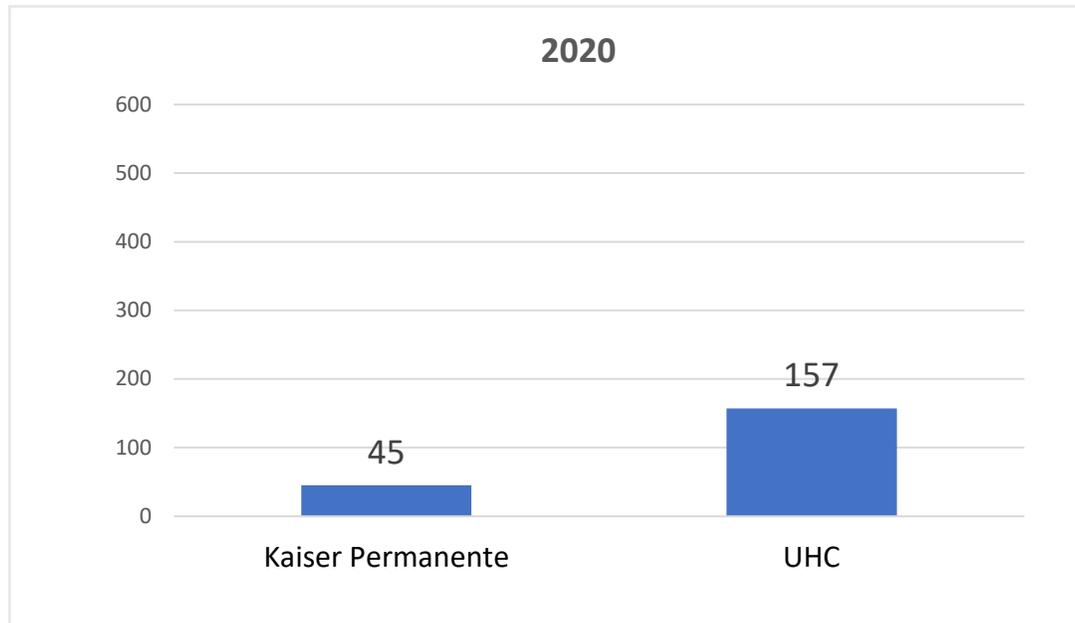
Relative Commercial Plan Performance – Actual PMPY vs Expected PMPY



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

COVID – Utilization by Plans

2020 & 2021 - Medicare Population



Medicare Members diagnosed with COVID-19 in 2021 increased over 2020 experience.
Kaiser Permanente experienced an 82% increase of SFHSS members; UHC a 67% increase
The surge happened from Jul. 2020 to Jan. 2021 and peaked in the months of Dec. 2020 and Jan. 2021.

Workstreams and Next Steps

Summary & Key Findings	Actions & Workstreams
Non-uniform return to pre-covid risk scores – indicative of ongoing variable under utilization	<ul style="list-style-type: none"> ▪ Monitor health plan reports and health metrics ▪ SFHSS Wellbeing & Communications
Disparities in health within SFHSS populations (e.g. Race, Gender, Department)	<ul style="list-style-type: none"> ▪ Racial Equity Action Plan ▪ Population and Social Health Strategies ▪ Detailed health profiles ▪ SFHSS Wellbeing & Communications ▪ Deeper analysis of the largest pre-covid to post-covid increases in risk scores by race
Data quality and standard metric comparability between health plans	<ul style="list-style-type: none"> ▪ Work with IBM and Health plan partners to investigate individual issues as they arise ▪ Data Management Strategy ▪ Uniform Health Plan Reporting & Performance Goals

Appendix

APPENDIX

- **Additional Supporting Details**

Risk Band Profiles by Age & Gender Cohort

HEALTHY			
Age-Band	Female	Male	Total
	20,198	24,253	44,451
Ages < 1	220	176	396
Ages 1-4	1,225	1,069	2,295
5-14	3,920	4,059	7,979
15-24	3,243	4,268	7,512
25-34	2,087	2,897	4,984
35-44	3,515	4,174	7,689
45-54	2,816	3,601	6,417
55-64	1,989	2,918	4,907
65 +	1,183	1,090	2,273

STABLE			
Age-Band	Female	Male	Total
	15,510	12,209	27,719
Ages < 1	109	113	222
Ages 1-4	397	626	1,023
5-14	925	1,060	1,985
15-24	1,960	1,306	3,266
25-34	1,632	858	2,490
35-44	1,912	1,449	3,361
45-54	2,921	2,187	5,108
55-64	3,550	2,516	6,066
65 +	2,104	2,094	4,199

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

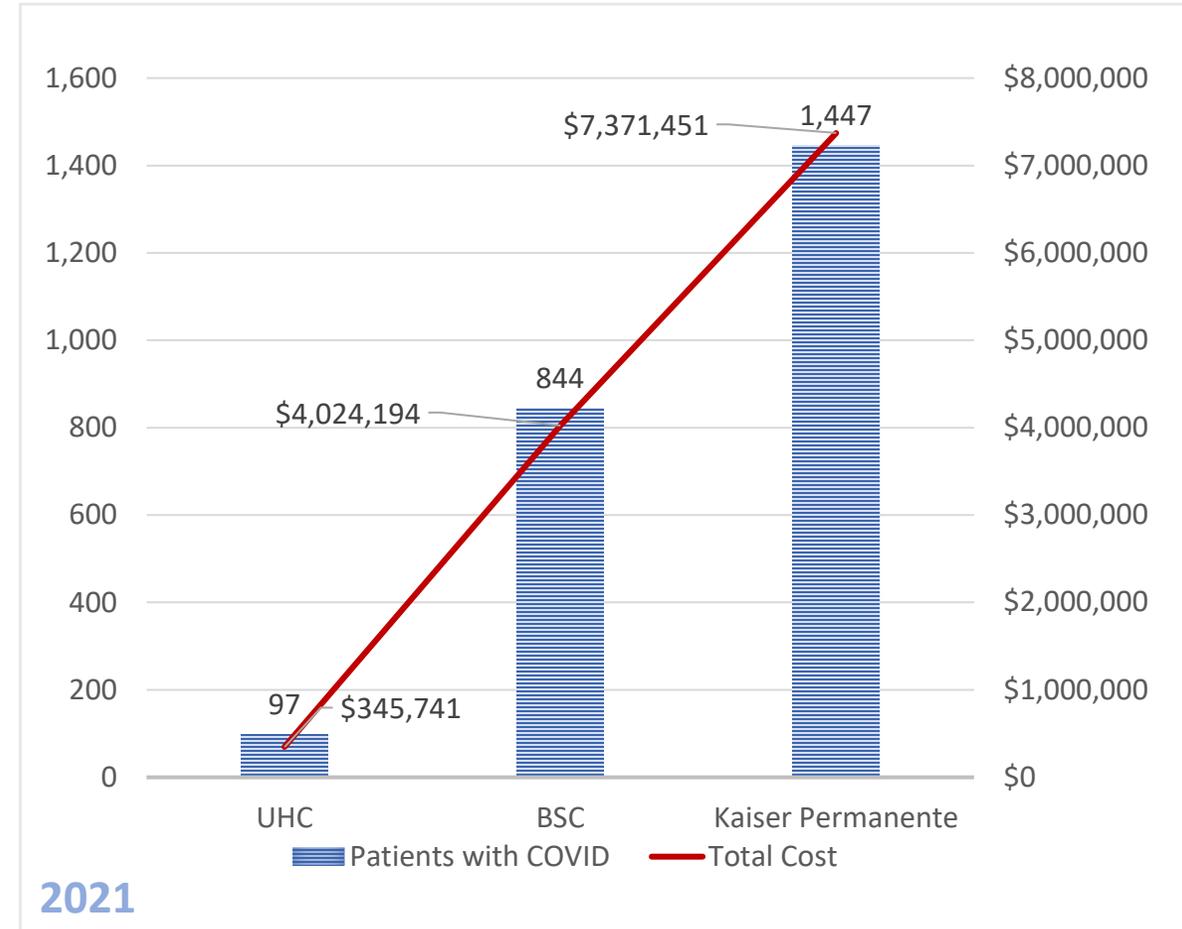
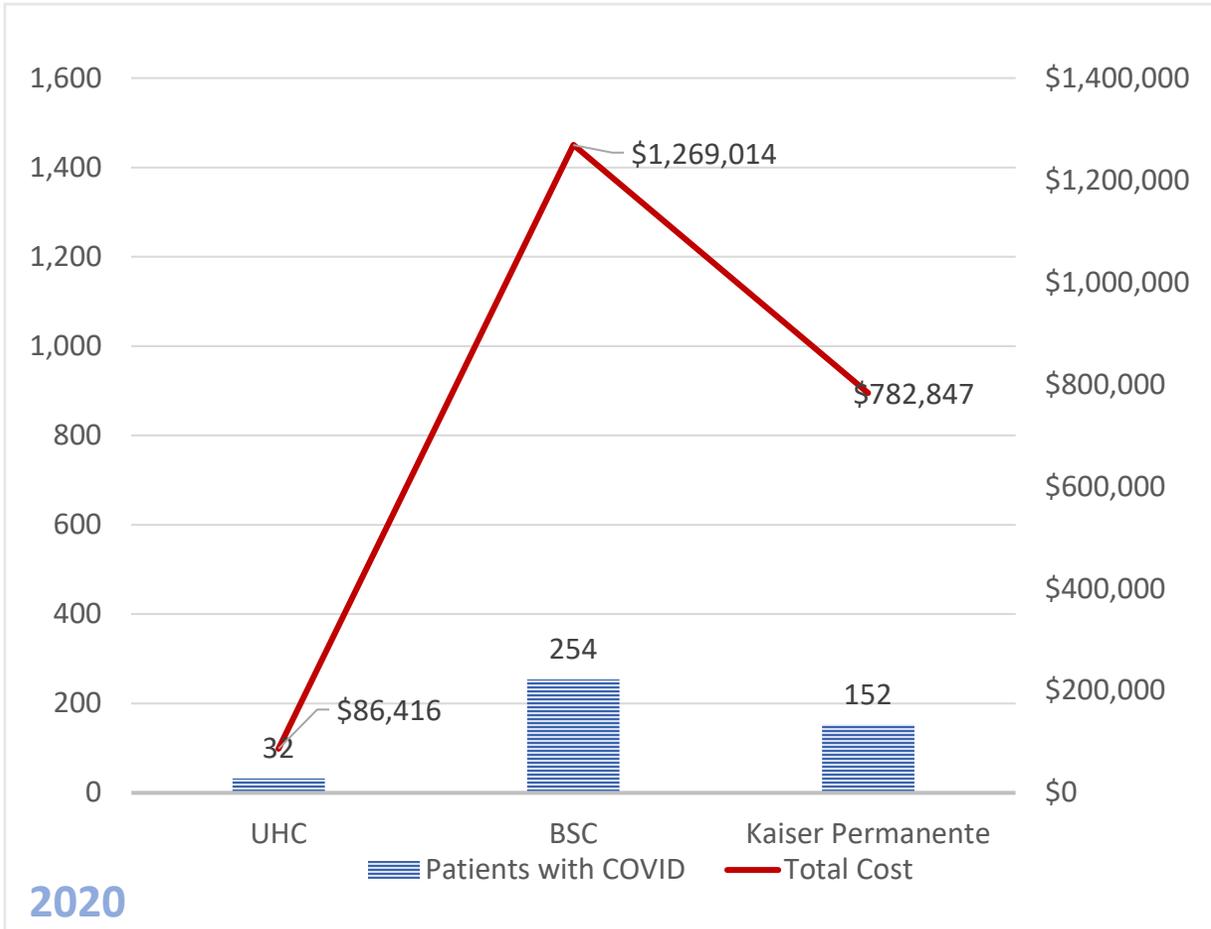
The remaining 42% are categorized as at risk, struggling or in crisis.

AT RISK			
Age-Band	Female	Male	Total
	13,801	9,890	23,691
Ages < 1	88	118	205
Ages 1-4	87	155	242
5-14	232	445	677
15-24	690	489	1,179
25-34	881	318	1,199
35-44	1,418	752	2,170
45-54	2,070	1,507	3,578
55-64	2,861	2,337	5,198
65 +	5,473	3,770	9,243

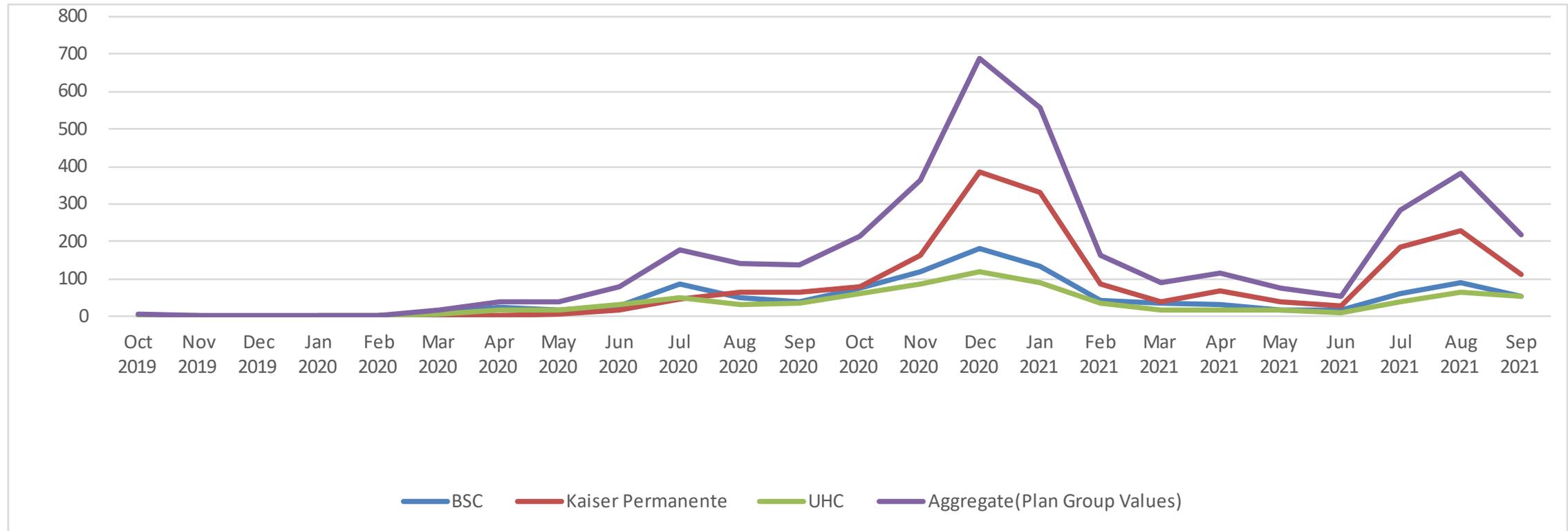
STRUGGLING			
Age-Band	Female	Male	Total
	11,554	7,976	19,531
Ages < 1	19	31	50
Ages 1-4	12	8	20
5-14	56	46	102
15-24	358	234	591
25-34	805	175	980
35-44	1,261	404	1,665
45-54	1,117	722	1,839
55-64	1,750	1,465	3,215
65 +	6,176	4,892	11,068

IN CRISIS			
Age-Band	Female	Male	Total
	4,072	4,167	8,239
Ages < 1	8	13	21
Ages 1-4	5	8	13
5-14	13	14	27
15-24	57	41	98
25-34	52	30	82
35-44	116	69	185
45-54	241	218	459
55-64	487	596	1,083
65 +	3,092	3,179	6,271

SFHSS Covid Impacts: Cost & Utilization by Plans 2020 - 2021



Month by Month View of COVID Cases in the SFHSS Population



Non-Medicare Members diagnosed with COVID-19 in 2021 increased over 2020 experience.

Kaiser Permanente experienced an 89% increase of SFHSS members; UHC a 67% increase and Blue Shield a 70% increase

The surge happened from Jul. 2020 to Jan. 2021 and peaked in the months of Dec. 2020 and Jan. 2021.