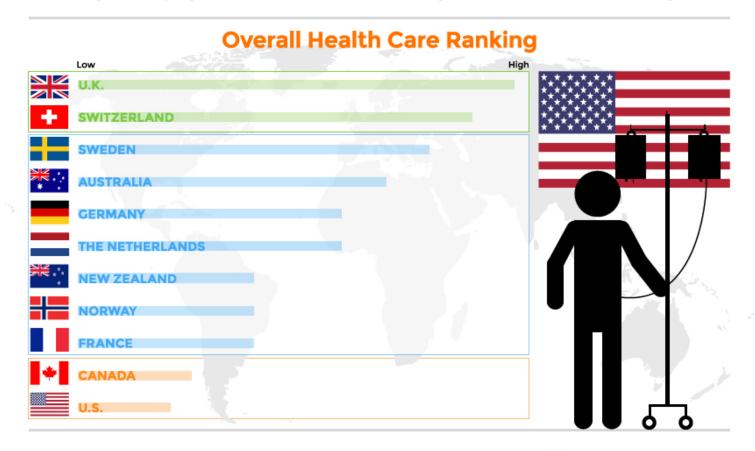
Our Not-for-Profit Mission: The Key to Creating Positive Change in Healthcare in America



Stephen H. Lockhart, M.D. Ph.D. Chief Medical Officer, Sutter Health

U.S. HEALTH CARE RANKS LAST AMONG WEALTHY COUNTRIES

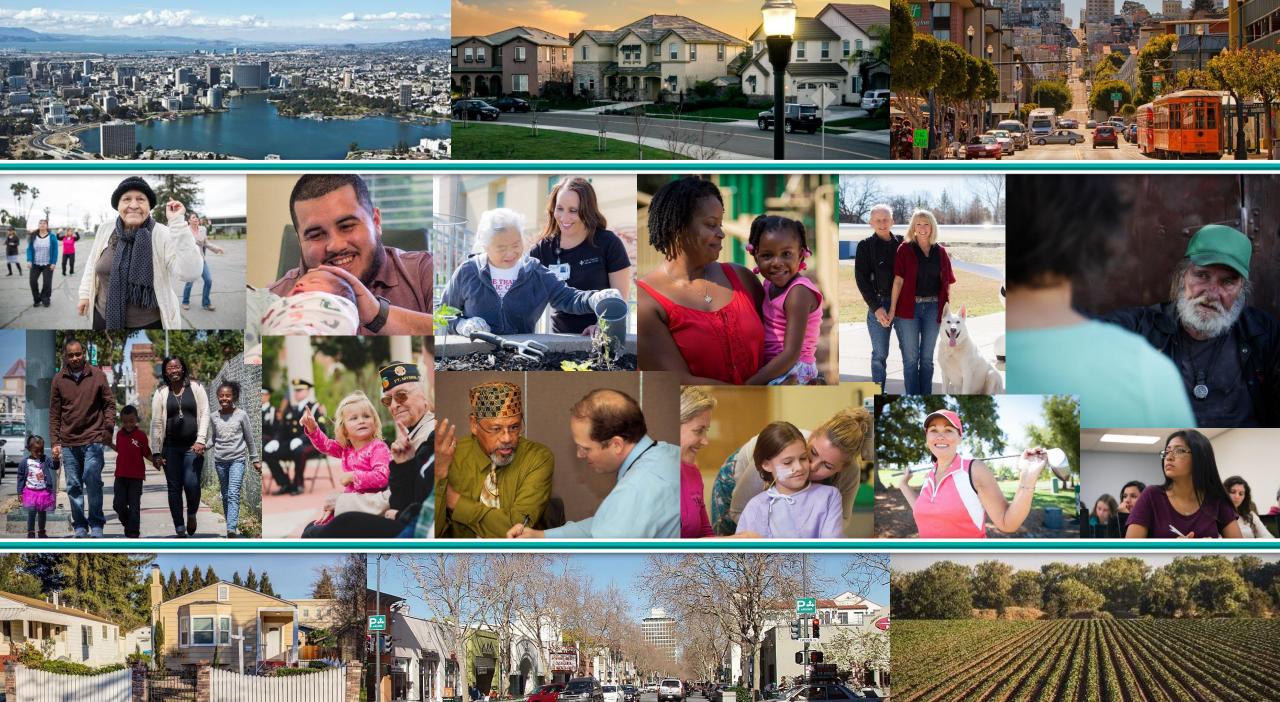
A recent international study compared 11 nations on health care quality, access, efficiency, and equity, as well as indicators of healthy lives such as infant mortality.



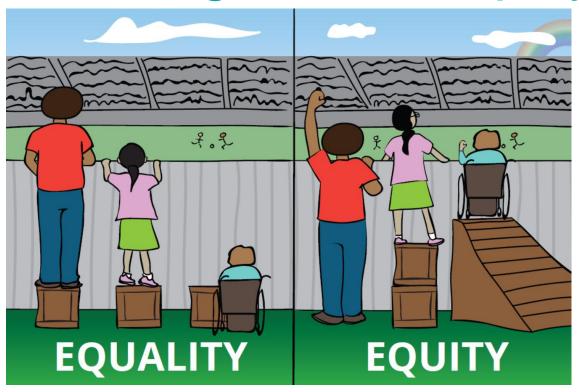








Defining Health Equity



DEFINITION: "At Sutter Health, all patients receive high- quality care regardless of their circumstances. We deliver care that meets the unique needs of our communities with a commitment to ensuring access to care and optimal health outcomes for all."

Building the team



Building the health equity index

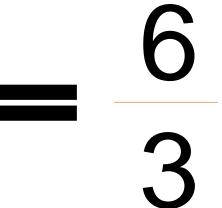
Observed

Electronic Health Record Data





ExpectedCalculated Data



OR

Health equity index inputs

Sutter Health EHR



Observed Encounters



Health Equity Index

American Community Survey – Census 2011-2015



Expected Encounters

Centers for Disease Control and Prevention 2014



California Department of Public Health



Sutter Health Equity Index Summary



Health Equity Index 1.1



Health Equity Index 1.2



Health Equity Index 2.2



Health Equity Index

Monthly dashboard - example

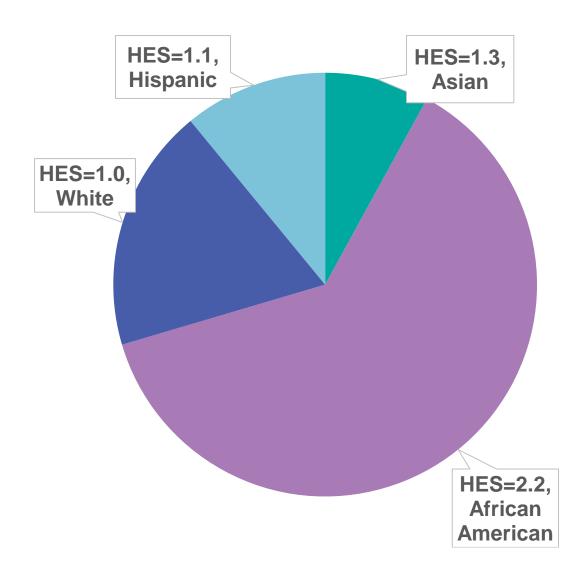
Sutter Health Equity Index Summary Rolling 12 Months

September 2017 - August 2018

				<u> </u>				
	Sutter Health - HEI for Asthma							
А	sthma	Asian	Asian Black Hisp White					
	20-44	0.5	2.4	1.1	0.6			
	45-64	0.8	2.0	0.8	0.4			
Male	65+	1.8	1.8	0.7	0.3			
	20-44	0.5	2.2	1.1	0.6			
	45-64	0.9	1.9	1.1	0.5			
Female	65+	2.1	3.3	1.1	0.4			
Health Equity Score		1.3	2.2	1.1	1.0			
Overall We	Overall Weighted HEI							



Monthly dashboard - example





Monthly dashboard - example

Sutter Health Equity Index Summary

Rolling 12 Months December 2016 - November 2017

	Asthma	Diabetes
Target	1.0	1.0
System HEI	1.4	2.2
Lakeside	1.3	1.8
Eden	1.2	2.6
Novato	1.5	2.0
Mills Peninsula	1.2	1.5
Santa Rosa	1.3	2.4
Delta	1.2	2.2
ABSMC	1.5	2.2
CPMC	2.0	2.4
Bay Operating Unit	1.6	2.6
Auburn Faith	1.2	1.4
Los Banos	1.1	1.4
Davis	1.1	3.0
Modesto	1.2	1.7
Roseville	1.2	1.5
Tracy	1.2	1.5
Sacramento	1.4	2.1
Amador	1.3	1.7
Solano	1.2	2.6
Valley Operating Unit	1.2	1.8
SUTTER COAST HOSPITAL	1.1	1.4
Note: Sutter Santa Cruz Ma and Menlo Park Surgical C HEI.	•	• ,

		Sutter Health	n - HEI for Ast	hma	
A	Asthma	Asian	Black	Hisp	White
	20-44	0.6	2.6	1.0	0.6
	45-64	0.5	1.9	0.8	0.4
Male	65+	1.6	1.6	0.8	0.3
	20-44	0.7	2.1	1.1	0.6
	45-64	1.0	1.7	1.1	0.5
Female	65+	2.1	3.0	1.0	0.4
Health Equit	ty Index (=weighte	ed avg. of HES)			

D	iabetes	Asian	Black	Hisp	White	
	20-44	0.8	14.7	2.8	3.0	
	45-64	0.4	1.5	0.8	0.7	
Male	65+	0.4	0.9	0.6	0.5	
	20-44	0.4	6.2	2.4	2.6	
	45-64	0.2	1.3	0.6	0.5	
Female	65+	0.4	0.7	0.6	0.4	

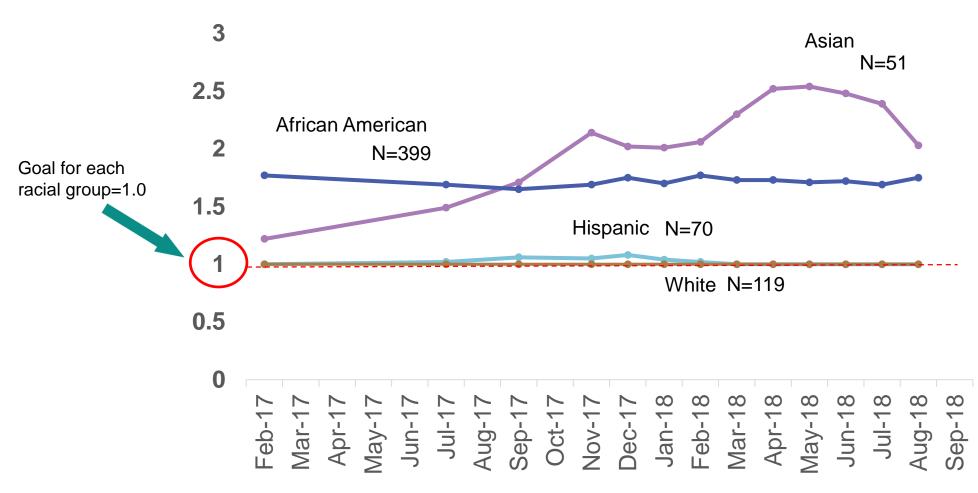
Sutter Health - Observed Asthma Encounters								
Asthma		Asian	Black	Hisp	White			
	20-44	81	642	472	553			
	45-64	37	254	121	353			
Male	65+	39	41	37	107			
	20-44	101	625	631	777			
	45-64	81	425	325	617			
Female	65+	83	106	120	272			
Total Observed		422	2093	1706	2679	6900		

Sutter Health - Observed Diabetes Encounters								
Diabetes		Asian	Black	Hisp	White	l		
	20-44	35	319	344	432			
	45-64	88	472	492	831			
Male	65+	110	152	207	660			
	20-44	22	299	308	362			
	45-64	54	416	363	596			
Female	65+	129	181	231	519			
Total Observed		438	1839	1945	3400	7622		

Sutter Health - Observed Asthma Patients								
Asthma		Asian	Black	Hisp	White			
	20-44	62	372	360	420			
	45-64	33	166	100	254			
Male	65+	33	33	26	99			
	20-44	82	489	509	605			
	45-64	63	322	258	477			
Female	65+	76	85	108	244			
Total Observed		349	1467	1361	2099	5276		

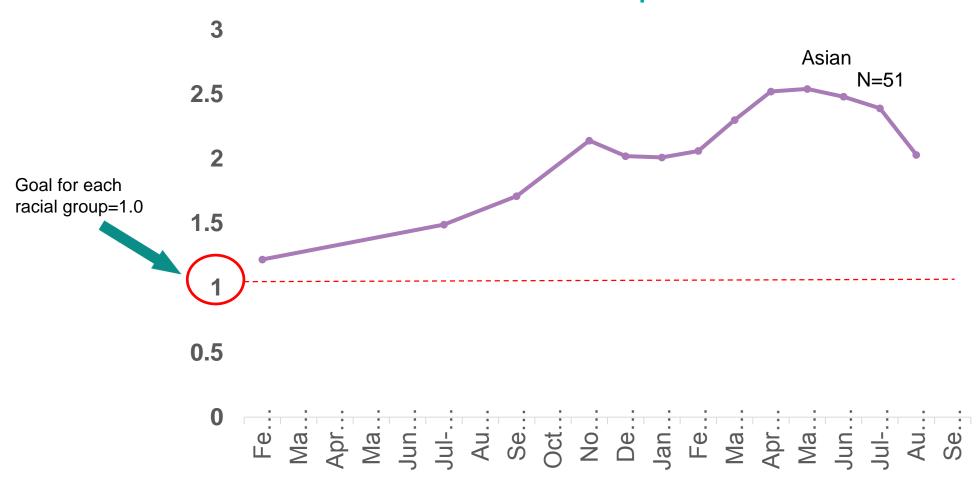
Sutter Health - Observed Diabetes Patients								
Diabetes		Asian	Black	Hisp	White			
	20-44	30	197	253	307			
	45-64	75	364	407	637	1		
Male	65+	104	123	183	560	1		
	20-44	20	162	219	236			
	45-64	47	280	297	438	1		
Female	65+	116	156	197	427			
Total Observed		392	1282	1556	2605	5835		

Health Equity Index - asthma over time at ABSMC



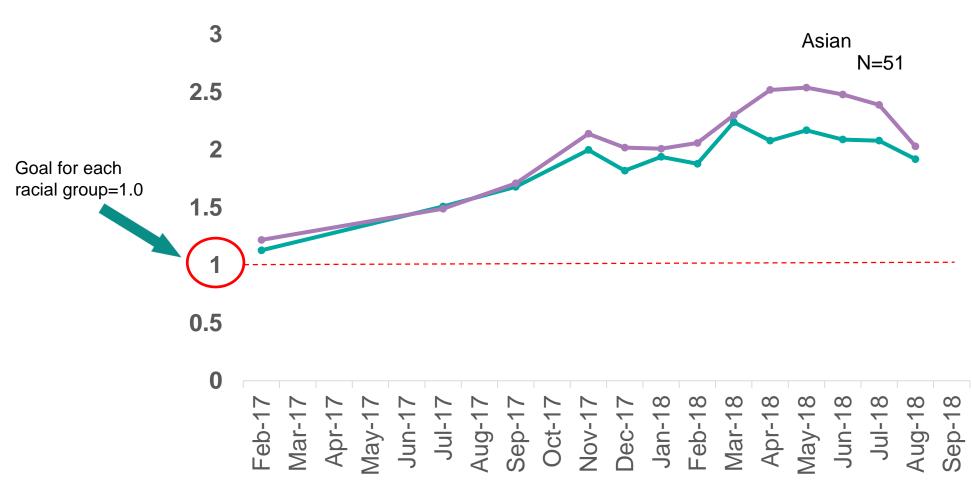


Health Equity Index - asthma over time at ABSMC small sample size



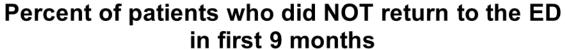


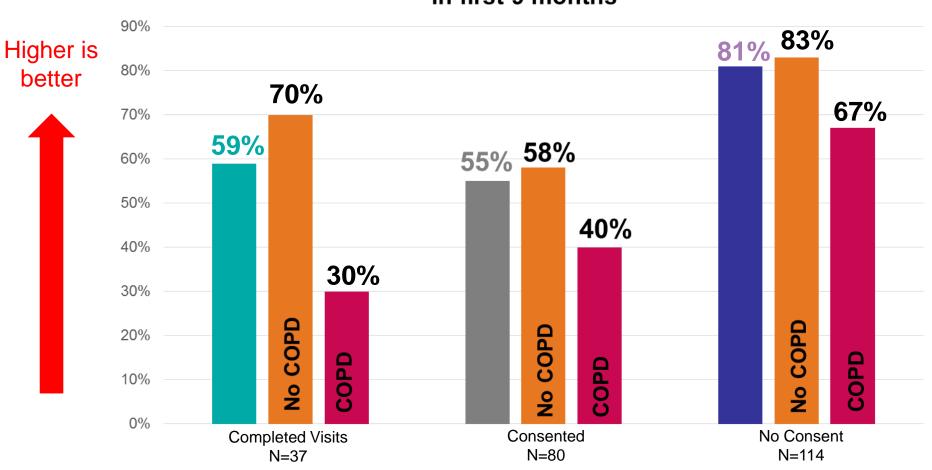
Health Equity Index - asthma over time at ABSMC small sample size





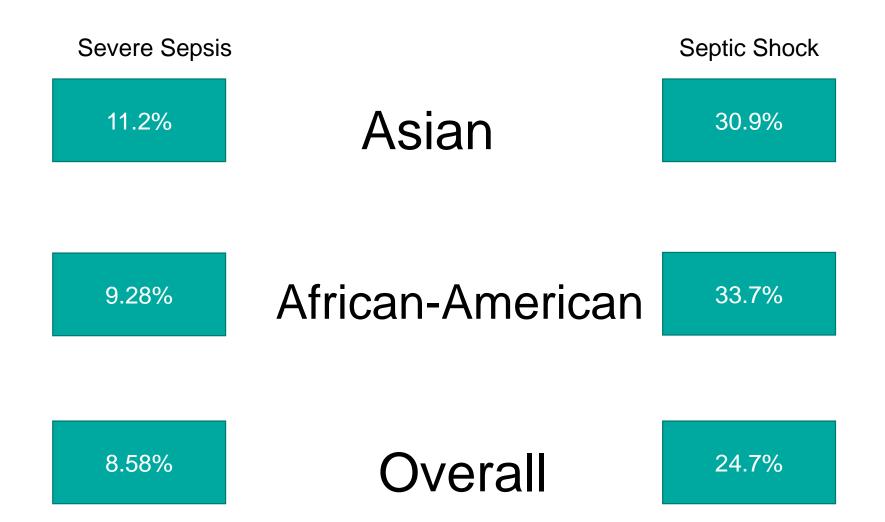
Early Pilot Outcomes







Sepsis Mortality: Preliminary Observations





Breast Cancer Screening Observations Asian White Overall African American

84.00%

85.00%

86.00%

81.00%

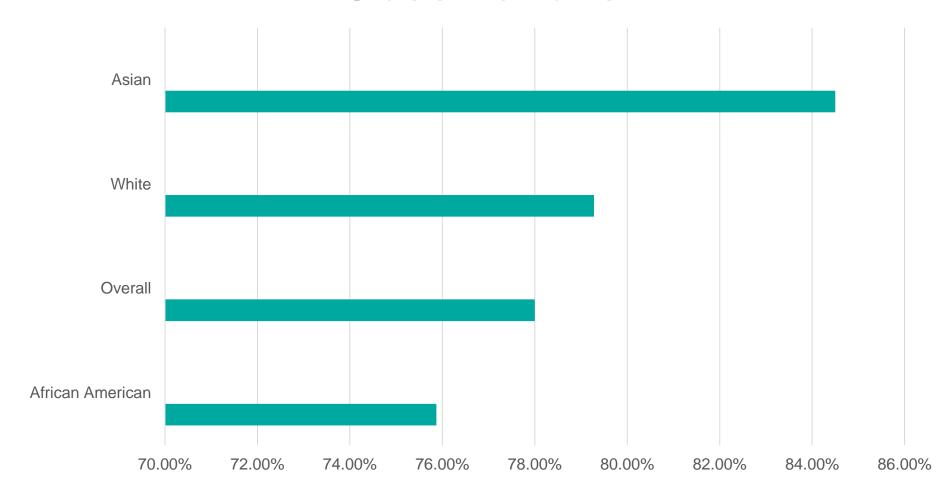
82.00%

83.00%



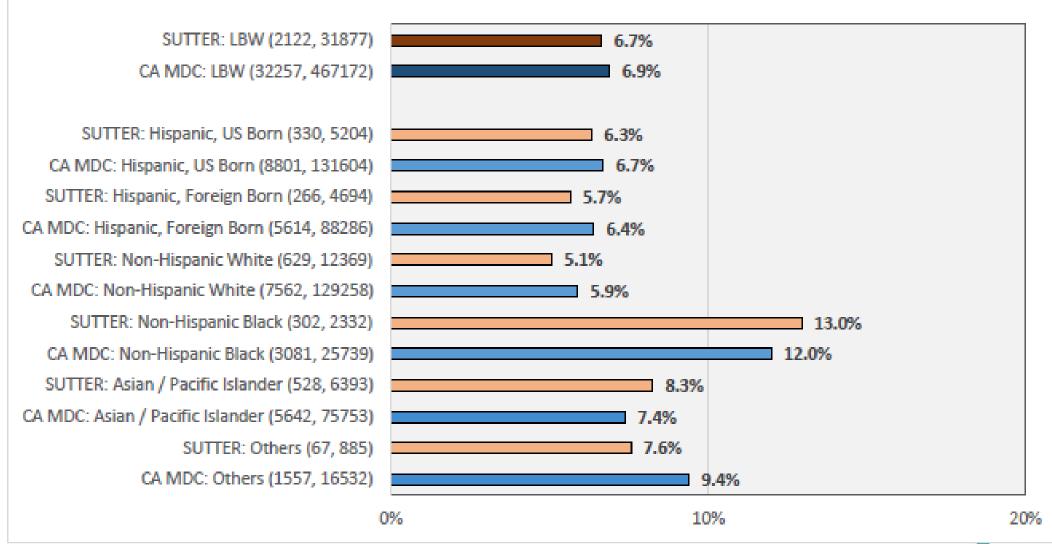
87.00%

Colon Cancer Screening Observations



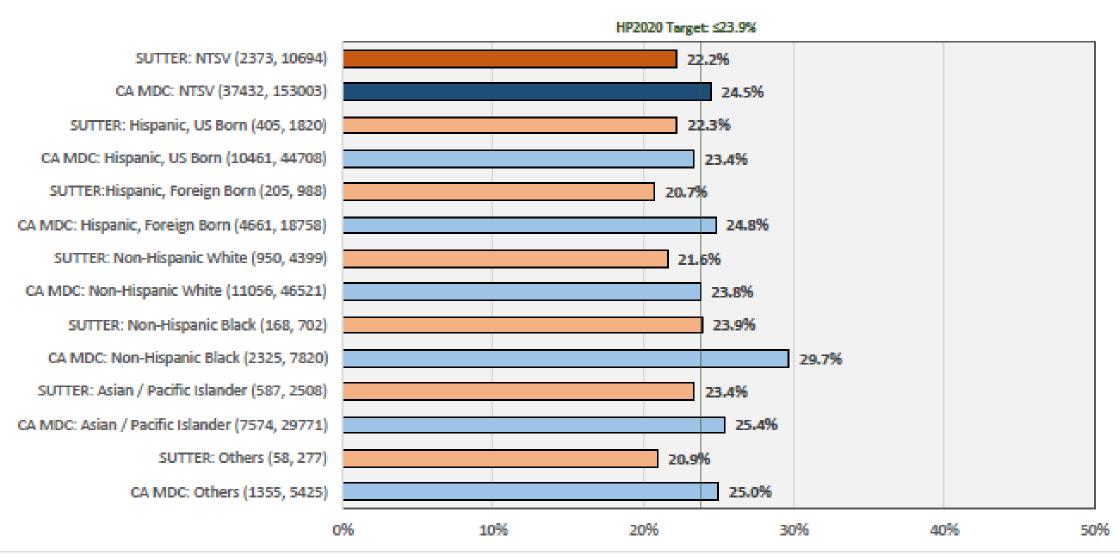


2017
Race/Ethnicity: Low Birth Weight (<2500 grams)



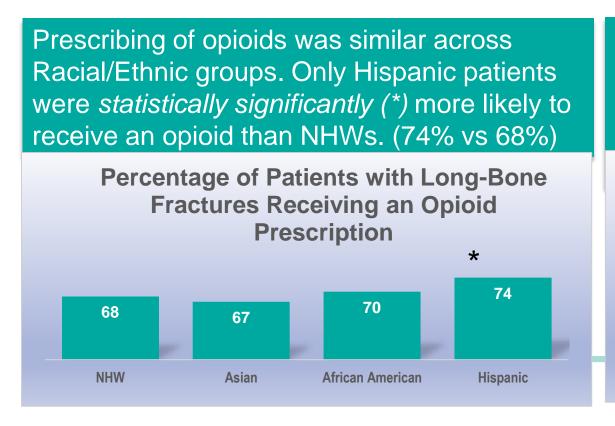


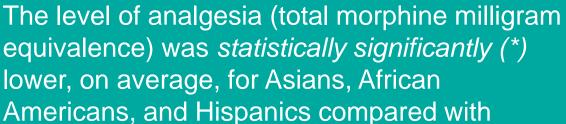
2017
Race/Ethnicity: Cesarean Birth: NTSV - Nullip Term Singleton Vertex (PC-02: Period-Specific)

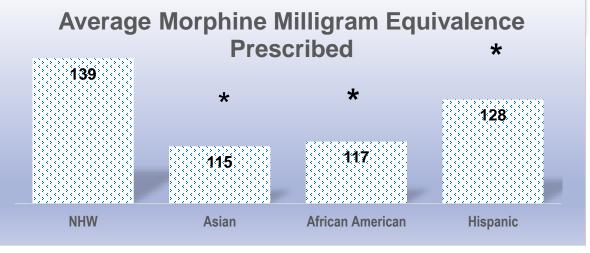




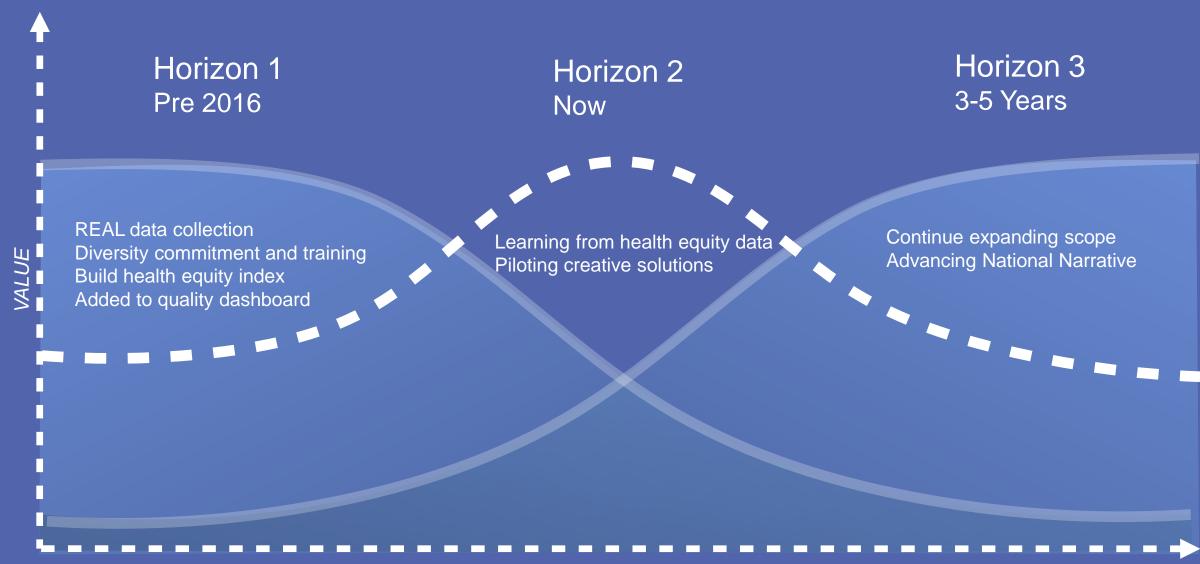
Opioid Prescribing at Discharge for Long Bone Fx in 2016 Sutter Health Emergency Departments (22 sites)







TAKE AWAY: At discharge from the ED, minority groups receive opioid prescriptions at the same, or higher, rate as NHWs, yet they receive, on average, less potent analgesia. Such differences may represent an overprescribing of opioids to NHWs.





Thank you

