

Key Data for Sacramento County Cardiovascular Disease and Diabetes



The Right Care Initiative (RCI) is dedicated to improving cardiovascular and diabetes outcomes by catalyzing uptake of patient-centered, evidence-based practices using performance data to drive improvement among health systems, medical groups, clinics, and health plans. Based at UC Berkeley School of Public Health, this public-private partnership was launched in 2008 by the UC Berkeley and UCLA Schools of Public Health with encouragement from the CA Department of Managed Health Care. RCI includes health system leaders, patient groups, the University of California (multiple campuses), USC, Stanford, Health Services Advisory Group (CMS QIO), CA Chronic Care Coalition, and RAND. We collaborate intensively with local leaders in 4 major metro areas: San Diego, Sacramento, Los Angeles and Silicon Valley. Right Care's first University of Best Practices (UBP) launched in San Diego in February of 2011; the 2nd in Sacramento 2012. UBP gathers health leaders for top performers to teach proven strategies, practices, and breakthrough ideas to prevent heart attacks, strokes, and diabetic complications.

University of Best Practices: Right Care's Translational Model to Implement Evidence-Based Innovations

- Monthly 2-hour convenings are held with leaders from the major regional health care delivery systems in each region.
- Leaders from successful organizations or experts present for 1 hour.
- A break-out session or discussion involving all participants follows in the second hour to consider how to apply the speaker's ideas in the local setting and to problem-solve how to overcome barriers to better uptake of evidence-based protocols and practices.
- Trusted performance data are the bedrock of the UBP model.

Key Statistics

- **Mortality rates in Sacramento County** for diabetes, coronary heart disease, and stroke are **higher** compared to the state. Figure 1.
- Sacramento has **higher hospitalization rates** for acute myocardial infarction (MI) and stroke compared with California overall (OSHPD).
- **Sacramento County has the 2nd worst rate of MIs in CA.**
- There are **large disparities by race** for cardiovascular hospitalizations and risk factors. Figs. 5, 6 and 8.
- Many counties are leading Sacramento on lowering risks. Table 1.

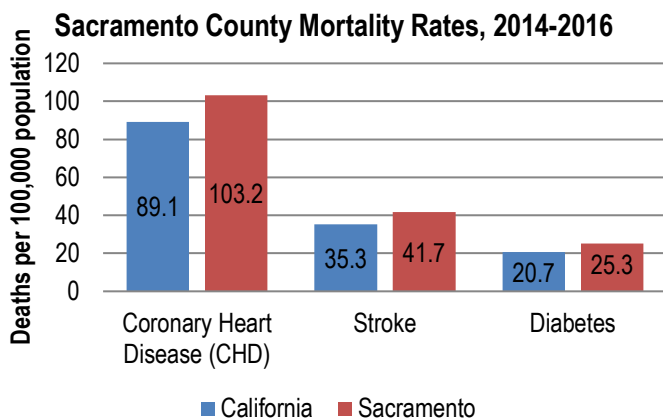


Figure 1: Average age-adjusted death rate (2014-2016). Source: California Department of Public Health. County Health Status Profiles 2018

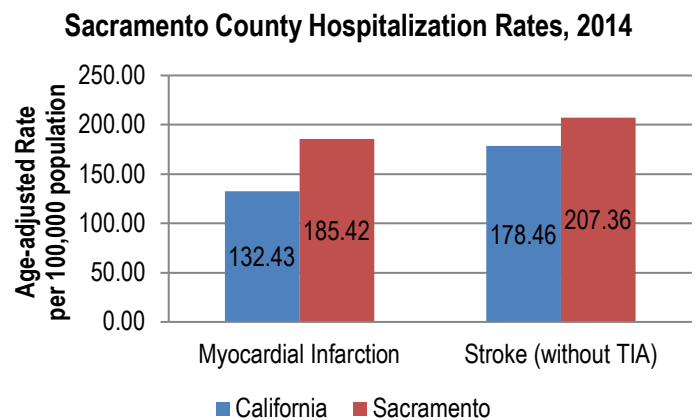


Figure 2: 2014 Age-adjusted hospitalization rate of myocardial infarction and stroke without TIA Source: California Office of Statewide Health Planning and Development's Patient Hospitalization Discharge Data

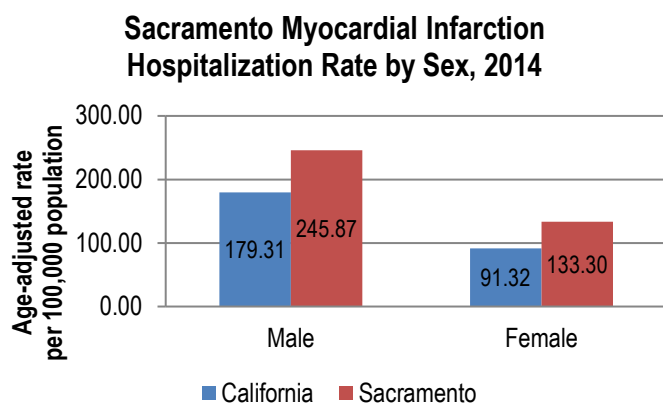


Figure 3: 2014 Age-adjusted MI Hospitalization rate in Sacramento stratified by sex Source: California Office of Statewide Health Planning and Development's Patient Hospitalization Discharge Data

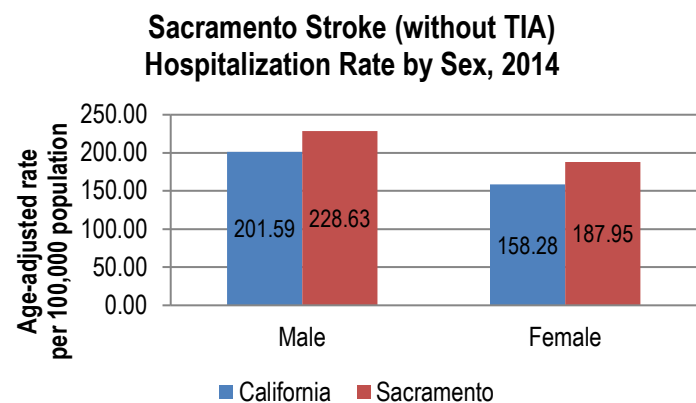


Figure 4: 2014 Age-adjusted Stroke Hospitalization rate in Sacramento stratified by sex Source: California Office of Statewide Health Planning and Development's Patient Hospitalization Discharge Data

Sacramento Myocardial Infarction Hospitalization Rates by Race, 2014

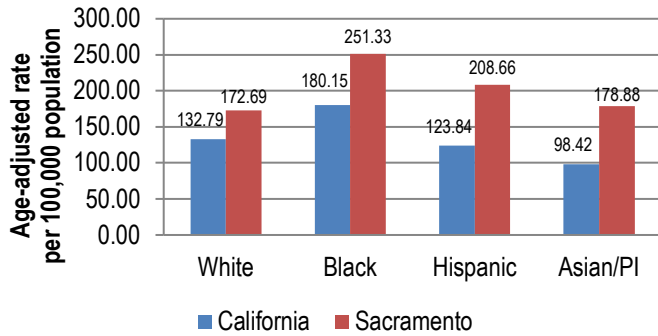


Figure 5: 2014 Age-adjusted MI Hospitalization rate in Sacramento stratified by race
Source: California Office of Statewide Health Planning and Development's Patient Hospitalization Discharge Data

Sacramento Stroke (without TIA) Hospitalization Rates by Race, 2014

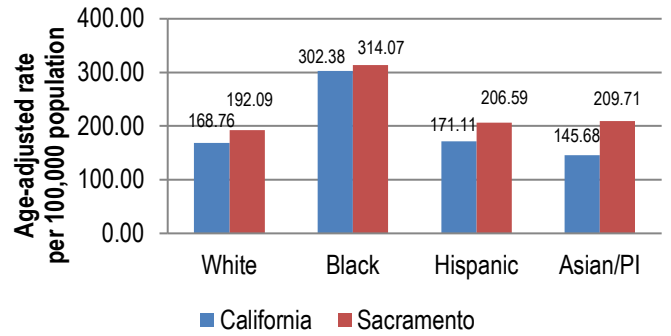


Figure 6: 2014 Age-adjusted Stroke Hospitalization rate in Sacramento stratified by race
Source: California Office of Statewide Health Planning and Development's Patient Hospitalization Discharge Data

Sacramento Self-Reported Risk Factors - California Health Interview Survey, 2014-2017

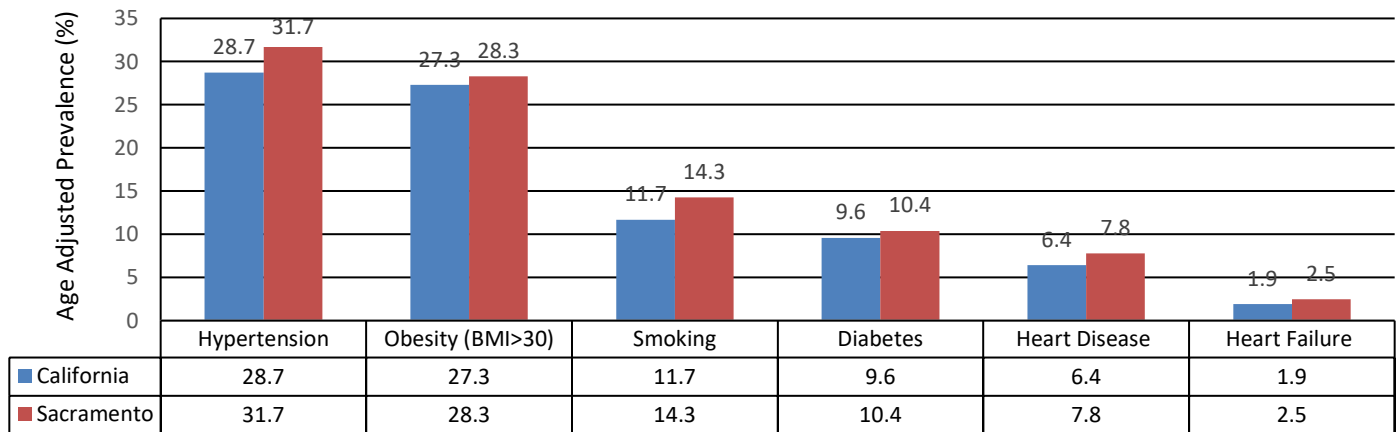


Figure 7: Self-reported Cardiovascular Risk Factors from 2014-2017 California Health Interview Survey
Source: Self-reported, publicly available telephone survey data, California Health Interview Survey (CHIS) UCLA Center for Health

Sacramento Self-Reported Risk Factors by Race/Ethnicity, CHIS, 2014-2017

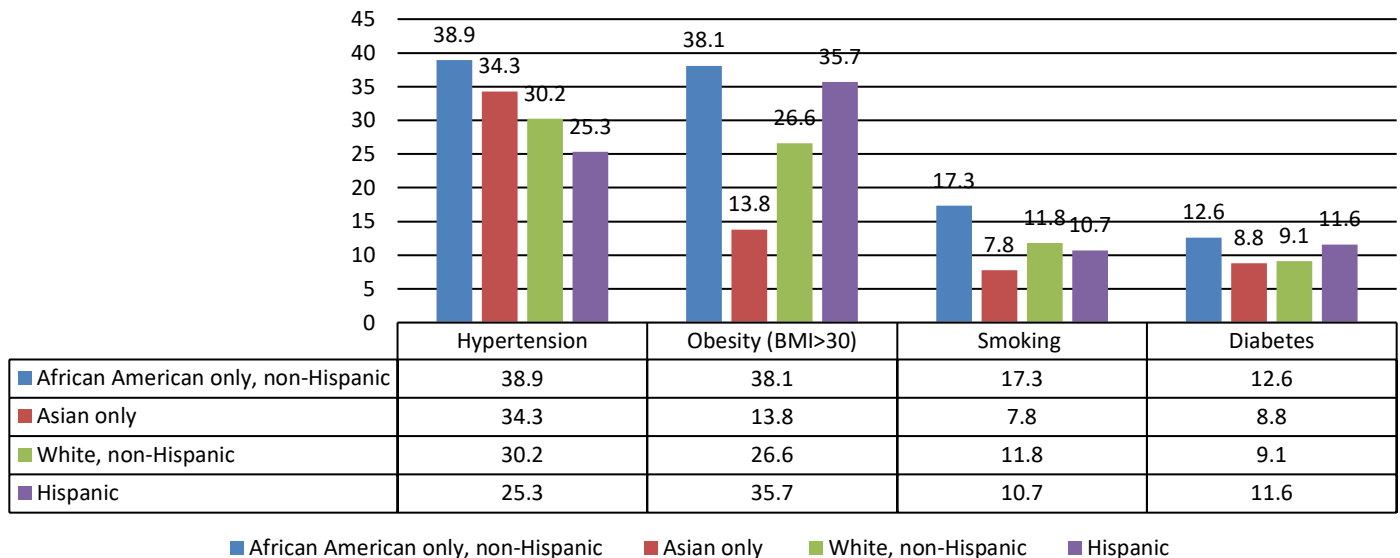


Figure 8: Self-reported Cardiovascular Risk Factors by race from 2014-2017 California Health Interview Survey
Source: Self-reported, publicly available telephone survey data, California Health Interview Survey (CHIS) UCLA Center for Health

Age-Adjusted Prevalence of Self-Reported Cardiometabolic and Other Risk Factors for Adults in California Counties (Percent (rank)) 2014-2017

County	Diabetes (% (rank))	Obesity (% (rank))	Hypertension (% (rank))	Heart Disease (% (rank))	Smoking Status (% (rank))
Los Angeles	10.3 (36)	28.3 (27)	28.7 (20)	5.8 (10)	11.0 (15)
Sacramento	10.4 (41)	29.9 (32)	31.7 (28)	7.8 (27)	14.3 (25)
San Diego	8.5 (23)	24 (13)	27.1 (9)	6.2 (16)	10.8 (12)
Santa Clara	8.8 (27)	19.4 (4)	28.3 (15)	5.1 (4)	8.1 (3)

Table 1: Data are age adjusted from pooled CHIS 2014-2017. Ranks are from 1-44 with 1 having the lowest prevalence, and 44 having the highest; small counties were pooled to create stable estimates. All estimates reported are stable. Source: Dingbaum, Darsie, Ivey et al., CA Department of Public Health Analysis, 2017 (CHIS 2014-2017 Adult Public Use File).

Comparing Counties – Coronary Heart Disease Three Year Averaged, Age-adjusted Mortality Rates (2014-2016)			
County (rank)	Age-adjusted Death Rate	95% Confidence Interval	
		Lower	Upper
Santa Clara (6)	58.2*	54.9	61.6
San Diego (24)	81.2*	78.2	84.2
State Rate	89.1	88.2	90.0
Sacramento (42)	103.9*	98.1	108.2
Los Angeles (43)	103.9*	102.0	105.9

Table 2: Age-adjusted Mortality Rates for Coronary Heart Disease. Source: County Health Status Profiles 2018 Report, California Department of Public Health

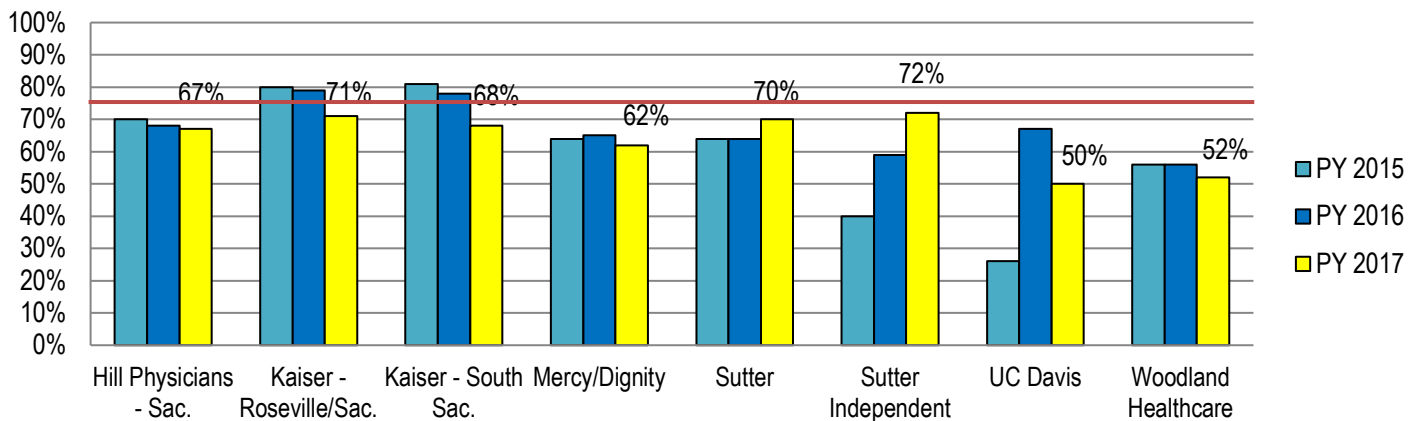
*Statistically significant relative to the state mean

Comparing Counties – Stroke (without TIA) Three Year Averaged, Age-adjusted Mortality Rates (2014-2016)			
County (rank)	Age-adjusted Death Rate	95% Confidence Interval	
		Lower	Upper
Santa Clara (5)	26.6*	24.3	28.8
Los Angeles (21)	33.2	32.1	34.3
San Diego (27)	34.3	32.4	36.3
State Rate	34.7	34.2	35.3
Sacramento (47)	41.7*	38.4	45.0

Table 3: Age-adjusted Mortality Rates for Stroke. Source: County Health Status Profiles 2018 Report, California Department of Public Health

*Statistically significant relative to the state mean

**Gold Bar Performance – Sacramento County Medical Groups
Controlling High Blood Pressure at < 140/90 mmHg (PY 2015-2017)**

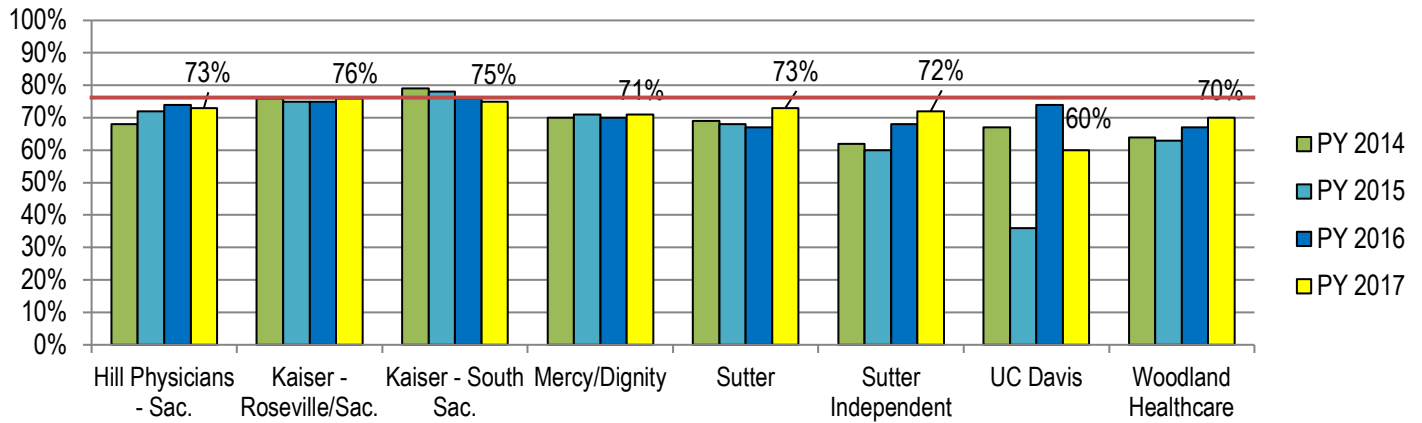


PY = Performance Year

Red Line marks 90th Percentile Performance (75%)

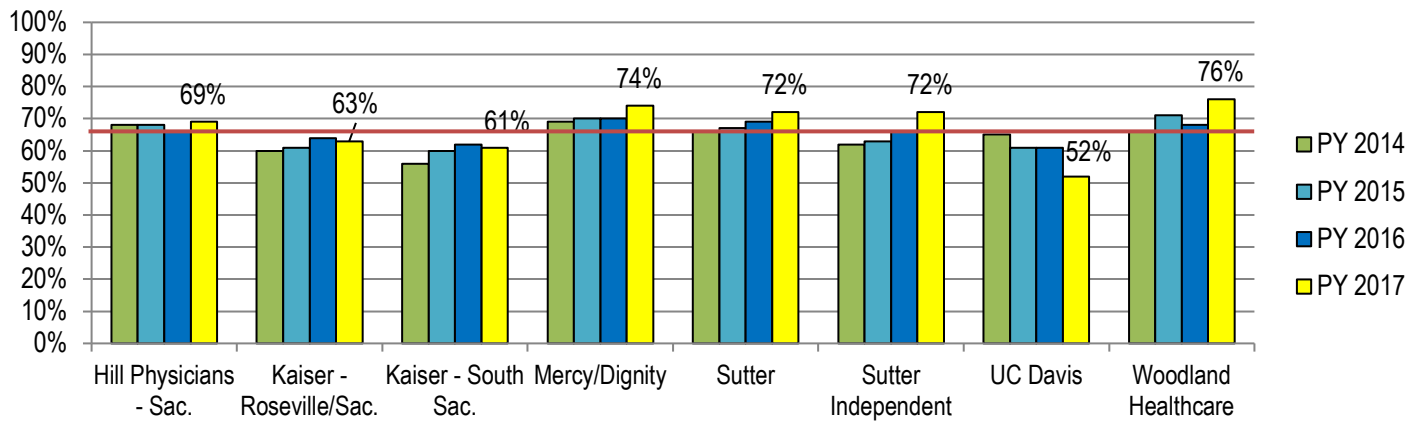
Source: Performance data for managed care patients, CA Office of the Patient Advocate Report Editions 2018-2019

Gold Bar Performance - Sacramento County Medical Groups Controlling Blood Pressure (< 140/90 mmHg) for People with Diabetes (PY 2014-2017)



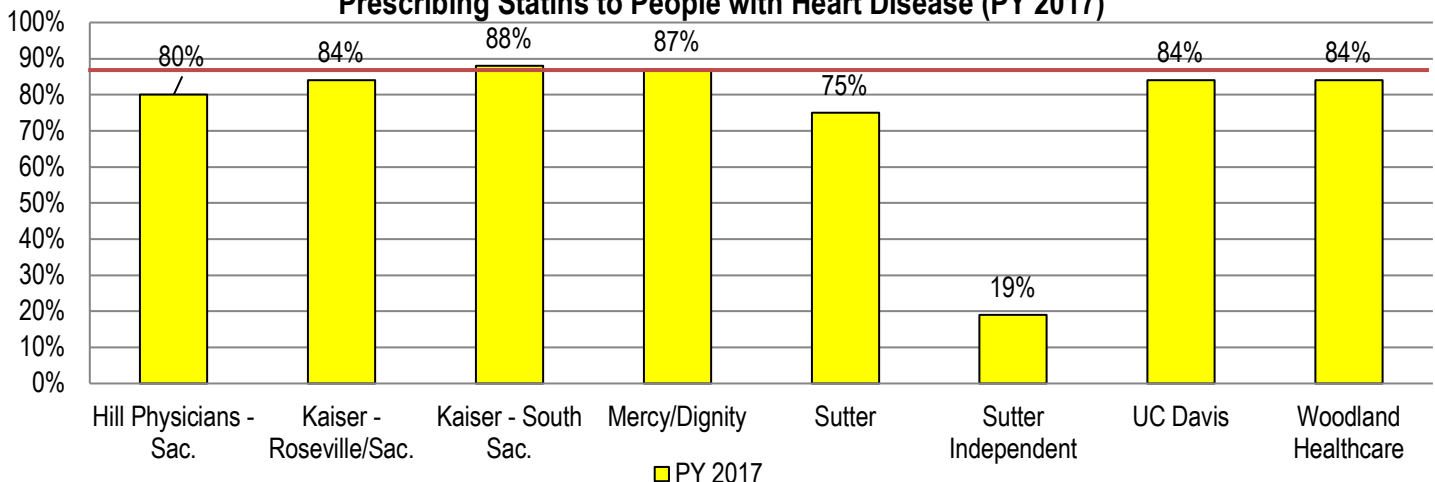
PY = Performance Year
Red Line marks 90th Percentile Performance (76%) Source: Performance data for managed care patients, CA Office of the Patient Advocate Report Editions 2018-2019

Gold Bar Performance - Sacramento County Medical Groups Controlling Blood Sugar (HbA1c < 8) for People with Diabetes (PY 2014-2017)



PY = Performance Year
Red Line marks 90th Percentile Performance (66%) Source: Performance data for managed care patients, CA Office of the Patient Advocate Report Editions 2018-2019

Gold Bar Performance - Sacramento County Medical Groups Prescribing Statins to People with Heart Disease (PY 2017)



PY = Performance Year
Red Line marks 90th Percentile Performance (87%) Source: Performance data for managed care patients, CA Office of the Patient Advocate Report Editions 2018-2019

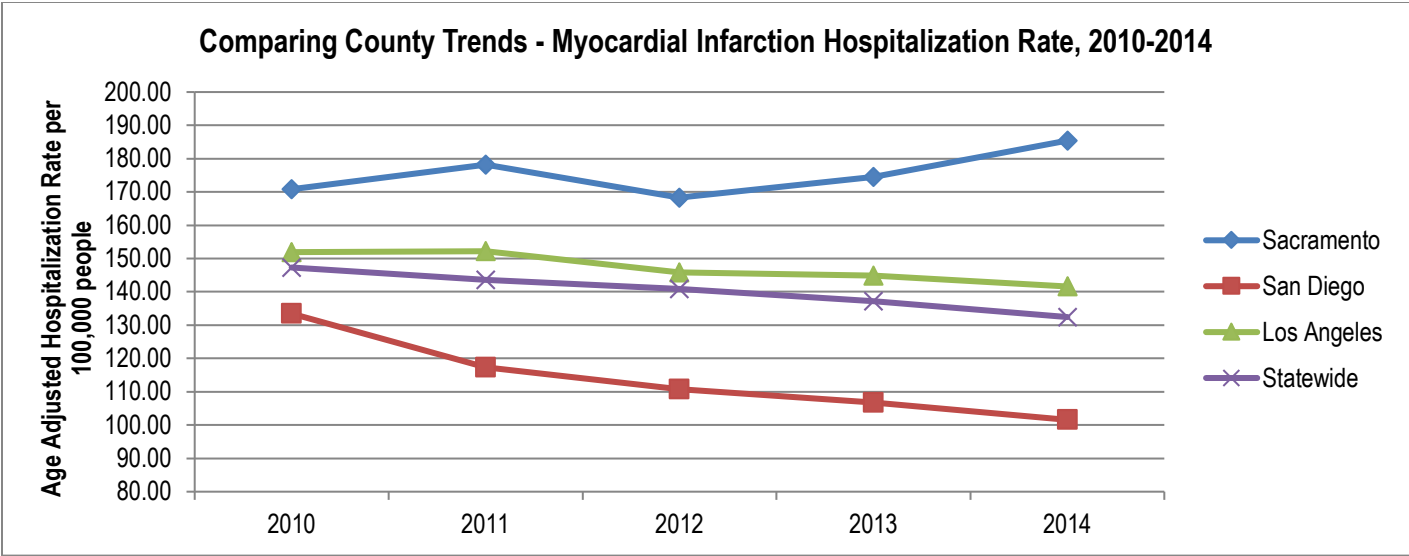


Figure 9: Age-Adjusted Hospitalization Rate for Myocardial Infarction (2010-2014 Office of Statewide Health Planning and Development)

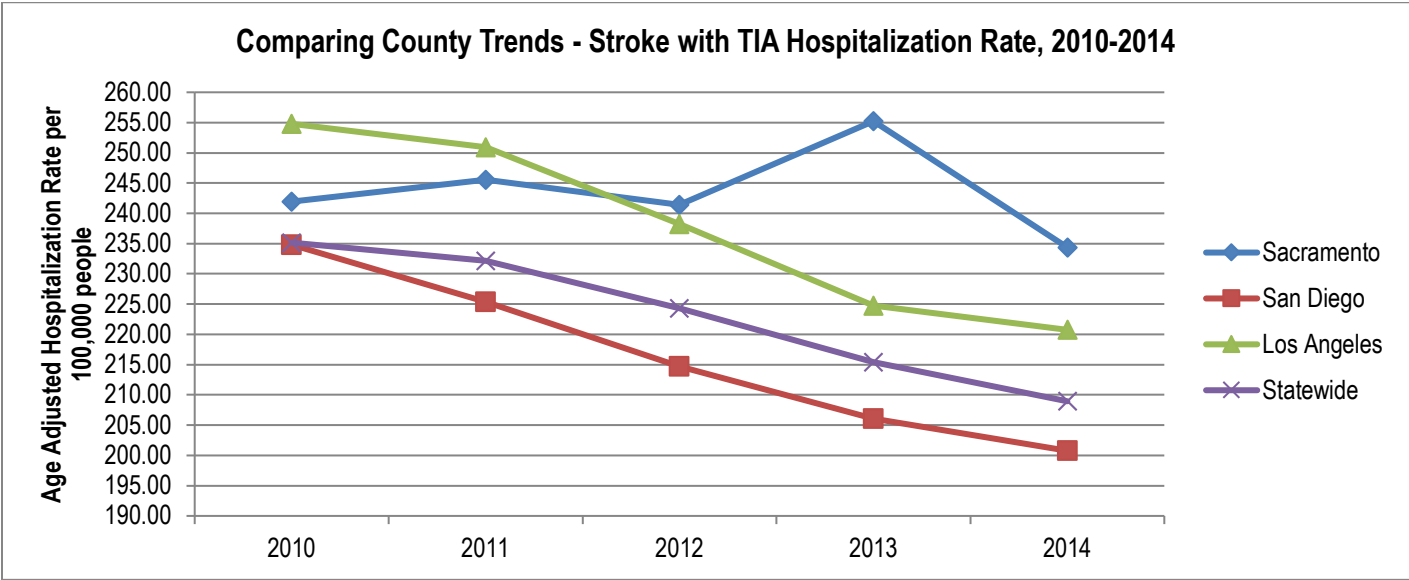


Figure 10: Age-Adjusted Hospitalization Rate for Stroke with TIA (2010-2014 Office of Statewide Health Planning and Development)

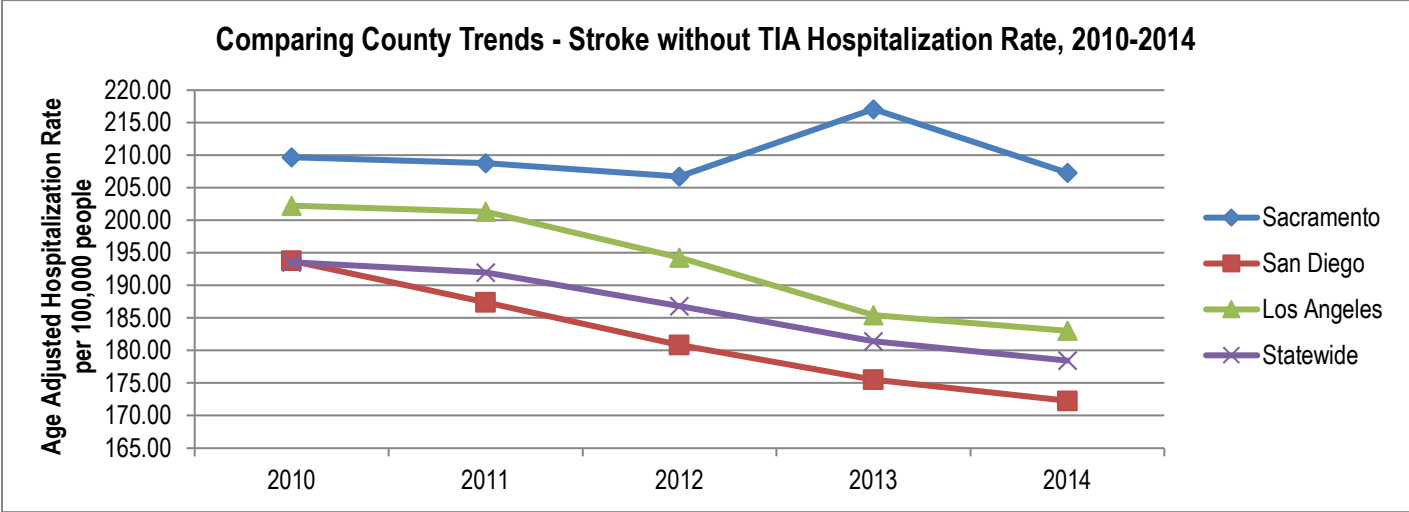


Figure 11: Age-Adjusted Hospitalization Rate for Stroke without TIA (2010-2014 Office of Statewide Health Planning and Development)

Sacramento County Mortality Hot Spots for Diabetes, Heart Disease, Hypertension, and Stroke (2007-2011)

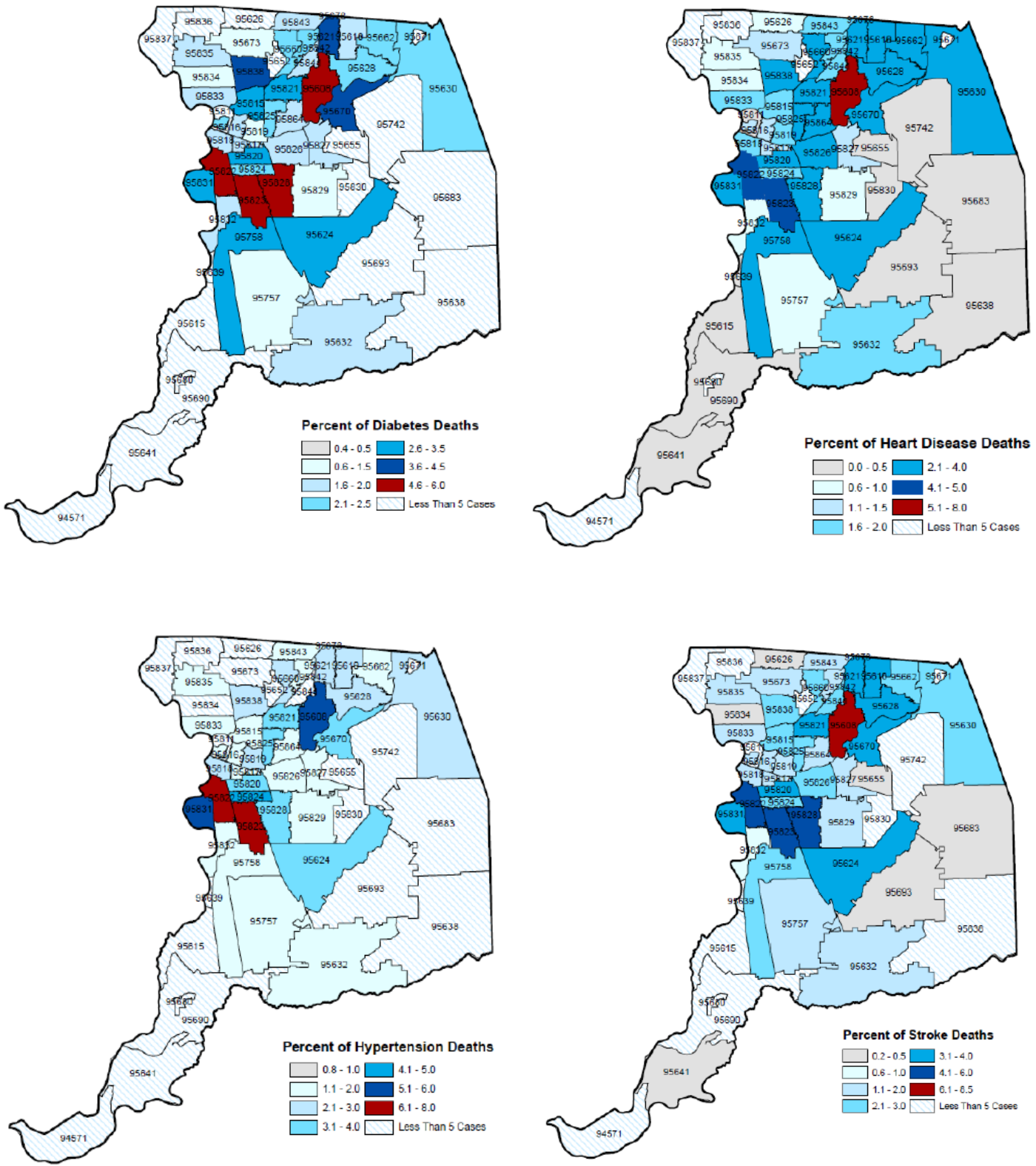


Figure 12: Sacramento County Hot Spots for Diabetes, Heart Disease, Hypertension and Stroke Mortality Rates (2007-2011)

Source: California Department of Public Health, Map 3,4,5,6. Community Health Status Report 2014

Proposed Action Plan for Sacramento County

Sacramento County has:

- **Higher rates of smoking than the state average**
 - Encourage primary care physicians to ask about smoking as a vital sign during every visit.
 - Provide brief cessation counseling for smokers which also helps meet meaningful use¹.
- **Higher rates of obesity than the state average**
 - Encourage measurement of BMI regularly in primary care; ensure patients are aware of obesity-related health risks².
 - Develop a plan with patients for addressing obesity; provide solid evidence to promote diet and physical activity changes.
 - Work to ensure all communities have access to safe, affordable options for healthy diets and physical activity in their neighborhoods.³
- **Higher rates of hypertension than the state; high rates of uncontrolled hypertension, especially for African Americans**
 - Improve community outreach about hypertension as a silent killer.
 - Improve medication adherence by utilizing health coaches to activate patients via motivational interviewing and evidence-based media messaging.
 - Provide information about best practices for treating hypertension to local primary care providers.
 - Ensure that physicians are made aware of the most recent medication protocols and guidelines for hypertension and guidelines are actively being upheld by all care team members.
- **Disparities in self-reported hypertension, smoking, and obesity exist among different race/ ethnicities in Sacramento County**
 - Utilize health coaches for evidence-based patient education and motivational interviewing on nutrition and physical activity and for counseling on smoking cessation.
 - Use culturally aligned, linguistically appropriate health coaches to bridge the gaps.
 - Ask your patients about social determinants of health including whether medication costs are within budget.

Other Interventions may include:

- Clinical pharmacists on the care team to integrate comprehensive medication management to improve quality of health care.
- Community-based screenings, patient education, and referrals into care, such as in faith-based settings and barbershops to "meet patients where they are."
- Referring smokers to tobacco tax funded smoking cessation programs.
- Creating a public messaging campaign such as on bill-boards and on social media to encourage patients to adopt healthy lifestyles such as 30 minutes of walking a day, and moving to a plant-centric eating pattern.
- Adopting culturally appropriate messaging to enhance education for high risk populations.
- Deploy evidence-based, culturally appropriate video training materials for high risk patients and their families to be prescribed before an appointment of motivational interviewing. High risk patients & families need to learn the importance of home blood pressure monitoring, that time is of the essence when CVD symptoms strike, and to call 911 rather than self transport to ensure prompt treatment at a hospital with capacity to treat quickly.

Bibliography

1. Maciosek MV, LaFrance AB, Dehmer SP, et al. Health benefits and cost-effectiveness of brief clinician tobacco counseling for youth and adults. *The Annals of Family Medicine*. 2017;15(1):37-47.
2. Cabodi J, Kelsberg G, Safranek S. Does brief physician counseling promote weight loss? *J Fam Pract*. 2011;60(9):548-550.
3. Laraia BA, Karter AJ, Warton EM, Schillinger D, Moffet HH, Adler N. Place matters: neighborhood deprivation and cardiometabolic risk factors in the Diabetes Study of Northern California (DISTANCE). *Social science & medicine*. 2012;74(7):1082-1090.
4. California Office of Statewide Health Planning and Development. Patient Hospitalization Discharge Data. Merged dataset 2010- 2014
5. California Health Interview Survey. CHIS 2014-2017 Adult Public Use File. Los Angeles, CA: UCLA Center for Health Policy Research, January 2017
6. County Health Status Profiles 2018 Report. California Department of Public Health.
7. Zheng H, et al. Sacramento County Community Health Status Report 2014, Sacramento County Department of Public Health, Department of Health and Human Services, Public Health Division, Disease Control and Epidemiology Unit.