

Assessing Effectiveness of University of Best Practices: Right Care Pilot Demonstration Project in San Diego Shows Improvements in Acute Myocardial Infarction Hospitalization Rates Compared with Rest of California



The Right Care Initiative of UC Berkeley School of Public Health has worked since 2007 to improve clinical outcomes by catalyzing uptake of patient-centered, evidence-based best practices among medical groups, clinics, and health plans. This public-private partnership is led by UC Berkeley School of Public Health and was publicly launched collaboratively with UCLA School of Public Health and the CA Department of Managed Health Care in 2008. Our collaborative is comprised of physician and clinical quality improvement leaders, health systems, multiple UC campuses, USC, Stanford, RAND, public health officials, patients, and advocates such as the CA Chronic Care Coalition. With support from NIH for our first pilot, and with subsequent charitable funds, we built four regionally-focused University of Best Practices (UBP) starting in 2011: San Diego, Sacramento, Los Angeles and the Bay Area Silicon Valley. Our 4th UBP was launched in Bay Area Silicon Valley in 2018 to continue to spread best practices to prevent and better manage heart attacks, strokes, and diabetes by building on the sustained 22% reduction of heart attacks we have seen with our initial pilot. Our University of Best Practices focus on leaders from organizations with breakthrough clinical quality who share strategies to improve patient outcomes. Data from our first NIH funded pilot University of Best Practices is described here.

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

- Monthly 2+ hour convenings are held with leaders from major regional health care delivery systems and public health.
- Leaders from high-performing organizations and/or experts present "how they did it" along with lessons learned.
- A break-out session or discussion involving all participants follows to consider how to apply the speaker's ideas in the local setting and to problem-solve overcoming barriers for improved patient outcomes.
- Trusted performance data is the bedrock of the UBP model.

Lessons Learned in Implementing University of Best Practices

- A collaborative, "non-combat zone" spirit among local clinical leaders is the essential ingredient, following the Warren principle: *In this room we compete against disease, not against each other.*
- High performing medical directors, coupled with cardiology and endocrinology experts, co-lead the discussions and mentor others to achieve better outcomes.
- 75% or less of our gathering time is for presentations to allow for sufficient discussion on achievable, locally applicable action plans.
- Many hours of behind-the-scenes planning and organizing are needed for a successful collaborative.
- Enthusiastic participation is built on the quality of intellectual content.

UBP Resources – A National Institutes of Health - Grand Opportunity (NIH-GO) grant, awarded in late 2009, supported the UC Berkeley, UCLA and RAND Right Care research teams to meet with individual San Diego delivery systems in 2010; supported hosting three separate day-long Right Care Initiative Scientific Summits in San Diego in 2010-2011; and launched the initial pilot University of Best Practices in San Diego in February 2011. When NIH-GO grant funds expired, Right Care Champions Judith and Jack White provided bridge funding to continue the San Diego UBP until new federal grant funds were obtained. Charitable contributions, grant funding, and membership contributions continue to support the regional University of Best Practices sites.

Since the introduction of the University of Best Practices in San Diego County in early 2011, there has been an observable decline in hospitalizations for adult heart attacks (myocardial infarction) when compared to the rest of California (see graphs below) (Fulton et al., 2017; Fremont et al., 2018). This is similar to trends seen in South Carolina where physician collaboratives across the state focused on fighting against heart disease. South Carolina efforts on better control of blood pressure and lipids moved the state from 51st on CVD deaths to 35th place nationally between 1995 and 2006 (Egan et al, 2011).

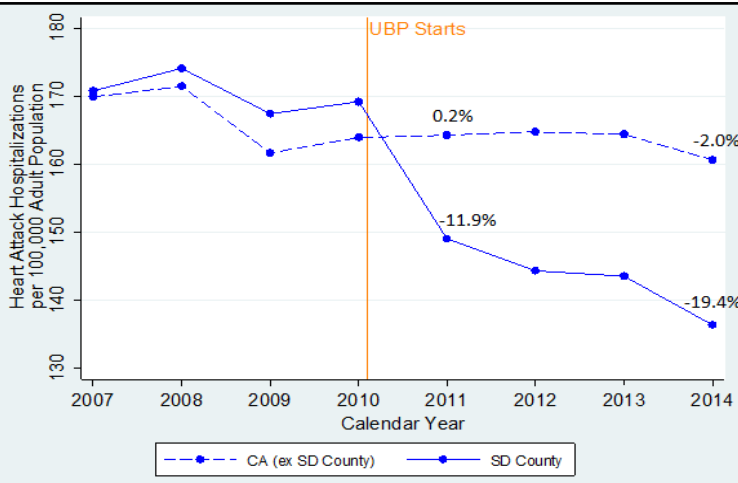


Figure 1: Hospitalizations per 100,000 Adult Population for Heart Attacks Comparing San Diego County with the rest of California, 2007-2014

Source: Fulton et al, 2015, analysis of California Office of Statewide Health Planning and Development's 2007 to 2014 Patient Hospitalization Discharge Data

Notes: SD County = San Diego County; CA (ex. San Diego County)= California excluding San Diego County; Heart attacks (ICD-9-CM code 410.xx); UBP= University of Best Practices. UBP started in February 2011, just after the 2010 data points. Percentages are percent changes since 2010.

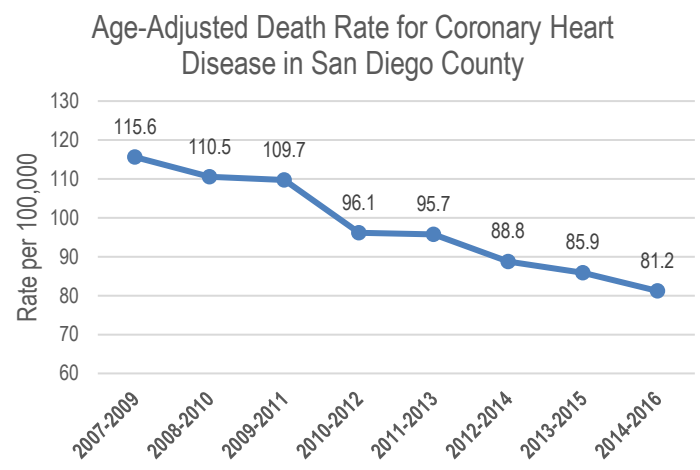


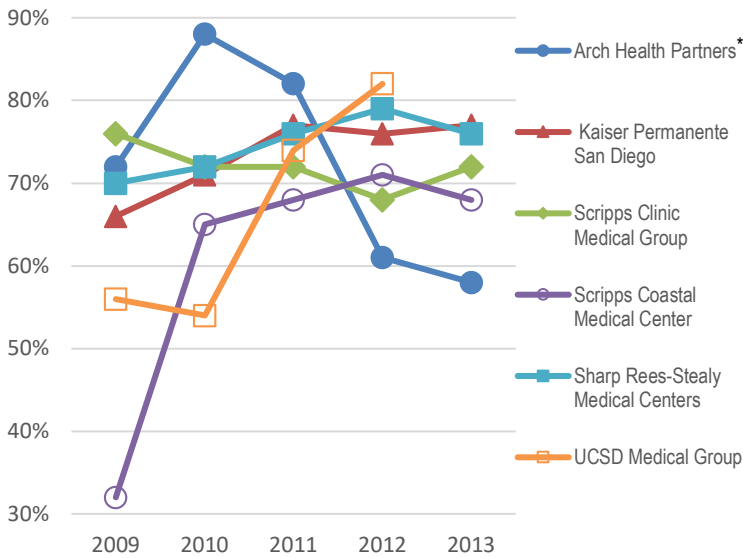
Figure 2: Three-Year Average Age-Adjusted Death Rate for Coronary Heart Disease in San Diego County 2007-2016

Source: California Department of Public Health County Health Report 2011-2018

Notes: Coronary Heart Disease (CHD): ICD-10 codes I20-I25 as underlying cause of death.

The Right Care Initiative started statewide convenings in 2008, and with NIH support began planning focused implementation in San Diego County (SD) in 2010. Starting in 2011, SD medical groups were supported by RAND to have regular data sharing meetings (in addition to the NIH supported Right Care University of Best Practices) to drive improved control of LDL cholesterol, blood pressure, and HbA1c. Two figures below illustrate individual medical group performance in SD in controlling LDL 100 cholesterol and blood pressure. Results from recent state report cards appear below. LDL 100 cholesterol and BP control in SD delivery systems outperformed California.

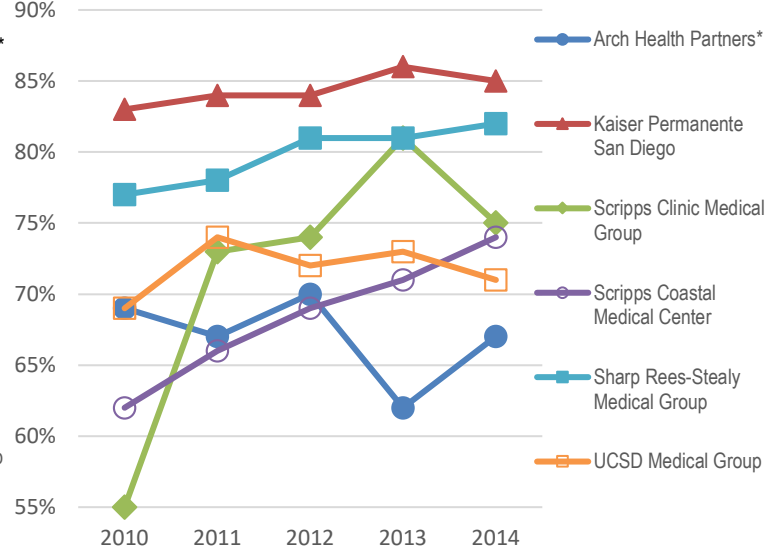
LDL Control <100 mg/dL for People with Heart Disease



* Performance of this group may be adversely impacted by incorporation of small practices observed during this time period.

Figure 3: LDL Cholesterol Control (<100 mg/dL) for People with Heart Disease. Note: LDL data were no longer recorded in San Diego County after 2013

Blood Pressure Control <140/90 mm Hg among Diabetics



* Performance of this group may be adversely impacted by incorporation of small practices observed during this time period.

Figure 4: Blood Pressure Control (<140/90 mm Hg) for People with Diabetes. Note: Data were not available for this measure until 2010

Looking Forward

Results and lessons learned from the University of Best Practices approach to prevention and better management of heart attacks, strokes and diabetic complications are being spread to UBPs in Los Angeles, Sacramento, Santa Clara County. Significant progress has been made toward the initial goal set by the steering committee of medical directors from the initial Right Care Initiative San Diego University of Best Practices (now renamed *Be There San Diego*) who came to consensus in 2011 that heart attacks could be reduced by 50% in 5 years by implementing the interventions on the Right Care Triangle (see triangle to right and [Right Care Initiative Project Brief](#)). **From 2011 to 2014, the hospitalization rate decrease in San Diego County was 16.5 percentage points more than the decrease in the rest of the state for heart attacks.** If those results were achieved throughout the rest of California, there would have been approximately 5,000 fewer hospitalizations for heart attacks each year, saving over \$100 million in annual payments to hospitals.

A September 2018 *Health Affairs* article indicated that if our initial pilot results were spread statewide, **\$935 million would be saved between 2011 and 2016 and over 42,000 acute myocardial infarction hospitalizations would have been prevented.**

Please see Press Release of *Health Affairs* study (Fremont et al., 2018) indicating a sustained **22% reduction in acute heart attack hospitalizations** over 6 years in our initial pilot community: [here](#)

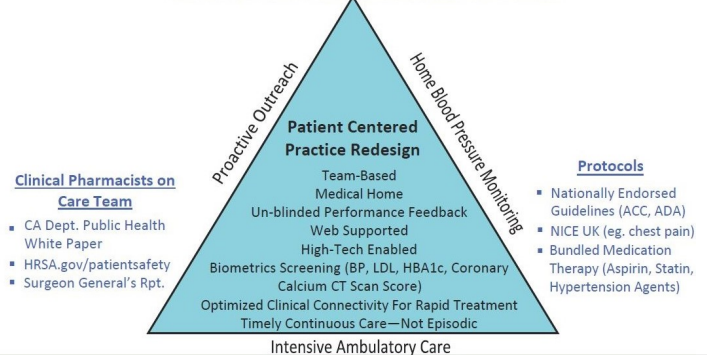
Building on the Shoulders of Giants

The Right Care Initiative launched the University of Best Practices pilot program in San Diego building on the conceptual learnings of collaboratives that had come before (Egan et al, 2011).

Note: In 2014, after NIH funding ran out, The San Diego UBP obtained independent funding and was renamed *Be There San Diego* University of Best Practices. Its goals and leadership by renowned cardiologist Anthony DeMaria, MD, remain unchanged.

Promising Interventions to Reach Right Care Control Targets for Heart Attack, Stroke, and Diabetes Prevention and High Quality Management

- Patient Activation**
 - Stress reduction, medication adherence, healthy sleep, nutrition & physical activity, smoking cessation
 - Evidence-based patient education (e.g., Project DULCE; Stanford Patient Self-Management)
 - Motivational interviewing and evidence-based media messaging



Publications and References

Results of the Right Care Demonstration Project have been published in *The American Journal of Managed Care* 2017; 23(10):596-603, and in *Health Affairs* 2018 37(9): 1457-1465

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Egan, BM, Laken, MA, Shaun Wagner, C, Mack, SS, Seymour-Edwards, K, Dodson, J, Zhao, Y, Lackland, DT. Impacting population cardiovascular health through a community-based practice network: update on an ASH-supported collaborative. *J Clin Hypertens (Greenwich).* 2011;13(8): 543-550.

Fulton, B, Ivey, SL, Rodriguez, H, Shortell, SM, Spautz, L, Lu, A, Klein, SL, Spencer, B, Hanley, HR. The relative hospitalization rate decrease for AMIs in San Diego County occurred across all age groups. RCI Annual Summit, Berkeley, CA. November, 2015.

County Health Status Profiles 2011-2018 Reports. California Department of Public Health.

Additional resources can be found at: www.RightCare.Berkeley.edu The Right Care Initiative is a charitably funded collaborative operated by UC Berkeley School of Public Health, and was originally launched in collaboration with UCLA and the CA Department of Managed Health Care

Project Brief Updated: May 2019; Originally Produced: 2016 by UC Berkeley Right Care Research Team: the Professor Susan L. Ivey, MD, MHSA, Professor Brent Fulton, PhD; and research assistants Amanda Lu and Bryan Vuong