PHASE Initiative in Northern California
Evaluation Executive Summary – March 2017

Driven by its mission to improve health, Kaiser Permanente Northern California developed PHASE (Preventing Heart Attacks and Strokes Every day), an evidenced based, population management approach for patients most at risk for heart attacks and strokes. PHASE focuses on preventing cardiac and cerebrovascular events with proven medications and aggressive risk factor management. Since 2003, Kaiser Permanente has reduced heart attacks and stroke-related hospital admissions among its own members by 60 percent through implementing PHASE.

Recognizing the potential public health benefits of making PHASE available to other organizations, Kaiser Permanente Northern California Region Community Benefit Programs began providing grant support and technical assistance to safety net organizations to implement, spread and sustain PHASE. From 2006 to 2014, the organization provided eight grants to northern California regional consortia and public hospitals.

In early 2015, Kaiser Permanente Northern California began reflecting on what had been learned during the previous PHASE grants to determine what it wanted to accomplish going forward. It established the PHASE Support Team—comprised of external technical assistance (TA) providers and evaluators—to support expanded PHASE redesign and implementation efforts. As a result of this process, Kaiser Permanente began publicly defining PHASE as an evidence-based, population health management program and clinical protocol that, when followed, reduces cardiac events. In addition, learnings from previous evaluation efforts helped focus the PHASE initiative further, with emphasis on six "PHASE Building Blocks" that were critical to the program's successful implementation:

- Adoption of evidence-based clinical guidelines
- Engaged leadership and supportive culture
- Quality improvement culture and process improvement methodology
- Data-driven decision making
- Team-based care
- Panel management

Also in 2015, Kaiser Permanente provided another round of funding—two-year, $400,000 grants—for the eight existing PHASE grantees. Grantees included:

Clinic consortia

- Community Health Center Network (Alameda)
- Community Health Partnerships (Santa Clara & San Mateo)
- Redwood Community Health Coalition (Sonoma, Napa, Marin & Yolo)
- San Francisco Community Clinic Consortium (San Francisco)

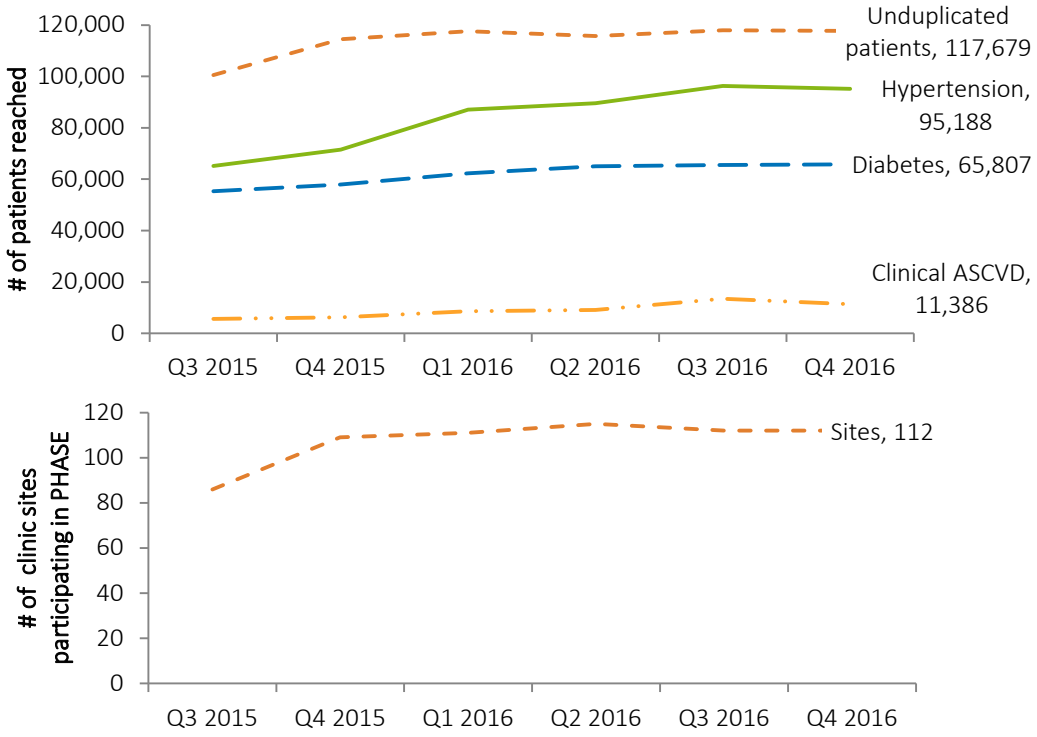
Public hospital systems

- Alameda Health System
- San Mateo Medical Center
- Santa Clara Valley Medical Center
- San Francisco Health Network

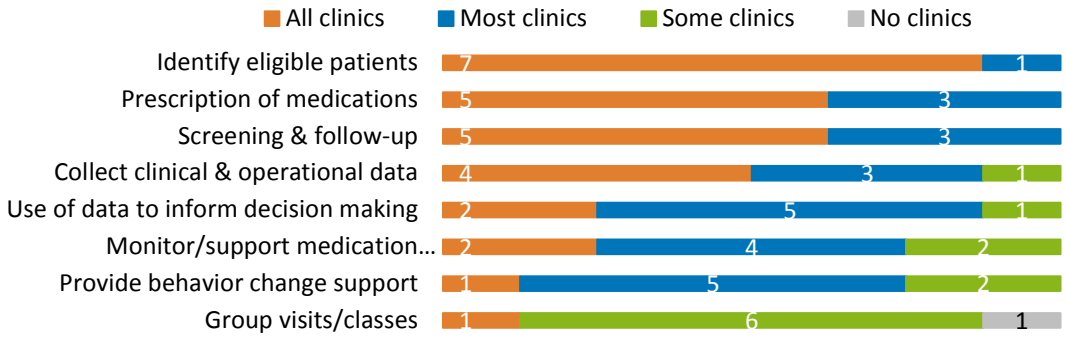
This is a summary of the evaluation report for the 2015-2016 investment in these eight grantees.

Reach of PHASE increased significantly, and many components of PHASE were institutionalized.

Reach of PHASE in the safety net has tripled since the end of 2014. Patient reach has increased from about 35,000 in 2014 to over 110,000 by the end of 2017. As of December 2016, PHASE was being implemented at 112 clinic sites in northern California. This increase was driven by expansion of the patient population (i.e., newly including patients with a diagnosis of hypertension and expanding the age range for patients with a diagnosis of diabetes), spread to additional clinic sites, and a general increase in patient volume as a result of the implementation of the Affordable Care Act and Medi-Cal expansion.



To further understand implementation, grantees were asked how they were implementing PHASE in their consortium member clinics or public hospital clinics. Most of the grantees said that identifying eligible patients, prescribing relevant medications, and screening patients for additional risk factors were components of PHASE that were being implemented at all or most clinics. **Many aspects of PHASE implementation were reported to have high degrees of sustainability** because they were institutionalized into how the clinic operates. To increase sustainability, grantees were intentional about not internally promoting their PHASE work as a part of a grant program that would end when the funding ended.



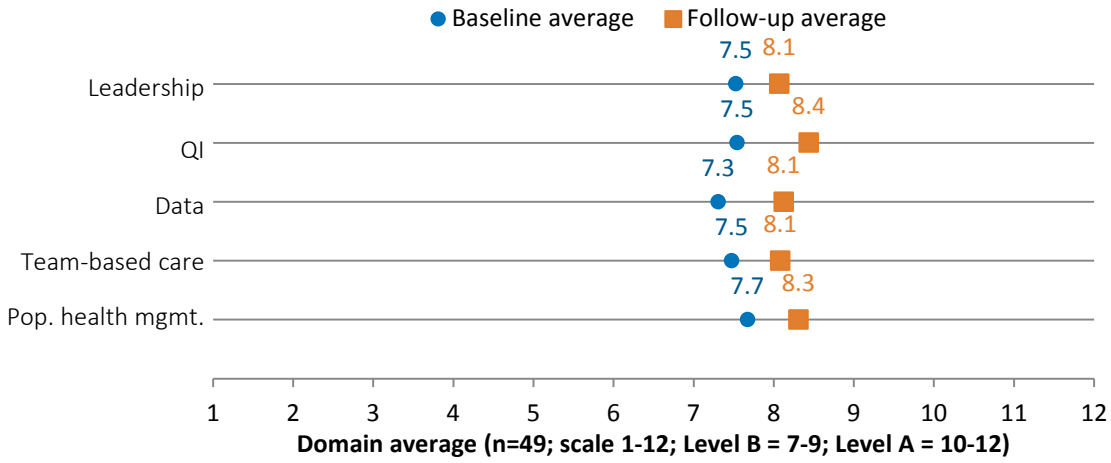
Translation of the medication protocol remained central to PHASE implementation. During the data collection period, there was a slight increase in the proportions of patients who were prescribed statins, ACE/ARB, and both medications. The key indicator for the successful implementation of the medication protocol is the percent of PHASE patients that were prescribed both a statin and an ACE/ARB. For the PHASE cohort, 41% of patients were prescribed both medications. While the percentage of patients who have been prescribed both medications is increasing, it is more than 20 percentage points below this target of 65%. Individual grantee prescription rates ranged from 21% to 67%, with two grantees exceeding the target. Targets are being revisited for the next iteration of PHASE to better capture performance.

PHASE was a model for population health management that has been applied to other programs and improvements.

Grantees have identified PHASE as a model for population health management programs. As one grantee stated:

> *"Implementation was about implementing the ALL protocol—[but] the protocol was actually secondary to all that we had to do to make that happen. So much, like IT, had to happen before we could do that. […] When we learned about PHASE, our approach from the get-go was to figure out how to dovetail the goals of implementing chronic care model with the PHASE program."*

PHASE contributed to building systems capacity, which was emphasized qualitatively and through the PHASE Building Blocks Assessment. Assessment scores increased across all five of the Building Blocks from baseline to follow-up. The areas that showed most room for improvement—defined by lowest baseline and follow-up averages—were related to team-based care, data-based decision making, and leadership.



At the **individual building block level,** grantees reported that:

Leadership support is essential and can occur at many levels within a clinic. Grantees discussed the importance of leadership buy-in and having both champions and change agents for the work. Leadership support was essential for resource allocation, making PHASE an organizational priority, assigning and empowering project leadership, and accountability. While top clinical and operational leadership support was an important facilitator, leadership can come from different levels within a clinic.

Quality improvement resources and infrastructure supported PHASE implementation, and PHASE was used to reinforce and teach QI basics. The extent to which a clinic had adequate "QI resources" was identified as a key differentiator between high and low performing clinics. The clinics' quality staff typically played a large role in the implementation of PHASE, and all grantees discussed how PHASE built on and supported ongoing QI practices.

By definition, PHASE is a population health management program and thus supported capacity development in this area. PHASE is designed to help clinics better manage a population or panel of patients at risk for CVD, and as such provides an opportunity for clinics to strengthen population health management capacity. Grantees (consortia and hospitals) reported that they had more confidence in providing support to their member clinics around population health management, and they perceived the clinics' capacity in this area had also increased.

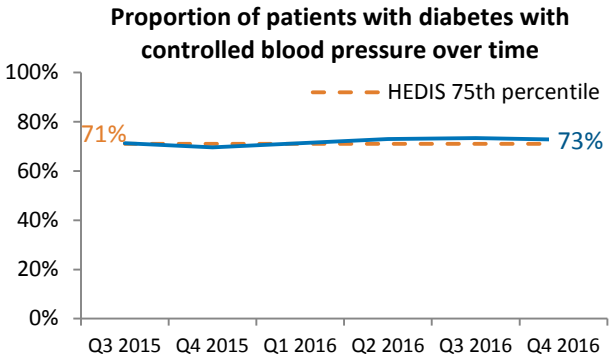
PHASE helped to advance team-based care in many different ways. Most of the grantees focused at least some of their PHASE efforts on advancing team-based care. As grantees spread PHASE, it was a testing ground for team-based care. This included: establishing standard care teams/dyads; solidifying role definitions; integrating a pharmacist on to the care team; integrating behavioral health; and expanding roles for medical assistants and nurses. Team-based care efforts were facilitated through standing orders, protocols, standard work, collaborative practice agreements, and new job descriptions.

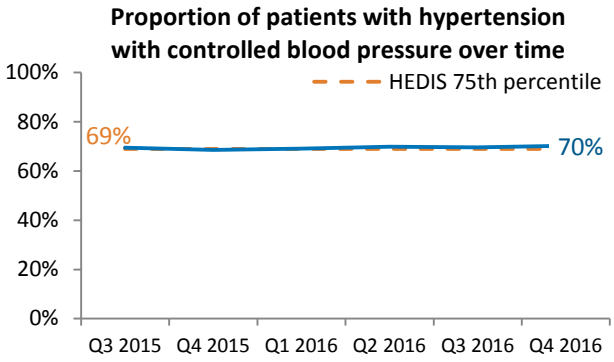
Progress in data-based decision making was reported as a key accomplishment by almost all grantees. As part of PHASE, most of the grantees focused on some aspect of improving data capacity. In particular, grantees focused on helping health centers/clinics in their networks get timely, reliable, accurate, and actionable data that could be used to identify patient care gaps and make improvements in quality measures. Grantees reported progress in this domain as falling into five broad areas: new data systems or improvement; data standardization; data quality; data transparency and visibility; and increased demand for data.

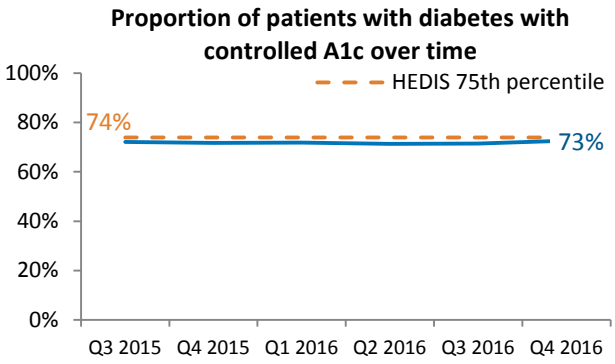
PHASE adopted standard clinical quality metrics based on HEDIS and UDS.

All grantees reported on HEDIS (blood pressure control, A1c control) and UDS (screening and follow-up related to tobacco use, BMI, depression) measures quarterly.

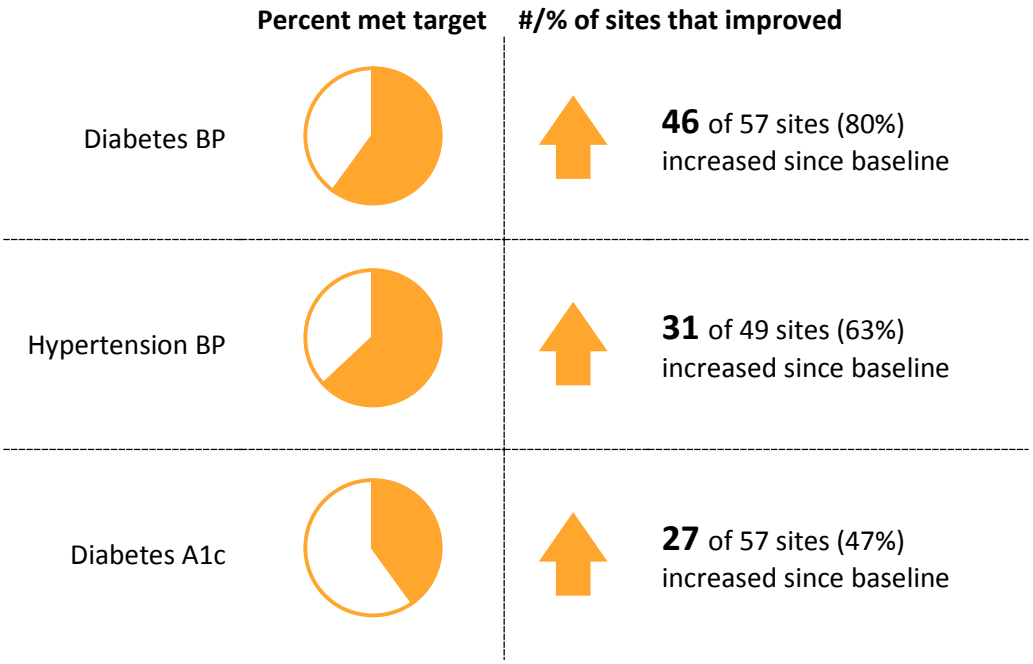
PHASE grantees achieved a stable and high proportion of patients with blood pressure and blood sugar in control, which suggests that these populations are being effectively managed. During the data collection period, cohort performance was relatively stable for blood pressure control and blood sugar control. The PHASE cohort is close to or exceeding the HEDIS 75th percentile for these measures. (See figures on the next page.)



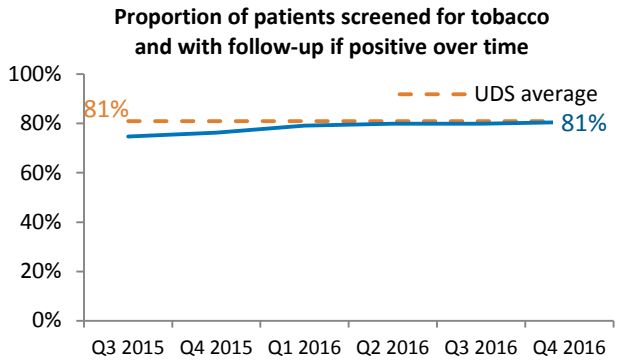


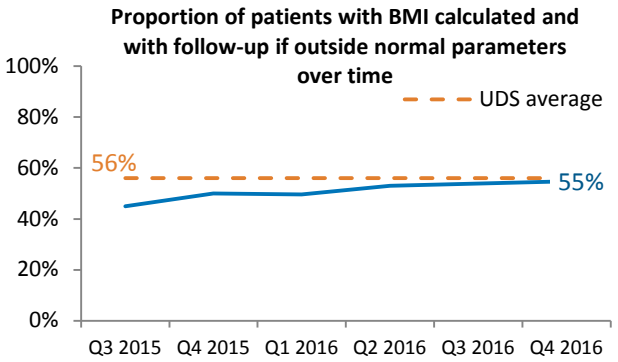


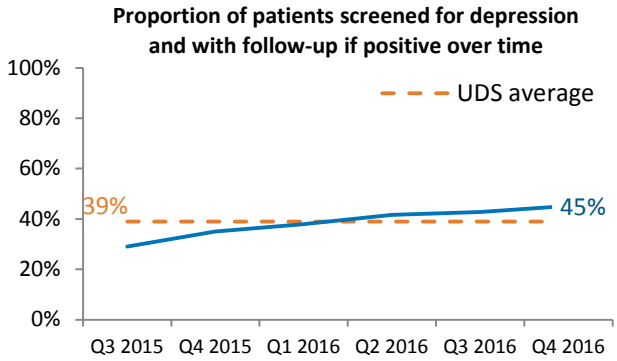
At the individual health center or hospital clinic level, about 60% of health centers/hospital clinics **met the target** for blood pressure control in both patients with diabetes and hypertension, while less than half met the target for A1c control. Similarly, in looking at the number of health centers/clinics that **improved from baseline to follow-up**, the most improvement was in blood pressure control for patients with diabetes, followed by blood pressure control for patients with hypertension.



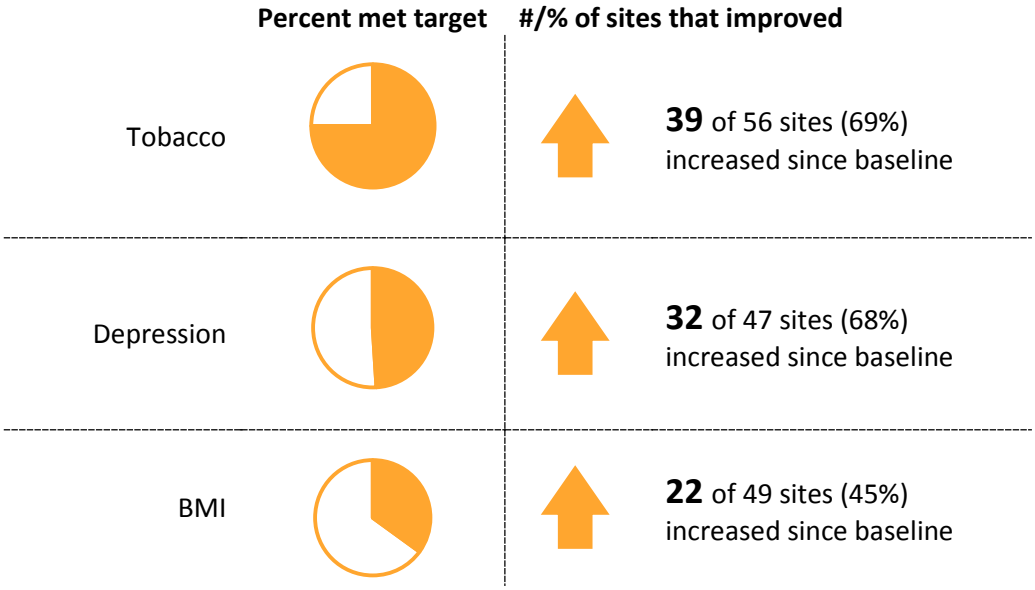
Trends for screening and follow-up measures align with UDS averages for 2014, which were used as benchmarks for PHASE. The PHASE cohort has the strongest performance on tobacco screening, followed by BMI and then depression screening. Performance on all three of these measures improved during the data collection period. Grantees have been working on ensuring more clarity and consistency around the definition of "follow-up" for BMI and depression screening, which would increase confidence in these data.







Looking at individual health center and hospital clinic sites, the trends were similar to the findings about the overall cohort—clinics had the strongest performance on tobacco screening, and showed the most significant improvement related to depression screening.



Consortia and public hospital systems provided multi-faceted support to clinics

The PHASE grantees all provided some level of support to participating clinics in the following areas:

- Clinical guidelines
- Data registries, validation, and analytics
- Quality improvement
- Team-based care
- Motivational interviewing/health coaching
- Patient engagement
- Clinical decision support

The support that grantees provided around various topics occurred through a variety of different modes—most commonly through regular peer meetings across clinics and health centers and through in-person trainings. Most grantees also provided internal toolkits and referral to external resources to support participating clinics' or health centers' implementation of PHASE.

The PHASE Support Team and technical assistance from Kaiser Permanente Northern California were key contributors to progress.

To support the grantees (consortia/hospitals), the PHASE Support Team worked closely with Kaiser Permanente Northern California to identify and provide opportunities for technical assistance that were responsive to the needs of grantees. The core support provided to all grantees included a combination of in-person and web-based learning opportunities, as well as resources and programmatic updates. All of the core support was perceived to have had at least some contribution to grantee progress. The in-person convenings, clinical webinars, and the program documents were rated as having had the most significant contribution to teams' progress on PHASE.

There were additional optional trainings and support available through the Center for Excellence in Primary Care (CEPC), Institute for Healthcare Improvement (IHI), Kaiser Permanente, and topical communities of practice. These optional trainings and resources were well received by those who participated. Several grantees who did not take advantage of these resources recognized this as a missed opportunity and shared their intention to take advantage of resources in the next grant cycle.

Grantees were highly satisfied with their participation in PHASE and indicated it was well aligned with their priorities moving forward.

In general, grantees reported high levels of satisfaction with participating in PHASE and indicated that participation in PHASE contributed to improving clinical systems and improving clinical outcomes. Grantees also expressed appreciation for the evolution of PHASE and that Kaiser Permanente Northern California allowed the program to evolve to align with changes in the health care environment. Grantees reported that PHASE helped support their strategic priorities, rather than being a siloed grant program. As one hospital said:

> *"[I'm] most excited that it's the same trajectory [in each round of PHASE]. The previous versions of PHASE set a foundation, and then this allows us to go deeper. What we need to do for PRIME [Public hospital Redesign and Incentives for Medi-Cal] and how PHASE has brought us to the precipice, has allowed us to focus on the end game. We've benefited a lot from the last two years."*

Across the grantees, there was strong support for the initiative and a belief that it's a high impact program that is well-aligned with the work that they need to be doing to improve patients' lives and meet the demands of the current health care environment. As one Chief Medical Officer said,

> *"PHASE is my favorite program because it has the highest potential impact on patients' lives… it has the potential to benefit the most patients for the least effort. It's a huge bang for the buck… It reminds me to always look at the impact of projects—the bottom line clinical impact—on patient lives."*

Many opportunities exist to strengthen and leverage PHASE.

PHASE began as the translation of a clinical protocol into the safety net to reduce cardiovascular disease. It has evolved into a population management program that has helped accelerate safety net providers' efforts to build clinic capacity and infrastructure, which ultimately leads to better quality care and improved health outcomes. As one consortium leader said,

> *"[PHASE] is crucial to moving things forward. It's creating infrastructure for doing [population health management] and then you can apply it to other things."*

As part of PHASE, grantees had flexibility in the specific strategies that they used to advance population health management for patients at risk of CVD. As a result, grantees prioritized and focused on different areas (e.g., team based care, data systems, etc.). These diverse approaches to improving population health management provide many opportunities for peer learning and exchange as grantees continue to consider new approaches to improving quality and health outcomes.

Kaiser Permanente Northern California made an intentional effort to align PHASE with the health care environment by aligning metrics with national and state standards and looking for areas of intersection between PHASE and other statewide initiatives related to value-based care. Other potential opportunities to leverage and spread PHASE include exploring how to: capture data and improve support around medication adherence; improve integration of behavioral health; treat the "whole patient" by understanding social determinants of health; and more robustly engage patients in quality improvement efforts.

Throughout the two-year grant, grantees emphasized that they aren't done with the work of PHASE. PHASE continues to evolve as Kaiser Permanente Northern California and its grantees look for opportunities to improve implementation and to leverage PHASE to improve clinic operations and the practice of population health management. This ongoing work to improve practices and leverage opportunities will ultimately improve the health of the populations served by community health centers and public hospitals in northern California.