



PHASE is an evidence-based, population health management program and clinical protocol that, when followed, reduces cardiac events.

In 2003, Kaiser Permanente Northern California developed PHASE (Preventing Heart Attacks and Strokes Everyday), an evidence-based, population management approach for its patients most at-risk for heart attacks and strokes. PHASE focused on preventing cardiac and cerebrovascular events with proven medications and aggressive risk-factor management.

Seeing success internally and recognizing the potential public health benefits of PHASE, Kaiser Permanente Northern California Community Health Programs began providing grant support and technical assistance to safety net organizations to implement PHASE. Kaiser Permanente Northern California has been supporting PHASE in the community since 2006.

Hypertension is the most prevalent chronic condition among patients served by the safety net in the United States. Many safety-net patients with hypertension are undiagnosed or their hypertension remains untreated, putting them at greater risk for cardiovascular events.¹



While PHASE has grown and evolved during the 14 years of support provided to safety net partners, a cornerstone of PHASE in the community remains sharing The Permanente Medical Group's (TPMG) clinical guidelines and practices, including the evidence-based medication protocol and approaches to population health management. In 2015, Kaiser Permanente Northern California formalized the technical assistance into a learning collaborative run by the PHASE project office, Center for Care Innovations (CCI). CCI convenes and provides technical assistance to the grantees to build capacity and foster bidirectional learning between the grantees and Kaiser Permanente.



In 2017, Kaiser Permanente Northern California provided three-year PHASE grants to 18 health care safety net organizations across the Bay Area, Central Valley, Fresno, and Sacramento.

Grantees included a mix of safety net providers, including 5 public hospital systems, 9 community health centers, and 4 community clinic consortia. Ten of the organizations were new to participating in PHASE in 2017, and received additional, individualized technical assistance and coaching.

Of the patients served by these safety net providers:²

- 80% are a racial and / or ethnic minority
- 65% are on Medicaid or CHIP
- 66% are at or below 100% of the poverty line

PHASE continues to be relevant and in demand for safety net partners because of the great potential for saving lives and reducing disparities in outcomes.

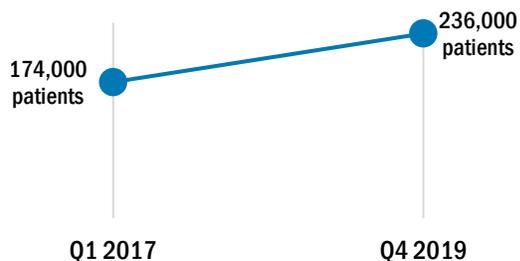
This report shares the results from Kaiser Permanente Northern California's investment in PHASE between 2017 and 2019.

¹ [https://www.jointcommissionjournal.com/article/S1553-7250\(17\)30203-9/fulltext](https://www.jointcommissionjournal.com/article/S1553-7250(17)30203-9/fulltext)

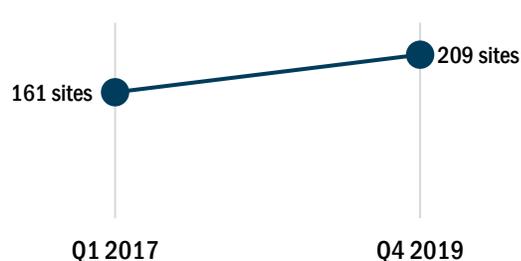
² <https://bphc.hrsa.gov/uds/datacenter.aspx?q=d&year=2018>, median percentage of 33 organizations that are federally qualified health centers or look-alike organizations that report to HRSA for UDS that are also part of PHASE.

During 2017-2019, PHASE's reach of participating clinics and patients increased by more than 25%.

The organizations involved in PHASE expanded the reach of their programs to **36% more patients** by Q4 2019 than in Q1 2017.

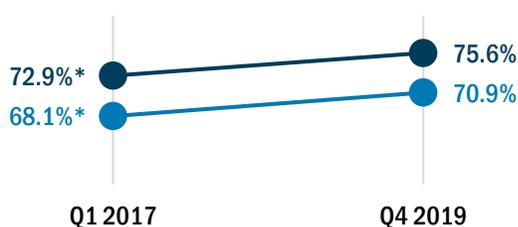


The main way organizations achieved this was by spreading to new sites. By Q4 2019, there were **48 more sites engaged (29%)**.



Most PHASE grantees increased the proportion of their patients with hypertension (HTN) & diabetes who had their blood pressure (BP) in control, even while serving an increasing number of patients.

The PHASE initiative statistically significantly increased the proportion of patients with controlled BP from Q1 2017 to Q4 2019 for both the population of patients with HTN and for those with diabetes.



* statistically significant

# with controlled BP in Q1 2017	# with controlled BP in Q4 2019
72,100 patients with HTN	115,300 patients with HTN
49,500 patients with diabetes	87,700 patients with diabetes



16 of 18 grantees surpassed the 2019 HEDIS³ Medicaid 75th percentile value for at least one of the two BP measures by Q4 2019.



10 of 18 grantees surpassed the 2019 HEDIS Medicaid 90th percentile value for at least one of the two BP measures by Q4 2019.

Over 10 years, a 2.8% increase in the BP control rate across the PHASE population of about 160,000 patients with HTN is projected to **prevent approximately 1,200 cardiac events**.⁴

Grantees implemented multiple strategies to improve BP control. All grantees generated data reports from their Electronic Health Record (EHR) or other data systems to identify care gaps; trained and assessed staff on specific skills, like taking blood pressure; and trained staff in motivational interviewing and/or health coaching.

The most commonly identified **strategies as the ones that most moved the needle on BP control** were:



Training staff on accurate BP measurement as well as when and how to do BP rechecks



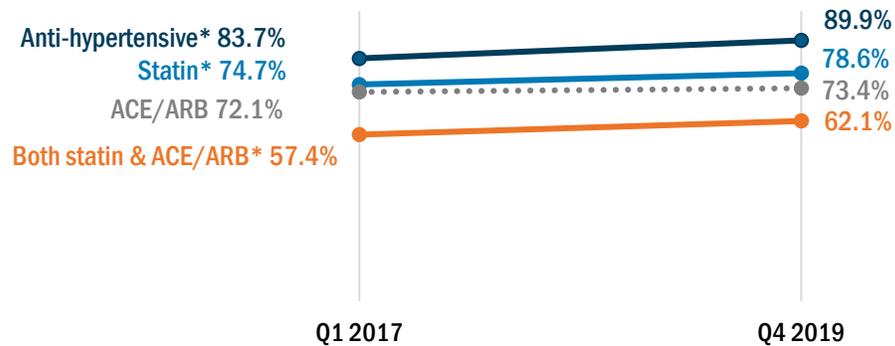
Using data to drive improvements

³ Health plans across the US use HEDIS (Healthcare Effectiveness Data and Information Set) measures to understand their performance. PHASE grantees submit data similar to HEDIS measures, but do not use exact HEDIS specifications. Percentile values are used as a benchmark to understand grantee performance relative to national performance trends.

⁴ Projections based on risk estimates from the scientific literature; methodology available on request.

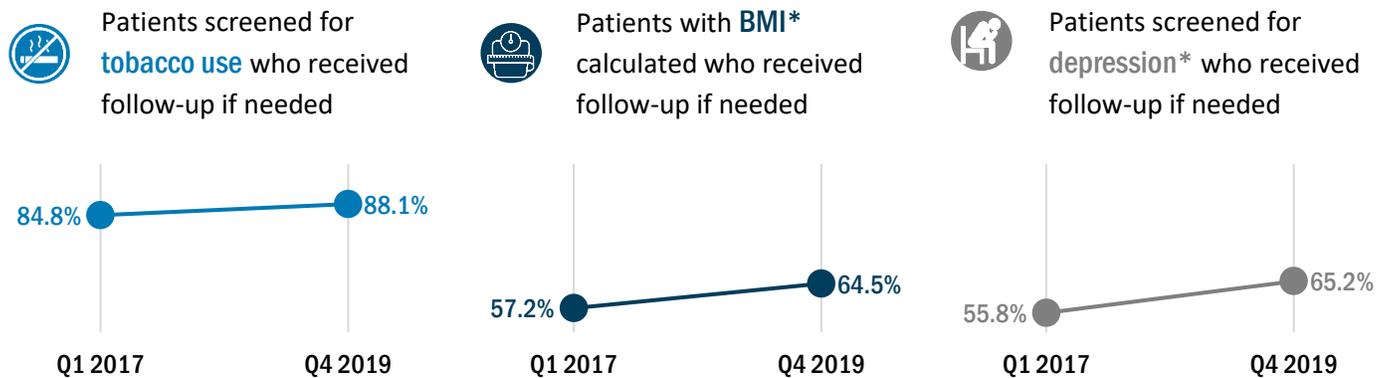
One important strategy to reduce cardiovascular risk was the implementation of TPMG's evidence-based medication protocol.

Over time, grantees increased the prescription rates for recommended medications. All trends were statistically significant except for the prescription of ACE/ARB alone. All grantees instituted provider education on guidelines and the medication protocol and used a PHASE champion to support implementation of the protocol. This champion was often a physician who could establish provider buy-in for the medication protocol, answer clinical questions, and promote the use of evidence-based medicine.

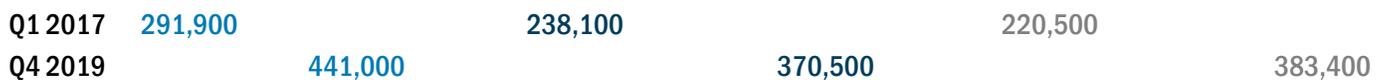


In addition to improvements in BP control, PHASE grantees improved performance related to screening and follow-up for cardiovascular risk factors—tobacco use, BMI, and depression.⁵

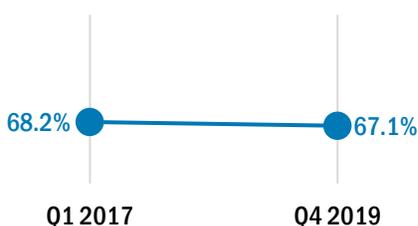
The changes for BMI and depression were statistically significant (*).



These improved rates were achieved even with an increasing patient population over time, resulting in increases in the **number of patients** who received screening and follow-up services for **tobacco use, BMI, and depression**:



The rate of hemoglobin A1c ≤ 9% declined* for PHASE grantees. This change was statistically significant (*); a similar declining trend was seen in national benchmarks.



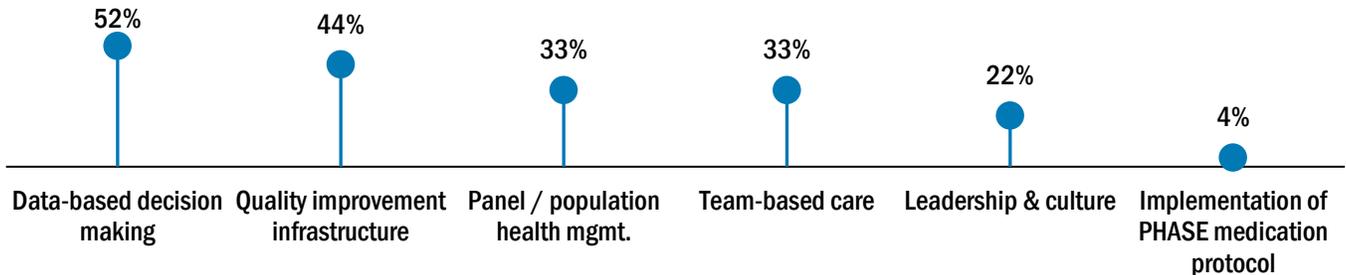
Even with the decline in the rate, the number of patients with their blood sugar ≤ 9% increased from **49,200 patients in Q1 2017** to **77,900 patients in Q4 2019**. This was due to an increase in the underlying population size.

⁵ Screening and follow-up measures are for all patients, not just those with a diagnosis of HTN and/or diabetes, so the denominator is higher than in disease-specific measures.

As a result of PHASE, participants reported being more confident in capacities required for effective population health management.

Project team leads—those responsible for leading their organization’s PHASE work—reported increased confidence in core competencies related to successful PHASE implementation (i.e., the “Building Blocks of PHASE”) as a result of participating in the initiative.

The below graph shows the [percentage of project team leads \(N=27\)⁶ who reported that their confidence significantly increased in key domains as a result of PHASE.](#)

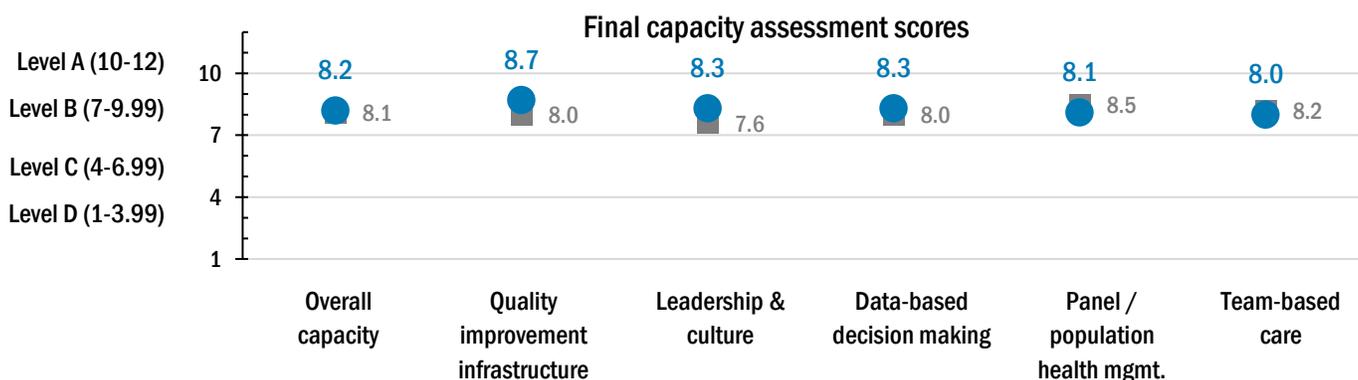


In addition to the survey assessing individual changes, the Building Blocks of PHASE assessment was administered to measure changes in organizational systems and practices to support effective population health management.

Newly participating clinics began with lower organizational capacity in the Building Blocks of PHASE and made more progress in building capacity throughout the program.

On average, newly participating clinics increased their capacity ratings by 11.7% across the five domains, while organizational capacity at longer-participating clinics remained stable. The nine community health centers who were participating in PHASE for the first time received individual coaching to build their capacity and support their PHASE work. Their progress resulted in the [newly participating clinics’ \(●, n=10\)](#) capacity meeting or exceeding the capacity of [longer-participating clinics \(■, n=56 clinic sites across hospital systems and clinic consortia grantees\)](#) by the end of the grant period (see figure below). The progress of these new clinics suggests that it is possible to accelerate capacity building by providing additional technical assistance and individualized coaching.

“The coach was a huge asset. He’s has the [insight to get you unstuck](#). He’s very honest too. He’ll tell you if you’re doing horrible. He’s not sugar coating it. But he’ll help you get started too.”



“Part of why we’re seeing an uptick in our measures, is the [availability of data](#) that the care teams can [take action on today](#). It’s not old data, at most it’s 48 hours old.”

“One thing that has changed is that especially at the site level there are folks [talking about QI](#) and different measures on a much more regular basis. [It’s more on their mind](#) than it’s been in the past.”

“[PHASE has pushed us](#) to think of our population more broadly (e.g., through outreach) versus the people just showing up every day.”

⁶ A survey was sent to the two primary PHASE contacts for each grantee organization (n=36); response rate was 75% (27/36).

The sustainability of PHASE efforts is bolstered by **leadership support** and alignment with organizational priorities; creating, implementing, and documenting **standard workflows**; and alignment with pay-for-performance programs.

“We have introduced a daily management system. That gives us tools to monitor what we’re doing, and that we’re consistent with what we’re doing (e.g., clinic observations, daily huddles, daily statistical checks). When we do those, it goes up the chain to the CEO, and they can support us to make sure that the operations run. **Infrastructure helps with sustainability** to ensure every move, everything we implement becomes part of the culture.”

“[Our goal] is to **ensure that everything is properly documented**, and workflows are in place so that if there is a change in personnel, the changes can be sustained properly.”

“**PHASE doesn’t exist in isolation** at any clinic. As I mentioned before, we have Whole Person Care programs – it focuses on patients who have complex needs. We’re seeing a lot of efforts going towards that and making care plans for patients and engaging them more and more.”

PHASE grantees were satisfied with the support provided by PHASE and indicated it contributed to their organization and the cardiovascular health of their community.

In-person convenings, motivational interviewing trainings, peer site visits, the PHASE onboarding playbook, and coaching were identified as the very useful components of the initiative.



94% of grantees rated PHASE’s relevance to their work as outstanding.



82% indicated that PHASE had an outstanding contribution to their organization’s goals/work.



76% indicated that PHASE has had a significant contribution to cardiovascular health in their community; all others reported that it had some contribution.



71% of participants were very satisfied with participating in PHASE. All other participants were satisfied; none were somewhat satisfied or not satisfied.

“**Without the support of PHASE** over the last decade or so, **there is no way we would have been prepared** to do what we’ve been doing in terms of knowing what our data priorities are, knowing what we want from the data in terms of registries for population health management, and also in terms of how we want to display our data to drive improvement.”

The Center for Community Health and Evaluation designs and evaluates programs that improve the health and well-being of communities across the United States. CCHE is part of Kaiser Permanente Washington Health Research Institute, based in Seattle, WA.

