What AHRQ Learned While Working to Transform Primary Care

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ABSTRACT

Building on previous efforts to transform primary care, the Agency for Healthcare Research and Quality (AHRQ) launched EvidenceNOW: Advancing Heart Health in 2015. This 3-year initiative provided external quality improvement support to small and medium-size primary care practices to implement evidence-based cardiovascular care. Despite challenges, results from an independent national evaluation demonstrated that the EvidenceNOW model successfully boosted the capacity of primary care practices to improve quality of care, while helping to advance heart health. Reflecting on AHRQ's own learnings as the funder of this work, 3 key lessons emerged: (1) there will always be surprises that will require flexibility and real-time adaptation; (2) primary care transformation is about more than technology; and (3) it takes time and experience to improve care delivery and health outcomes. EvidenceNOW taught us that lasting practice transformation efforts need to be responsive to anticipated and unanticipated changes, relationship-oriented, and not tied to a specific disease or initiative. We believe these lessons argue for a national primary care extension service that provides ongoing support for practice transformation.

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BACKGROUND

The last 4 years have been a time of dramatic and turbulent social, economic, and political change in the United States, all of which have repercussions for the nation's health and health care. The COVID pandemic stretched the health care system to its limits, revealing and exacerbating existing inequities and gaps in care and outcomes, and pushing many primary care practices to the brink of closure.[1]

Two important (and paradoxical) things have not changed, however: primary care remains both essential and fragile.

As the National Academies of Sciences, Engineering, and Medicine (NASEM) observed in 2021,

> "High-quality primary care is the foundation of a robust health care system … and is the essential element for improving the health of the US population…[P]rimary care is the only health care component where an increased supply is associated with better population health and more equitable outcomes. For this reason, primary care is a common good, which makes the strength and quality of the country's primary care services a public concern."[2]

Yet the same challenges that existed before the COVID pandemic—declining financial margins, changes in ownership, an aging population with increasingly complex medical needs, workforce shortages, and high burnout rates—continue to make it difficult for many primary care practices to engage in the time-consuming and resource-intensive work of practice transformation and quality improvement (QI).[3-5]

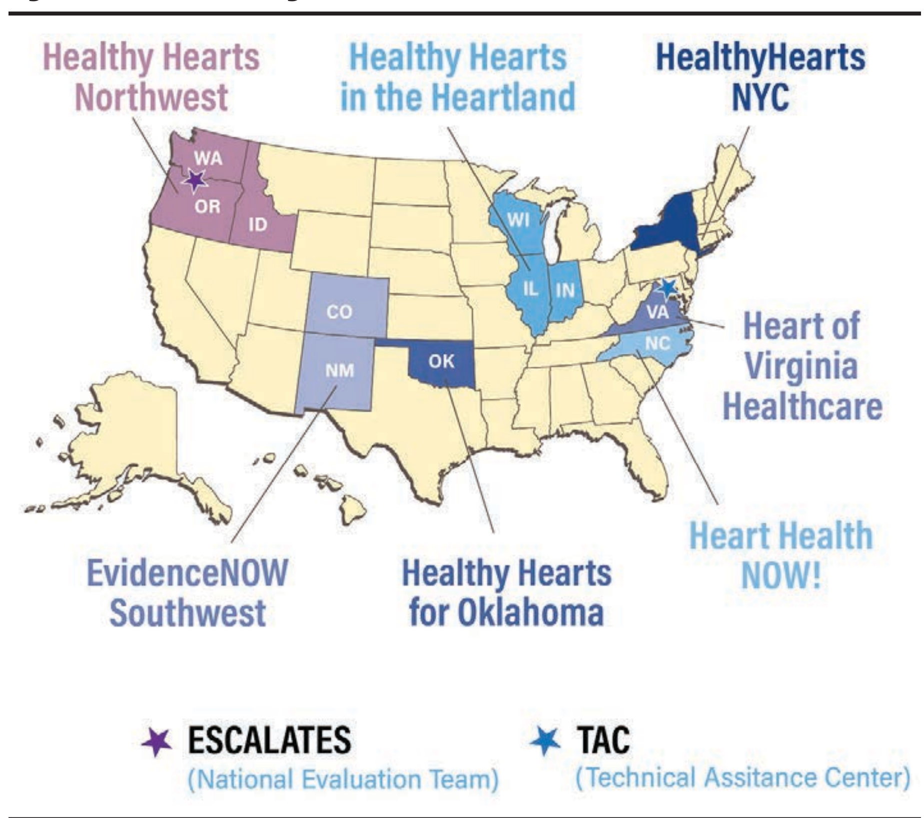
The Agency for Healthcare Research and Quality (AHRQ) has gained insights that can be used to support and strengthen the essential work of primary care.

AHRQ and Practice Transformation: The EvidenceNOW Initiative

AHRQ has been committed since its inception to improving the quality of primary care services in the United States, recognizing that the primary care system is both crucial to the nation's health and at risk. In 2015, AHRQ launched EvidenceNOW: Advancing Heart Health, building on previous federal investments such as The Office of the National Coordinator for Health Information Technology's (ONC) Regional Extension Centers (RECs)[6] program and the Health Resources

and Services Administration's (HRSA) Area Health Education Centers (AHEC) program.[7] This was the largest investment in primary care research in AHRQ's history and one of the largest ever in the United States. The 3-year initiative was designed to generate evidence regarding the effectiveness of external QI supports in helping small and medium-size primary care practices improve the delivery of evidence-based cardiovascular care.[8] AHRQ awarded grants to cooperatives in 7 regions across the country to implement EvidenceNOW and conduct region-specific evaluations.[9-13] In addition, AHRQ funded an independent, overarching evaluation and a technical assistance center to provide learning and support services to the grantees (Figure 1). Detailed information regarding the implementation and evaluation of EvidenceNOW is available elsewhere.[14-18]

Figure 1. EvidenceNOW grantees and technical assistance contractor.



AHRQ = Agency for Healthcare Research and Quality; ESCALATES = Evaluating System Change to Advance Learning and Take Evidence to Scale; NYC = New York City; TAC = Technical Assistance Center.

Note: AHRQ awarded grants to 7 regional cooperatives as part of the original EvidenceNOW initiative. Each cooperative successfully recruited and engaged 200-250 small and medium-sized primary care practices and provided quality improvement support services (see Figure 2). AHRQ also awarded a grant to support the national evaluation of EvidenceNOW, known as Evaluating System Change to Advance Learning and Take Evidence to Scale (ESCALATES), and established an EvidenceNOW Technical Assistance Center to support the implementation and evaluation grantees.

Sources: **https://www.ahrq.gov/evidencenow/projects/heart-health/about/cooperatives/index.html and https://www.ahrq.gov/evidencenow/projects/heart-health/research-results/research/national.html**

EvidenceNOW evaluators found that primary care practices were receptive to external support for practice transformation and dramatically increased the number of strategies used to improve the quality of care.[8,19] Although the improvements practices made in their delivery of services to prevent cardiovascular disease were modest, they are predicted to prevent 3,169 cardiovascular disease events over 10 years and prevent $150 million in medical care costs.[20] Evaluators found that frequent and consistent practice facilitation worked best to improve practices' capacity for QI.[8] Detailed findings from the national evaluation and the 7 regional evaluations are described in almost 100 publications that can be accessed through the AHRQ EvidenceNOW website.[21]

What Else Has AHRQ Learned From EvidenceNOW?

As the EvidenceNOW funder, and as researchers ourselves, we were deeply interested in the findings from the national and regional evaluations. But we also were committed to using EvidenceNOW as an opportunity for adaptive learning; we wanted to apply the principles of QI to our own work, including how we approach supporting evidence-based primary care transformation. This meant looking beyond the question of whether EvidenceNOW "worked," to reflect on our experiences and those of our EvidenceNOW partners, to identify and distill lessons that can be used to design better future funding opportunities, strengthen the nation's primary care practices, and improve the health of the population.

Three key lessons emerged from our reflection and review.

1. There Will Always Be Surprises That Will Require Flexibility and Real-Time Adaptation

It was rewarding to see that the EvidenceNOW approach, which recognized regional differences and incorporated multiple implementation strategies (Figure 2),[15] proved effective even when some initial assumptions, including anticipated payment reform and the stability of the practice workforce, did not materialize. We were inspired by the practices participating in EvidenceNOW, which were incredibly creative, dedicated, and resilient; they worked hard to improve the care they offered their patients, often under adverse conditions.[8]

On the other hand, we were humbled by less pleasant surprises. For example, we found that health information

Figure 2. EvidenceNOW quality improvement services.

IT = information technology.

Source/Notes: https://www.ahrq.gov/evidencenow/model/index.html

technology (HIT) systems were not robust enough to support QI, despite years of work in this area in advance of designing EvidenceNOW. Based on our understanding of the difficulties inherent in using paper-based charts for intensive QI work, and that not having an electronic health record (EHR) could be a limiting factor in practice transformation work,[22,23] the original funding opportunity announcement for EvidenceNOW directed grant applicants to aim to have at least 60% of participating practices using an EHR.[24] As a result, a majority of the participating practices used EHRs that had been certified by ONC, and more than one-half reported that they had the ability to produce reports of electronic clinical quality measures.[4]

We discovered early on, however, that we had been naïve in thinking that having an EHR meant that primary care practices had the health IT capabilities needed to access, use, and share data easily for QI and evaluation purposes. This remained true even 5 years after the initiation of the ONC RECs and the Centers for Medicare and Medicaid Services (CMS) EHR Incentive (or "Meaningful Use") Programs.[25] Limitations in technology (such as EHR designs that made accessing and sharing data difficult) created significant problems, especially for reporting electronic clinical quality measures. Practices continued to need support even after the Meaningful Use program wound down. Practices also encountered workforce and financial barriers to carrying out core QI tasks. For example, some participating practices did not have staff who were able to access and utilize EHR data for QI, population health, or evaluation purposes, or skilled staff did not have time to do this work. Some practices also found that EHR providers restricted access to data.

These impediments created a layer of difficulty that we assumed we had addressed in the initiative's design. In reality many practices struggled with the IT aspects of the project, and some practices with EHRs had to use chart audit or review techniques to gather the data, which had we sought to avoid.[4,8,26] Providing technology support to practices took far more time and effort than anticipated, diverting attention and resources from other activities, and requiring significant adjustments by the cooperatives and the initiative as a whole.

A second unpleasant surprise was that although we were cognizant of trends in the larger primary care landscape, such as the acquisition of independent practices by health systems, we did not anticipate the extent and magnitude of the major disruptions participating practices would experience (eg, changes in ownership, clinicians, and key staff). Slightly more than one-half of EvidenceNOW practices experienced 1 or more disruptions during their participation, impeding some practices' engagement in practice transformation activities and their ability to improve cardiovascular care.[27-32]

These examples brought home to AHRQ the importance of planning for emerging challenges that can occur at multiple levels in practice improvement work. In practical terms, this means that improvement initiatives should be designed to build capacity and resilience. Initiatives must be flexible, and funded to provide adequate time and resources to support adaptive responses to unexpected hurdles.

2. Primary Care Transformation is About More Than Technology

Practices clearly need technology that works, along with the training, staff, and funds to use it effectively. But delivering primary care and facilitating successful practice improvement largely depend on human interactions and behavior, and thus require more than technological fixes. EvidenceNOW confirmed for us that people and relationships matter in making the changes that ultimately will improve the health of individuals and the population.

People matter. The well-being of practice personnel involved in primary care transformation is not a new concern,

but it merits continued attention and emphasis. EvidenceNOW evaluators found that "zero burnout" practices had higher levels of psychological safety and adaptive reserve (capacity for learning and development), were more often solo and clinician-owned, and were less likely to have participated in accountable care organizations or other types of demonstration projects, highlighting the importance of practice environments and characteristics.[33]

It is also important to recognize that primary care transformation requires complex behavioral changes. Regardless of the impetus for transformation, people must change what they do for the transformation to occur, and as almost anyone who has made a New Year's resolution can attest, changing well-established behaviors is difficult.

Many practice facilitators understand behavior change theory and are highly adept at supporting individuals and teams in making difficult changes. But it is important that policy makers and funders also understand the fundamental role of behavior change in primary care improvement.[34] In designing new policies and practice improvement initiatives, it is crucial to consider what the desired outcome is (eg, increased rates of preventive screenings), what behaviors need to change, who needs to change their behaviors, and what can be provided that will help people change relevant behaviors. Evidence from multiple disciplines about how people change and what types of supports are needed can be integrated into policies, funding opportunity announcements, and other supports for practice improvement.

Relationships matter. EvidenceNOW, by design, recognized that primary care practice transformation is a relationship-based endeavor[35] that relies on collaboration, cooperation, and communication.

We encouraged grantees to form regional cooperatives[5] to bring together the skills, experiences, and resources of the various parties needed to design and carry out their projects—including researchers, primary care and QI organizations, public health agencies and community-based organizations, public and private payers, and consumer/patient groups. Partners worked toward the common goal of providing effective support for practice improvement. These regional partnerships were inspired by the agricultural Cooperative Extension Service (CES). The CES uses extension agents to support improvements in local farming communities,[19] much like the evidence-based coaching provided by practice facilitators in EvidenceNOW. The agricultural CES formed the foundation for the EvidenceNOW model, which we also believe could be the model for a national primary care extension service:

> "[H]ealth extension agents have an integrative beelike function, cross-pollinating best practices between patients, clinics, public health entities, universities, and communities. Their value is realized in the degree to which they establish long-term, personal relationships and trust. Even in an environment where health system and hospital mergers can threaten long-established physician-patient care continuity and undermine community trust in the commitment of new systems to tend to priority local needs, health extension agents can offer new systems a continuity of trusted relationships and linkages to needed resources."[36]

AHRQ was also intentional in designing EvidenceNOW to provide space for collaborative problem solving and knowledge sharing among the grantees. This was reflected in a variety of activities, including: annual meetings with grantees, the national evaluator and technical assistance center, and AHRQ program officials; an active learning community; working meetings to harmonize evaluation measures and processes; and highly collegial relationships between AHRQ program officials and the grantees. These activities provided multiple opportunities for researchers, implementers, evaluators, and federal staff to develop trust, safely express concerns, and help each other as challenges arose. The effective relationships that emerged also facilitated important later work that was accomplished collaboratively, including the development of *Tools for Change*, a curated, searchable repository of resources for primary care improvement based on the EvidenceNOW model, which is available on the AHRQ website.[37]

Building good relationships took effort and time, and the path was not always smooth. But the payoffs—in collective learning, effective problem solving, and productivity—made these investments worthwhile. As a result, participants in EvidenceNOW collaboratively created a new model of primary care research and practice improvement.

3. It Takes Time and Experience to Improve Care Delivery and Health Outcomes

There is an understandable bias on the part of policy makers to want results and answers as quickly as possible—pressing problems need solutions and there is a voluminous backlog of health system issues that could be informed by research. But EvidenceNOW reminded us, as others have learned, that it takes time to make changes in care delivery processes and for the effects of those changes to become apparent.[38]

In designing EvidenceNOW, we knew that it would take time to build the trust and relationships that form the foundation of effective transformation work within regions and in practices. We knew that it would also take time for practices to implement and sustain change strategies, and for that work to be evaluated. But we learned it is important to take a broader view of the time needed to make substantive changes in primary care practice. It can take years for organizations to develop experience with transformation, and this investment of time is needed to change practices' capacity for improvement and other outcomes.[19,39]

Looking Ahead

These lessons argue for a stable and well-funded external infrastructure, such as a national primary care extension service, that provides ongoing support for practice transformation. EvidenceNOW taught us that primary care practices need continuing external support for practice transformation

that is responsive to anticipated and unanticipated changes; oriented toward people and relationships; respectful of the time and effort change requires; and not tied to a specific disease, grant, or demonstration project.[19]

Funding for practice improvement support that is not project-specific is needed to help primary care practices address care processes and services as a whole—which is how patients encounter care—rather than being limited by funder-defined priorities. In addition, without ongoing funding for core infrastructure costs, gaps inevitably occur between project funding periods. These gaps can lead to loss of trained and specialized staff—and with them the collective knowledge, skills, and relationships built with primary care practices that allow improvement programs to be efficient and effective. Ongoing structures and processes are essential to keep practices engaged, disseminate knowledge, and facilitate further improvement.

The lessons offered by EvidenceNOW also suggest that a durable practice transformation infrastructure should be designed to be flexible, tailored, and responsive to the unique technical assistance needs of diverse types of primary care practices, including small and medium-size primary care practices (where many Americans still get their primary care); independently owned practices; primary care practices within health systems, and rural, suburban, and urban practices. Practices of different sizes and ownership types may have very different capabilities and support for data collection and sharing for quality reporting purposes, and practices in different locations may face substantially different challenges in recruiting and retaining appropriately trained personnel. A stable, flexible, primary care extension program would be well-positioned to respond to practices' differing needs.

We believe that a national primary care extension program could play a vital role in humanizing primary care for providers and recipients of care.[40] Looking ahead, we see an expanded role for a primary care extension service in supporting primary care as a common good, further building the pathway to high-quality primary care and improved health equity, as described in the 2021 NASEM report.[2] This would entail helping practices and their community partners further understand the perspectives, priorities, and needs of their patients and communities, and respond to those needs by improving or adding appropriate services (for example, behavioral health and social care services).[41] Support of this type could also enhance the well-being of primary care clinicians and staff, by linking practice improvement more directly to what matters to them—providing high-quality care that helps patients live longer, healthier lives.

Despite challenges, the EvidenceNOW model of external support boosted the capacity of primary care practices to improve quality of care, while advancing heart health.[8] We believe that improving the nation's primary care system requires inspired action and unwavering persistence. AHRQ looks forward to using its experience, expertise, and the lessons learned from EvidenceNOW to help inform a system-wide transformation that recognizes the role of primary care in maintaining and improving the health of all Americans.

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Key words: primary health care; quality improvement; health extension; practice transformation; practice facilitation; EvidenceNOW; Agency for Healthcare Research and Quality (AHRQ)

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