Supporting Spread:
Lessons from the California Improvement Network
About the Foundation

The California HealthCare Foundation works as a catalyst to fulfill the promise of better health care for all Californians. We support ideas and innovations that improve quality, increase efficiency, and lower the costs of care. For more information, visit us online at www.chcf.org.
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I. Introduction

*Recognizing the traditionally slow diffusion of innovation within and across health care provider communities, in 2006 the California HealthCare Foundation (CHCF) began to address the need for providers to share better practices in chronic disease care and to spur adoption of improvement strategies across all sectors of care. The following year, seven public and private organizations (an eighth joined in 2008) that support better chronic disease care at the clinical practice level entered into a formal partnership with CHCF to form the California Improvement Network (CIN).

The purpose of CIN, whose member organizations work with providers serving nearly 20 million Californians, was to better understand and support the spread of—that is, having a wide range of practices adopt—better practices for improvements in care. The network’s focus was on ambulatory chronic disease care and primary care practices, in particular the adoption of chronic disease registries and the application of quality improvement (QI) methods. Though these approaches have been demonstrated to improve chronic disease outcomes, the most challenging work remains in establishing networks and processes that encourage primary care practices to implement them. Therefore, CIN members met not only to learn and share better practices but also to focus on ways to better spread them from one to another among providers, teams, clinics, and sites, and even across patient conditions.

Within CIN, the member organizations and CHCF developed a strong community that produced and shared insights on how to spread better practices across a variety of practice settings. CIN was able to increase the number of providers who engaged in QI activities and used chronic disease registries (automated systems to track care for specific groups of patients, e.g., those with a diagnosis of diabetes). Over a two-year period (2007–2009), seven CIN partners showed increases in the number of patients tracked in chronic disease registries and significant improvements in the use of registries for reminders and outreach. Six partners demonstrated increases in the number of “engaged practices,” that is, practices that use registries, present varying infrastructures and approaches to the spread of best practices in chronic disease care, and work with clinicians from a broad range of outpatient settings.
deploy evidence-based guidelines, promote patient self-management, and/or track improvement processes and outcomes. Perhaps just as significant, in an era of growing resource constraints, greater patient demand, and provider exhaustion, CIN served as an important network and sounding board for improvement leaders.

From a statewide clinic association working with over 800 community clinic sites, to a rural community-wide organization led by an independent practice association, to the largest county health care delivery system in California, the CIN partner organizations present varying infrastructures and approaches to the spread of best practices in chronic disease care, and work with clinicians from a broad range of outpatient settings. (See Table 1 on page 4.) Some partners work directly with providers; others are improvement programs supporting organizations that, in turn, work directly with providers. (There is some overlap in providers and patients across the organizations.) Also, the Institute for Healthcare Improvement and the MacColl Institute for Healthcare Innovation were strategic partners for CIN, providing a national perspective on spread, as well as technical assistance and guidance.

This report discusses the structured approach to spread that the CIN partners were encouraged to use, with key spread principles highlighted at an organizational level. It also focuses on the dynamic between organizational partners and providers, and the strategies and tactics used to support spread at the provider group and practice levels.
Table 1. California Improvement Network Partner Organizations

The following are brief descriptions of the organizations that comprised the original eight CIN partners during the period discussed in this report. For a fuller description of each organization, including each one’s major QI initiatives, see the Appendix to this paper.

**California Academy of Family Physicians (CAFP).** The state’s largest primary care specialty society, with more than 7,000 member physicians who serve an estimated 1.3 million patients with chronic diseases. From 2005 through 2009, CAFP’s major QI activity was its New Directions in Diabetes Care (NDDC) initiative, to help small practices improve diabetes care and engage in practice redesign. CAFP also provided online resources regarding the chronic care model, practice redesign, the patient-centered medical home, and health information technology (HIT).

www.familydocs.org

**California Health Care Safety Net Institute (SNI).** The QI affiliate of the California Association of Public Hospitals. SNI represents 19 public hospitals, academic medical centers, and health care systems, including 137 primary care and multiple specialty care clinics. SNI’s public hospitals serve an estimated 2.4 million primarily low-income, uninsured, or publicly-insured patients. Its major improvement activities focus on diabetes care, patient access, and visit efficiency in outpatient public hospital clinics; chronic disease registry and electronic health records implementation; and technical assistance and coaching for improvement staff.

www.safetynetinstitute.org

**California Primary Care Association (CPCA).** A statewide organization representing more than 870 community clinic sites that serve an estimated 4.7 million Medi-Cal, uninsured, and underserved patients. CPCA’s major improvement activities include developing a centralized data reporting system for quality metrics from community clinics throughout California, and supporting the adoption of chronic disease registries in community clinics.

www.cpca.org

**California Quality Collaborative (CQC).** An organization, cosponsored by Aetna, Anthem Blue Cross, Blue Shield of California, California Association of Physician Groups, HealthNet, and Pacific Business Group on Health, that engaged 118 medical groups and individual practice associations (IPA) during 2007–2010. These constituents represent about 14,000 primary care physicians and thousands of other health care professionals in California, who provide care for nearly 13 million patients. CQC’s major improvement activities include QI collaboratives and learning communities, in-person QI workshops, Web seminars, teleconferences, and technical assistance and coaching to individual medical groups and IPAs.

www.calquality.org

**Humboldt-Del Norte Independent Practice Association (HDNIPA).** Includes 27 primary care practices and five safety-net clinics in two counties, with about 10,000 enrollees, and with many programs offered to all of Humboldt County (population 130,000). HDNIPA’s major improvement activities include: centralizing and supporting a community-wide registry for patients with diabetes; leading a medical home collaborative; providing technical assistance to individual member practices to improve care processes; and implementing a community-wide e-referral system.

www.hdnipa.com

**Los Angeles County Department of Health Services (LADHS), Clinical Resource Management Program (CRM).** A county safety-net agency (the second largest public health system in the nation) with approximately 100 hospitals, health centers, clinics, and public-private partnerships, whose members provide care to 740,000 individuals, most of whom are uninsured. Its major improvement activities include: intensive care management to high-risk patients with diabetes, heart failure, and/or asthma; a Web-based chronic disease registry in all CRM sites and select county primary care outpatient clinics; and decision-support tools specific to managing these chronic diseases.

www.ladhs.org

**L.A. Care Health Plan (L.A. Care).** The nation’s largest public health plan, serving over 850,000 residents in Los Angeles County through a variety of programs including Medi-Cal, Healthy Families, Healthy Kids, and L.A. Care Health Plan Medicare Advantage. Its major improvement activities include financial incentives to providers to improve diabetes care and to promote HIT use, and offering a chronic disease registry free of charge to select practices during 2008–2009.

www.lacare.org

**Partnership Health Plan of California (PHC).** A managed care plan that covers care at 130 sites in Napa, Solano, Sonoma, and Yolo Counties, serving over 150,000 enrollees through Medi-Cal, PHC’s own Healthy Kids program, and Medicare Advantage special needs plans. Its major improvement activities include offering financial incentives on key quality measures, supporting the use of a chronic disease registry, and providing individual coaching and technical assistance to practices.

www.partnershiphp.org
II. Establish a Strategy for Spread

One of the most important lessons learned by the CIN partner organizations is that the preparation for a specific program of spread is as important as the methods used to implement it. Any strategy must begin with the establishment of concrete, measurable goals that are explicit about the changes each partner intends to spread, including to which practices and with what timing. Facilitating organizations must determine the specific type of change that its providers are likely to support, get top leadership support for the changes, and align the proposed changes with results that will be meaningful to those providers.

“What, to Whom, by When”

The improvement strategy or specific practices to be spread should be clear to both the organizational team and the target audience with regard to goals, time frame, and spread measures—as embodied in the phrase, “what, to whom, by when.” The target audience should be made as specific as possible in the spread plan, with identification of the particular practices and/or clinics that are to make the improvements. Equally important, the plan should establish a clear sequence of who will undertake the changes both initially and over time, with the audience segmented based on readiness.

For example, the California Quality Collaborative (CQC) develops a strategic plan and accompanying measures, with target goals, every three years. One of these goals has been to improve statewide average patient experience scores. In implementing its plan, CQC worked with 17 of its constituent medical groups and IPAs in three waves, the first with those who had expressed a clear willingness to take improvement steps, and the next two with those who had the most room for improvement. By working with the earlier adopters, CQC developed a more concrete set of changes that groups could undertake to improve patient experience. By next targeting some of the lower performing groups, CQC was able to improve its constituents’ overall rate by 1.6 points (on a 100-point scale), a faster improvement rate than statewide trends, influencing the care of 1 million enrollees.

People and Practices in Different Stages of Readiness

Inevitably, different practices will be at different stages of readiness to accept and/or implement change. But these stages of readiness are fluid, with a late adopter of one change (e.g., advanced access scheduling) perhaps being an early adopter of another (e.g., diabetes team care). Spreading improvement requires exercising skills in change management: Those with experience in change adoption and management may require less information to get started, while those with less experience may be more successful if they start with a relatively simple “change package” that maps out specific (generally ten or fewer) steps in order to adopt and master a new approach to care.

Zero in on the Problem

An organization attempting to initiate and support change must invest its resources where a constituent group, and in particular its senior leadership, is ready and willing to engage in and support such change. Moreover, spread will only be successful if, from the
provider’s and care team’s perspective, the change addresses a perceived problem. Also, regardless of how willing an organization is to change, both the management skills and infrastructure to do so must be available, at both the organization and practice level. A change becomes even more compelling when it addresses a business need, such as reducing costs or saving resources.

A vivid example of this lesson comes from the Los Angeles County Department of Health Services (LADHS) Clinical Resource Management (CRM) program. CRM developed a Web-based registry, within their own disease-focused referral clinics, to manage patients with congestive heart failure, poorly controlled diabetes, and asthma. While many of the CRM nurse practitioners and care managers embraced the registry from the outset, it was difficult to convince the primary care clinics of its value. As CRM expanded the functionality of the registry, however, front line staff found that the medication list within the registry helped address an immediate need to review both outpatient and discharge medications from LADHS hospitals. And as soon as the primary care clinics realized the registry supported this important medication reconciliation process, they began an uptake of the registry.

**Providers Also Need to Self-Manage**

Principles regarding how to support behavior change in patients are also applicable to supporting change at the practice and organization levels. For example, providers are urged to partner with patients to set short-term, manageable lifestyle change goals, such as establishing an exercise routine or weight loss plan that the latter view as realistic and attainable. Similarly, when setting aims for QI and spread of better practices, it is best to begin with goals that a practice or care team is confident it can reach.

**Effectively Engaging Patients Improves Clinician Experience**

The application of QI or other practice changes can sometimes mean added work or time for providers. One of the ways to engage providers in the change process is to demonstrate to them how other aspects of the changes can reduce or shift work, offsetting their “losses.” For example, motivational interviewing (a technique to understand and influence a patient’s desire and willingness to change behaviors) can be time-consuming. In a capitated setting, this work can be paired with time-efficient phone contacts; in other settings, non-provider staff can conduct the interviews, or do additional pre- or post-visit work.

Another example can be found in an effort to support patient self-management, and to enhance the clinical experience of both provider and patient. As a primary intervention, CQC hosted a workshop on provider-patient communication as part of its Improving the Patient Experience collaborative. While many providers felt that setting a patient agenda (soliciting patient primary concerns, symptoms, and specific requests for the visit) would be time-consuming, many were pleasantly surprised by the benefits they reaped from the new approach.

“Agenda setting works! It can be a challenge at times with those patients who like to talk, but not any more challenging than the prior interactions. What I have found is that I have to let go of my own agenda unless [there is] ample time. This helps me feel less rushed/anxious/etc. “

— PHYSICIAN

PHYSICIAN’S MEDICAL GROUP OF SANTA CRUZ

“My attitude has changed and I now have more eye contact with my patients. I believed that I was listening but couldn’t convince them. Now, that is not an issue. “

— PHYSICIAN

FACEY MEDICAL GROUP
Another self-management principle applicable to the spread of better practices is alignment of the change or new processes with a result that is personally meaningful to the provider. This might include identifying “pain points” about practice as well as what it is about patient care that brings joy to the work—such as spending meaningful time with patients, or discussing cases with colleagues—and then linking those things to the proposed change or improvement. Alignment with personally meaningful results may also frequently consist of offering a better quality of work life for providers. For example, this might mean practice redesign that produces more stable work hours or fewer call coverage commitments, in turn allowing for better home and family life for providers.

**Comparisons Matter**

Those CIN partners that had constituents in the commercial sector found that publicly reported performance data can be a valuable tool in initiating or driving change at the organization and practice levels. Both CQC and the Humboldt-Del Norte Independent Practice Association (HDNIPA) found that for medical groups/IPAs and individual practices, making providers aware that they were rated as average or below average compared to their peers was a powerful motivation for change. CQC has led three waves of a collaborative to improve the patient experience of care. Among the medical group/IPA teams in this collaborative, most sought to improve on their Patient Assessment Survey scores, which are part of the California Pay for Performance program (www.iha.org). HDNIPA has found reliable, unblinded comparative data to be a strong motivator when approaching individual clinicians about improving performance, particularly in the area of patient experience of care. Such data on individual practice performance are publicly available in Humboldt County (www.communityhealthalliance.org), including data on Open Door Community Health Centers (Open Door), the local community clinic system.

While any public reporting can be effective motivation, CIN partners found comparative performance reporting to be the most compelling. It appears that what matters most for clinicians is where they stand in relation to their peers, even if the data are blinded. Unblinded comparative data are the most powerful motivators of team performance, in part because those being measured must accept the data. Such comparative reporting in Humboldt County was initiated by HDNIPA in stages: first as blinded, comparative reports shared individually with the practices in the IPA; then as unblinded comparative reporting; and finally, as data made publicly available. Early work in this community began with the practice association's medical director himself. The local medical community considered him to be a diabetes expert, so the effect was striking when he modeled the importance of reviewing quality information by sharing his own “need to improve” diabetes quality scores.
III. Create an Effective Social System for Spread

While the establishment of feasible, well-targeted goals is necessary to engage providers in the spread of better practices, a social system — the relationships between organizations and provider groups, and between providers themselves — that effectively supports change is equally crucial.

Leadership at All Levels

Senior Leadership
Top provider group leadership needs to support and promote the practice or idea to be spread and plays a pivotal role in communicating how the particular change would fit into the organization’s overall strategies and priorities. As part of its role in promoting spread, senior leadership should designate and actively support both an executive sponsor and a day-to-day spread manager, who are ideally not the same individual. An additional vital responsibility for leadership is to identify and remove barriers that prevent the change, which might include assuring that staff has the time and materials to get the work done, adjusting staff roles (and job descriptions) to facilitate the change, and revising policies or procedures that do not support change.

CIN partner organizations used different strategies to engage senior leaders. For example, the Safety Net Institute (SNI) involved the CEOs of public hospital systems by sharing results on a common set of improvement measures at quarterly meetings; those same hospital CEOs also joined team learning sessions to hear from their teams about both successes and challenges in improving care for diabetes patients. When CQC sought to support improvement teams in commercial medical groups/IPAs, it recognized that making the business case for why the organizations would benefit from these changes would help to engage senior leadership. Consequently, CQC aligned much of its improvement work with statewide pay for performance measures, so that senior leadership could regularly gauge economic benefits to their organizations.

Day-to-Day Spread Managers
The day-to-day spread leader has time specifically dedicated for working with others to adopt better care practices. This spread leader serves as a key communication channel and should be adept at project and change management, and at understanding and presenting data, though a clinical background is not essential (thus the spread manager is often different from the “clinical champion”). Particularly in smaller practices, medical assistants and other non-physician providers may perform well in this role. Specific activities of the day-to-day spread manager include: leading and connecting those who are working to promote and make practice changes; packaging improvements for easier adoption; developing and coordinating communication strategies; identifying and supporting messengers to promote the improvements; identifying system barriers to adoption; tracking progress; communicating with the executive sponsor; and providing feedback to both the target population and leadership.

Within SNI’s spread efforts to improve diabetes care, two individuals from each constituent public hospital system were formally designated as spread leaders for their sites. These spread managers
had clinical backgrounds and, perhaps more importantly, were adept at relationship-building and communicating with all members of the care team, as well as with senior leaders. SNI supported these individuals in building improvement skills and by convening them to share with, learn from, and support each other. One concrete result was the creation of a cross-county working group to improve chronic care delivery as part of residency training programs in public hospitals. This group, the first of its kind, convened spread leaders and trainees to share improvement projects with their clinics. The training program leaders (who are generally not the improvement leaders in their hospitals) are continuing to collaborate to improve the residency training experience.

If an IPA or health plan is working with a small private practice, the organization can provide the spread manager with other types of support. Since small practices often do not have a specially-designated day-to-day manager, HDNIPA helped spread better practice by providing centralized management of a community-wide disease registry with ongoing feedback to the practices and outreach to patients. A key to the success of this service was the inclusion of all diabetes patients, not just those who were covered by IPA contracts; the registry scope has now expanded to include a range of chronic conditions as well as patient experience surveys. In this case, HDNIPA took on some of the tasks that someone within the practice might otherwise be assigned to do, such as entering survey data into the system, making sure practices are up-to-date with reporting, contacting patients who are overdue for follow-up care, and linking patients with peer support services in the community.

**Front Line Personnel**

Whether in the context of a daily team huddle, monthly team meeting, or conversations with patients, some of the best ideas for improvement come from the front line. HDNIPA, for example, has developed a cadre of interested and motivated medical assistants who now network and share tactics in order to help their practices manage QIs. Similarly, the LADHS CRM holds monthly brainstorming sessions with its front line staff. Ideas from those sessions are presented to leadership, who then assess the ideas for alignment with strategy and for financial, technical, and logistical feasibility. In turn, tools and ideas from CRM leadership are vetted and improved by this front line staff group.

**Peer-to-Peer Learning**

Overcoming resistance or lack of will to change can be addressed, in part, by seeing such change in action and by hearing from other health care providers about the effects and implications of successful implementation of a new or adapted practice. Even when there is wide-ranging evidentiary support for a certain practice behavior, some health care providers tend not to believe in a change unless and until they see it in practice and/or hear from those who have already implemented it. This need to experience the workability and benefits of a particular change can often be filled through direct communication about the practice with peers—in similar and different organizational settings—who are ahead of them on the adoption curve.

Among community clinics in California (which total over 800 sites), regional clinic consortia lead QI learning sessions and provide technical assistance (both to clinics and to other consortia). By acting to capitalize on one another’s expertise (e.g., in supporting electronic disease registries, or training leaders to develop a culture of QI), they
share internal resources and maximize the range of services provided to each consortia’s member clinics. For example, the Culture of Quality series (training in QI for clinic leadership) was developed by the Redwood Community Health Coalition, based in Petaluma, and is being used, as adapted, to engage clinic leaders in the San Francisco area. And, within each region, individual clinics with specific strengths (e.g., advanced EHR adoption, strong data validation experience, higher diabetes quality scores, use of advanced access scheduling) have shared their experience and expertise with other clinics.

Coaching Is Key

Many CIN partner organizations emphasize that change management needs to be taught continually, that change requires teamwork, and that making change requires a set of skills usually not taught as part of health professional development. These improvement (or change management) skills are often learned “on the job” and are enhanced by coaching, where the coach acts as a sounding board, brainstorming partner, and general confidant who helps to think through problems and develop solutions.

While practice coaching is often immensely helpful and even crucial, alone it is not sufficient to enable change and sustain improvements. The CIN partner organizations also required ongoing improvement support and expertise as they implemented their spread strategies. CIN therefore invested in developing improvement advisors—more sophisticated improvement specialists, with strong skills in measurement and QI techniques, trained by the Institute for Healthcare Improvement. The networking of these improvement advisors with local CIN partners and teams was further facilitated by the co-teaching of basic improvement skills workshops (“The ABCs of QI”). Working together, they continually enhanced the curriculum, sharpened partner improvement skills by learning from one another, and developed personal relationships that enabled sharing and calling upon one another for advice or help.

Aligning Change with Payment System

While financial incentives can increase the level of engagement, they may not necessarily lead to better performance once a practice is engaged. Similarly, financial incentives tied consistently to specific measures may promote activities which “teach to the test,” i.e., improve a discrete aspect of care but not the overall system. Examples of changing measures to better promote system-wide change include moving away from specific diabetes care measures (e.g., diabetic foot checks) to an aggregate measure (e.g., frequency and control of glucose testing plus a series of tests to detect diabetic vascular disease). Other examples can be found in the strong (though weakening) history of capitation in California, which has led to a plethora of tools and techniques which better support patient chronic disease self-management (e.g., email consultation, patients’ portal access to their medical records, and electronic prescribing).

Sometimes, these changes are quite incremental, but set the stage for engaging practices in improving their care. For example, L.A. Care’s Diabetes Improvement Project (DIP) is a pay-for-participation project for physicians to self-audit their practice on 14 diabetes measurements and report their data quarterly. The purpose of the DIP was to increase physician compliance with evidence-based guidelines in order to improve management of their diabetic care in areas such as obtaining BMI or administering influenza and pneumococcal vaccines when indicated.
With regard to such support tools, what constitutes an effective combination and emphasis differs for each organization. With HDNIPA, for example, the process began with comparative reporting to get people's attention, focusing initially on diabetes care. Next, a diabetes registry was expanded to include a range of other conditions. Then, an e-referral system was added to access specialty care and higher-end diagnostic testing and procedures. Each initiative started with measurement and followed with various mechanisms to support change in provider behavior. HDNIPA used a combination of improvement collaboratives, coaching, comparative reporting, and team support. In the small practice setting, providers are paid for their time.

In another example, one partner found that with small practices, more support was needed than was expected. Indeed, even high-performing practices needed or preferred to have an improvement coach meet with them in person rather than by phone. Such individualized help and accountability established the discipline the practices needed to take action; however, this approach is very difficult to scale for a larger improvement organization or range of practices.

Partnership HealthPlan of California (PHC) provides a good example of using multiple levers to promote the spread of improvements among the providers with whom it contracts. Dr. Chris Cammisa, former medical director of PHC, declared that, “[You] cannot overestimate the value of coaching and technical assistance in shepherding change and making improvements at the practice level.” But despite this emphasis on coaching and technical assistance, PHC also found great efficacy in simultaneously offering financial incentives.

Development of Teaching Resources
CIN partner organizations identified some key resource needs and developed different mechanisms for addressing them. The first was a simple curriculum to teach basic models and approaches to QI—the “ABCs of QI.” This was followed by a slightly more sophisticated training on how to use and interpret data for improvement. These resulted in common curricula which are consistently used, refined, and shared by partner organizations. (See www.chcf.org.)

A second need was to make the case for the effectiveness of teamwork, and to model team meetings. Rather than a curriculum, for this purpose CIN developed a short video to demonstrate how and why team meetings worked in two different clinical settings. (See www.chcf.org.) Improvement advisors have found the video useful as a way of introducing the concepts and as a basis for discussion to help newly forming teams talk about how they might work together more effectively.
IV. Establish Measurement and Feedback Systems

Essential to any program of improvement spread is a set of measurements — of the improvements and of the spread process itself. Through the systematic use of such measurement, organizations and providers can both gauge the benefits accrued by the changes, and thereby remain engaged, and determine where adjustments need to be made. The development of such measures is a crucial part of the planning process.

Measuring Spread Itself

In addition to defining measures that assess improvements in care, organizations supporting spread should develop measures that specifically assess the extent of that spread. CIN partner organizations all collected data on common measures: practice engagement in partner-led improvement initiatives; chronic disease registry use for population management and at the point of care; and the number and percentage of patients with diabetes (the most commonly tracked diagnosis) who were entered into a chronic disease registry. Individual partner organizations, however, often used a more sophisticated dashboard of measures to assess their success in promoting spread, and the impact of that spread on both care processes and patient outcomes. CRM, for example, used a data dashboard showing disease management program participation and outcomes, for specific diseases and by clinics within a geographic area (cluster) and facility. HDNIPA tracked rates of registry utilization and patient experience/satisfaction at the individual provider level. CPCA tracked data on implementation of HIT systems, use of lab interfaces, and provider/team reporting.

Measurement Only as Good as the Definitions

With greater use of HIT, CIN partners found that they were able to make multi-purpose use of certain data (e.g., clinical documentation, patient longitudinal management, and population management), which helped them to both improve the validity of data and broaden the range of issues that can be tracked. At the same time, this raised many questions about the measures themselves, such as how to effectively define the denominator of who is to be measured, what the numerator actually measures, and how the measure aligns with the organization’s improvement goals. For example, in comparing rates of diabetes control (via HgbA1c, using cutoff of < 9), one clinic may appear as a higher performer because it successfully moved patients who were at the cusp of the cutoff point (e.g., moved patients from a HgbA1c of 9.2 to 8.9). Using the same metric, another clinic chose to focus on patients with very high HgbA1c levels (> 12), seeking to bring them down to the 9 range. Because of the different focus, this clinic appeared to be a poorer performer, in spite of significantly lowering average HgbA1c levels and improving the outcomes and prognoses for their patients.
**Mid-Course Corrections**

Ongoing measurement and feedback are necessary to help determine whether changes actually result in improvements and whether improvements are sustained. Data collected over time can encourage successful sites and challenge slower adopters. Just as importantly, data may show where the changes need to be adjusted in order to reach improvement goals. Data should be shared at both organizational and front line levels, which not only brings all parties into the orbit of successes and the process of adjustments, but also makes the progress of spread transparent for all, thus encouraging continuing engagement. This sharing is even more powerful when it includes the senior leaders of the organization.

If medical groups/IPAs or their practices are not already collecting data at the practice level, the partner organizations need to support development of a measurement and feedback infrastructure that supports the testing of interventions and changes. In this regard, PHC linked the use of a Web-based registry (www.managedcare.com) for diabetes care with its annual Quality Bonus Incentive Program. PHC bases its quality incentive payments for diabetes care on data that practices enter into the registry on measures of HbA1c < 9.0 percent, LDL-C < 100, and blood pressure < 140/90. In other words, practices that contract with PHC are encouraged to use the registry not only to manage their patients with diabetes, but also to demonstrate their qualification for incentive payments based on their patients’ improvement.

**Feedback, Feedback, Feedback**

Those responsible for spread need to meet regularly to review progress and make adjustments, as needed, to the spread plan. The same principles used for rapid cycle improvement at the practice/clinical level must also be brought to bear at the organization or system level. To continue to spread progress, participants must document and regularly reflect on what has worked and not worked in adopting specific improvements.

The sharing of performance data is only the first step in its effective use. The next key step is to use the data, in a sustained way, for improvement at both the organization and individual provider levels. The CIN partners found most effective a combination of process and outcome measures — provided more than just annually — focused on clinical quality, operational efficiency, and patient experience of care, and on which comparative reporting could be provided. Patient experience data appears to be the strongest instigator of behavior change.

At the organization level, one way the CIN partners found to regularly revisit performance measures was to use a dashboard. For example, SNI developed a high-level dashboard for its executive team (i.e., CEO, CFO, and CMO) as part of its Seamless Care Center Initiative, a two-year project in which five public hospital systems work to improve clinical quality, patient experience of care, and the operational aspects of care delivery in the outpatient setting. The dashboard includes measures in all three areas and is on the agenda of every quarterly executive leader meeting for these five hospital systems. The measures are a balanced set that includes: clinical care measures (percent of patients tracked in disease registries, diabetes care measures), operational efficiency (visit cycle time, third next available appointment), and organizational health measures (patient experience and staff satisfaction).
At the practice level, it is similarly important to regularly provide performance data. Medical leadership at both PHC, a regional Medi-Cal managed care plan, and HDNIPA, a regional IPA, meet periodically with practices to review data with clinicians in order to maintain the momentum of continuous QI. At PHC, leadership has found that providing actionable, credible data to practice sites and individual providers on an ongoing basis was extremely helpful in affecting change. The momentum was also maintained by clinical leaders and other improvement staff meeting individually with practices to review their data and discuss opportunities and tactics for improvement.

The experience of CIN partners has shown that a performance dashboard for providers must be maintained to prevent positive results from declining over time. It is also effective to tie performance evaluation to results. “Reporting fell off after the first year of the Humboldt Diabetes Project, as providers assumed that the project had ended,” noted Alan Glaseroff, M.D., CMO of HDNIPA. “Registry use declined, and performance plummeted. Comparative reports in turn became inaccurate as they were based on incomplete data in the registry. We then tied use of the registry to our P4P [pay-for-performance] program, and were able to turn around performance.”

PHC found that the group process helps drive change when providing data to practitioners. PHC delivers population data back to medical directors from the medical groups and clinics with which it contracts, and seeks their input and guidance in setting standards and expectations on clinical quality and resource utilization. It is also important at the practice level to make the data transparent and visible to the entire care team, and to tie financial incentives to the meeting or exceeding of standards. Non-clinical staff can be just as critical as clinicians when it comes to improvements in processes of care, and data on a practice’s performance, in addition to financial incentives based on that performance, can help drive their engagement.

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**Both Data and Messenger Must Be Credible**

To encourage and help ensure that data are regularly revisited and used to drive improvement, both the data and the messengers who present it need to be credible. The California Primary Care Association (CPCA) and its member clinics find that having an ongoing group of clinicians and QI staff working together across the state, first to develop standardized quality measures and then ways to validate the results, is key to buy-in and engagement by the clinics. This gives the clinics local input into a statewide process, with feedback regarding “real-world” issues about data collection and validity.

Work groups are formed to support the standardization of clinical operational measures and data reporting and validation. CPCA collects data on these measures from consortia and clinics, then validates the data and provides reports to each of the consortia every six months. The consortia and clinics use the reports to identify areas where there is need for improvement and where there is potential to share best practices. The group has recently expanded the collaborative set of measures to include operational efficiency.
**Learning from Others**

Several CIN partners found a cross-sector approach to be an effective way to spread improvements. Often, people in different sectors (commercial for-profit, nonprofit, and public) are “siloed,” unaware that they are each attempting to implement the same sorts of changes. By bringing together providers from across sectors, CIN enabled them to learn how others are using various approaches to address similar problems. It became clear that the issues involved in changing individual and organizational behavior did not differ significantly across sectors, and that similar approaches could be appropriated from one sector to another.

Cross-sector collaboration in improvement activities has yielded specific, concrete benefits. For example, when implementing a diabetes registry for its practices, HDNIPA invited the Open Door community clinic system, also operating in Humboldt County, to use the same registry, which resulted in a community-wide registry with 95 percent of patients with diabetes tracked by one system. HDNIPA’s partnership with Open Door not only supported the spread and sustainability of the registry but also led to collaborations between the IPA and other community clinics in the area. It also positioned the community to participate in significant national projects, including the Robert Wood Johnson Foundation’s Aligning Forces for Quality initiative. A similar relationship was created between CRM’s multi-disease management registry and Los Angeles County’s community clinic partners to facilitate sharing of data from disease registry systems.

Another example of such cross-sector cooperation comes from CQC, which runs a regional collaborative in the Inland Empire that began as a group of provider organizations interested in sharing with and learning from each other. CQC began with about 30 organizations in the commercial sector. But once it began hosting local meetings in which different organizations from the same geographic area could meet in person to share their experiences, participation from across sectors increased dramatically, to about 100 organizations in less than a year, with the collaborative recently agreeing to work together to improve diabetes care. CQC believes that meeting face-to-face in an accessible location facilitated and accelerated relationship-building across these provider organizations and health plans.

Perhaps one of the more compelling effects of cross-sector cooperation was the reenergizing of the quality leaders in partner organizations. The network allowed partners to share both tactical ideas (such as how to better place EHR consoles in exam rooms) and larger strategies (such as how to better engage organizational leaders and transform the culture to embrace quality as a core value). As one of the partners enthusiastically described the phenomenon, “The peer support I get reenergizes me to go back and do the work I do every day.”
Reimbursement Systems a Barrier to the Spread of Large-Scale Improvements

For those who work in primary care, reimbursement which rewards visits or procedures rather than whole-person care continues to be a major barrier to the spread of improvements. This can be seen in CQC’s attempts to support medical groups in reducing avoidable emergency department (ED) visits. Under some types of coverage, patient copayments for an ED visit were less than those for an urgent care appointment, so patients had a financial incentive to go to the ED. As a result, decreasing avoidable ED use was partly dependent on health plan payment structures and thus, to that extent, beyond the control of medical groups.

California providers face a particularly complex market structure, with a range of financial incentive messages often targeting the same clinical practice, including reimbursement for some patients under capitation (via several health plans, each with its own additional quality incentives) and for others under fee-for-service (via PPO plans). While some providers practice outside of these incentives (e.g., Kaiser Permanente-employed physicians and salaried community health center providers), for the majority of California providers the ability to institute and spread some forms of system-level improvement, in particular support for more effective chronic care, is hindered by business constraints.

For now, large, integrated systems tend to be better positioned to spread improvements at a larger scale. Perhaps with passage of the Patient Protection and Affordable Care Act there will be better alignment between the payment system and the spread of system-level improvements. But even with altered payment structures, the changes required to spread health care improvements remain primarily local. Engaging, supporting, and energizing those within local communities who make and support these changes in the health care delivery system remains a vital part of making care more effective.
V. Conclusion

There is no well-defined recipe for ensuring the spread of health care improvements, but the strategies and practices developed by the CIN partners are one important set of ingredients for supporting the dissemination and adoption of better care. From the CIN partner organizations and others, there is strong support for increasing the rigor of the spread process through the use of a spread plan, development of spread measures, and regular assessment of progress. The CIN experience has also taught that successful spread requires that providers and others change behavior. Moreover, the same concepts involved in activating patients to become more involved in their care also applies to communication techniques and approaches to engaging providers and others on the care team in improving care.

In the end, CIN participants learned that, just as with patients, health care systems and providers respond to incentives both financial and emotional. There is much that is well-understood and quantified about how to produce better health and health care — what works “on the ground.” Health care delivery, on the other hand, largely remains a nearly data-free zone. The hope and intention of the CIN effort is that measurement, transparency, feedback, and the use of data to drive improvement will begin to fill in this space. This report focuses on experiences that have promoted improvement changes locally. There is hopeful anticipation among CIN participants that health reform will help align financial incentives, drive business changes, and provide the resources needed to truly enable provision of “the right care at the right time” and to make it affordable for all. Even with those incentives in place and aligned, however, there remains the hard work of changing how health care systems (and the humans within them) function. Encouraging examples of how such changes are possible are described in this report.
**Appendix: CIN Partners, 2007–2009**

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<th>ORGANIZATION</th>
<th>DESCRIPTION OF ORGANIZATION</th>
<th>KEY QUALITY IMPROVEMENT INITIATIVES</th>
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| California Academy of Family Practitioners (CAFP) | Largest California primary care specialty society with more than 7,000 member physicians who serve an estimated 1.3 million patients with chronic diseases | - From 2005 through 2009, CAFP’s major quality improvement (QI) activity was its New Directions in Diabetes Care initiative for small practices to improve diabetes care and practice redesign  
- Provides online resources on the chronic care model, practice redesign, the patient-centered medical home, and HIT |
| California Primary Care Association (CPCA) | Represents the interests of 807 community clinics and health centers (CCHC)  
- Mission is to strengthen its member CCHCs and networks through advocacy, education, and services, in order to improve the health status of their communities | Major QI initiatives:  
- Adoption and use of automated disease registries, improving diabetes care, and optimizing access to care and clinical workflow  
- Standardization of clinical quality measures and reporting across California community clinics—supported via four regional training and learning communities |
| California Quality Collaborative (CQC) | Dedicated to advancing the quality and efficiency of patient care in California  
- Transforms outpatient practice by leveraging the relationships physicians already have with medical groups, IPAs, and health plans; together, they contract with 35,000 practices | First two years of a three-year strategy, with 2007–2010 goals:  
- Improve the patient experience (measured by statewide scores) by spreading best practices  
- Improve clinical performance in the lower performing regions in the state through peer-to-peer learning networks  
- Improve efficiency by testing best practices in reducing overuse of clinical services  
- Increase the number of physician groups engaged in CQC activities |
| California Safety Net Institute (SNI) | Represents 19 public hospitals, academic medical centers, and comprehensive health care systems, including 137 associated primary care clinics and multiple specialty care clinics across the state  
- Public hospital systems serve an estimated 2.4 million primarily low-income, uninsured, or publicly insured patients | Major improvement activities included:  
- Leading several collaboratives to improve diabetes care, patient access to care, and visit efficiency in outpatient public hospital clinics  
- Supporting chronic disease registry and electronic health record implementations  
- Spreading palliative care  
- Testing the “Lean” approach to operational efficiency and reducing waste in four public hospital systems  
- Working closely with five hospitals and all affiliated clinics to develop their infrastructure to better support ongoing QI in primary care |
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<td>Humboldt Del Norte Independent Practice Association (HDNIPA)</td>
<td>Represents 7,000 managed care patients&lt;br&gt;Network includes 210 MDs, 80 mid-level practitioners, and 97 mental health professionals, including safety-net community clinic providers</td>
<td>Participant in the statewide pay-for-performance (P4P) program&lt;br&gt;Enhancer of community-wide disease registry beyond diabetes care to include depression and breast care&lt;br&gt;Leader in Humboldt’s Aligning Forces for Quality Initiative to provide and report practice level quality measures (including patient experience)&lt;br&gt;Leader in microsystem redesign with primary care practices</td>
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<td>L.A. Care Health Plan (L.A. Care)</td>
<td>Largest public agency health plan in the nation, with over 800,000 members in Medi-Cal, Healthy Families, Healthy Kids, and L.A. Care Health Plan Medicare Advantage HMO&lt;br&gt;More than 10,000 physicians serving membership</td>
<td>Several programs to improve clinical outcomes:&lt;br&gt;Diabetes Incentive Pilot: eligible PCPs earn incentives for optimal screening and blood sugar control of L.A. Care members in their practices&lt;br&gt;Diabetes Improvement Project: facilitated P4P project&lt;br&gt;Incentives for use of disease registries in panel management (including free registry access)&lt;br&gt;Incentives for use of e-prescribing technology</td>
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<td>Los Angeles County Department of Health Services, Clinical Resource Management Program (CRM)</td>
<td>Operates a network of three acute care hospitals, one rehabilitation hospital, two multi-service ambulatory care clinics, six comprehensive health centers, and ten owned-and-operated health centers, and supports 80 public-private partnerships&lt;br&gt;Hospitals and clinics serve approximately 700,000 patients annually, of whom 67% are uninsured and 26% have Medi-Cal&lt;br&gt;Includes over 4,000 physicians or practices</td>
<td>CRM is one of several county-wide and facility-specific performance improvement efforts:&lt;br&gt;Supports development and enhancement of the Disease Management Registry as tool for CRM’s systematic approach to chronic disease care (focused on diabetes, asthma, and heart failure)&lt;br&gt;Electronic tools are used at the point of care in disease-specific clinics to increase care quality for patients through decision-support utilizing vital signs, clinical indicators, and pertinent medical history</td>
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<td>Partnership Health Plan of California (PHC)</td>
<td>Contracts with state of CA to manage care for over 160,000 Medi-Cal patients with small product lines in Medicare Advantage (6,000 patients), Healthy Kids (fewer than 1,000), and Healthy Families (fewer than 1,000).&lt;br&gt;Contracts with over 400 primary care physicians and 1,200 specialists in the four counties&lt;br&gt;Includes 142 primary care clinic sites and over a dozen hospitals, including the University of California system, Catholic Healthcare West, Sutter, Kaiser, Adventist, and community-based hospitals</td>
<td>Number of QI programs focused on colorectal and breast cancer screening, diabetes care, controlling high blood pressure, and access to primary care, including P4P incentives and reminder letters:&lt;br&gt;Supports use of disease management registry&lt;br&gt;Participates in Consumer Assessment of Healthcare Providers and Systems Program&lt;br&gt;Has QI Program Bonus for PCPs</td>
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