Lift All Boats: How Five Public Hospital Systems Are Raising Clinical Care and Operational Efficiency

California HealthCare Foundation

REPORTS FROM THE FIELD

Executive Summary

The California Health Care Safety Net Institute (SNI) works with public hospitals to improve patient care by facilitating team-based initiatives. In 2010, SNI launched the Seamless Care Center Initiative (SCCI) with five California public hospital systems.

The SCCI was a two-year initiative; one year participants focused on clinical quality and effective chronic disease management, and during the other year, they worked on operational efficiency and access to care. With the goals of improving population health and building the internal capacity for ongoing, large-scale improvement in public hospital systems, the SCCI engaged all of the adult primary care clinics within each participating system.

Although previous SNI programs focused on a single major improvement area, this initiative was designed to integrate the activities and measures of both clinical quality and operations improvement. The initiative's ultimate goal was to support the building of patient-centered medical homes. The program involved more than 300 executives, clinicians, and staff members from 29 clinics across the participating public hospital systems.[1]

The passage of the Affordable Care Act and the creation of California's five-year Section 1115 Medicaid Waiver in 2010 further fueled the primary care improvement work that took place through the SCCI. The Delivery System Reform Incentive Program (DSRIP), a federal and state pay-for-performance initiative under the waiver, offers California's public hospital systems an unprecedented opportunity for transformation. This incentive program, which rewards health care providers for achieving specific health outcomes and systemwide improvements, represents a dramatic shift from traditional health care financing and provides public hospitals with the opportunity to earn ongoing funding to continue and expand on the work started during the SCCI.

Results

The SCCI impacted more than 12,000 low-income patients with diabetes across California. Processes of care improved during both the clinical quality year and the efficiency and access year. The SCCI had some impact on clinical outcomes — more within individual pilot populations than across the public hospital systems in aggregate. Although it is still too early to determine the overall impact of the work that took place during the initiative, during the access year, three systems achieved patient no-show rates of 10% or less and third next available appointments (TNAAs) of 10 days or fewer by the final learning event (See Table 1 on page 6).

This report describes the SCCI and how it helped accelerate change in 29 of California's public hospital primary care clinics. With teamwork, the use of data to drive improvement across all levels of the organization, leadership engagement, and good communication, participating clinics are transforming themselves into patient-centered medical homes and providers of choice.

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Six key findings emerged from the SCCI:

1. **A robust information technology (IT) infrastructure, including a disease registry and adequate staffing, is essential for primary care improvement.** All participants had IT systems in place at the start of SCCI to enable data-driven improvement. However, there was wide variation in the ease with which their systems could provide timely and accurate clinical data to teams.

2. **Empowering frontline clinic staff through tools and training fosters the development of a team-based approach to care.** Through its training programs, the SCCI strengthened existing care teams and encouraged teams to share the care for their patients and to move beyond traditional roles and responsibilities.

3. **Given the structure of the SCCI, the two-year time period was insufficient to see aggregate improvement in the outcome metrics across all five hospital systems.** The organizations that were able to provide timely and accurate clinical data to teams and to track the most patients in their registries began the clinical quality work in year two. Thus, the full impact of these teams' work was not captured within the time frame of the program. SNI would expect greater improvement in the outcome measures in 2013 if the program continued to track these patients for an additional year.

4. **Access to quality improvement expertise and practice coaching is essential for primary care transformation.** With the goal of building internal capacity to support future change efforts, SNI encouraged public hospital clinic leaders — ambulatory care leaders, clinic managers, and quality improvement personnel — to play a more significant role in coaching clinical quality teams than they had in previous SNI programs. Although transferring change management responsibilities onto clinic leaders built local improvement expertise, the clinic leaders' training and time to do this work was insufficient to provide adequate coaching support to frontline teams. Because practice coaching is critical to the success of transformation efforts, as public hospital systems continue to grow hospital clinic leaders with the expertise and time to fulfill this role, SNI will build in weekly coaching for teams in the near future.

5. **Champions are important to spark change but insufficient for large-scale implementation and spread.** It is often easier for ambulatory care leaders to support individual improvement champions than to standardize a new practice across an entire system. However, champions alone cannot ensure institutional change; spread is a leadership responsibility.

6. **Communication is key to the success of concurrent improvement efforts.** Participation in the initiative raised awareness about the need for better feedback loops in data reporting and clearer channels of communication both intra- and interdepartmentally within each of the participating public hospital systems. Effective internal communication enhances a hospital system's ability to manage multiple initiatives simultaneously and increases the likelihood of successful and rapid delivery system transformation.

Introduction

The Seamless Care Center Initiative (SCCI), a two-year effort of the California Health Care Safety Net Institute (SNI), was designed to improve care quality, efficiency, and access in primary care clinics within five California public hospital systems. SNI, the quality improvement partner of the California Association of Public Hospitals and Health Systems (CAPH), designs and directs programs that accelerate the spread of innovative practices among California's public hospitals and clinics.

Launched in January 2010, the SCCI was built on several years of collaborative work between SNI and California's public hospital clinics to improve chronic disease management, efficiency of care delivery, and the patient's primary care visit experience.

The ultimate goal of the SCCI was to help public clinics in their evolution into patient-centered medical homes with the capacity to:

- Improve the health status of low-income patients
- Address health care disparities
- Implement reliable, safe, and efficient care based on clinical evidence and best practices
- Spread clinical quality and effective chronic disease management starting with the diabetes patient population
- Advance operational efficiency and access
- Build the resources and internal capacity needed to manage ongoing, large-scale improvement work in primary care

The SCCI involved 29 primary care clinics from five public hospital systems, each of which is a member of the California Association of Public Hospitals and Health Systems (CAPH). In total, the program involved more than 300 staff members, clinicians, and executive leaders from the participating systems and impacted more than 12,000 patients.

Program Components

This initiative focused on two improvement areas: clinical quality and effective chronic disease management of patients with diabetes, and operational efficiency and access to care. Participating public hospital systems focused on one improvement area for the first year and the other improvement area the second year. While past SNI programs centered around one major improvement topic, the SCCI integrated two areas of focus over the course of the program.

SNI staff, external consultants, and public hospital ambulatory care leaders provided training, coaching, and the facilitation of peer-to-peer learning. Two of the five hospital systems began with improving operational efficiency and access in year one, while the others started the program with improving care for their chronically ill patients — primarily those with diabetes.

Clinical Quality and Effective Chronic Disease Management

SNI developed and delivered the content for the clinical quality year. Using the Model for Improvement (developed by Associates in Process Improvement) and the Chronic Care Model (developed by MacColl Center for Healthcare Innovation) as roadmaps, SNI provided the structure and coaching to help clinic teams measurably improve care for their chronically ill patients.[2,3] Key learning concepts for this year also included teamwork, automated registry use, and effective patient-provider communication.

The format followed a modified version of the IHI's Breakthrough Series collaborative model, with two in-person learning sessions followed by action periods and virtual meetings.[4] After years of leading large-scale collaboratives, SNI found that this structure balanced the need for face-to-face learning events with the need to maintain adequate clinic staffing during these off-site events.

The SCCI also differed from previous collaboratives by involving all of the adult primary care clinics from the participating systems, rather than engaging one or two pilot clinic teams. Instead of holding regional events convening pilot clinics from different public hospital systems, each system went through the program modules as its own cohort, with all of its adult primary care clinics engaged. Although some peer-to-peer learning

across organizations was sacrificed, SNI facilitated the sharing of best practices using alternative methods, including the use of a shared online portal and cross-fertilization through ambulatory care speakers from sister public hospital systems at learning events. One of the main benefits of this new program structure was that it provided all clinics within a given system with a shared improvement language and vision, which will ultimately help participating hospital systems with future spread efforts. Further, this structure allowed SNI to design and tailor learning session content for each participating organization, including engaging a given system's leaders to serve as faculty for some of the sessions.

During the action periods, SNI periodically provided coaching via phone during the weekly improvement team meetings. To build internal capacity to lead this work, SNI also hosted monthly calls for the ambulatory care leaders within each system to discuss their clinics' progress in the program. The calls covered topics such as empanelment, care team optimization, and how to most effectively spread and sustain the clinics' best practices.

Clinic improvement teams reported monthly progress on five diabetes measures — the percentage of eligible diabetes patients:

- With one HbA1c test recorded in the past 12 months
- Whose most recent HbA1c test is $>9\%$ (poor control)
- Whose most recent HbA1c test is $<8\%$ (good control)
- Whose most recent LDL-C is <100 mg/dL
- Whose most recent BP is $<130/80$ mmHg

Each system's ability to monitor progress was heavily reliant on the functionality of its disease registry.

Patient-Provider Communication

Another component of the clinical quality year was a program on effective patient-provider communication — the Choices and Changes: Clinician Influence and Patient Action workshop of the Institute for Healthcare Communication.[5] This three-day train-the-trainer workshop certified up to eight staff members from each county to deliver the workshop within their own organizations. To spread this content beyond the public hospital systems engaged in the SCCI, two SNI staff members were also certified as faculty to lead this workshop.

In the Choices and Changes workshop, participants learned and practiced skills to motivate and empower patients to self-manage and to change health behaviors. Featured skills included building relationships, assessing patients' motivation for health behavior change, tailoring interventions to address patients' conviction and confidence, setting goals collaboratively, and action planning.

Operational Efficiency and Access: Patient-Centered Scheduling

Coleman Associates, an expert in the field of patient flow redesign, was contracted to lead the work focused on operational efficiency and access. The key learning concept was Patient-Centered Scheduling (PCS), which focuses on reducing no-show rates and changing scheduling practices to allow all patients to get the appointment times they desire with their providers — whether it is same day or later.[6]

PCS acknowledges that one of the key barriers to access and efficiency is a consistently high no-show rate. While reducing no-show rates alone is not the solution to access problems, it is a critical first step. Beyond providing no-show solutions, PCS addresses key barriers to access that stem from larger, structural decisions about appointment schedule templates and visit types. In the PCS collaborative, teams were taught to simplify the

schedule and minimize the number of appointment types by using Coleman's Simplified Patient Scheduling.

Clinic teams attended four learning sessions, each of which was followed by a learning action period where teams tested and applied the PCS concepts. Teams reported their data weekly on an online web portal hosted by Coleman Associates.

High Impact Management Training Program

During the PCS collaborative, Coleman Associates also led a High Impact Management Program (HIMP) to train leaders and managers in change management and operational efficiency. This three-month program involved up to 25 leaders and managers from each organization. All HIMP participants were involved in the PCS work taking place at their organizations.

Beginning with a one-day, in-person meeting, and followed by weekly calls for three months, the course covered the following topics: ownership and responsibility, attention to results, the importance of communication with staff related to improvement projects, grooming future leaders, and using data to manage change.

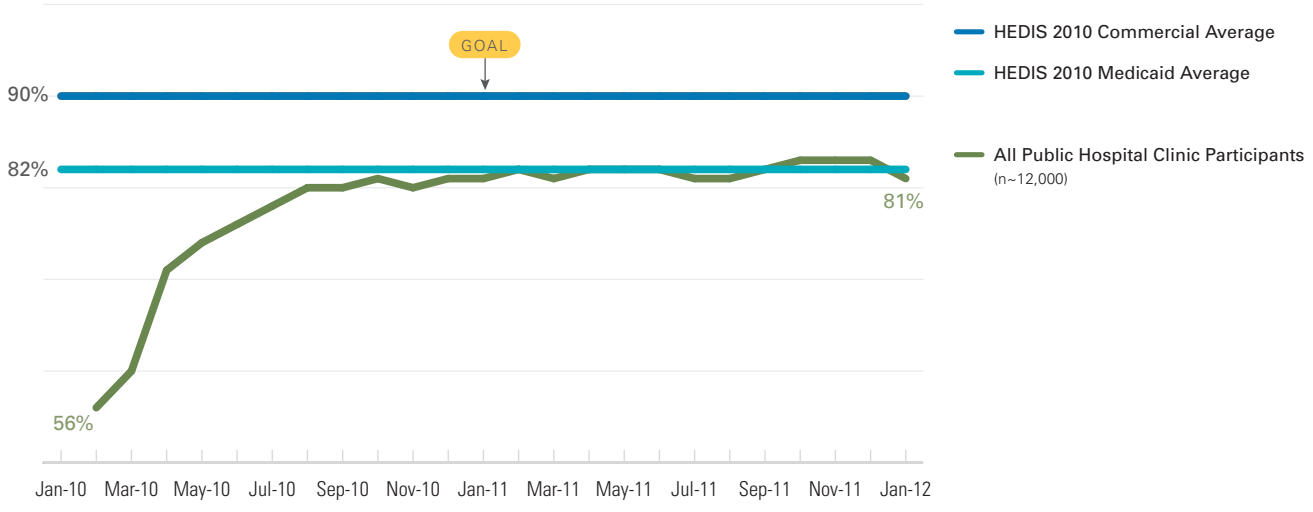
Results

In aggregate, this work positively affected the health of 12,000 low-income diabetes patients across California. While SCCI had some impact on the diabetes outcome metrics, it is too early to determine the overall impact of the work that took place during the initiative. The greatest impact can be seen on the process measures, both within the clinical quality and the efficiency and access year. See Figures 1–5 for more detailed results.

Some of the major results include:

- **Clinical quality process measure.** The aggregate percentage of eligible diabetes patients with one HbA1c test recorded in the past 12 months across all five systems increased from 56% to 81%. This translates to an additional 3,000 low-income diabetes patients with an HbA1c test completed to assess their diabetes control and to guide their treatment (see Figure 1).

Figure 1. Percentage of Diabetes Patients with HbA1c Test in Past Year, January 2010 to January 2012



Note: The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90% of US health plans to measure performance on dimensions of care and service.

Source: Dashboard data were reported by public hospital system staff on a monthly basis and collected and analyzed by SNI.

Table 1. Patient Centered Scheduling Results

	NO-SHOW RATE			THIRD NEXT AVAILABLE APPOINTMENT (TNAA)		
	BASELINE	FINAL LEARNING EVENT	JANUARY 2012	BASELINE	FINAL LEARNING EVENT	JANUARY 2012
Public Hospital A	35%	20%	24% 12 months post-LS4	54 days	45 days	50 days 12 months post-LS4
Public Hospital B & C*	19%	6%	5% 0 months post-LS4	28 days	8 days	10 days 0 months post-LS4
Public Hospital D	19%	8%	15% 4 months post-LS4	7 days	1 day	1 day 4 months post-LS4
Public Hospital E	16%	10%	11% 16 months post-LS4	14 days	8 days	6 days 16 months post-LS4

*Public Hospitals B and C were from the same county and participated in the learning sessions together.

Source: Clinic teams entered weekly data on a shared online portal. Data shown were aggregated by SNI.

- **Efficiency and access (PCS).** Three systems achieved no-show rates of 10% or less and third next available appointments (TNAAs) of 10 days or fewer by learning session four (see Table 1).

Findings: Elements of Success

This section outlines major findings from the SCCI and highlights the elements that helped and hindered success through data and direct examples.

FINDING #1: A robust information technology (IT) infrastructure, including a disease registry and adequate staffing, is essential for primary care improvement. The first step toward creating medical homes is developing a data system that allows clinics to access data on their patients for population management and quality improvement.[7] SNI has been supporting California's public hospital systems to implement disease registries since the launch of SNI's first Chronic Care Learning Collaborative in 2005. Since then, the number of public hospital system clinics using disease registries has risen significantly, with close to 50 now using registries for both population management and decision support at the point of care. Of the public hospital systems that currently have the infrastructure to manage population health, some are using the registry component within their electronic medical record (EMR), while others are using standalone registries in addition to their other electronic information systems.

All participants had IT systems in place at the start of SCCI to lead data-driven improvement, and all made major improvements in their data systems during the two years. However, there was wide variation in registry functionality and in the ease with which their systems could provide timely and accurate clinical data to improvement teams.

What Helped

Organizations that had robust population management systems and that provided clinic staff with training and direct access to these systems saw the maximum benefits of data-driven improvement. Clinic teams that were able to query the registry themselves felt more empowered to use the data for improvement and take responsibility for their panel of patients. Further, because the teams were involved with entering and analyzing the data, they trusted the accuracy of the reports the registry generated. Rather than dwelling on data validation, these teams were able to move toward action-oriented improvement work early in the program.

The ability for data to serve as a motivator for change was most apparent with the diabetes process measure. SCCI

participants saw a dramatic increase in the percentage of eligible diabetes patients with one HbA1c test recorded in past 12 months (see Figure 1 on page 5). The teams' ability to make significant progress on the HbA1c process measure enabled them to shift gears and begin to address the clinical outcome measures.

What Hindered

Progress on outcome measures was hindered by registry problems at some sites. Despite registry prerequisites built into the initiative's application process, three participants struggled with data issues throughout the program. These organizations' IT systems either did not contain accurate data, could not be easily queried, or were not directly accessible by clinic teams. SNI alerted system leaders about these concerns early in the process and served as a connector between IT staff and ambulatory care leaders both internally and across organizations to address the issues.

For example, teams at one organization did not have access to the registry module within its EMR and had to submit data requests to the hospital data manager or director of primary care. Due to competing priorities and IT issues, the turnaround time for these requests was sometimes more than two weeks. The lack of access to real-time data demoralized teams and made it difficult for them to carry out their improvement work. Further, as is the case with many EMRs, the registry module could only produce limited data for population management purposes.

Although registry challenges limited the success of the SCCI, as a result of this initiative, there has been a clear commitment and channeling of resources toward IT and registry support. All hospital systems are providing more training and registry access to clinic staff so they can produce customized reports for ongoing population management and quality improvement efforts. With support from its CEO, one hospital system is actively working to resolve the issues within the registry module in its EMR. Another has created new permanent positions to maximize use of its clinical quality data.

Because most EMRs have limited capabilities as tools for population management, two hospital systems will be implementing i2iTracks, a standalone registry system that will interface with their existing electronic information systems. This registry will greatly increase the hospital systems' abilities to lead data-driven improvement in the future. Through their participation in the SCCI, all systems are moving toward implementing more robust tools for population management and providing more training and IT support for frontline teams.

FINDING #2: Empowering frontline clinic staff through tools and training fosters the development of a team-based approach to care. In addition to improving care quality and access, the SCCI also focused on teamwork, a critical piece of the medical home foundation.

What Helped

By providing training and content expertise on concepts such as developing a shared vision, running effective team meetings, and establishing team norms, the SCCI contributed to the development of well-functioning improvement teams. To quantitatively gauge progress toward more effective teamwork, SNI distributed a shortened version of the PeaceHealth Team Development Measure.[8] Designed to measure team development, the tool includes questions about key components of highly functioning teams such as good communication, team cohesiveness and trust, and role clarity.[9]

The tool was administered during the clinical quality year at learning session one (LS1) and then again five to six months later at LS2. Table 2 (page 8) shows the results.

In aggregate, the scores of the positive questions increased by 6%, and the scores of the negative questions decreased by 6%. These results imply enhanced team development.

Table 2. Team Development Measure Results

	POSITIVE QUESTIONS (HIGHER IS BETTER)		NEGATIVE QUESTIONS (LOWER IS BETTER)	
	LS1	LS2	LS1	LS2
Public Hospital A	3.00	3.18	2.14	1.98
Public Hospital B & C*	3.25	3.26	1.90	2.08
Public Hospital D	3.16	3.58	2.36	1.93
Public Hospital E	3.13	3.35	2.13	1.93
Average	3.15	3.34	2.11	1.98

*Public Hospitals B and C were from the same county and participated in the learning sessions together.

Source: Surveys were administered at clinical quality learning sessions one and two. Data shown were aggregated by SNI.

SNI staff observed that the improvement teams appeared to work more effectively together by the end of the clinical quality year.

SNI saw a culture shift at some sites where teams began to share ownership and accountability for the health of their patient populations. Team members were willing to expand roles and responsibilities and to attend training to gain new skills in panel management activities. Physicians delegated medication adjustments to the clinical diabetes educators and clinical pharmacists on the team, which ultimately allowed each member of the care team to spend more quality time with patients.

During the access year, front office clerks played a particularly important role in implementing Simplified Patient Scheduling. Seeing the impact of their own efforts brought more meaning to their work. An administrator from one clinic said, "We were skeptical at the beginning. But building this team, we are true believers. We have seen a culture shift happen and new leaders emerge from our frontline staff as a result of the Seamless Care Center Initiative."

Feeling empowered by the experience of participating on an improvement team, several staff members expressed motivation to continue this work beyond the end of the initiative.

To continue to foster teamwork and the practices of highly functioning teams beyond the SCCI, SNI created a training video titled *Active Care Teams: Embracing Daily Team Huddles.* The 10-minute video is available on the SNI website: www.safetynetinstitute.org. It features a team demonstrating the tools and techniques needed to effectively huddle on a daily basis. This video is intended as a useful training resource for clinics planning to implement daily team huddles. For those clinics already practicing daily team huddles, the video can be used as an orientation resource for new employees.

What Hindered

While the SCCI provided the forum for multidisciplinary improvement teams to develop, the complete transformation to a team-based approach in which consistent care teams work together on a daily basis to share the care for a panel of patients was challenging at some sites. Due to staffing issues and competing priorities at the leadership level, some organizations still had not established consistent care teams by the end of the program.

Another factor that inhibited the full transformation toward team-based care at some sites was the lack of physician champions. One system, which has a large residency program and many part-time clinicians, did not include physician leads on the improvement teams until late in the clinical year. This made it virtually impossible for its teams to make significant changes to the way their system delivered care to its chronically ill patients. The organization ultimately withdrew from the program when leaders realized that system-level issues were impeding their success. In light of these and other challenges, administrators spearheaded a redesign of their clinic

system and now have full-time providers with consistent care teams in place.

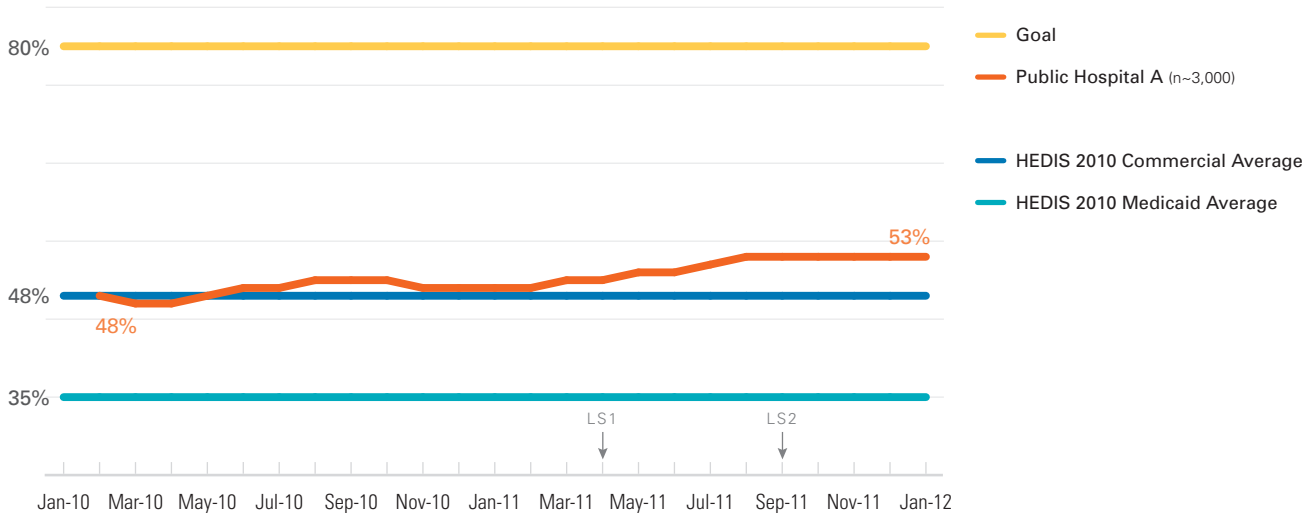
FINDING #3: Given the structure of the SCCI, the two-year time period was insufficient to see aggregate improvement in the outcome metrics across all five hospital systems. Aggregate improvement was seen in the HbA1c process measures. However, for outcome measures in aggregate — looking at all five systems together — there was no improvement seen within the time frame of the program. Still, there were improvements in the outcome measures at the individual system, clinic, and provider levels.

What Helped

One hospital system was able to improve LDL control in aggregate across its entire system during the short time period (see Figure 2). The percentage of diabetes patients with LDL < 100 at this hospital increased by five percentage points (from 48% to 53%). This result is especially noteworthy given that its data included all diabetes patients followed in its primary care clinics, not just those cared for by the pilot teams in the SCCI. There were two notable differences in this hospital system that likely enabled widespread improvement in this outcome measure compared to other participating public hospital systems: This system had a highly functional registry, and its clinical quality improvement teams were larger and included more disciplines than other systems' teams.

Similarly, the ability to view more granular data at the clinic and provider level was essential to keeping teams motivated during the short time frame of the initiative. One of the metrics that improved at the clinic level at this participating public hospital system was the HbA1c < 8 measure. This clinic improved the percentage of diabetes patients with HbA1c < 8 from 66% to 74% (see Figure 3 on page 10). Its team, which included a certified diabetes educator (CDE), instituted a diabetes clinic session one afternoon per week where they selectively scheduled their diabetes patients who were not at goal. The physician and the CDE huddled prior to the sessions. In addition to being more aggressive with initiating insulin for patients with elevated HbA1c values, the CDE had follow-up

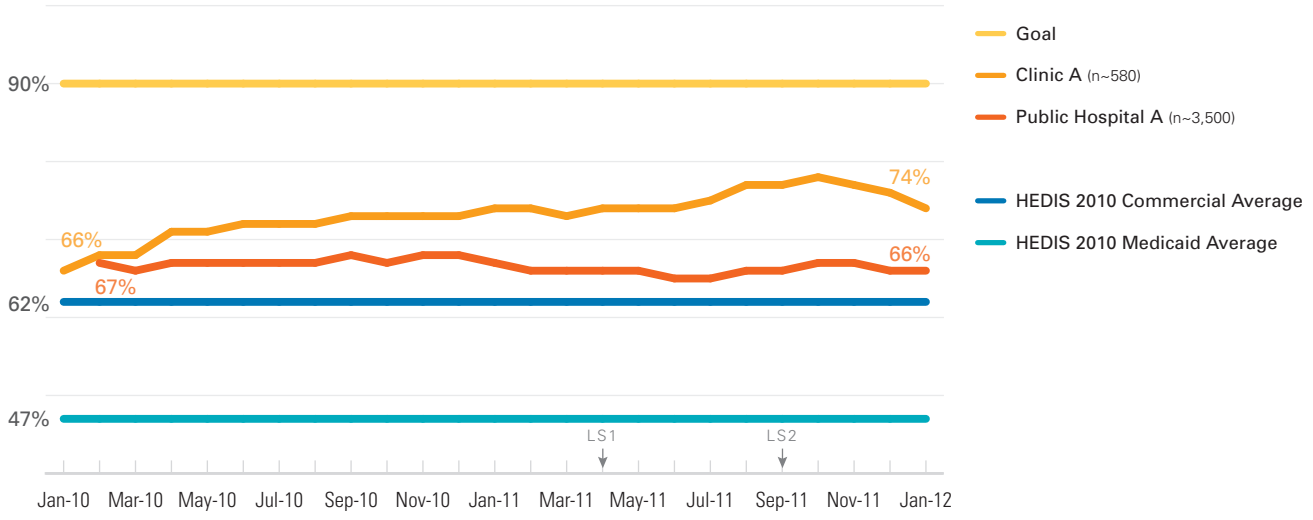
Figure 2. Percentage of Diabetes Patients with LDL <100, January 2010 to January 2012



Notes: The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90% of US health plans to measure performance on dimensions of care and service. LS1 = clinical quality learning session 1. LS2 = clinical quality learning session 2.

Source: Dashboard data were reported by public hospital system staff on a monthly basis and collected and analyzed by SNI.

Figure 3. Percentage of Diabetes Patients with HbA1c < 8, January 2010 to January 2012



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Source: Dashboard data were reported by public hospital system staff on a monthly basis and collected and analyzed by SNI.

visits with patients for insulin titration and medication adjustments. The physician noted that he paid more attention to his patients' results because of his engagement in the collaborative and due to the prompt feedback on the monthly measures. The availability of timely and reliable data on his patients was a driving force for this physician to change treatment regimens and improve the care provided to his patients.

In addition to clinic-level data, access to provider-level data was important during the SCCI. Because provider-level data are more sensitive to the impact of a team's improvement work and panel management efforts than are clinic-level data, SNI worked with teams to produce these data whenever possible. The ability for systems to generate these granular data depended on the robustness of their IT system and the extent to which they had empanelled patients. Additionally, the SNI coach worked with teams to collect data on a smaller scale through their rapid cycle testing.

What Hindered

One factor contributing to the lack of movement in the aggregate outcome measures across all five hospital systems was that the structure of the program did not allow for sufficient time needed to see improved clinical outcomes across entire systems. Given the staggered structure of the program, half of the systems began the clinical quality work in year two. Hence, the data resulting from their work in clinical quality was captured for only one year, and it could take an additional year beyond the end of the initiative to see the full impact of their efforts. It is likely that if all teams did clinical quality work in year one, with continued tracking of the diabetes metrics during year two, more improvement would have been seen across all five systems in the aggregate clinical outcome measures.

In addition to program structure, another possible explanation for the lack of aggregate improvement in the outcomes measures is that in general, process measures are, according to improvement science expert Jonathan

Mant, "more sensitive than outcome measures to differences in quality of care." In contrast, wrote Mant, outcome measures "reflect all aspects of the process of care and not simply those that are measurable or measured." [10]

Given the slow pace at which the clinics improved the aggregate clinical outcome measures during the SCCI, it may be worth involving multiple pilot teams per clinic for future collaboratives. The American Academy of Family Physicians National Demonstration Project (NDP) to build patient-centered medical homes revealed that "the magnitude of stress and burden from the unrelenting, continual change required to implement components of the NDP model was immense."[11] Engaging more pilot teams per clinic may help combat change fatigue and allow leaders to more quickly identify, implement, and spread promising strategies for change. To meet the expected growth in demand for services with implementation of the Affordable Care Act in 2014, clinics will need to dramatically and rapidly transform their delivery systems. Having more people focused on this work will speed its success, but many clinics will be challenged to carve out the protected time and resources required.

FINDING #4: Access to quality improvement expertise and practice coaching is essential for primary care transformation. All SCCI hospital systems had participated in previous improvement work with SNI, so each hospital system began with a small cadre of quality improvement champions. One of the main goals of the SCCI was to further enhance each organization's internal capacity to lead future primary care improvement efforts, rather than rely on outside practice coaches. The ability with which the participating teams could rely on internal experts, rather than external coaches, to lead change varied by program area and by site.

What Helped

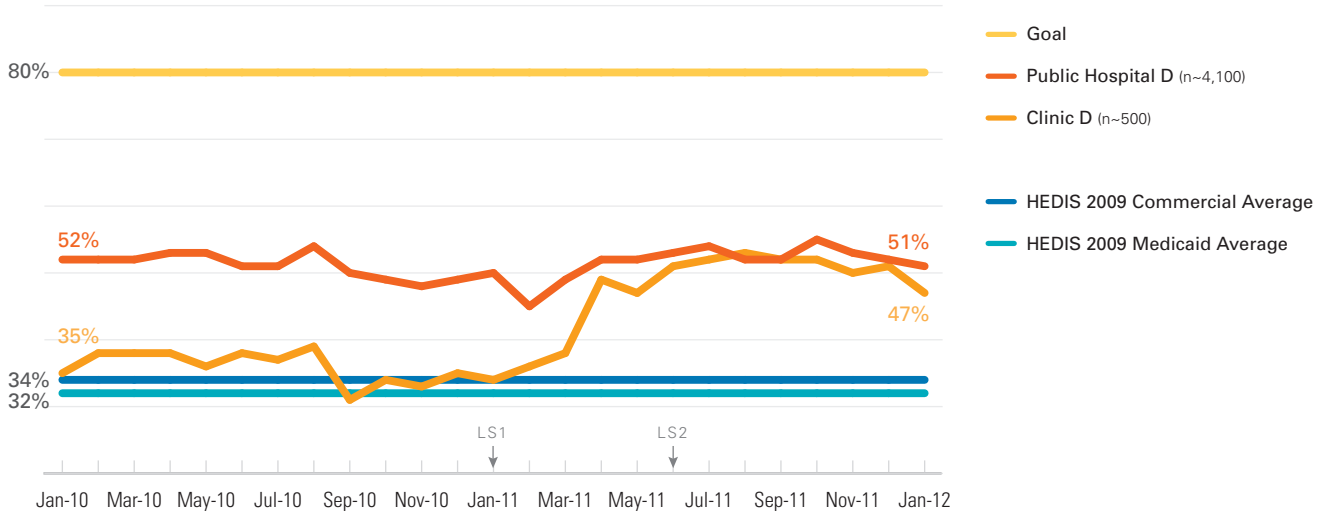
Practice coaches are described in the literature as facilitators who work collaboratively with teams to make changes designed to measurably improve patient outcomes.[12]

Given the disruptive nature of implementing Coleman Associates' concept of Simplified Patient Scheduling, the PCS teams benefited greatly from the intensive coaching by Coleman consultants. With deep content expertise in clinic redesign and access, Coleman consultants taught clinic representatives the PCS methodology and guided them through every step of the process during weekly work sessions. The two key metrics used to assess progress during PCS were no-show rate and TNAAs. The SCCI's goal was to reduce the no-show rate to 10% or less and TNAAs to seven calendar days or fewer. This TNAA goal is more stringent than California Department of Managed Health Care regulations, which require that patients be treated by HMO-contracted doctors within 10 business days of requesting an appointment.

Several staff members were skeptical of the PCS methodology at first. But after working closely with the coaches, participating hospital systems in three out of the four counties achieved no-show rates of 10% or less and TNAAs of 10 days or fewer by learning session four (see Table 1 on page 6).

During the clinical quality year, one team was chosen by an SNI staff member participating in the IHI Improvement Advisor Professional Development Program to be the subject of a project. This team received more intensive coaching than the others in the clinical quality year and achieved positive results. This team received face-to-face coaching, rather than telephone coaching, which made it easier to provide meaningful feedback. The percentage of diabetes patients with BP<130/80 at this clinic increased from 35% to 47% (see Figure 4 on page 12). Key interventions included standardizing measurement of blood pressure throughout the clinic (protocol and training), reaching out to patients with care gaps, improving self-management support, and conducting uniform medication reconciliation.

Figure 4. Percentage of Diabetes Patients with BP < 130/80, January 2010 to January 2012



Notes: The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90% of US health plans to measure performance on dimensions of care and service. LS1 = clinical quality learning session 1. LS2 = clinical quality learning session 2.

Source: Dashboard data were reported by public hospital system staff on a monthly basis and collected and analyzed by SNI.

What Hindered

During the clinical quality year, in an effort to foster the development of the internal quality improvement leaders, SNI did not provide coaching at each weekly team meeting. With the exception of the team chosen for the IHI Improvement Advisor project, SNI targeted the teams that needed the most coaching or those that were new to the Model for Improvement methodology. Most of the coaching was provided via email and phone.

In reality, the internal leaders charged with leading change during the SCCI had other primary responsibilities, and some had only one half day per week to facilitate quality improvement activities at multiple clinics. Because leaders lacked protected time for quality improvement, the need for external coaching was greater than anticipated.

Until public hospital systems expand their cadre of clinic-based quality improvement experts, SNI will plan its programs so that improvement teams receive weekly "touches" from the SNI improvement advisor. When feasible, coaching will be conducted in person.

Also, certain improvement efforts, such as major access improvement models, will likely still require intensive coaching from outside experts.

FINDING #5: Champions are important to spark change but insufficient for large-scale implementation and spread. Many of the successful clinics in this program relied on improvement champions within their organizations to sustain the work. It is often easier for an ambulatory care leader to support champions than to standardize a practice across the entire system. However, champions can only go so far; spread is a leadership responsibility.[13]

What Helped

SNI encouraged leadership engagement in the spread of improvement efforts by discussing this topic on monthly calls with ambulatory care leaders, by inviting senior leaders and CEOs to learning sessions, and by encouraging leaders to join team meetings and regularly review the SCCI monthly data. Also, the HIMP program

was designed to build the internal capacity for leaders to support the spread and sustainability of the access work.

Leaders at one organization supported the spread process by committing time for teams to meet and continue the clinical quality work even as they crossed into the access work in year two. This system allowed teams to continue work with diabetes patients while concurrently improving access with PCS. Hence, HbA1c improvement continued throughout the duration of the two-year initiative (see Figure 5).

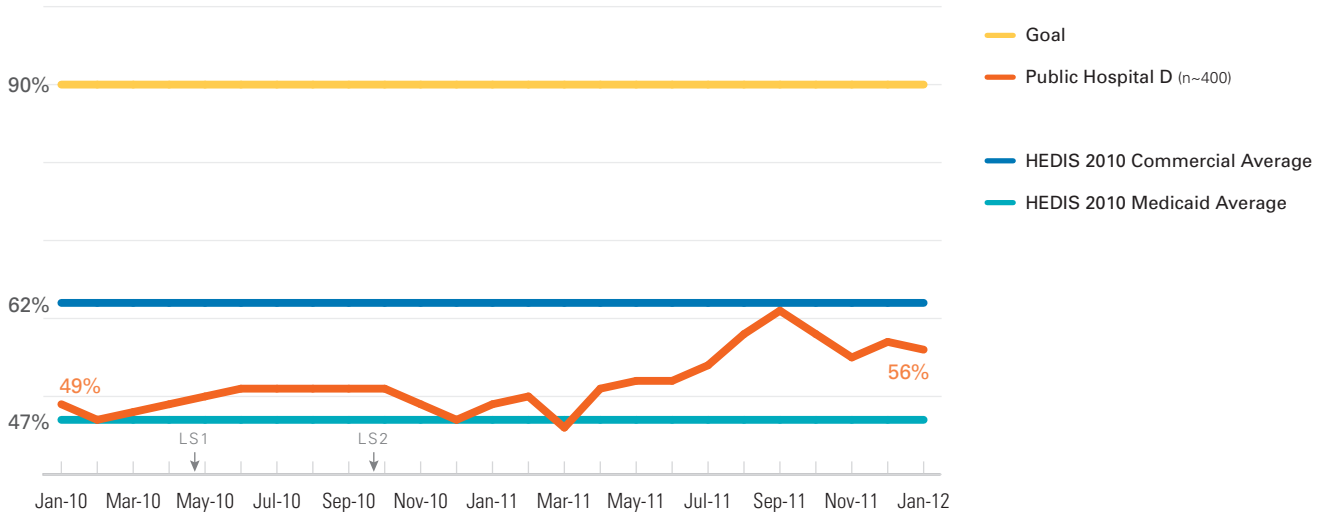
What Hindered

Although continuing work on both improvement areas within the second year of the initiative was the intention of the SCCI, in reality, most systems viewed the two years of work as separate and distinct. It was difficult for leaders of participating systems to carve out time for teams to make meaningful improvements in both the clinical quality and PCS work each week. This made spread and sustainability challenging when transitioning from year one to year two of the program.

Although SNI started to see promising work around standardizing best practices (e.g., the adoption of a diabetes medication treatment algorithm), spread did not occur fast enough to improve aggregate clinical outcome measures within the clinical quality year.

In his recent article "Big Med," Atul Gawande, MD, discusses the idea that the health care industry can learn from the success of the restaurant chain industry. In the words of a Cheesecake Factory manager interviewed by Gawande, health care should "study what the best people are doing, figure out how to standardize it, and then bring it to everyone to execute."[14] Reducing unnecessary variability in the system, standardizing medication algorithms and protocols, training staff on evidence-based practices, and changing job descriptions are just a few of the ways health system and clinic leaders can ensure that best practices become the way the organization does business. Given the multiple competing priorities and limited resources of most public hospitals, it can be very challenging to accomplish the above endeavors within the time frame of a program like the SCCI.

Figure 5. Percentage of Diabetes Patients with HbA1c < 8, January 2010 to January 2012



Notes: The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90% of US health plans to measure performance on dimensions of care and service. LS1 = clinical quality learning session 1. LS2 = clinical quality learning session 2.

Source: Dashboard data were reported by public hospital system staff on a monthly basis and collected and analyzed by SNI.

Also, leaders often hesitate to standardize practices because taking autonomy away from clinics and individual clinicians can be detrimental to morale. System leaders must strike the right balance between promoting standardization and allowing creativity at the local level.

FINDING #6: Communication is key to the success of concurrent improvement efforts. Given the system-level transformation required by the SCCI and the multiple areas of improvement involved, communication across all levels of staff was essential. High-performing systems consistently establish "system-level quality steering and oversight committees to provide direction to system leaders in setting systemwide goals," according to researchers Julie Yonek, Stephen Hines, and Maulik Joshi.[15] While the SCCI was aligned with the participating organizations' overall strategic priorities, each system differed in how much ongoing communication took place to remove barriers and coordinate efforts.

What Helped

Good communication from leaders can be powerful in motivating change and building goodwill among frontline teams. At several systems, the CEO spoke at the clinical-quality learning sessions, both to provide the overall vision and context for the work taking place within the SCCI and to show their executive level support. During an interactive session at one event, the CEO asked teams what inspired them about this work and what leaders could do to better support them. The most common responses had to do with access to data and the need for more protected time to carry out improvement work. Although this CEO could not promise immediate solutions to the issues raised, the discussion reassured teams that they were well supported and that the barriers would be removed as quickly as possible. Good communication led to the teams clearly understanding how the work they were doing related to the overall strategic plan of the organization. SNI encouraged this type of dialogue between leaders and frontline improvement teams throughout the initiative, including during the action period webinars and the monthly leadership calls.

SNI also encouraged organizations to widely disseminate the monthly SCCI data across all levels of staff to engage them in the improvement work. At SNI's suggestion, some CEOs sent their teams monthly email messages of encouragement based on the SCCI data. Other leaders shared the SCCI data at monthly medical director meetings, which included physicians and staff not formally engaged in the program. This not only primed the spread process, but also allowed leaders to discuss action steps to resolve barriers when data were not showing promising results.

What Hindered

While CEO support for the SCCI was clear at all participating sites, some systems lacked clear channels of general communication both intra- and interdepartmentally. During the course of its involvement with the PCS collaborative, one organization did not meet the no-show rate and TNAA goals for the program despite making some progress. This system reduced no-show rates from 35% to 20%, and its TNAAs, which began at 54 days, decreased to 45 days. The organization opened a new centralized call center at the same time that the PCS was beginning, with neither the PCS nor call center leads realizing the potential impact on the other. The rollout of these multiple initiatives and technologies did not seem to be coordinated or streamlined. This significantly hindered the PCS teams' ability to control their schedules and implement Simplified Patient Scheduling. However, access has continued to be a priority for the organization. Now, more than a year after implementation of PCS, their no-show rates range from 13% to 19%. Leaders report that this is because they have instituted a new process for collecting and validating the PCS data internally, which allows them to provide more timely and accurate data to the teams.

Through its participation in the initiative, this organization learned lessons that will be useful while it juggles multiple initiatives in preparation for health reform. Good communication will enhance any hospital's ability to manage simultaneous initiatives and increase the likelihood of successful and rapid delivery system transformation.

Conclusion

After several years of work with public hospital primary care clinics in California, the SCCI was SNI's effort to focus on access, operational efficiency, and chronic disease management at the same time. As building blocks for the SCCI work, the earlier collaboratives established fundamental tools within clinics, such as process redesign, and developed a small cadre of leaders to manage and coach improvement teams.

The 1115 Medicaid waiver, which was approved by the Centers for Medicare and Medicaid Services in November 2010, also helped fuel the work of the SCCI. The connection between the SCCI work and the improvement milestones in the Delivery System Reform Incentive Program provided frontline staff with context and value for the work of the initiative.

The Seamless Care Center Initiative has helped accelerate change in 29 of California's public hospital primary care clinics. Participants learned firsthand how teamwork and data use were critical to driving improvement efforts in both years of programmatic work. Participants focused on leadership engagement and effective communication within and between silos. New leaders emerged who increased systems' internal capacity to manage improvement work in primary care. Participation in the SCCI was a critical step in these clinics' transformational journey toward becoming patient-centered medical homes and providers of choice in anticipation of health reform.

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Endnotes

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