



Enhancing a Culture of Quality: Lean Series Training

Background

The Health Alliance of Northern California (HANC) and North Coast Clinics Network (NCCN) partnered to implement a Lean training series for Quality Improvement and Operations staff from member health centers, both consortia and Partnership HealthPlan of California. The two Consortia work together to support member clinics in improving the quality of care through crafting data reports, hosting peer network meetings, sharing promising practices, and offering trainings on Quality Improvement methodology. HANC and NCCN also work closely with the Medi-Cal Managed Care plan, Partnership HealthPlan of California (PHC), that serves the Northern California region, to advance regional quality goals.

In health care Quality Improvement (QI), there are two standout QI methodology systems: The Model for Improvement and Lean. Both models are from the manufacturing world and focus on applying the scientific method to improvement work to bring about rapid change; however, they also differ from each other in some significant ways.¹ Up until 2019 HANC-NCCN's QI training efforts focused on The Model for Improvement (MI).

HANC-NCCN began to explore options to bring some Lean trainings into the northern region. One of HANC's member clinics, Anderson Valley Health Center (AVHC), had begun a Lean transformation process and brought on a Lean expert consultant to start a multiyear Lean transformation at the clinic. The trainings consisted of quarterly 3-day clinic-wide intensive workshops interspersed with virtual leadership trainings. HANC identified this as a great information gathering opportunity and was invited to participate in a few of the in-clinic workshops to observe Lean transformation in action. HANC-NCCN decided to move forward with designing an introduction to Lean series for Quality Improvement and Operations staff in the region. The Lean consultant was the lead with HANC-NCCN Staff as secondary trainers to help tailor the content to the Networks' needs, organize trainings, learn Lean alongside the other participants, and help deliver the trainings. A series of six webinars, in-clinic practice work, and one large in-person workshop were rolled out in the second half of 2019. In total, 15 HANC-NCCN clinics sent staff to participate in the series with an average of ten participants in the coaching webinars, an average of thirty participants in the introduction webinars, and a total of fifty participants at the in-person workshop. The webinars were also recorded and posted on the HANC website for on-demand use for those unable to attend and for future spread of Lean content in the region.

¹ Scoville R, Little K. *Comparing Lean and Quality Improvement*. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2014. ([Available at ihi.org](#))

What is Lean and Why Pursue Lean?

In healthcare an organization will have many internal and external requirements and goals simultaneously requiring attention. A community health center, for example, might have a patient advisory board concerned with diabetes management, leadership worried about patient wait-times, a public health partnership focused on hypertension, and a group of providers aiming to improve well child visit rates all wanting to see improvement in their areas of interest at the same time. The Model for Improvement (MI) is a powerful model that helps healthcare organizations achieve rapid improvement through tests of change and project management tools to organize these many simultaneous improvement projects at once.² “Lean, on the other hand, is a set of operating philosophies and methods that help create maximum value for patients by reducing waste and waits. It aims to fundamentally change organization thinking and value, which ultimately leads to the transformation of organization behavior and culture over time. It focuses on how efficiently resources are being used and asks, ‘what value is being added for the patient’ in every process.”³ It is important to note, Lean and MI are not oppositional and can be very complimentary to one another¹. Furthermore, exploring Lean alongside the MI allows organizations to evaluate whether a Lean, a MI, or a combined approach best suits their organization. Ultimately, Lean’s emphasis on adding value for the patient and implementing a Management System is what compelled the consortia to move forward with Lean learning.

Lean is a way of thinking and behaving at both an individual and an organizational level. This Lean thinking system orients one’s work and the organization around:

Two Principles ⁴

1. Continuous improvement of patient value.
2. Respect for people.

Two Habits ⁴

1. Improvement.
2. Coaching.

Lean is less concerned with seeing the work as a series of complex improvement projects to be managed and more concerned with seeing the work as an opportunity for creating value for the end-user. Habitual coaching, improvement, and learning from frontline staff are the means to achieve that end. In instances where a Lean clinic is confronted with multiple goals and requirements, they will always go back to these principles and goals to orient their work. For example, with this framework one can immediately ask questions such as, does this improvement tool allow me to add-value for the patient? Does this project orient itself around respect for the patient and those doing the work? Am I being an effective coach in this situation?

Training Structure

The HANC-NCCN Lean training series was broken up into two tracks:

- **The Coaching Cohort (CC):** consisted of a smaller group of QI and Operations leadership from the Consortia, health centers, and PHC that received more intensive

² The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (2nd Edition). Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. San Francisco, California, USA: Jossey-Bass Publishers; 2009.

³ [\(Lawal AK, et al, 2014\)](#). Lean management in health care: definition, concepts, methodology and effects reported (systematic review protocol). See also: [JHI](#), [JHI 2](#), [Toyota Kata](#), [Catalysis](#), [Lean Enterprise Institute](#), [Torre-Consulting](#).

⁴ [Torre-Consulting](#) and [Toyota Kata](#)

training and practiced Lean coaching skills by helping colleagues who attended the larger Exposure Cohort.

- **The Exposure Cohort (EC):** consisted of a broader group of QI and Operations staff that received an introduction to Lean with less emphasis on developing Lean coaching skills. The Coaching Cohort participated in all six webinars and the in-person workshop, whereas the Exposure Cohort participated in the two EC webinars and the in-person workshop.

Learning Goals and Training Content

The main learning goals of the training series were to:

1. Familiarize participants with Lean principles, habits, and basic tools;
2. Give participants skills and knowledge they could immediately apply to their work; and
3. Provide a road map for further Lean learning.

Familiarizing the network with what Lean is and building a shared understanding was a vital first step in expanding Lean capacity in the network. Furthermore, providing participants with an understanding and practice of the core principles and habits gave them a framework to evaluate day-to-day work and organizational culture right off the bat. Lastly, giving participants ample resources to dive deeper into Lean and continue learning after the training helped engage those with previous experience and continued the momentum to learn and apply Lean concepts and tools after the trainings were over.

Coaching Cohort 2019	Exposure Cohort 2019
<p>Webinar 1 Learn about Lean; prepare to practice learnings</p> <p>Webinar 2 Debrief practice; prepare for Exposure Cohort webinar</p> <p>Webinar 3 Plan for Exposure Cohort in-person workshop: approach, roles, and pre-work</p> <p>Webinar 4 Check-adjust project results: what did we learn and how does this inform a spread model for Lean thinking?</p>	<p>Webinar 1 Learn about Lean; prepare to practice learnings with coach</p> <p>In-Person Workshop Review concepts and practice application through simulation(s). Set up additional practice.</p> <p>Webinar 2 Close the loop: what did you try and learn? What's next?</p>

Webinars

The webinars were the main delivery method of the training content and after getting into the core principles and habits of Lean, prepped the participants to go back to the clinics to coach others on what they learned and apply their learning through practice observations. The Coaching Cohort Webinars had thirteen staff participate from eight health centers, including:

- Anderson Valley Health Center,
- Hill Country Health and Wellness Center,
- Long Valley Health Center
- Mountain Valleys Health Center,
- Mendocino Coast Clinics,
- Open Door Community Health Centers
- Shasta Community Health Center,
- Shingletown Medical Center

As well as staff from PHC, HANC, and NCCN. The Exposure Cohort Webinars had an average of 30 people attend from 15 Member Clinics, PHC, HANC, and NCCN. During the webinars, participants of both tracks were given a road map for further Lean learning with reading lists, office hours with the Lean consultant and consortia staff, recommended Lean training organizations, and in-clinic practice work.⁵

In-Clinic Work

Familiarizing the participants with an understanding of Lean through webinars gave them an immediate framework to evaluate their work. However, these Habits and Principles are deceptively simple and require much practice to fully ingrain in an organization. Thus, participants were also given in-clinic work to begin practicing these concepts.

The main in-clinic work consisted of teaching colleagues the content (Coaching) and process observation (Value-add, Respect for People).

- Process observation: through the Lean lens, process observation involves going to where the work is happening, identifying steps with value-add to the patient, and identifying waste steps. In Lean one goes to where the work is happening and sees those doing the work as the experts. Thus, there are two critical steps in conducting a respectful process observation:
 - Before the observation, the process observer schedules a time with the person involved in the process, explains that they are there to observe and learn from the involved staff rather than being there to monitor or assess their work.
 - After the observation, the process observer sits down with the involved staff to see if they agree on the value-add steps, the waste steps, and if there was anything missed. Together the team generates ideas for improvement and what steps they might change or eliminate in the current process.

In-Person Workshop

The in-person workshop had 50 staff attend from 15 of the member clinics, PHC, HANC and NCCN. The in-person workshop built upon the in-clinic practice as participants got a refresher on the main Lean concepts and practiced Lean process observation through watching simulated processes to identify value-add steps and waste steps. Those that had practiced with in-clinic work had the opportunity for further practice of process observation

⁵ See <https://thehanc.org/qi-webinars-and-resources/> for the Webinar recordings.

and coaching. Those that did not have the opportunity to try the in-clinic work were able to get real-time experience, feedback, and coaching.

Training Evaluation

HANC-NCCN received very positive feedback on the Lean training series through a post-training evaluation, discussions during the wrap-up webinars, and one-on-one conversations with participants. Many clinic staff found the focus on adding value for the patient, respecting the knowledge and expertise of those doing the work, coaching, and striving for continuous improvement, all very useful concepts for aligning their work and improvement efforts. In the evaluation, participants were asked to rate the elements of the training on a five-point scale with 5 being excellent and 1 being poor. The “Overall Rating” of the training was rated at 4.82 and the “Value of the Topic” was rated at 4.84. One of the main training goals was immediate applicability of the content: participants rated “Applicability of Practice” at 4.84. Furthermore, 97% of respondents “Strongly Agreed” or “Agreed” that they were able to identify specific actions to take back to their clinics.

What did you like most about the training?

“How simple tools can be put to practice easily”

“Learning about ways to increase value to patients and decrease waste”

“In-Clinic Observation: go see, ask why, show respect”

“What I can practice at my own clinic; effectively problem solve.”

“Being able to interact with peers to process the information”

“Pushed us to learn and grow”

Many also noted that the two principles and habits are deceptively simple, realizing through their in-clinic practice, that fully implementing these powerful concepts throughout the organization would take significant practice and leadership buy-in. Nevertheless, they felt using these concepts to align their thinking and behavior in their own day-to-day clinic work resulted in a new way of looking at the work with great results regardless of where they felt they were at in their Lean learning journey. Furthermore, many expressed interest in the consortia continuing to bring Lean content to the region.

What We’ve Done with Lean

The Lean training series was a large undertaking and the consortia are committed to keeping the momentum going in the region. Three main strategies that are being implemented are:

1. **Integrating Lean content into established consortia work:** The consortia staff are bringing Lean methodology into the Networks’ own projects, promoting the Lean Training Series recordings alongside other QI resources on the consortia websites, and bringing Lean content to the QI Peer Network and Operations Peer Network.

2. Develop smaller-scale, one-off Lean trainings to provide to the network: The consortia continue to offer Lean training opportunities, such as the Lean Visual Management Systems workshop that HANC-NCCN offered at the March 2020 Rural Roundtable.

3. Utilize burgeoning network of Lean learners: As a direct result of their experience in participating in the Lean Series Training, Long Valley Health Center (LVHC) decided to work with the Lean consultant to bring on-site Lean trainings to their clinic. AVHC continues to work with the Lean consultant. Consortia staff, PHC staff, and other Lean Series participants continue to study Lean Methodology. A growing network of Lean learners makes site visits, clinic driven workshops, and sharing of practical Lean implementation learnings additional avenues for spreading Lean.

Key next steps, given the ongoing impact of COVID-19, are to follow-up with health centers engaged in this cohort to learn how they have continued their Lean journey or where they may need further support. This feedback and ongoing peer network interactions will help inform smaller-scale, one-off trainings developed in the near term. All-in-all, the Lean training series has brought a new angle and energy to improvement work in the region and has become another great building block in the consortia and region's commitment to quality healthcare and continuous improvement.

Health Center Abbreviations

CHC Acronym	CHC Name	Consortia	Pts. Seen: UDS 2019	Counties (Physical Site)	EHR and Pop Health	PCMH (Levels = 2014 Standards) (Annual = 2018/19 Standards)
AVHC	Anderson Valley Health Center	HANC	2,605	Mendocino	eCW ; i2i Tracks; BridgIT	Level 2 (exp. 20/21)
HCHWC	Hill Country Health & Wellness Center	HANC	7,028	Shasta	Centricity ; i2i Tracks	Annual
LVHC	Long Valley Health Center	HANC	2,840	Mendocino	eCW ; i2i, BridgIT	Annual, with BHI Distinction
MCC	Mendocino Coast Clinics	HANC	9,868	Mendocino	NextGen ; i2i Tracks	Annual
MCHC	Mendocino Community Health Center	HANC	31,206	Mendocino, Lake	NextGen ; i2i EagleDream	Level 3 (exp. 2020)
MVHC	Mountain Valleys Health Centers	HANC	11,884	Lassen, Modoc, Shasta, Siskiyou	Greenway Health: Intergy	Expired 2017
NRHC	Northeastern Rural Health Centers	HANC	13,164	Lassen	eCW	Level 3 (exp. 01/21)
ODCHC	Open Door Community Health Centers	NCCN	60,219	Humboldt, Del Norte	OCHIN Epic ; Tableau ; SQL	Annual
RCMS	Redwood Coast Medical Services	HANC	4,544	Mendocino	NextGen ; i2i Tracks	Annual
RRHC	Redwoods Rural Health Center	NCCN	5,320	Humboldt	NextGen ; i2i Tracks	Level 1 (exp. 12/20)
SHC	Shasta Cascade Health Center	HANC	6,452	Siskiyou	eCW ; BridgeIT	
SCHC	Shasta Community Health Center	HANC	33,610	Shasta	NextGen ; EagleDream ; SQL	Level 3 (exp. 05/20)
SMC	Shingletown Medical Center	HANC	1,860	Shasta	AllScript ; Crystal	Level 3 (exp. 05/20)
STHS	Southern Trinity Health Services	NCCN	4,597	Trinity, Humboldt	Meditab IMS; i2iTracks	
WSMC	Western Sierra Medical Clinic	HANC	16,008	Nevada, Placer, Sierra, Yuba	eCW ; BridgeIT	Looking to re-apply
Total	Health Alliance of Northern California – North Coast Clinics Network	-	211,205	13 Counties	7 Distinct EHRs	11/15 with PCMH Certification

