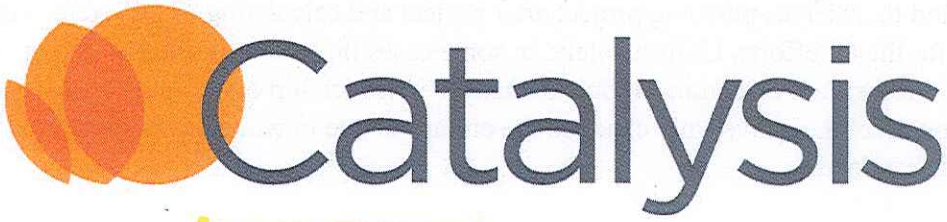

Inspiring Healthcare Leaders
Accelerating Change

No More Projects

Kick-starting a continuous-improvement culture in healthcare

Stuck in projects? Want true cultural transformation? Learn how one academic medical center is making this shift to engage 52,000 caregivers in a culture of continuous improvement on a quest to deliver safer, more efficient, and more compassionate care.

July 2017

Dr. Lisa Yerian
Nate Hurle

createvalue.org

Introduction

Continuous improvement (CI) works in healthcare. This statement is well-supported by many books, articles, and blogs, citing innumerable examples of CI successes in healthcare.[1] Many healthcare organizations have taken steps to apply lean by hiring external consultants, building process improvement teams, and embarking on "projects" aimed at improving quality or cost. Many then find themselves pursuing project after project and calculating "ROI" (return on investment) for the CI efforts. Unfortunately, in some cases those same CI teams become disbanded and efforts are discontinued due to changes in leadership or a round of cost-cutting. Only a few ever feel they have truly changed the culture to one in which improvement efforts are systemic and sustained.

Successful project work can be simple; successful cultural transformation is difficult and elusive. At issue is not if CI works, but rather, "how" to effectively build a true culture of continuous improvement in healthcare. Few have done so successfully. While the lean literature abounds with examples of CI transformation in other industries, in healthcare there are fewer examples of how to succeed in a cultural transformation. Without such peer benchmarks, many healthcare organizations pursuing CI continue to emphasize projects, absent the cultural change, management system, and philosophy needed to truly transform healthcare.

The Cleveland Clinic has enjoyed significant success in its clinical reputation and financial stewardship.[2] Despite these successes, like other organizations within and beyond healthcare, the pressures of the changing industry combined with a fervent commitment to "patients first" propel the Cleveland Clinic to actively and relentlessly pursue improvement. This constant desire to improve on quality, safety, and access for patients creates an unwavering demand for help in improving the way we deliver care to provide more value for patients. In the past the CI team, like those in many other healthcare organizations, attempted to meet this demand by leading process improvement projects. However, Cleveland Clinic leaders came to realize that this approach was limited; we simply could not improve fast enough if all improvement was based on projects led by CI department personnel. We needed to engage all 52,000 caregivers in improving care for our patients; we needed to create a culture of improvement, a culture in which every caregiver is capable, empowered, and expected to make improvements every day.

Cleveland Clinic

The Cleveland Clinic is a large, not-for-profit, multispecialty academic group practice. Established in 1921 in Cleveland, Ohio, the Cleveland Clinic has grown to see 1.9 million unique patients in 2015 through the efforts of 52,000 individual caregivers, including over 3,000 salaried staff physicians and scientists. Ranked the #2 hospital by *US News and World Report* (2016) with national rankings in 14 adult and 9 pediatric specialties (including ranking as the top heart center for 22 years in a row).

[1] John Toussaint, *On the Mend*. (Cambridge, MA, Lean Enterprise Institute, 2010).
[2] "Cleveland Clinic Financial Information," Cleveland Clinic, Jan. 24, 2017.

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Today Cleveland Clinic caregivers are focusing on what matters most. They look at measures to identify problems, solve those problems effectively, and use standardization to ensure that we consistently deliver the highest quality, most compassionate, and lowest cost care. And in doing so caregivers have made significant impacts for our patients *and* for the people doing the work (*Figures 1-4*). All of these improvements have been led and sustained by the people doing the work, and improvements like these continue every day in our ever-growing culture of improvement.

Figure 1. Hillcrest Hospital Cleanliness HCAHPS (Dec. 5, 2016)

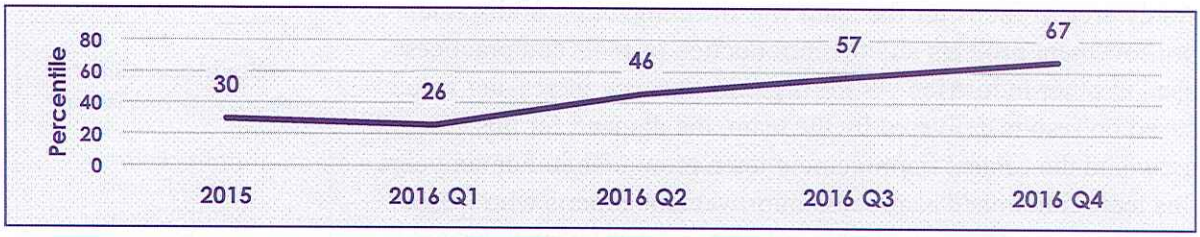


Figure 2. Hillcrest Hospital Would Recommend HCAHPS (Dec. 5, 2016)

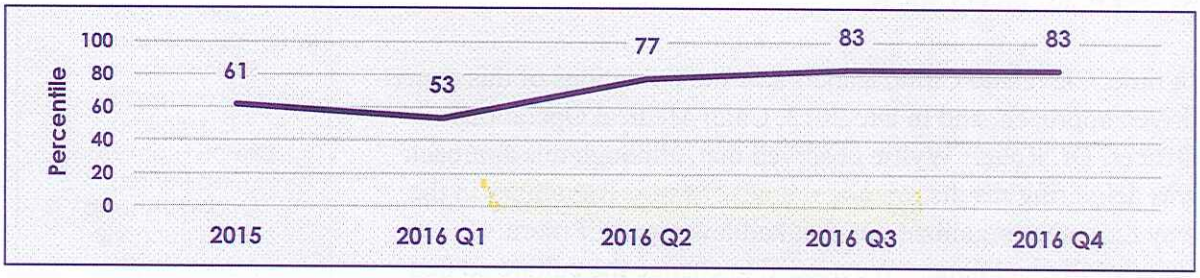


Figure 3. Pharmacy: Prescription Home Delivery Time

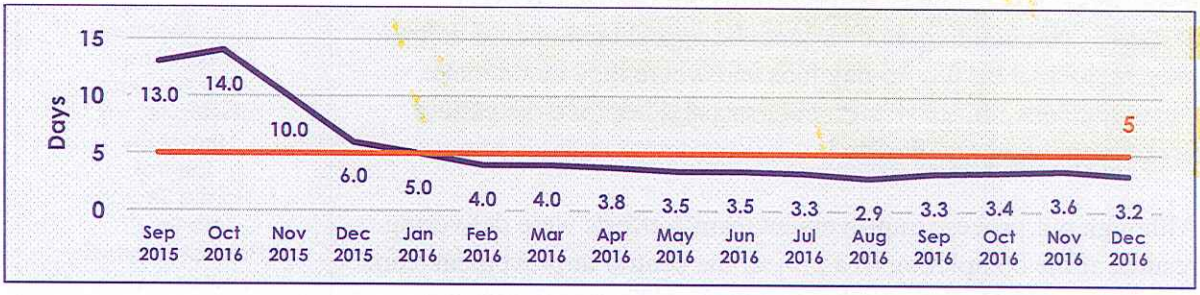
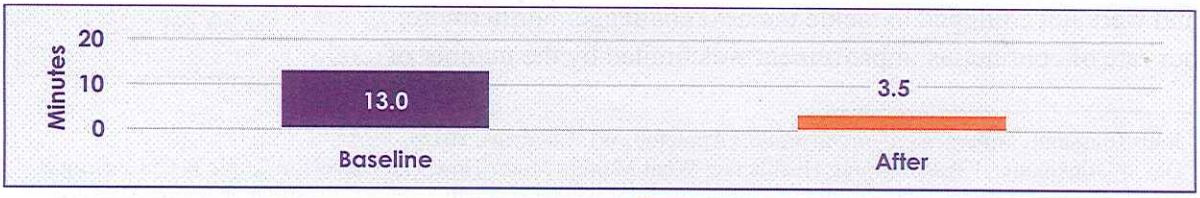


Figure 4. Outpatient Phlebotomy Patient Wait Time



source: Cleveland Clinic

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Background

In 2006 the Cleveland Clinic, like other healthcare organizations,[3] established a central improvement team to help support the recognized and growing demand for process improvement. This team is comprised of individuals with significant process improvement experience, mostly from outside of healthcare, and they sought to take these practices into the Cleveland Clinic. Team members brought manufacturing and banking experience in lean, six sigma and project management (see *Cleveland Clinic Improvement Team*).

A key area of focus for the team was the completion of discrete improvement projects and the introduction of tools and practices used in other industries. As the organization saw increasing value based on results delivered by the team, the demand for this support grew and the central improvement team grew with it. For six years, this team functioned as process improvement experts who would assist leaders, managers, and frontline caregiver teams in process improvement projects, yielding improvements in cost, quality, and patient flow, among others.

In time, Cleveland Clinic leaders saw the limitations of this expert-driven approach, and in late 2012, Chief Medical Operations Officer, Dr. Robert Wyllie observed that, although this approach was delivering results, we had not yet changed the culture in the way that other organizations that had leveraged CI more successfully had done. "We needed to change the culture so that everyone was thinking about it, teach them some basic tools and a basic approach, and drive responsibility for changes to every caregiver. We had to give everyone the opportunity to look at how they're doing their day-to-day jobs and where they could make improvements, reduce wastes, cut costs and improve the patient experience," said Dr. Wyllie.[4]

Although our process improvement team's efforts were delivering results, at the completion of a project the central improvement team member would move on to the next project. The caregivers were then left with insufficient capability to build on those improvements and were not equipped to tackle the next challenge. Furthermore, our rate of continuous improvement was limited by the number of

Cleveland Clinic Improvement Team*

Holley Boren
Allyce Butara
Susan Coyne
Chad Cummings
Cinnamon Dixon
Sandy Ferguson
Jorge Freyre
Kevin Gazley
Ryan Gusching
Louie Hendon
Eric Holizna
Quentin Jamieson
Rob Kenney
Amanda Knapp
Chris Kucharik
Mark Ladd
Eric Luciano
Rosanna Lui
Jimmy Millar
Tom Mooney
Mike Okrent
Amy Palmiero
Jim Pavlescak
Tim Pettry
Joe Rak
Hamid Sediqe
Tom Smyth
Hannah Thomas
Lauren Wyeth
Melissa Vandergriff
Jake Zapolnik

*As of Jan. 1, 2017

[3] John Toussaint, *Management on the Mend.* (Appleton, WI, Catalysis, 2015).
[4] David Drickhamer, "Transforming Healthcare: What Matters Most? How The Cleveland Clinic Is Cultivating a Problem-Solving Mindset and Building a Culture of Improvement," Lean Enterprise Institue, lean.org, May 28, 2015.

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people on the central improvement team, and we would never have enough CI experts to meet the challenges of our current healthcare environment. An additional risk to this approach that we identified was an overreliance on the CI experts in some parts of the organization; certain leaders who had experienced this type of CI support reported that they required help from a CI team member in order to drive improvements. This problem seemed to correlate with those areas with the most extensive history of "discrete project" type of CI support, and it posed a barrier to creating a culture of improvement.

Figure 5. See It in Action

source: Cleveland Clinic

Getting Started

Dr. Lisa Yerian, Medical Director of Continuous Improvement, took on this challenge to engage everyone in making improvements every day. She followed the advice of Mark Reich, Chief Operating Officer, Lean Enterprise Institute, to "do an A3[5] on that."[6] Reich's advice — and the A3 approach to problem solving — proved extremely useful in approaching this large and complex problem. Yerian began to develop her first A3 and engaged others in solving the

[5] John Shook, *Managing to Learn*. (Cambridge, MA, Lean Enterprise Institute, 2008).
[6] David Drickhamer, "Transforming Healthcare," Lean Enterprise Institue, lean.org, May 28, 2015.

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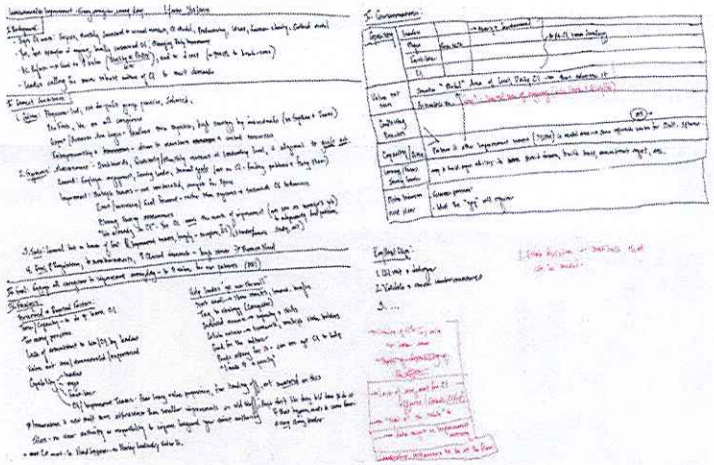
problem: the gap between current condition (CI work was project-based, and improvement was rate-limited by the number CI personnel) and the target condition (a culture in which every caregiver was consistently engaged in improvement). The A3 served not only as a problem-solving tool but also a collaboration and change management tool. Through the A3, Dr. Yerian engaged executive leaders, the current CI team members and leaders, and leaders in other support functions, including finance, business intelligence, and quality leaders in solving this problem.

Figure 6. A3 Culture of Improvement



Current condition: CI work was project-based, and improvement was rate-limited by the number of CI personnel

Target condition: A culture in which every caregiver was consistently engaged in improvement.

Source: Cleveland Clinic

Through the A3 process we detailed the rationale for tackling this problem: we could not improve fast enough to meet our patients' needs, the demands of healthcare reform, and remain competitive if we maintained the current state. Our project-based approach was limited in impact based on the number of CI team members, challenges to sustain improvements, and lack of ownership by the local leaders and team. Furthermore, improvement was seen as an "event" rather than something every caregiver engaged in every day. Our goal is to achieve a culture in which *every caregiver* is capable, empowered, and expected to make improvements every day. This, we recognized, would require massive personal and organizational transformation to achieve.

Our goal is to achieve a culture in which every caregiver is capable, empowered, and expected to make improvements every day.

We then looked at both strengths and barriers to achieving this desired future state. Our key strengths included an existing recognition of every employee as a "caregiver" who impacts the patient;[7] high caregiver engagement; a culture where we aspire to be the best; and a focus on our customers, voiced in the mantra "patients first." Also in place were strong data and analytics capabilities, including a robust and extensive set of dashboards and a quarterly scorecard review process. Important barriers to creating a culture of improvement included capacity and capability to consistently and effectively drive improvement. Leaders, managers, and frontline caregivers

[7] James I. Merlino and Ananth Raman, "Health Care's Service Fanatics," *Harvard Business Review*, May 2013.

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reported being extremely busy and in some cases overwhelmed; we anticipated these individuals would have difficulty creating time to learn and apply improvement methods. Recognizing capacity was a large and complex problem, we chose to focus our initial efforts on building CI capability.

Our first countermeasure was to create a model area,[8] which would help us to accomplish three specific aims:

1. Test our hypothesis that by building caregiver capability we would change the culture.
2. Provide a visible example of a culture of improvement, including both behaviors and results.
3. Begin the change and learn from our efforts.

We further hypothesized that if we achieved these aims, the capable caregivers could help further the culture in other parts of the organization by helping other caregivers build capability, thereby aiding and accelerating the transformation we desired.

Our first model area was a data analytics department — Decision Support Services (DSS) — within the Division of Finance. This area was chosen because Executive Director Chris Donovan had made significant contributions to the A3 and showed deep commitment to the vision of every caregiver, every day. Through our own experiences and those of others, we recognized the importance of a deeply committed leader, to maintain team focus during a likely challenging transformation journey. We, thus, began to work on creating a model area by building caregiver capability.

During our first gemba visit to the team's workspace, the team vocalized problems they faced in their work, so we divided the department into four teams (approximately nine members each) and began to build problem-solving capability by applying the A3 approach to four problems the teams were facing in their work. We set weekly "report-outs" — meetings in which the teams would report on their learning and progress to their local leaders and CI leadership. These report-outs proved extremely useful to solidify the team's learnings, track progress on the A3s, and adjust our approach through cycles of Plan-Do-Check-Adjust (PDCA). Furthermore,

Model Areas

- Model Areas are teams in pursuit of the entire Cleveland Clinic Improvement Model
- Choose initial model areas with senior leaders who are committed and may be interested in doing more. You don't need the whole enterprise to commit, just a piece of it so you can get started!
- Lead with results (not methods) when talking with others; once they see results they will want to hear about the methods.
- Bring leaders to gemba and let those doing the work talk about it, not the CI people — this will demonstrate the capability, caregiver engagement, and cultural shift.

[8] John Toussaint, "Systems Approach for Transforming Healthcare Value," Catalysis, October 2015.

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during the report-outs we could reinforce the purpose of the work (building a culture of improvement, and building a model area), and practice and coach lean leadership behaviors.

Over the first few months the teams began to track their progress visually and became increasingly enthusiastic as they saw measurable improvement. They then began to ask for ways to track and prioritize both improvement ideas and more of the problems they were identifying in their work. From this pull we could help the team build behaviors and systems to support these newly recognized needs. We also worked to share the A3 and this "model area experiment" with executive leadership in Medical Operations (including Dr. Wyllie), Cleveland Clinic Chief Financial Officer Steve Glass, and other Cleveland Clinic executive leaders. Several executives agreed to gemba visits (i.e., going to see where the work is done). Kelly Hancock DNP, Executive Chief Nursing Officer, said after a gemba visit, "I was impressed by the level of engagement that the frontline staff displayed around the process as well as the outcomes. I was equally impressed by the use of visual management tools as an effective strategy for changing behaviors."

When we brought the leaders of those areas out to see our model cell at DSS and they expressed interest in seeing this approach in their departments, we asked for only one thing: "Let us work with *one* of your teams so you can experience the impact yourself, and then you can decide if we should extend to other areas." These visits led to requests for model areas in other places, including pharmacy and nursing. Hancock said, "This work allows caregivers to be empowered to suggest ideas and recommendations that they themselves can act upon. Their ability to create the solutions to what matters most to them fosters a culture of innovation and forward thinking."

Growing a Culture

Through our work with the DSS team we proved that we could do this in a small area. We then had to move on to the next problem: how do we create new model areas?

For our next model areas we targeted our inpatient pharmacy and an inpatient unit at Hillcrest Hospital. In the early phases of our work at Hillcrest Hospital, we asked our senior leaders, Brian Harte MD, President of Hillcrest Hospital, and Hancock, for five items:

1. We only want you to commit to trying this in one nursing unit. We wanted to remove the risk and natural hesitancy of saying we should do this everywhere without our teams first experiencing the impact and effort required.

2. You pick the unit. It did not matter to the continuous improvement team where this work happens. It's based on principles, behaviors, and systems that work in any environment.

3. Be patient. This is an experiment and, while we have a plan, we intend to learn from the experiment and adjust. Results will come, but in this first iteration it may take longer than it will in the future.

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4. Come and talk with the team. The greatest evidence of change is in talking with the caregivers — before, during, and after these changes.

5. We need your help in determining how to do this. Our internal CI team does not have all the answers; we need to partner to determine the best way to do this.

Dr. Harte recalled, "The essential commitment was for leadership to engage this work, with our presence at regular updates from the model areas, and assurance that our caregivers would have the time needed for their facilitated learning. We felt that for this to succeed, we had to make our support visible and felt with our presence."

As we began this work in clinical model areas we faced new problems, including an important question of, "What exactly are we replicating?" Initially we delivered training to the DSS teams with the skills and capabilities that we felt would be important for creating a culture of improvement. However, these new teams didn't have anything immediately to tie these skills to (i.e., no clearly defined problems to solve with the new skills), and they grew impatient. As clearly indicated in the Lean Transformation Model,[9] we needed to start with purpose. Then the teams could begin to identify the problems they needed to solve and processes they needed to improve in order to deliver on that purpose. Capability building, then, was based on those problems, and clearly linked to better delivering on their purpose. Any training without a clear connection to better delivering on our purpose, unfortunately, was waste. So we adjusted our approach and began to more directly engage the team in solving problems that mattered most to them; we began to start with purpose. Then we could engage the team in building the capability to solve the problems they faced and improve the processes they employed on delivering on that purpose, or what matters most.

As we began to engage a growing number of diverse teams we recognized a need to have a clear roadmap for building a culture of improvement to guide both our CI team and the organization. While we had familiarity and some experience with the Shingo Model for Operational Excellence[10] on our team, we found that the term "operational excellence" and components of the model did not resonate well with our organization. As Mark Graban wrote, "It's easier to rally people around improvement or quality than it is "performance excellence" or something more jargony."[11] We needed language and a model that every member of our organization would understand and embrace, and a model that defined the systems and behaviors we were learning as essential to building a culture of improvement in our organization.

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[9] John Shook, "Transforming Transformation," Lean Enterprise Institute, lean.org, Jan. 22, 2014.
[10] *The Shingo Model*, Shingo Institute, Jon M. Huntsman School of Business, Utah State University.
[11] Mark Graban, "Cleveland Clinic Improvement Model, Part 1: Alignment & Visual Management," leanblog.org, Jan. 19, 2016.

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As additional model areas applied the Cleveland Clinic Improvement Model, the results became clear: teams achieved measurable performance improvement (*Figures 1-4* on page 2) and visible, tangible evidence of cultural transformation.

We reached a point where we felt our first Nursing Inpatient Model Area had the results and cultural shift we were looking for. Initially those results were shared with Hancock and Dr. Harte, with a request to come and talk with the teams. When Hancock and Dr. Harte went to the teams, it was the frontline staff and managers that shared the progress, not our CI team members. These caregivers demonstrated an understanding of how this affects their daily work, the impact it makes to them and our patients, and their genuine enthusiasm. Dr. Harte shared, "What we saw from five main, the initial model area, was a tremendous level of engagement of the caregivers, champions, nurse managers, and teams. Even before we had quantifiable results, we saw a commitment to ideas that would eliminate waste, standardize process, and participation across the breadth of the team, which gave us confidence that we were on to something that was going to be rapidly scalable."

In September 2014, the CI team leveraged learnings from all of our model areas in the creation of the Cleveland Clinic Improvement Model (CCIM) (*Figure 7* on next page).[12] It is not a model for the CI team, but rather a unifying model for the entire organization to improve quality, safety, access, and patient experience, and reduce cost, based on defining what matters most. The CCIM has been improved over the years with input from across the organization, including Quality and Patient Safety, Patient Experience, Human Resources, and the numerous caregivers involved in this process. The model serves as a method to broadly distribute the Cleveland Clinic approach to improvement and demystify CI for our organization. This model is used to describe the systems that are put in place to drive the ideal behaviors at all levels of the organization.[13]

Through this experience and DSS' experience, our executive leaders began to say, "I want this everywhere in my organization." In those cases we shifted our focus from creating a single model area to transforming the culture through creating the systems and behaviors defined in the CCIM throughout a large part of the organization. Hancock, Dr. Harte, and CFO Glass all made commitments to use the CCIM to build a culture of improvement across the Nursing Institute, Hillcrest Hospital, and the Division of Finance. Specifically, they committed to building a culture in which every caregiver every day is capable, empowered, and expected to make improvements. In total these three executives lead teams representing approximately 50 percent of all Cleveland Clinic caregivers. Since these initial commitments, additional leaders have had similar experiences and made commitments for their respective organizations, including additional regional hospitals and clinical institutes.

[12] Cleveland Clinic Improvement Model, Cleveland Clinic, Jan. 24, 2017.
[13] John Toussaint, *Management on the Mend*. (Appleton, WI, Catalysis, 2015).

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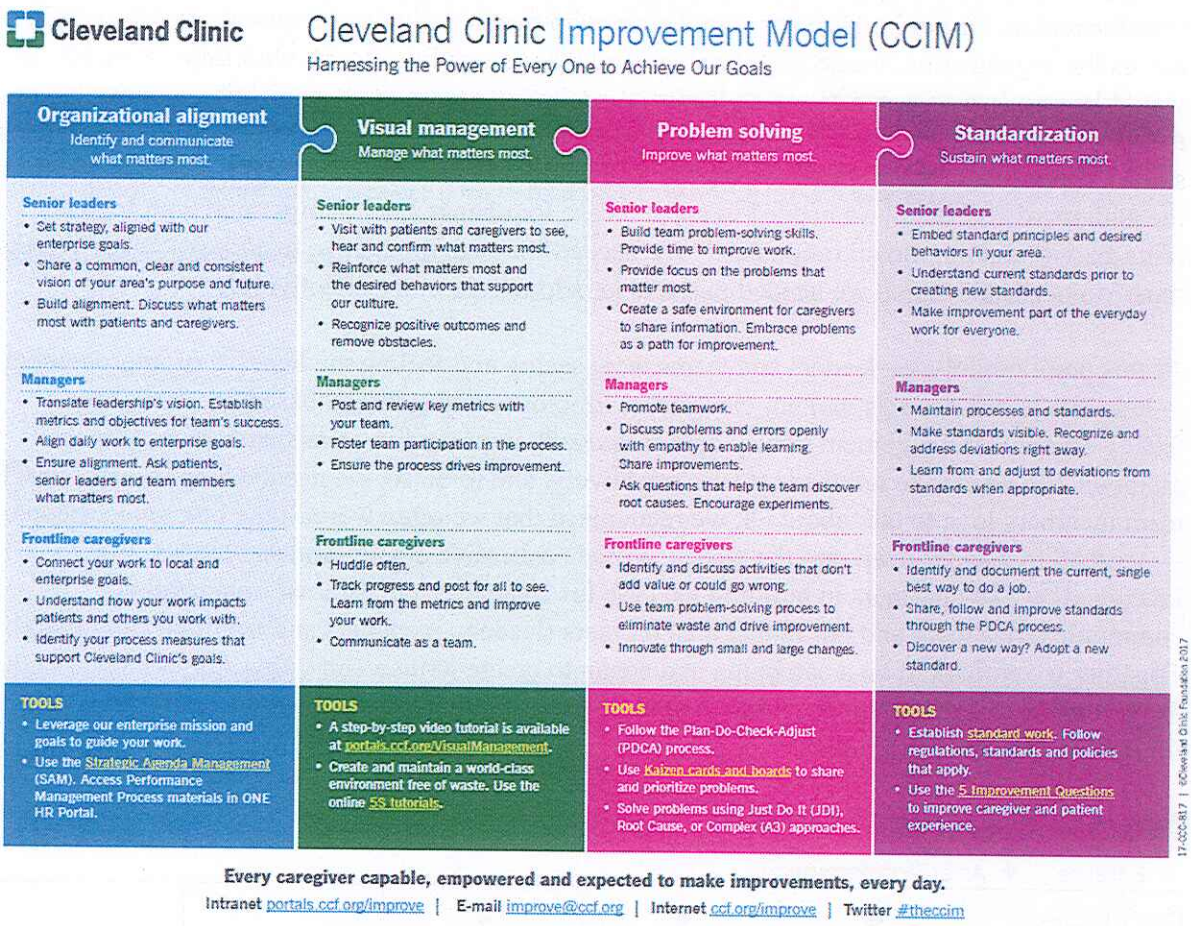
Figure 7. Cleveland Clinic Improvement Model



Source: Cleveland Clinic (www.ccf.org/improve)

Even with strong executive commitments, we still faced a major challenge. These committed leaders and their teams accounted for approximately *half of the organization*. To this point our impact to the total number of individual caregivers in the organization was relatively small, approximately 2 percent (1,000 people out of 49,000). While we were making progress, our goal was *every* caregiver, every day. We now faced our next problem to solve: we needed to reach more caregivers, and we needed to do so in a coordinated fashion, creating consistent and aligned systems that link at the highest level of the organization. To do so we would need not just the commitments of these leaders, with this approach, but also that of their entire enterprises. In the CI literature, we regularly read how important it is to have senior leadership engagement.[14] Rarely do we hear advice on how to go about getting it.

[14] Larry Fast, "What is the Senior Leadership Team's Lean Leadership Role?" *Industryweek*, industrweek.com, Dec. 9, 2013; and "An Improvement Culture is Built on Three Pillars," KaiNexus, kainexus.com.

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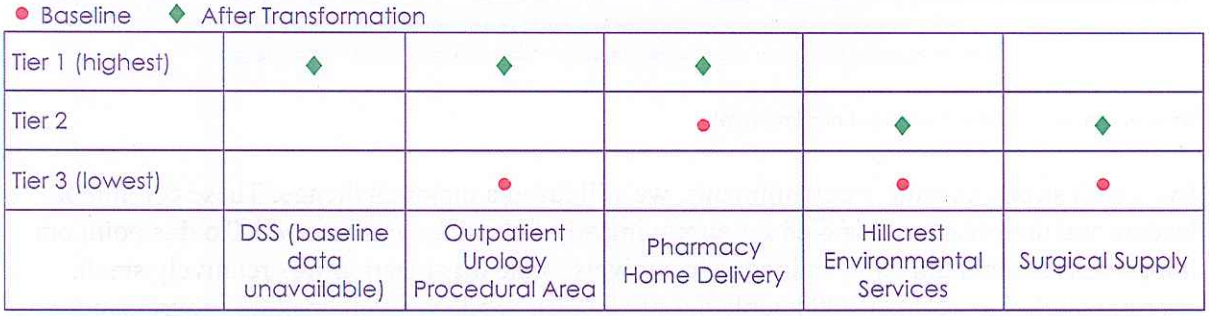
We could not lead with a methodology; we knew that a call to "do lean" or "six sigma" would not create the level of commitment we would need to achieve such large-scale organizational transformation. CI Senior Director Nate Hurle, who oversees the implementation of the CCIM across the organization, immediately recognized that compelling stories with impressive results would be required to generate senior leader commitment across our organization, and we began to work toward building and telling those stories. Only after a leader saw the results would he or she be interested in the methods we used to achieve them. As detailed by Chip and Dan Heath, the authors of "Switch," we needed to make a case for change that incorporated both logical (data-based) and emotional rationales.[15] We needed the case for change to address "what matters most" to our leaders, and we needed partners to help tell the story effectively.

At this point model-area leaders and teams were seeing and feeling the benefits of improvement — benefits to our patients *and* our caregivers. Employee engagement, based on 2015 Press Ganey employee engagement survey data (*Figure 8*), improved in areas that had used these methods. We needed to tell these stories effectively, and to do so, we needed help. While our CI team members love to talk about CI, we recognized that we often weren't the best spokespeople — tending to wander deep into the weeds, provide excessive details, and use jargon. We leveraged two key partners in building the case for change — our internal organization communications team and our model area partners (leaders, managers and frontline caregivers). Together we embarked on a campaign and began to create written and video stories shared with the rest of the organization that focused on how teams were improving what matters most — improving care for our patients.

Figure 8. Employee Engagement Data



Source: Cleveland Clinic

As these stories began emerging throughout the organization, a natural and unscripted groundswell emerged, and we began to shift the cultural expectations of engaging caregivers at all levels of the organization in building capability to improve the work. "Model area" requests have continued, and while some project requests do still come to us from leaders who are more interested in projects than capability, it is at a greatly reduced rate, and, in many cases, we can

[15] Chip Heath and Dan Heath, *Switch: How to Change Things When Change is Hard.* (New York, Crown Publishing Group, 2010)

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5. Integrate into your mainstream messaging to all employees. Do this by partnering with human resources, your communications team, and others in your organization.

Finally, we recommend to all healthcare leaders who desire cultural transformation to approach this problem (the gap between current state and desired state) as you would any other complex problem — by creating your own A3. While we hope others find benefit in the sharing of our model and our journey, we caution against simply replicating what we've done. Every organization is different, our current state no doubt differs from yours, and the barriers and countermeasures that we used in our organization may ring hollow in yours. Through A3 thinking one can begin the important journey of understanding the problem and the current state in which it occurs; creating a clear, consistent vision; understanding root cause; and performing small experiments to test countermeasures, demonstrate the value, and learn. Perhaps most importantly, though, through the A3 you will learn important things about your organization and about your problem, and these lessons will prove invaluable on the difficult but rewarding transformation journey.

Contacts

To learn more about the Cleveland Clinic Improvement Model, please contact:

Dr. Lisa Yerian
Medical Director
Continuous Improvement
Cleveland Clinic
yerianl@ccf.org

Nate Hurle
Senior Director
Continuous Improvement
Cleveland Clinic
hurlen@ccf.org

Marta Karlov
Education Director
Catalysis
mkarlov@createvalue.org

Paul Pejsa
Network Director
Catalysis
ppejsa@createvalue.org

Chris Weisbrod
Network Manager
Catalysis
cweisbrod@createvalue.org

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move these from a discrete project to be completed to a pull to use the CCIM to build a Culture of Improvement.

For discrete project requests, we have shifted the ownership to local teams and supported them by creating an internal application-based, collaborative problem-solving program that builds capability while teams solve problems. This shift in emphasis enables the CI team to focus on building caregiver capability at all levels (leader, manager, frontline) through the establishment of the systems and behaviors outlined in the CCIM. After a visit in December 2015, lean author Mark Graban commented, "I like how Cleveland Clinic, like Toyota, emphasizes the need to 'build capability' and develop people. It's not just about solving problems today but also building capabilities that allow people to be better at solving problems in the future."[16]

What's Next

In 2016 we hosted several external visitors, including Graban, Ohio State's Masters of Business Operational Excellence program, and a gemba visit for 50 colleagues from the Catalysis Healthcare Value Network (CHVN). We found these visits to be extremely helpful as we listened to their feedback and own learnings from their work. Consistent feedback from our guests was to work on our organizational alignment system and create clear alignment between the improvements and the organizational priorities. Through gemba visits, hosted by CVHN members, we've seen excellent examples, from which we are learning and actively working on in 2017.

Conclusion

Many organizations are facing the dilemma of how to shift from valuable projects to a cultural transformation. At the Cleveland Clinic, we have learned five important lessons through our own A3 and the testing of countermeasures:

1. Link the call for transformation to a clear, compelling purpose (not "lean" or "six-sigma," which are particularly not compelling to those unfamiliar with these terms).

2. Create engagement from a few senior leaders to try an experiment in their area. Let them understand and experience the benefits before you ask them to engage in a larger endeavor.

3. Work with the willing, engaging those that are enthusiastic about the possibilities.

4. Engage your marketing team and *the people doing the work* to help effectively share the story with others through both logic and emotion.

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[16] Mark Graban, "Cleveland Clinic Improvement Model, Part 2: Problem Solving & Standardization," leanblog.org, Jan. 20, 2016.

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