

*The CCH Way!*

# Lean Healthcare Annual Report 2019-2020

May 1, 2019 – April 30, 2020



Columbus Community Hospital uses Lean Healthcare, a process improvement methodology, leadership style and management system that emphasizes eliminating waste to add value for patients.

It looks for waste or non-value-added activities in: overproduction, inventory, defects, processing, transportation, waiting, motion and people. Once these areas of waste are identified, Lean encourages employees to use open communication and teamwork to make these processes less wasteful and more efficient.

The ultimate goal of Lean is to establish a culture in which all of an organization's employees are constantly looking for ways to reduce waste, streamline processes and improve patient care. When implemented correctly, Lean works by creating a culture of improvement and problem-solving at all levels of the organization. It encourages all employees to look at how their work is being done to see if there are ways to make that work more efficient.

Over time, these improvements in processes help Lean organizations save critical resources; improve the safety, quality and flow of patient care; increase patient satisfaction, as well as the hospital's return on investment; reduce staff turnover; and decrease patients' wait times and lengths of stay.

Since CCH started using Lean Healthcare initiatives in late 2016, Lean has led to numerous improvements throughout the hospital. This annual report will highlight the improvements made through Lean in the fiscal year 2019-2020 from May 1, 2019 to April 30, 2020.





Bill Elton  
Lean Facilitator

## Notes from the Facilitator

Improvement experts often say, “Lean is a journey.” Improving the way we work takes time, teamwork and dedication. Lean is not a quick fix. It’s a long-term initiative which is focused on making the correct long-term solution. Engaging all levels of staff in continuous improvement happens daily and places the organization on a learning journey.

Through it all, Lean is customer-focused and our ultimate customer is the patient. Lean seeks to add value by improving our service to patients. Patients and staff work together to determine what the hospital is doing well and what we can do better. Lean Healthcare asks us to constantly learn from, and about, our patients. We gather the voice of the customer through surveys, focus groups and by asking, “What is working? What can we do better? What additional value can we provide?”

Improvement is not always an easy task. The Lean methodology takes time to learn and put into practice. Sometimes instinctively, we jump to a solution or race to solve an issue quickly, but we need to take a step back, ask questions, engage those who are doing the work and gather information so we can use the proper countermeasures for improvement.

Daily improvement over time leads to long-lasting results. What we do today to improve our organization and better serve patients affects what Columbus Community Hospital will be in 10, 20 and 30 years. Implementing Lean correctly now will ensure staff and patients will benefit today and in the future.

Thank you for your dedication to improvement as we create the most value and best hospital for our patients!



## Three Components of Lean at CCH:

- Continuous Improvement
- Adding Patient Value by Eliminating Process Waste
- Engagement, Empowerment and Respect for Everyone

## The History of Lean at CCH

Lean implementation usually takes an organization five years, and based on that timeline, CCH is still in the beginning stages of its Lean journey.

CCH started using Lean in late 2016 and in 2017, 12 individuals from across the organization completed specialized training in the process. These individuals now make up the core CCH Lean team. That same summer, Bill Elton was hired as Lean facilitator and an initial Lean strategic plan was implemented under the guidance of Nicole Blaser, CCH’s quality improvement director.

From there, the CCH Lean team worked with senior leaders and directors to develop specific goals for Lean Healthcare going forward. Staff engagement and Lean education were among those goals, as were a variety of process improvements throughout the hospital.

Since its introduction at CCH, Lean has led to increases in patient satisfaction and safety, improved communication, staff and physician satisfaction, as well as achieved measurable results. As of January 2019, Lean improvements have provided the organization with increased Lean engagement, daily improvement strategies, training, increased value and cost savings.

## How Lean Works



Lean is not strictly for departmental use. In order for Lean to be effective, its principles must be utilized across all levels of an organization. Thankfully, the program is not designed to be one size fits all. It can be easily adapted to address different processes throughout the hospital's various departments – and thus far, it has been.

Since the implementation of Lean at CCH, Elton has been impressed with the Lean involvement he has seen from CCH employees.

“Our employees view improvement in a very proactive way and it is awesome to see staff excited about improvement,” he said. “Staff engagement and willingness to improve has made a tremendous impact on our implementation plan.”

To further engage all CCH employees in the Lean process, Elton has visited staff department meetings to give them more information on Lean and how it works, including the tools Lean uses to make improvements.

Some of the most common Lean tools are value stream maps and 5S improvements:

- Value stream maps are diagrams that show how a process works from beginning to end, while highlighting the various interactions involved in that process. This helps people see processes from a different perspective so they can more clearly identify areas that aren't functioning as effectively as possible.
- 5S is an organizational and housekeeping tool used in Lean Healthcare. It stands for “sort, set-in-order, shine, standardize and sustain.” Using this technique, employees organize their work materials and/or supplies by sorting them, placing them in logical locations, cleaning the area and then adhering to this organizational system in different locations and over time.

Value stream maps allow CCH employees to assess where the organization is now. They make processes visible and encourage employees to explore opportunities for improvement by asking questions like:

- “How can we make this better?”
- “Are we performing at the highest level?”
- “Our process works, but is it really what our patients view as value?”

By looking at these processes critically – and from a different perspective – CCH employees are able to use Lean to create improvements through tools like 5S.



## Columbus Community Hospital Lean Team

CCH's Lean Team is made up of 12 Green Belt-trained individuals:

- **Nicole Blaser**  
*Quality Improvement Director*
- **Chad Van Cleave**  
*Vice President of Financial Services*
- **Kathy Enderlin**  
*Human Resources Assistant*
- **Melissa Foltz**  
*Emergency Room - Unit Secretary/LPN*
- **Todd Henggeler**  
*Information Services Ambulatory Support*
- **Sue Hrnicek**  
*Surgical Services Director*
- **Zac Kavan**  
*Materials Management Director*
- **Janice Gone**  
*Lab - Point of Care Coordinator*
- **Tracy Long**  
*Operating Room - R.N.*
- **Lee Moser**  
*Radiology Tech*
- **Lynn Muth**  
*ACU/ICU Peds Service Line Coordinator*
- **Darcy Wisehart**  
*Pharmacist*
- **Bill Elton**  
*Lean Facilitator*



# FY 2019-2020 Strategic Plan:

Each year, CCH's Lean Healthcare plan follows the steps in this pyramid:



**Events** are Lean improvements

**Development** refers to training, communication and staff engagement.

- Ongoing goals in this area, include:
  - Providing Lean training and support to directors and front-line staff
  - Providing general orientation or “Lean Basics” training
  - Sharing Lean resources and educational materials on the intranet page
  - Sharing Lean updates and education on the main floor bulletin board

**Alignment** refers to Lean improvements that are aligned with CCH's strategic goals.

- Ongoing projects in this area, include:
  - *5S improvements* in Education, Laboratory, Wellness Center Rehab Services, Swing/SNU, Human Resources, Nutritional Services, OB, Housekeeping
  - *Processing mapping* in Health Information Management, Radiology, Infusion, OB, Laboratory, Respiratory Therapy, Education, Home Health, Occupational Health, Surge, ACU/ICU
  - *Patient safety projects* in Pharmacy, ACU/ICU, Swing/SNU, ED, OB, PACU, OR, Same Day Services, Cardiopulmonary, Laboratory, Radiology, Housekeeping, Quality
  - *Patient satisfaction projects* in Information Services, Infusion, Laboratory, Respiratory, Radiology, ENT Clinic, Pharmacy, ACU/ICU, ED, Occupational Health, Home Health, OR, PACU, Same Day Services, OB, SURGE, Housekeeping
  - *Staff satisfaction projects* in Education, Home Health, Information Systems, OR, SDS, ENT Clinic, Pharmacy, Occupational Health, OB, Swing/SNU, Laboratory, ED, ACU/ICU, Quality, Nutritional Services, Health Information Management, Housekeeping



## Lean Implementation Timeline

Lean implementation follows a four-part timeline, as detailed below:

### Step 1: Educate on Lean Concepts

- Make small process changes
- Build relationships
- Engage staff, and
- Introduce Lean through orientation

### Step 2: Focus on Lean Strategic Planning

- Continue Lean education
- Provide Lean training to directors and key staff to impact 30 to 40% of the organization
- Identify Lean leaders (anyone who has a passion for Lean)
- Implement three to four big projects, two mid-sized projects and several small process improvements, and
- Communicate progress

### Step 3: Develop Culture of Lean Thinking (Problem-solving)

- Set improvements to impact 60 to 80% of the organization, and
- Implement three to four big projects, three to four mid-sized projects and several small process improvements

### Step 4: Foster Idea that Process Change is Normal and Natural

- Communicate that Lean isn't just an idea, it's the way we do things, and
- Continue Lean improvements with larger value streams and continuous improvements until 100% of the organization is impacted

## FY 2019-2020 Lean Improvements

Since its introduction at CCH, Lean has made progress on improvements throughout the organization.

The Lean team has realized a 40% increase in the number of improvements and organizational impacts from the last fiscal year.

It has also worked on improvements with the following departments: ACU/ICU, ED, Same Day Services, Maternal Child Health, Laboratory, Radiology, Respiratory Therapy, OR, Nutrition Services, Pharmacy, Education, Cardiopulmonary Rehab and Home Health.

Here is an overview of some of the Lean accomplishments of the last fiscal year:

### Code Cart Maintenance and Restocking Project

Code carts are an important medical tool. They allow health care professionals to have exactly what they need on hand, when they most need it. That's why checking code carts and ensuring they are fully stocked is so important.

One of Lean's major 5S improvements in 2019 was on done on code carts.

Using a Lean session, a team was able to look at the current code cart process, identify the root cause of issues and create countermeasures to improve that process.



That team included: Darcy A. Wisehart, pharmacy; Ann Smith, Skilled Nursing Unit (SNU)/Swing Bed; Avona Wennihan, pharmacy; Sara Becker, obstetrics; Sarah Huettner, Post Anesthesia Care Unit (PACU); Kaylyn Pearson, Emergency Department; Kayla Gehring, PACU; Rebecca Micek, Cardiac Rehabilitation; Lynn Muth, Acute Care Unit and Cheyenne Engstrom, radiology.

Thanks to their work to map their current processes, identify issues and make improvements, the team's improvements ensure that the carts are always correctly checked and restocked.

"I'm incredibly proud of our group who were willing to have an open discussion, ask questions and work towards a consen-

sus which will benefit all affected," said Wisehart. "Making improvements to a process takes time. We will continue to work together to ensure the process remains working"

The group also did a 30- and 60-day review after enacting their changes to see if they needed to make any adjustments to their new process.

### Wheelchair Organization

5S improvements do not have to be big to make a big difference, an example of this is a 5S project in the SNU/Swing Bed area that led to a substantial time savings impact.



Wheelchairs in the department often have their footholds or peddles taken off and when they were put back together, it was sometimes difficult to find the correct peddles for the correct chair.

Sharon Bonk, activities coordinator in SNU/Swing, thought to use a decorative tape to match up the correct peddles to the correct chairs. This has led to a time savings that has allowed staff to spend more time with their patients.

"Having the wheelchairs and peddles marked with matching colors has saved so much time and frustration when the peddles are not attached," she said. "This used to be tedious and very time consuming. Now, all we have to do is look at the color strip on the wheelchair and match the color on the peddles."

### Improvements in Clerical Processes

Lean Healthcare doesn't just work with physical organization. It can also be used to address clerical matters, such as the one recently discovered by Kari Brock, administrative assistant in Home Health & Hospice.

"I recently came across a charge associated to a supply in our system that had a begin date of several years ago," Brock said.

"As I started investigating, I noticed that was the case for all of our supply charges.



## FY 2019-2020 Lean Improvements

(Continued)

They all had a start date of whenever the supply was first input into the system.”

There wasn't a system in place that would allow Brock to update the supply charges annually, so Brock was planning to update them all manually. Using Lean methods, Brock turned to Information Systems for help. They created a plan that allowed most of the supply charges to be updated automatically.

“This will save countless hours each year in manually updating, as well as save us money by charging the correct amounts for each supply,” Brock said. “I'm extremely grateful that we could all work together to come up with a solution.”

### Lab Device Organization

Sometimes organization is all it takes to lead to time savings and improvements in patient care. This was recently demonstrated through a Lean improvement in the laboratory.

In the past, the department had patient printer labels, handheld computers (PDAs) and i-STAT instruments scattered through three rooms of the lab draw center. Staff members were having a hard time keeping track of the devices or new batteries for equipment, etc.

To address the issue, the phlebotomy team members had an open discussion on how they could make the situation better. They decided to store the devices in a centralized location and a top shelf was designed and built by maintenance to organize them. All of the PDAs and the i-stat instruments are now located on the top shelf in charging bases and the printers are plugged in on the bottom shelf. This ensures the tools are ready to use and easy to locate.



“Creating one station for the devices has minimized clutter and made the rooms appear more organized,” said Janice Gone, point of care coordinator-laboratory, who was the point person on this Lean improvement. “It also reduced the amount of time spent looking for and keeping track of devices.”

## Quotes from the Lean Team:

“Lean enables everyone in our organization to improve no matter your job title. Each employee knows their own job the best, so ideas about workflow improvement need to be from those doing the work.”

~ Lee Moser, BSRT (R)(CT), radiology

“We are addressing issues which staff recognize need to be improved. Staff involvement empowers improvement, thus allowing staff to work in the best processes possible.”

~ Darcy Wisehart, pharmacist

“It does not have to be a huge project or process to be able to use the Lean methodology.”

~ Sue Hrnicek, MSN, CNOR, RN,  
director of Surgical Services

“There are Lean tools/methods available to help with process improvement and increase efficiency in every area in the hospital.”

~ Tracy Long, RN, BSN, OR

## Contact Information:

To learn more about Lean and how you can get involved, reach out to a Lean team member. They have all been trained in Lean methodology and are excited to share information and resources on Lean.

You can also contact Elton at 402-562-4793 or [wselton@columbushosp.org](mailto:wselton@columbushosp.org) or visit the Lean page on the CCH Intranet.

