Lean *Six Sigma:*

Guiding process improvement at OMH

It's getting to be more common these days to walk into a conference room and see on the wall a large strip of paper with stacks of colorful memo notes. This is called a "Value Stream Map," and they're being used by an increasing number of state agencies to analyze a work process using the **"Lean Six Sigma"** (LSS) approach.

LSS is method of continuous process improvement that can help people produce better results with less time, effort, and materials. It combines the Lean process' focus on eliminating waste with Six Sigma's focus on removing the causes of errors.

Given the industrial history of Lean and Six Sigma, it might sound as though this process only works in manufacturing. But research has shown that LSS can be used in any work environment. LSS is not simply a series of projects, a way to reduce staff, or a way of pressuring people to work faster. Nor does it promise to be the "silver-bullet, cure-all." But it **is** a way of **empowering** staff to work together to discover solutions using data, observation, and innovation.

This edition of *OMH News* will discuss the LSS concept and introduce you to the various projects that are under way — some of which may be in your own workplace. We welcome your comments at omhnews@omh.ny.gov.

History:
How the quest to refine production led to strategies for improving your workplace

Although some historians can trace the roots of the Lean process back to ancient China, with the mass production of iron castings, the earliest that researchers can actually **document** its use was in 13th century Venice.

Needing to arm themselves to defend their empire, the Venetian navy established an **Arsenal** to build hundreds of warships each year. To increase production, engineers came up with the idea of using a standardized design for their ships. Different areas of the Arsenal produced specific parts, and ships under construction moved continuously along a narrow channel from one assembly point to another.

This idea of "work flow" production caught on elsewhere in Europe and later in the United States. In 1804, the **English Royal Navy** developed specialized machines to produce wooden items for its ships. In 1822, the **Springfield Armory** in Massachusetts used an array of machines to build rifles. By the 1850s, armories throughout the United States were making standardized metal parts for weapons.

Map of the Venice Naval Arsenal.

From military to industrial use

As the use of mass production grew, so did the analysis of its process. In the 1890s, mechanical engineer **Frederick W. Taylor** determined that production could be improved by close observation of workers to eliminate waste. Calling this concept "scientific management," Taylor eventually developed the first "time studies."

American engineer **Frank Gilbreth Sr.** took this a step further, adding studies of motion and developing tracking methods that focused on the individual steps of the manufacturing process. His wife, **Lillian,** complemented his work by studying the motivations of workers and how their attitudes affected the outcome of the manufacturing process.

American Automaker **Henry Ford** and colleague **Charles E. Sorensen** understood that a manufacturing system was made up of distinct elements – people, machines, tooling, and products. Coordinating these elements into a continuous system for building a Model T automobile, they developed conveyor belts and special-purpose machines so that many suppliers could produce hardened metal parts for their assembly line.

In the early 1940s, the United States, preparing for war, sought the help of Sorensen to adapt the **Ford Production System** to build warplanes rapidly. Sorensen broke down the plane's design into essential units, making a separate production layout for each unit, building as many units as required, then delivering each unit in its proper sequence to the assembly line to make a finished plane.
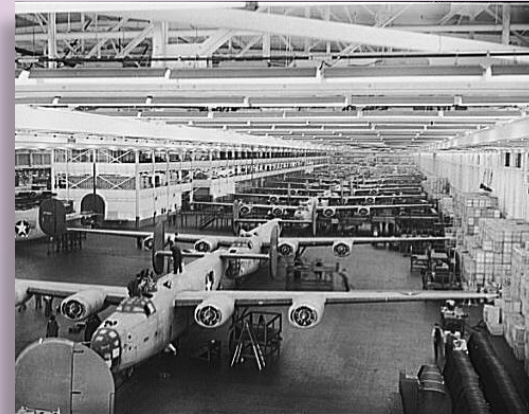
Ford's ability to produce "a bomber an hour" caught the attention of Japanese industrialists after the war. In the 1950s, **Kiichiro Toyoda** and his engineers made a series of simple changes to the Ford system to enable his company to rapidly produce a wider variety of products. Toyota's improvements included developing machines that were the proper size and sequence for their products and a mistake-proofing, quality-assurance process.

Ford Willow Run warplane production plant.
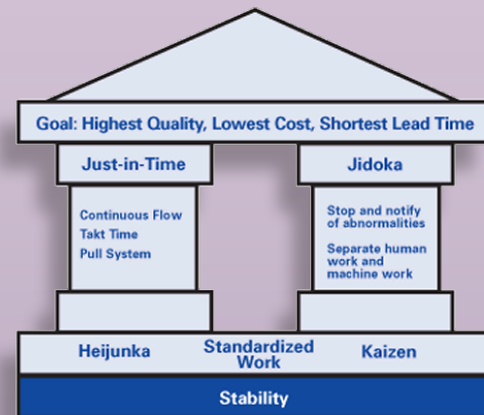
From manufacturing to healthcare

Toyota engineer **Taiichi Ohno** started incorporating quality assessment at each step of the **Toyota Production System** – from product design to consumer relations. Toyota developed the first "quality circles" by including its factory workers in studies to eliminate waste, defined as anything that did not add value to the customers – such as overproduction, excess inventory, defects, waiting, motion, over-processing and transportation and handling.

Toyota Production System concept.

Fellow Toyota engineer **Dr. Shigeo Shingo** further studied the integration of people with effective processes to identify and solve problems, developing the Kaizen concept. "Kaizen" is a Japanese word for "continual improvement," involving activities that continuously improve all functions and involve all employees.

The success of Japanese manufacturers drew the attention of American companies and researchers. In the 1970s and 1980s, a research team from the Massachusetts Institute of Technology's International Motor Vehicle Program conducted a comparative study manufacturing practices throughout the world.

One team member, **John Krafcik,** coined the term "Lean" to describe the Toyota system in a 1988 journal article, *Triumph of the Lean Production System*. **James P. Womack,** PhD, the team's research director, made the concept known to a worldwide audience with his 1990 book, *The Machine That Changed the World.* Womack later founded the Lean Enterprise Institute, Inc., a nonprofit training and research company established to help advance Lean thinking.

At about this time, engineers at Motorola Inc., were developing a similar process- improvement system, **Six Sigma,** a term that comes from the field of statistics. While Lean is focused on eliminating waste and ensuring efficiency, Six Sigma seeks to improve the quality of the output of a process by identifying and removing the causes of defects and minimizing variability. It uses a set of empirical and statistical quality management methods and creates a special infrastructure of people within the organization who are experts in them.

The **healthcare sector** began to use Lean and Six Sigma methods in the early 2000s, in response to changing reimbursement models and the need to do better with less. Research found that the use of Lean helped to improve the quality, efficiency, and safety of patient care.

According to the **Institute for Healthcare Improvement**, Lean could help make health care more responsive to patient needs by increasing productivity, reducing costs, and improving patient flow. Studies have reported that 50 percent of hospitals in the United States are currently making use of Lean techniques.

"Kaizen" is formed by the Japanese characters "Kai" & "Zen," which literally translates to "change for the better."

Best-selling book that gave the Lean concept wide recognition.

Lean in New York State government

Recognizing the benefit of cutting waste, understanding of internal processes, and improving performance, numerous federal, state, and local government agencies have adopted Lean principles during the past three decades.

Governor Andrew M. Cuomo implemented the Lean program in New York State in 2013 at the suggestion of the Spending and Government Efficiency Commission. The **New York State Lean Office** started 10 pilot projects at that time. Now there are nearly 400 projects in 38 agencies with more than 8,500 state workers participating. Some examples of their success:

- The **Department of Motor Vehicles** reduced the average in-office wait time to register a vehicle acquired through a casual sale and, in select pilot offices, to obtain a driver's permit.

- The **Department of State** reduced the processing time to license real estate brokers and agents.

- The **Department of Health** reduced the time for processing Certificates of Need and Operating Certificates.

- The **Department of Labor** reduced its backlog of unemployment insurance break in claims requests and shortened the time from request to reinstatement.

The New York State Lean program has helped re-organize state government to reduce costs, improve service, build a culture of performance and accountability, and modernize and right-size government to make it more efficient, effective, and accountable.
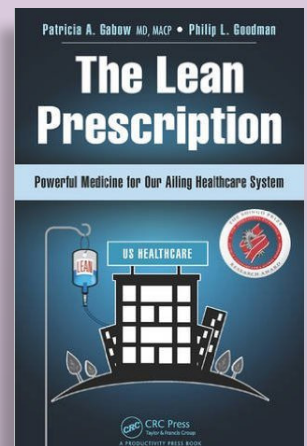
In 2016, the state's Lean initiative received the **Citizens Budget Commission's Prize for Public Service Innovation.** The prize is awarded annually – in alternating years to either a New York State or a New York City agency – to recognize and promote successful improvements in the delivery of public services. OMH
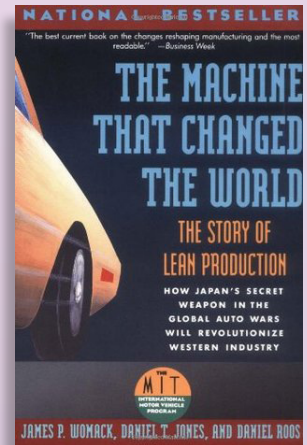
Applying Lean principles to healthcare.

For information on the Lean Enterprise Institute, visit: https://www.Lean Six Sigma.org.

Results:
Lean is improving care, quality, and performance throughout OMH
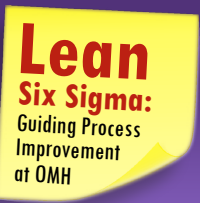
"As providers throughout the public mental health system transform, OMH also must adapt to the changing environment," wrote **OMH Commissioner Dr. Ann Sullivan**, in the *OMH 2014-15 OMH Interim Plan.* "It must embrace new tenets of healthcare management, from accountability, to collaborative care, improved outcomes, and high return on investment for New Yorkers."

The Lean process has been well-suited to helping the agency meet this goal. After successfully using Lean since 2011 on projects to increase efficiency and improve outcomes for consumers, OMH created an LSS Deployment Unit in 2015 to put Lean methods into operation throughout the agency.

Innovative solutions

The unit has initiated more than 80 projects since then, bringing about positive, measurable results. Some examples:

- **Sagamore Psychiatric Center –** Reduced the median restraint/seclusion entry time into the New York State Incident Management and Reporting System from the episode occurrence.
- **Hutchings Psychiatric Center –** Decreased medical emergency report defects.
- **New York Psychiatric Institute –** Increased the proportion of clients screened, as evidenced by a completed flu vaccination form.
- **Central New York Psychiatric Center –** Reduced the median number of days for initial responses from Sex Offender Treatment Program (SOTP) administration to complaints from SOTP residents. Decreased the amount of time it takes to deliver mail and packages to SOTP residents.
- **New York City Children's Center –** Reduced the time to respond to requests for information.
- **Rockland Psychiatric Center –** Reduced the amount of time it takes to fill a staffing vacancy. Increased the percentage of staff that respond timely and appropriately to the psychiatric emergency.
- **Rockland Children's Psychiatric Center –** Decreased the amount of time it takes to accept, transfer, and complete intake for a new admission.

Recognition and growth

The LSS Deployment Unit's work has been recognized by the New York State Lean Office. At the second annual New York State Lean Conference in 2015, OMH's Central Office Human Resource Management's "Reducing Time to Hire" team received the "Voice of the Customer" award for its project to research customer needs and challenges, and successfully use this feedback to improve the hiring process.

The OMH Bureau of Inspection and Certification's "Monitoring Outcome Reports" team was also selected as a finalist in the "Data Digger" category, for its project to overcome data challenges through use of effective data-mining strategies.

A crucial part in changing the culture of executive agencies is engaging employees and making Lean a routine part of staff's everyday activities. To help bring this about, the New York State Lean program provides training to "Empire Belts," staff who facilitate Lean projects (see page 10).

OMH is one of 38 agencies currently partnering with the New York State Lean Office in training Belts. So far, approximately 80 staff within psychiatric centers, field offices and the Central Office have been certified, or are in the process of being certified as Belts._{OMH}

OMH's Lean Six Sigma Deployment Unit at the 2015 New York State Lean Conference.

The result of a successful Lean 5S project (see page 9). Reference binders are filed and labeled in an organized manner so that everyone can find important information quickly.

*OMH staff receiving the 2015 "Voice of the Customer" award. From left: **Amy Rodak, Mark Stevens,** and **Lynn Heath**.*

Process:
Steps for a successful Lean project

Lean
Six Sigma:
Guiding Process
Improvement
at OMH

"The goal of a Lean project is to evaluate and improve a process we use during a work-day," said **Mark Stevens**, OMH LSS Director. "Lean works on the principle that the staff closest to the work have the best ideas for improvement and that a series of small or low-cost improvements can have a significant impact."

Roles of staff

An Lean project involves staff on several levels and in many roles. An **"Executive Sponsor"** sets the vision for the project and promotes involvement by participating in the project kick-off, regular status reports, and the final executive report. A **"Project Sponsor"** initiates a project and has the authority to make changes recommended by the team.

A group of staff, known as **"Belts,"** are trained to lead projects and facilitate activities. The Belts then orient a second group of staff, who are experts in the subject matter involved, on the concepts of the Lean process. Belts and staff experts then partner in structured projects, using various Lean tools to analyze their processes and develop solutions.

Erika Choi, Director of the New York State Lean Program, providing training during a Kaizen event in New York City.

Preparation

A kick-off meeting is held with the supervisors, project team members, Project Sponsor, and any relevant program staff and management to give an overview of the process and expected time commitment. They compose a **charter** that clearly describes the problem that needs to be solved, defines the scope of the upcoming work, and sets a time in which the project is to be completed.

Teams often hold a preliminary **"Process Walk"** or **"Waste Walk"** to help identify waste and problems. Usually conducted by a cross-functional team, the walk is used to assess their day-to-day activity, making note of all observed waste.

They identify inputs and outputs, ask whether supplies and support are adequate, time how long it typically takes to perform a process, and determine what causes delays or problems. They take note of whether anyone is frustrated or hurried because of time pressure.
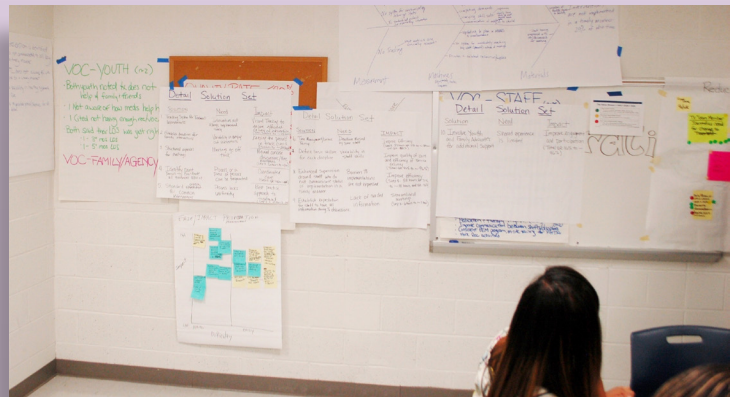

Developing an implementation plan during a Kaizen event.

Value Stream Mapping

Lean uses a deliberative process to identify and eliminate waste. Called **"Value Stream Mapping,"** it's a simple, visual approach intended to create a picture of the process being studied. A Value Stream Map includes a step-by-step description of the current paper work, activities, and information flow needed to transform a product from its current state to what a customer wants or needs.

Lean defines the concept of "value" from the perspective of the client. "Learning what the client wants or needs is crucial," Stevens said. "Because we're often so close to the process that we're unable to see the problems in getting to that point."

OMH staff analyzing a Value Stream Map during a recent Kaizen in New York City.

To identify waste, the Lean project team uses an exercise called: **"TIMWOODS,"** in which each letter stands for one of the eight different types of waste:

- **Transportation —** Movement of parts, paper, and materials.
- **Inventory —** Having too much of office supplies, materials, finished products, or work-in-progress.
- **Motion —** Movement of people or machines that does not add value to the product or service.
- **Waiting —** For information, approvals, or a meeting to end.
- **Over-production —** Making more than is required or earlier and faster than is required.
- **Over-processing —** Effort that adds no value.
- **Defects —** Anything that results in a decrease in quality.
- **Skills —** The waste of not using people's mental, creative, and physical abilities.

Kaizen event

Value Stream Maps are examined thoroughly during the Kaizen event, which is the heart of the process. Usually held over three days, a Kaizen is a workshop that's designed to give teams an opportunity to examine the root causes of waste and inefficiency. Facilitated by trained Belts, these events are fast-paced, high energy, and results-driven.

The first day is dedicated to root-cause analysis. Team members will use colored dot stickers to assign a value to each of the steps in their map – determining whether an activity transforms or shapes the work in process, is required by law or regulation, or does not transform or shape the product or service.

On the second day, teams create a "future state" of a work process without waste – eliminating, consolidating, rearranging, and streamlining steps. Then they develop a plan of action to put these changes in place.

On the third day, the teams design visual controls to ensure everyone is communicating and working toward a shared goal. The event concludes with a presentation of outcomes to executive staff.

Follow-up

Some improvements can be implemented immediately. Others may need to be identified for the future. The Lean process uses visual controls, such as a scoreboard, to keep track. The scoreboard is used to check in with the team every day, prioritize work, and indicate impediments in the workflow. A "huddle," a quick daily meeting to review scoreboards, is another tool that can keep a team in constant communication and focused. OMH

Checking the scoreboard during a Lean follow-up huddle.

Improvement:
A series of Lean projects is seeking to reduce length of stay for inpatients

Lean Six Sigma: Guiding Process Improvement at OMH
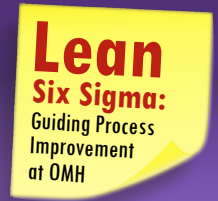
OMH is launching a series of Lean projects this fall to improve inpatient flow at eight psychiatric centers.

"Research has verified what we all know from experience — The best place for recovery is at home, in the community," said **Tricia Hartnett,** OMH Director of Quality Management. "And the faster we can get our clients back into a setting of comfort, the better off they are."

Working with experts from Toyota

Facility staff and the LSS Unit are working with the New York State Lean Office and the Toyota Production System Support Center (TSSC) on the project. TSSC is a not-for-profit corporation affiliated with Toyota that collaborates with organizations to help them become more productive, maximize available resources, and improve quality and safety.

For more than two decades, it has shared its expertise related to process improvement with more than 200 manufacturers, government entities, and non-profits involved in disaster recovery, hunger relief, and healthcare.

The objective of improving patient flow is based on OMH's strategic goal of rebalancing and stabilizing inpatient and community mental health services. The key performance indicator to be addressed is length of stay, with a specific target of discharging 90 percent of new inpatient admissions within 180 days, or — for children — discharging 80 percent of new admissions within 90 days.

The first group of facilities — Creedmoor, New York City Children's, Pilgrim, and South Beach — started their projects in September. A second group, Mid-Hudson and Rockland, will start in October. A third group, Greater Binghamton and Hutchings, will start in November.

Parallel improvement projects

The eight facilities are participating in one of three parallel Kaizen events. Each group is examining a specific part of the patient care process. The were then responsible for selecting a specific process to be addressed. Projects involved key processes that directly impact length of stay, such as:

- Admission — intake, orientation, and assessment.
- Treatment — treatment planning, active treatment, and clinical treatment.
- Discharge planning — timing of discharge referrals or supports.
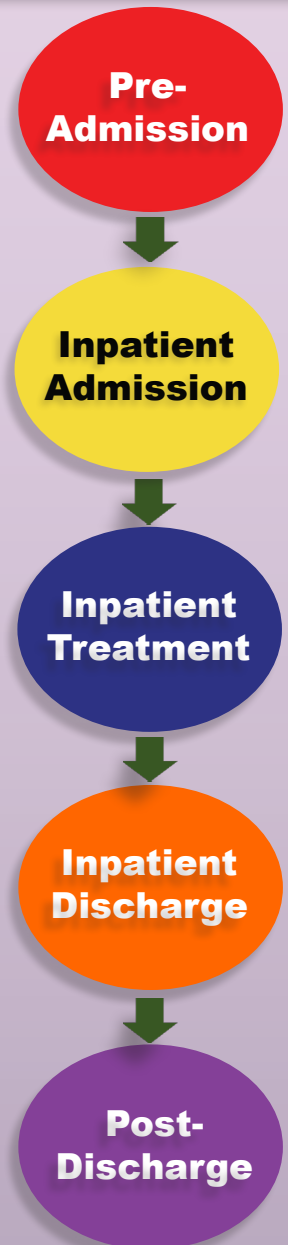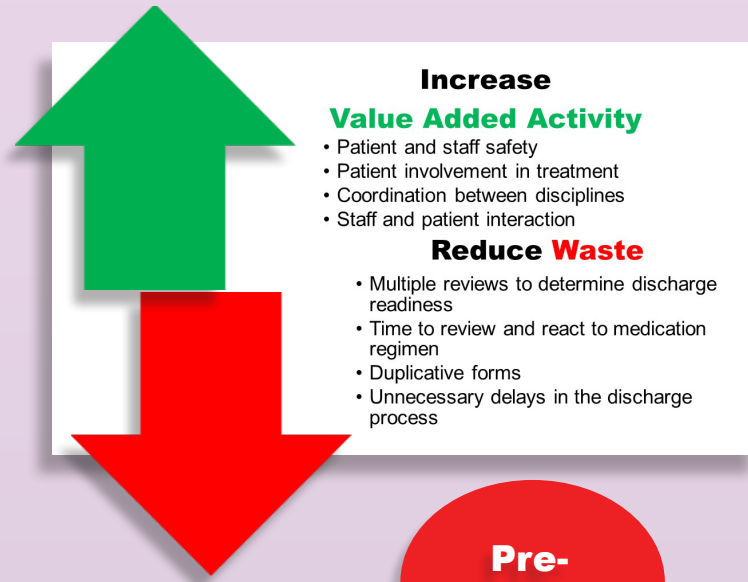
Facilities evaluated performance related to these processes, selected a specific project, and submitted a project charter:

Creedmoor

- Increasing the percentage of Assisted Outpatient Treatment (AOT) applications that are complete and accurate upon first submission.
- Reducing the amount of redundant AOT paperwork, which will result in a decrease in the amount of time it takes the social workers to complete the paperwork

NYCCC

- Decreasing the time from when a need for change in treatment is identified to when it is implemented.
- Improving quality of care and efficiency of service delivery.
- Decreasing the time it takes to implement a change in treatment.

Increase
Value Added Activity
- Patient and staff safety
- Patient involvement in treatment
- Coordination between disciplines
- Staff and patient interaction

Reduce Waste
- Multiple reviews to determine discharge readiness
- Time to review and react to medication regimen
- Duplicative forms
- Unnecessary delays in the discharge process

Pre-Admission

Inpatient Admission

Inpatient Treatment

Inpatient Discharge

Post-Discharge

Pilgrim

- Improving the process for determining AOT eligibility and obtaining vital documents to decrease the time from when a patient is admitted until the pre-discharge meeting.

South Beach team

- Increasing the percentage of treatment recommendations made during the peer supervision that are implemented.
- Improving the percentage of times the medication regimen data is collected from the Mental Health Automated Record System.

During the Kaizen, each facility team focused on a project or problem area related to length of stay and used various Lean concepts and tools to increase value-added activity — such as clinical treatment, coordination of care, active treatment — while eliminating forms of waste — such as waiting, defects, transportation, and motion. TSSC and New York State Lean Program representatives coached the teams on Lean concepts during the first of these events.

"With help of the trainers, we drilled down into that process, saw the data involved, and then brainstormed for solutions," said **Kathy O'Keefe**, Executive Director of Pilgrim PC. "Such as getting vital documents that facilitate the discharge — birth certificates, Medicaid information, Social Security cards, and information from other hospitals — that have to do with determining AOT eligibility."

"Whether or not someone is eligible for AOT has a lot to do with the path they take upon discharge," O'Keefe added. "So the earlier we do this, the quicker we can facilitate a discharge. We looked at anything that could impede this process. We found that there are some real simple things, like the need to sign duplicate forms, that sound like little things. But, in the course of a day, just add time."
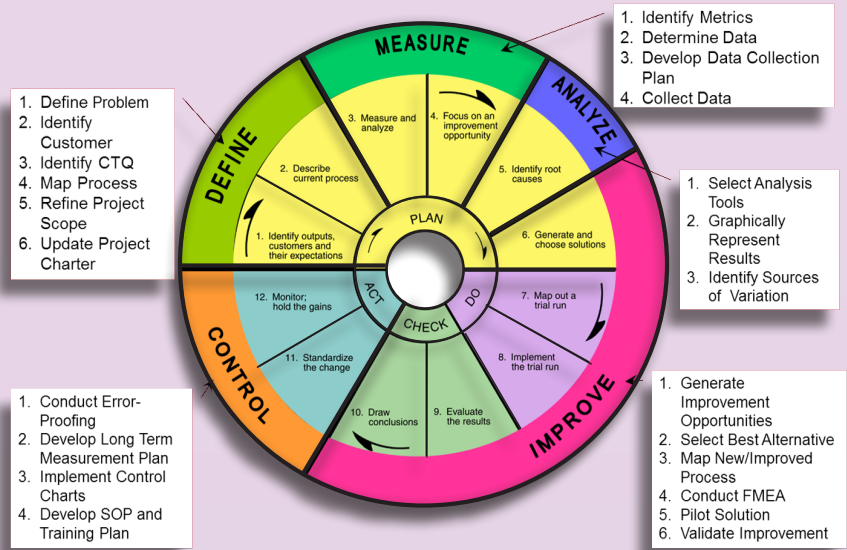
"Everybody is a part of the team, it doesn't matter what your title is," said **Dr. Keith Ditkowsky,** Clinical Director of the New York City Children's Center Bronx Campus. "We found that communication is a big issue on so many levels. Such as recognizing the triggers when somebody needs a change in treatment plan, and then communicating to everyone involved what needs to be done, all across the board. The whole philosophy of the program is based on everybody having an equal voice and a part in the process, that people who are doing the work have a say in what works."

"I was excited because I was speaking for my peers and my patients, and my voice was being **heard**," said **Monique Velluti,** Peer Specialist at Creedmoor. "I feel like we're able to get a better understanding of all the steps involved, and that we can really bring about some changes."

After the teams have completed their projects, they will share their best practices with the entire system, so that all facilities can make use of them.

Future projects

OMH's LSS Unit will continue to identify potential projects that will help improve patient flow. Interested facilities are expected to participate in at least one Value Stream Mapping workshop per quarter. These workshops are facilitated by the LSS Deployment Unit on a monthly basis and participants can attend in-person or via video teleconference. Facility and Central Office leadership will then evaluate the projects based on the value to OMH in terms of impact on care, alignment with priorities, effort required, and probability of success.OMH

1. Identify Metrics
2. Determine Data
3. Develop Data Collection Plan
4. Collect Data

1. Define Problem
2. Identify Customer
3. Identify CTQ
4. Map Process
5. Refine Project Scope
6. Update Project Charter

1. Select Analysis Tools
2. Graphically Represent Results
3. Identify Sources of Variation

1. Conduct Error-Proofing
2. Develop Long Term Measurement Plan
3. Implement Control Charts
4. Develop SOP and Training Plan

1. Generate Improvement Opportunities
2. Select Best Alternative
3. Map New/Improved Process
4. Conduct FMEA
5. Pilot Solution
6. Validate Improvement

The DMAIC approach:
Reducing waste and variation

The chart above illustrates the "DMAIC" approach, a data-driven method based on Six Sigma practices of eliminating waste and reducing variation. Its name comes from the first letters of its five steps:
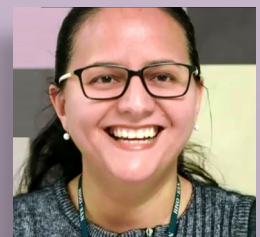
- ***Defining*** *the problem, opportunities, goals, and customer requirements.*
- ***Measuring*** *process performance.*
- ***Analyzing*** *the process to determine root causes of variation and waste.*
- ***Improving*** *process performance by addressing root causes.*
- ***Controlling*** *the improved process and future process performance.*
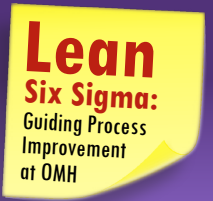

Kathy O'Keefe

Dr. Keith Ditkowsky

Monique Velluti

For information on the Toyota Production System Support Center, visit: http://www.tssc.com.

Organization:
Lean project helps nurses make workstations more efficient

Lean Six Sigma: Guiding Process Improvement at OMH

According to research, 20 to 30 percent of healthcare spending nationally is associated with waste, costing between $550 billion and $910 billion each year. Common causes of waste are failures in care delivery, failure to coordinate care, overtreatment of patients, and administrative complexity.

Nurses are familiar with such frustrations. Studies say that a nurse walks on average 3.5 to 4.5 miles each day at work. A large portion of these miles can be spent looking for equipment or supplies, completing multiple copies of documents, and unnecessary transportation. For direct-care staff, a more efficient workplace means:

- Reduced wait time and length of stay for patients.
- More time to asses, treat, educate, and plan with the patient.
- Reduced errors.
- Reduced unnecessary workload, duplicative work, and rework.

"Nurses are very well-suited for leading Lean projects because of their commitment to quality patient care and assessment skills," said **Maxine Smalling**, **RN,** OMH Chief Executive Nursing Officer. "A 2012 report in *Nursing Administration Quarterly* supported this view — pointing out that nurses have experience leading multi-disciplinary teams and have the ability to look at a hospital through the eyes of their patients."

"This is why OMH leadership has, in turn, demonstrated its commitment to the Lean process by providing the financial resources to initiate nurse-led projects," she added.

During the past year, the LSS Deployment Unit has worked with OMH's Coordinated Nursing Office and facility nursing staff at eight OMH psychiatric centers to use the "5S" Lean process (see chart below) to improve efficiency by looking at the organization of their workstations. Here are some of the results. OMH
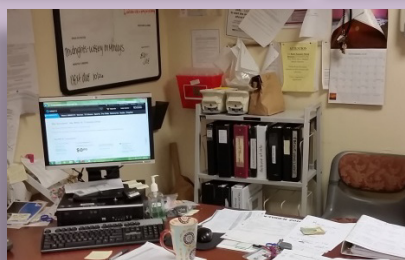
Nurses at St. Lawrence Psychiatric Center removing outdated supplies from their station.
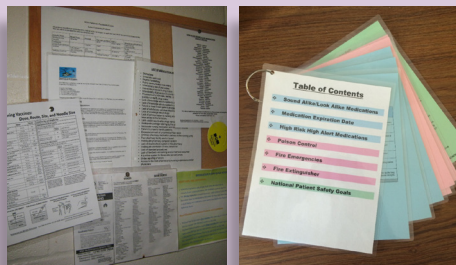
Information on medications, at one time scattered among several documents, is now filed and stored in one accessible location.
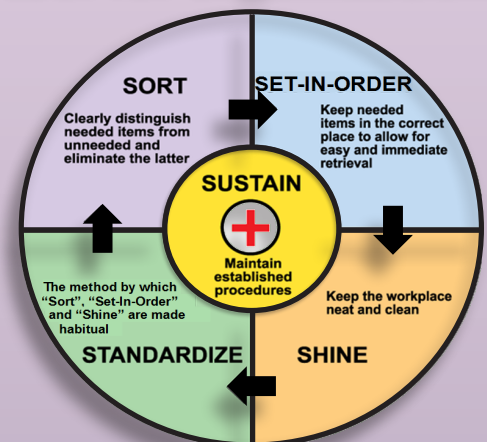
Supplies and medications, also scattered among the shelves, are now sorted and labeled.

All of these elements come together to make an efficient nurses station in which information can be retrieved quickly.

Lean 5S:
A tool for organization

SORT — Clearly distinguish needed items from unneeded and eliminate the latter

SET-IN-ORDER — Keep needed items in the correct place to allow for easy and immediate retrieval

SUSTAIN — Maintain established procedures

STANDARDIZE — The method by which "Sort", "Set-In-Order" and "Shine" are made habitual

SHINE — Keep the workplace neat and clean

For this project, OMH nurses used the Lean "5S" process. As indicated in the chart above, 5S is a simple but highly effective set of techniques that removes waste from a work environment through better workplace organization, visual communication and management, standardization, and general cleanliness. The 5S process helps to eliminate the need to search for items, creates a better-defined flow of materials and information, and reduces clutter, waste, and the probability of errors.

Lean Six Sigma: Guiding Process Improvement at OMH

Belts play a vital role in implementing the Lean process.

Belts are employees of an organization who have been trained in Lean improvement methods and lead a process-improvement team. Belts are responsible for making crucial decisions and devising strategy during the project-planning process.

To be successful as a Belt, an individual must have strong communication, problem solving, and leadership skills, as well as a desire to promote continuous process improvement. Once trained, all Belts are expected to promote the use of Lean methods at their locations and complete at least one project per year.

New Belts earn certification

Ten OMH staff members recently completed training to be certified as Belts. They join the ranks of approximately 45 Belts throughout OMH:

Green Belts

- **Kathryn Albano,** Sagamore Children's Psychiatric Center
- **Gina Bae,** New York City Field Office
- **Geralyn Caracas,** Mohawk Valley Psychiatric Center
- **Helen Matz,** Capital District Psychiatric Center
- **Sara Young,** St. Lawrence Psychiatric Center

Black Belts

- **Tracey Blackwood,** Capital District Psychiatric Center
- **Irene Estrin,** New York Psychiatric Institute
- **Kanika Jefferies,** New York City Children's Center
- **Stephanie Lilly,** Central New York Psychiatric Center
- **Heidi Reed,** Hutchings Psychiatric Center

In addition, **Kelly Bevins** of the Central Office LSS Unit recently became the first OMH employee to become certified as an **Empire Belt.**

Empire Belt certification is awarded by the New York State Lean Office to state employees who have demonstrated a mastery of leading process-improvement projects using Lean methods and tools. To become certified, Empire Belts must attend a two-day "Boot Camp" and additional trainings, and then facilitate multiple Lean projects — including an external project at another state agency.

There are currently 32 certified Empire Belts within New York state agencies statewide. Approximately 35 OMH staff have attended Boot Camp, the first step toward earning this certification.

Because OMH's contract with the University at Buffalo Center for Industrial Effectiveness to train Green and Black Belts will be ending soon, the Empire Belt will be the only option available for certification.

Staff who are interested in becoming a Belt should obtain approval from their Quality Director or other Executive level staff and notify the LSS Deployment Unit. For information on becoming a certified Empire Belt, please e-mail OMHLSS@omh.ny.gov. ᴼᴹᴴ

Kelly Bevins *(left) being presented with an Empire Belt certificate by* ***Erika Choi,*** *Director of the New York State Lean Office.*