



Business of Pediatrics

Pediatric **Health** Network





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Driving Healthcare Excellence with Lean

Using a Lean Thinking approach to drive Performance, Quality, and Staff Engagement

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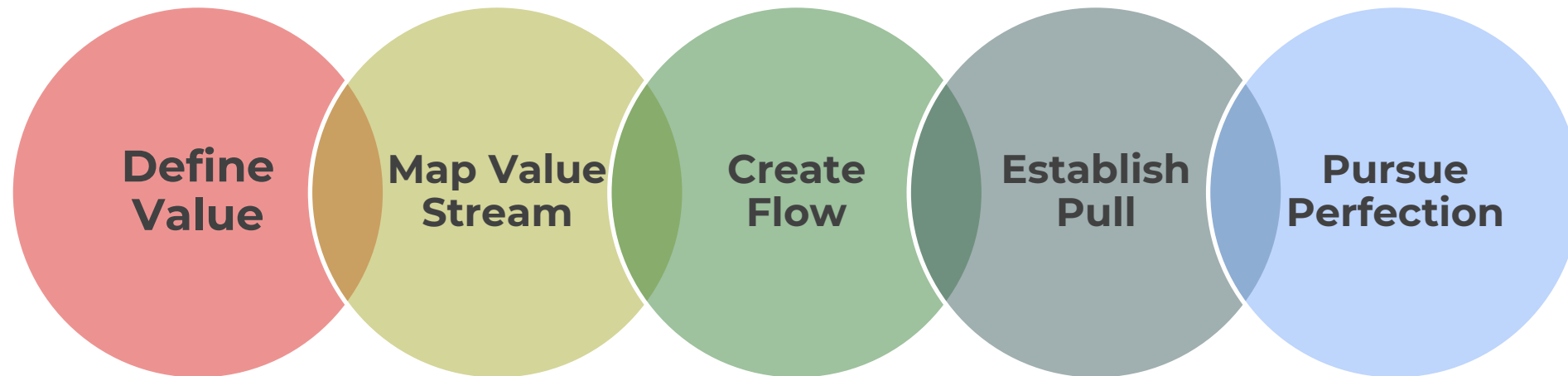
Agenda

- What is Lean Thinking?
- Adopting Lean thinking to a pediatric practice
- Current state – Go to Gemba
- Detecting operational waste
- Case Study
- Define the current state using the IS vs IS NOT happening matrix
- Act on the goal



What is Lean Thinking?

The Lean methodology is a management approach focused on maximizing customer value by reducing waste.



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What is Lean Thinking?

Lean Thinking **begins with people**: Empower staff to become **problem-solvers & change agents**.

Healthcare provides unique challenges:

- Processes are less visible
- Tradition of individuality
- Lack of meaningful data
- People can't be controlled like a machine
- Environment & expertise is often reactive



What is Lean Thinking?

Lean thinking's aim is to develop each person's self-sufficiency in problem-solving by supporting them in their continuous improvement activities.

Therefore, it is **not**:

One-time
communication
from top leadership

One-time
introduction of the
upcoming change

One-time training
session

Coercion or
intimidation

Assuming everyone
understands the
“why”

Owned solely by the
project team



What is Lean Thinking?

Respect for people:

- Authority to solve their own problems
- Respects team's decisions
- Employees' level of motivation to improve increases, which increases the value provided



Continuous Improvement:

- Incremental changes to solve problems
- Each problem is taken as a challenge
- Each solution is devised through a learning process
- Small constant improvements are turned into big improvements
- Process moves towards achieving the final goal - value creation for the patient



Adopting the Lean principles to a pediatric clinic

- Quality of care:** Treatments are effective, safe and achieve improvement over time.
- Cost efficient:** Financial resources are utilized wisely to provide optimum care.
- Patient centered:** Care is tailored to meet the patient's needs, preferences and awareness of value. This leads to satisfaction.
- Equitable:** High quality of care is accessible to all populations.



Our first step is to 'Go to Gemba'

Japanese term for “the actual place.”

Area where value is created.

Examples:

- Hospital: Operating room, patient room
- Clinic: Exam room
- Laboratory: Specimen draw room
- Clinical test: equipment room where test is performed





Defining the current state

'Go to Gemba' to identify the different processes underway.

KEY

Primary drivers for
patient flow and
treatment quality

Value adding

SUPPORT

Enables the KEY
processes to be done
better or faster

Value enabling

WASTE

Does NOT enable
process to be done
faster/better – Patient is
not willing to pay for this.
Non-Value Adding



Detecting operational waste



Defects



Overproduction



Waiting



Non-Utilized talent



Transportation



Inventory



Motion



Extra processing



Examples of Waste



Defects

Incorrect medical diagnosis, Wrong/Missing Vitals or Operation with bad outcome



Overproduction

Duplicate forms asking for same information, prepping vaccines before called for



Waiting

Waiting for the right resources to take the next step in care, waiting for necessary equipment



Non-Utilized talent

People unable to perform task due to lack of training, staff waiting for patients



Transportation

Patient or medication transport required; causing delay in next medical task



Inventory

Inventory in place but no longer needed or expired



Motion

Excess movement required to obtain supplies
Poor physical layout – resulting in extra motion



Extra processing

Nurse and Provider doing exact same step, reiterative communication for same visit



Table group exercise

10 minutes

Think of the various types of waste that you have seen in your own clinic.

Using the DOWNTIME template:

1. Each person thinks silently about waste: activities that are non-value adding (NVA) in their environment.
2. Use one sticky note for each different waste activity.
3. Using the laminated template at your table, go around the table and one-by-one, each person places one sticky note in the corresponding grid.
4. Continue to go around the table until all sticky notes are placed.
5. Discuss common NVA activities and priorities.



Case Study in a Pediatric Clinic

Clinic A: Providers indicate that they must wait for patients to be ready for the exam due to various reasons: Lack of gowning, lack of accurate and necessary vitals, lack of proper forms.

Clinic B: Patients are not ready when the Provider enters the room (gown, screeners, health forms, arm band).

So what? This causes delays in starting the patient exam and the overall visit.

The response: Form a team at each clinic to address 'Readiness.'



Defining the current state

Staff decided to '**Go To Gemba**' during a staff meeting to identify why patients were not prepared for the provider visit. Team members made observations using sticky notes and applied these to the IS/IS NOT Happening Matrix.

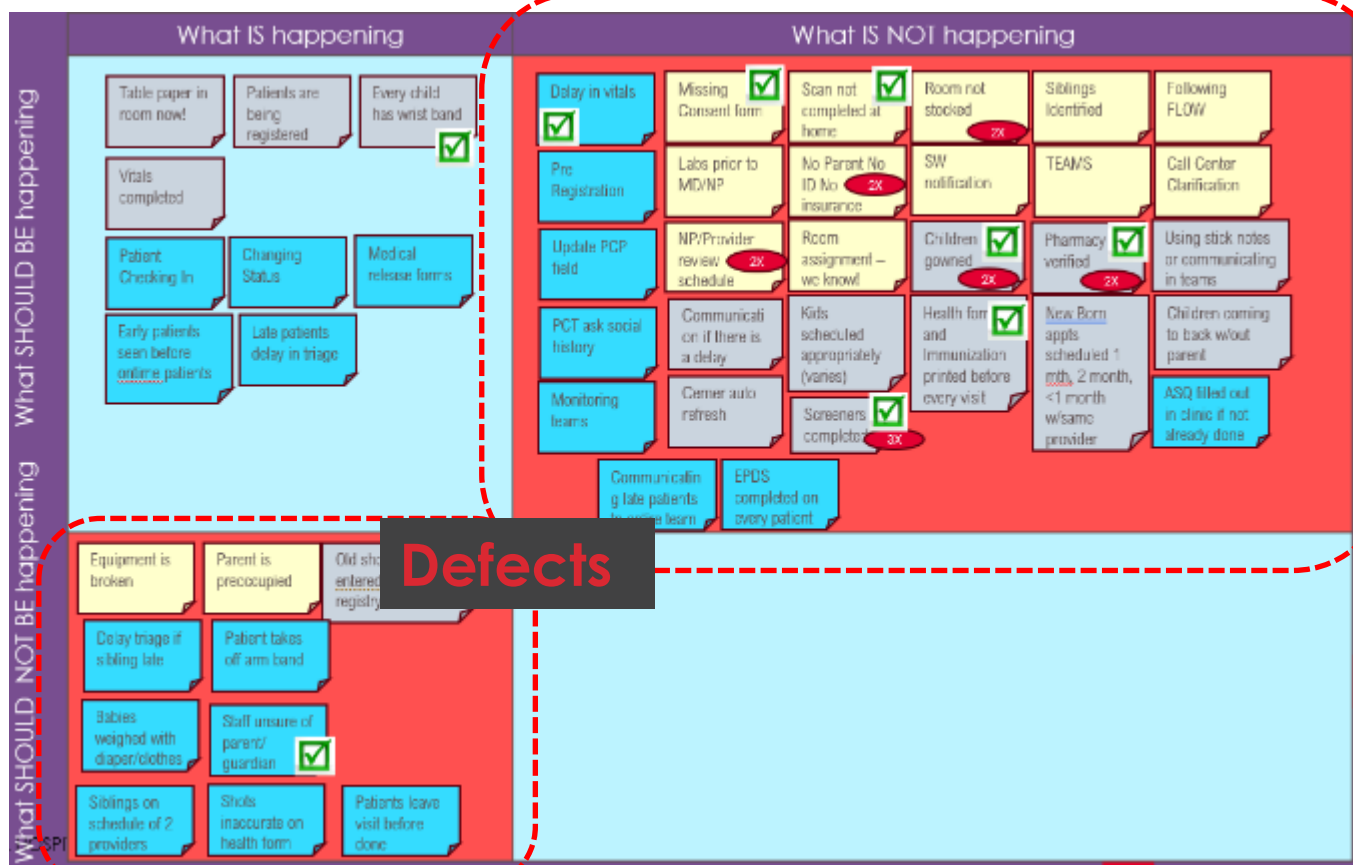
Some of the major defects were categorized as:

1. Inconsistent expectation of activities prior to being seen (gown, screeners, vitals and forms).
2. Not checking to ensure health forms & screeners were completed.
3. Appropriate gown sizes weren't available.
4. Spotty visual controls.
5. Equipment issues.



Narrow the Defects: Is/Is Not Happening Matrix

The Is/Is Not Happening Matrix



Don't try to solve world hunger.... Start with the 

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Narrow the Defects: Is/Is Not Happening Matrix

	What IS Happening	What IS NOT Happening
What SHOULD be Happening		Defect
What SHOULD NOT be Happening	Defect	

- Team based
- Identify key vs support processes
- Consider which activity *IS* or *IS NOT* currently happening
- Indicate if these activities *SHOULD* or *SHOULD NOT* be happening
- Map them on the 4-square matrix to identify which activities are DEFECTS:
 1. *IS* but *SHOULD NOT* be happening
 2. *IS NOT* but *SHOULD* be happening



Table group exercise

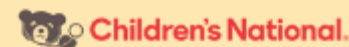
10 minutes

Example problem statement: *The patient is currently not properly identified, gowned, with all vitals and forms filled out. This causes delays in the starting the exam, which results in longer overall patient visits.*

Create your own 'Is/Is Not Happening' Matrix

1. Decide if this is the problem your table wants to address. If not – quickly describe a different problem.
2. Think of an activity that is either happening or is not happening related to the problem.
3. Each person writes one issue or pain-point per sticky note.
4. Using the matrix at your table, each person places their sticky notes in the corresponding grid.
5. Review as a team to ensure correct placement.
6. Narrow the focus to the key issues in the grids labeled “DEFECT”.

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Next - Identify key vs support processes

KEY

Primary drivers for
patient flow and
treatment quality

Value adding

- **Key** activities (value adding) included:
 1. Physically handing a gown to the patient and instructing on its use.
 2. Stocking the room with supplies.
 3. Supporting the patient in filling out forms.
 4. Obtaining vitals and answers to interview topics.

SUPPORT

Enable the KEY
processes to be done
better or faster

Value enabling

- **Support** activities (value enabling) included:
 1. Willingness of the patient.
 2. Setting up the room prior to exam.
 3. Guardian identification
 4. Printing health forms.



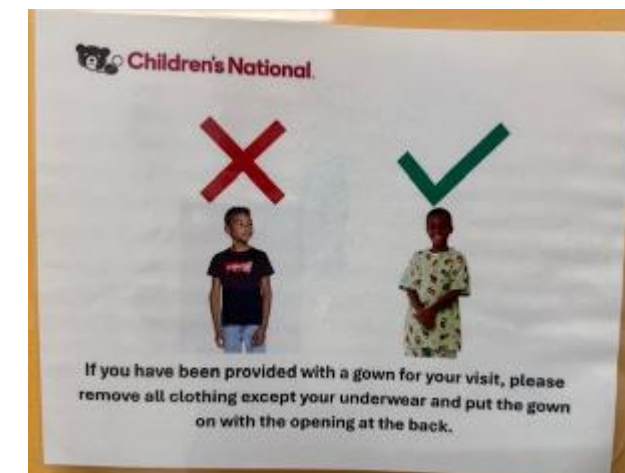
Acting on the goal

After observing, gathering data and conducting an improvement Kaizen*, the team

- Created **new visuals** to help team understand how to perform the readiness process
- Redefined **standard work** and trained PCTs
- Used a screener '**cheat sheet**'
- Created a standard on a **completed health form**
- Updated the **standard practice sheet for 5+** sport screener
- Developed guidelines when to use **quick intake**
- Designed new marketing-approved **gowning visuals** to post for families in visit rooms
- Established **control plan** to continue to measure and respond to current situation

Completed Health Form

Visual – how to gown

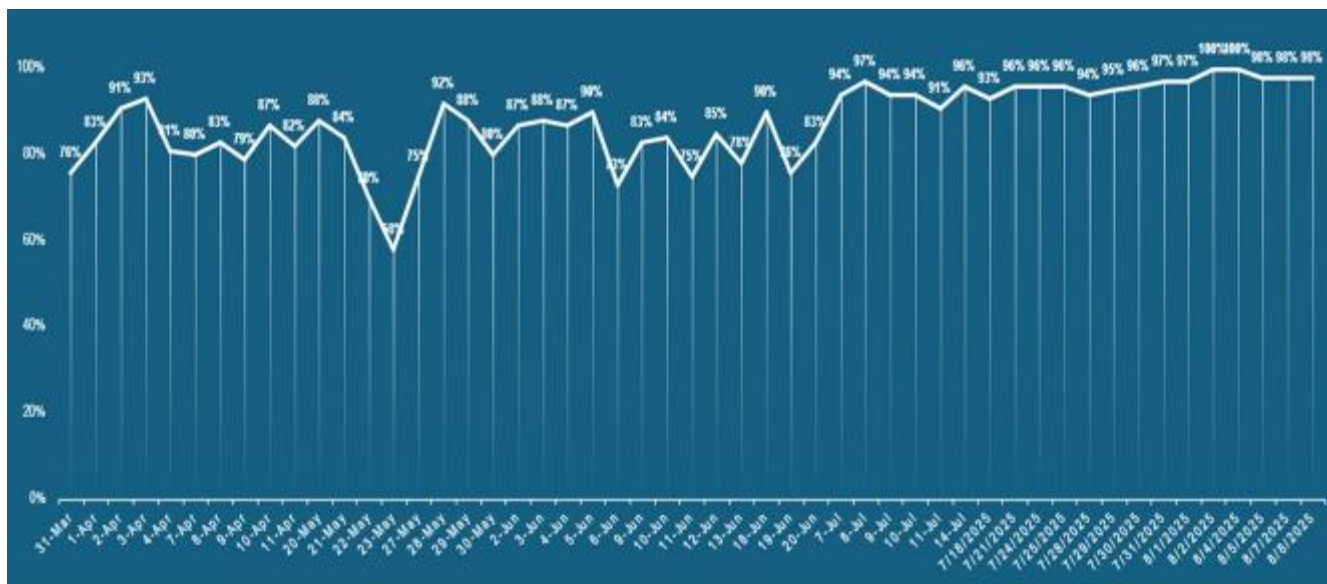


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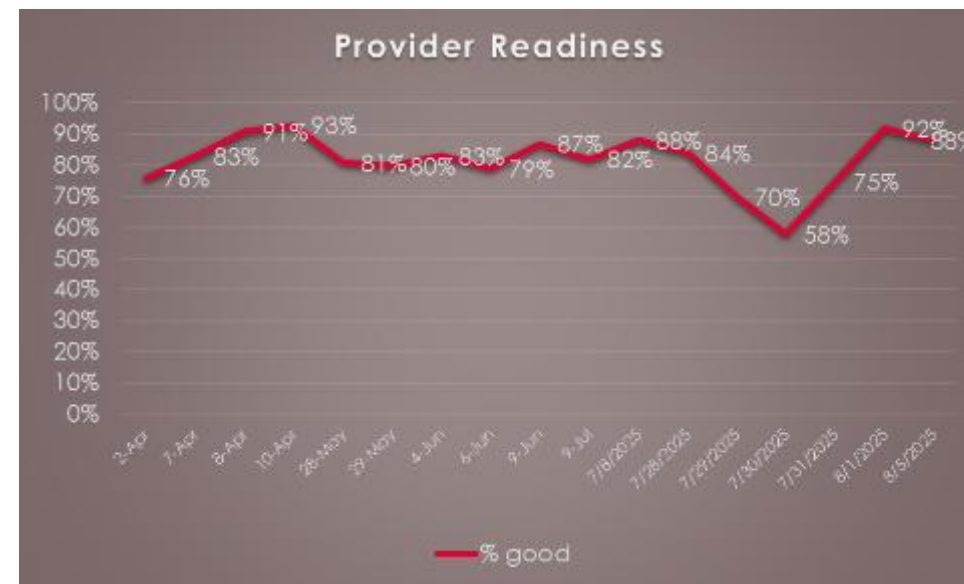


Acting on the goal

Clinic A results

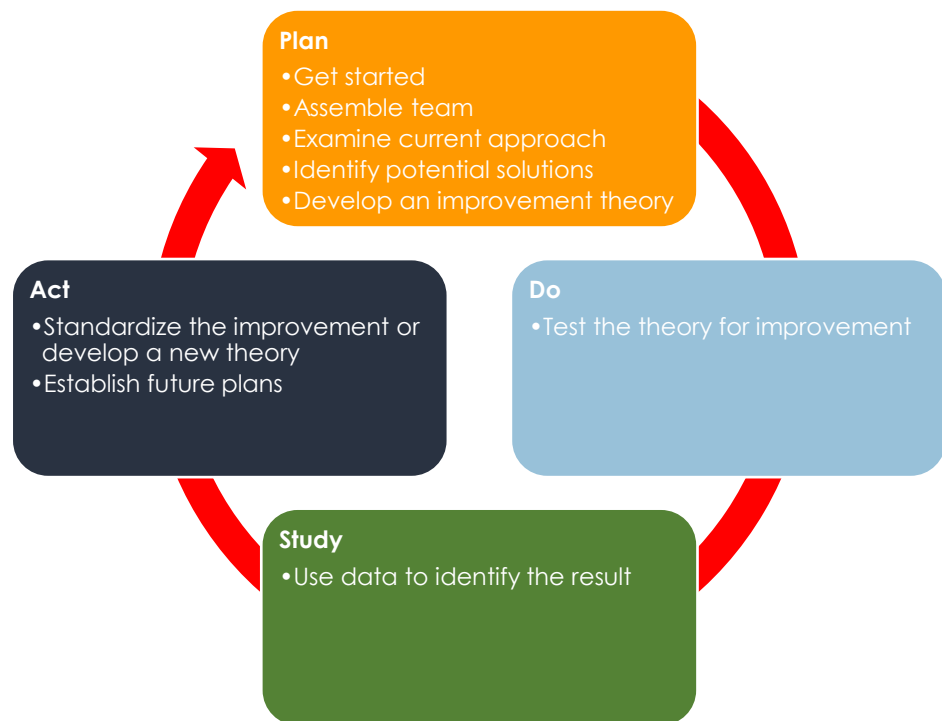


Clinic B results

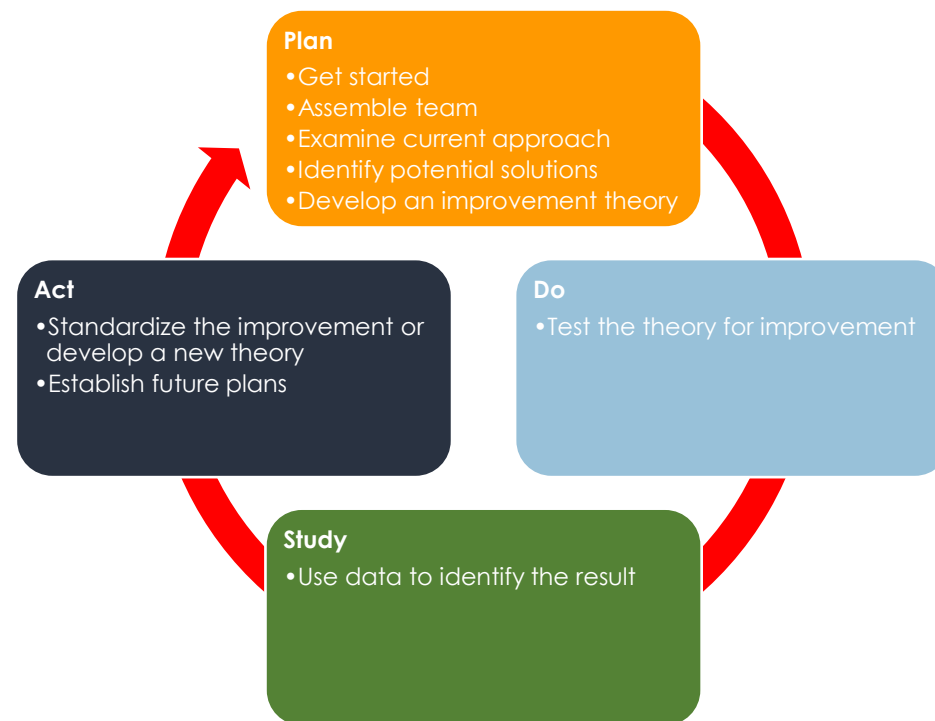




Acting on the goal



Learn!



Learn!

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Lean Thinking Summary

- Lean is about maximizing patient value
- Staff are empowered to be problem-solvers
- Healthcare poses unique challenges which often lead to delays and longer visits
- Incremental change builds towards continuous improvements in patient care and efficiency
- Teams use 'Go to Gemba' and practical exercises to identify value adding, value enabling and waste processes
- Acting on the goal is centered around practical solutions such as improved visuals, standardized checklists, staff training and updated standard work

Thank you



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