



# STAFFING WORKFLOW OPTIMIZATION USING PROCESS IMPROVEMENT METHODOLOGIES

March 23, 2022 | NRHA

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# Agenda

- 1 Welcome and Introductions
- 2 Current Healthcare Staffing Situation and How We Got There
- 3 Value Added vs. Non-Value-Added
- 4 Solutions – 4 Parts
- 5 Application to Workflow
- 6 Q & A Discussion

# Meet the Speakers



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# **Current Healthcare Staffing Situation and How We Got There**

# "US faces crisis of burned out healthcare workers"

**Nearly 1 in 5 Health Care Workers Have Quit Their Jobs During the Pandemic**

**Nurses and the great attrition**

A recent McKinsey survey found that more than 30 percent of nurses are thinking of leaving direct patient care. What can be done to inspire them to stay?

**Not-for-Profit Healthcare Staffing Shortage Has Long-Term Effects**

**Rising Ambulatory Volume Strains Understaffed Practices: Report**

*'Nursing Is in Crisis': Staff Shortages Put Patients at Risk*

*The 2021 American Hospital Association's Environmental scan projects a shortage of 500,000 RNs by 2026.*

# "US faces crisis of burned out healthcare workers"

## The Shrinking Rural Workforce: Jobs Increase, but Number of Workers Declines

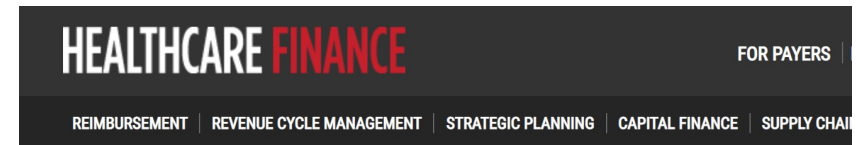
NEWS

### Emergency order issued on hospital staffing, space

Elective procedures may be reduced by 50%

crisis  
gig

By Dylan Scott | @dylanlscott | dylan.scott@vox.com | Nov 8, 2021, 10:10am



OCT 07 | MORE ON WORKFORCE

## Staffing shortages ramp up recruitment pressure on hospitals

One bright spot in the Moody's report shows rising nursing school enrollment, leading to a more robust long-term staffing pipeline.



Nathan Eddy



# What Healthcare Organizations Are Facing...



Staffing and price  
gouging of  
agencies

Staff shortages  
and fatigue

Aging workforce

Finding personal  
balance between  
multiple roles

Rising salary costs,  
especially to  
recruit and retain  
nurses

Staff shortages  
and cost of  
supplies due to  
COVID-19

# How We Got Here

- › Nursing shortage perspective
  - › Aging workforce
  - › Declining number of faculty for nursing schools
    - › Aging faculty
  - › Decreasing number of clinical sites and resources
  - › Hospital expense reduction in the largest cost center
  - › Pandemic (multiple reasons)
  - › “Burnout”
  - › Increased need to support an aging population



# Risks of Not Addressing



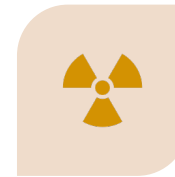
REDUCING BED  
CAPACITY



SHUTTING  
DOWN  
CLINICAL  
SERVICE LINES



QUALITY AND  
SAFETY  
CONCERNS



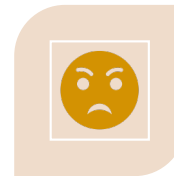
ADVERSE  
EVENTS



STAFF MORALE  
AND CULTURE  
IMBALANCE



FINANCIAL  
STRAIN



DISSATISFIED  
PATIENTS



# **Value Added vs. Non-Value-Added**

# Non-Value-Added = WASTE

*In healthcare, waste is any expenditure of time or resources that does not contribute to the efficient delivery of patient care, i.e., doesn't add value to the patients' experience*



# Waste Impacts the Patient, the Staff, and the Organization



## **Bad patient experience**

- Long waiting time for essential services
- Increased stress
- Less time for care, education, and research
- Redundancy in information and treatment



## **Decreased staff morale**

- Unpredictable/uncontrollable work schedule (called off and called in)
- Redundant paperwork and
- No time for education, psychosocial care
- Constantly running around, putting out fires
- High staff turnover



## **Operational options are limited**

- Full house leads to declining new patient transfers and admissions
- Clinic hours are limited
- Increasing costs from “waste” in use of physical materials and staff

# Waste of Motion

- › Searching for patients
- › Searching for medication
- › Walking to equipment that is not centrally located
  - › Example-Arm band printer
- › Searching for poorly organized or located supplies



rona consulting group standard work sheet UGATE

area/location: UGATE operation: UGATE date of observation: 10/10/11  
 subject observed: MA sequence: 1 from: 10:00 to: 10:15  
 (pt, nurse, etc.): MA process: UGATE observer: UGATE

quality check safety precaution standard WIP # pieces of WIP takt time elapsed time for one observation

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rona consulting group standard work sheet EPIC DOTS

area/location: EPIC DOTS operation: EPIC DOTS date of observation: 10/10/11  
 subject observed: MA sequence: 1 from: 10:00 to: 10:15  
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# Waste of Defects

- › Medication errors
- › Wrong patient information
- › Wrong procedure performed
- › Critical missing information
- › Duplicate medical records



In the US, deaths from medical errors equal an airliner crashing every day

A mistake becomes a “**defect**” when an uncorrected error reaches the customer, such as a provider completing entry

# Waste of Transport

- › Transporting patients to surgery prematurely
- › Moving samples, specimens or equipment, early, or to the wrong location
- › Moving patients or equipment long distances due to poor layout



Many patients are moved multiple times within the same level of care during an inpatient stay creating lots of waste and extra work



# Waste of Unused Human Potential

- › Look for where we are using our people to do non-value-added work which is routine



## EMPLOYEE TRIFECTA





# Waste of Inventory

- › Duplicate medications and supplies in excess of normal usage
- › Extra or out of date supplies or medications
- › Excessive office supplies
- › Obsolete charts, files and equipment



How many folks have ever discovered out of date meds, forms or other items?  
How many have instituted a system to correct this?

# Waste of Overproduction

- › Testing ahead of time to suit Lab schedule.
- › Making extra meals for patients who have been discharged
- › Printing, emailing, sending or faxing the same document
- › Treatments done ahead or after schedule to balance hospital staff or equipment



Producing extra reports no one will ever look at anymore!!!

Why are so many papers printing on our network printer??

# Waste of Waiting

- › Patients waiting to be seen
- › Delays in bed or room allocation
- › Delays for lab test results
- › Delays for radiology test results
- › Patients back up due to equipment not working properly



In the ED you may wait to get triaged, wait to get seen, wait for labs, wait for a bed, wait for transport, wait for handoff, wait for consults, etc.

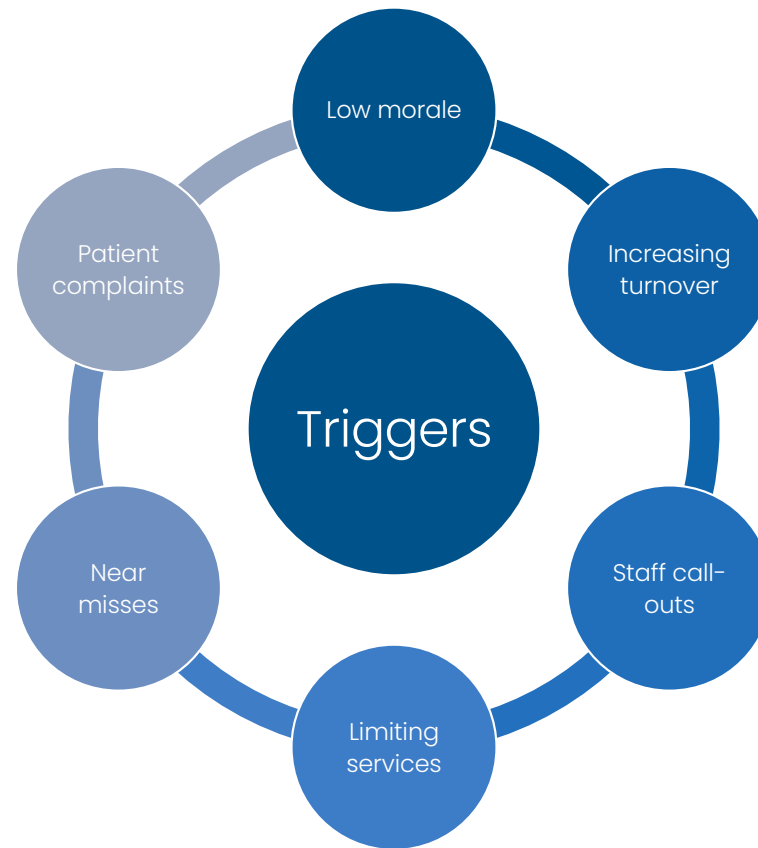
# Waste of Over-Processing

- › Entering repetitive information
- › Completing excessive paperwork
- › Ordering more diagnostic tests than the diagnosis warrants
- › Retesting because a staff member obtained the specimen incorrectly



Many staff and patients feel they have to enter the same information in many places and need to enter a different password to get into multiple different systems to do this

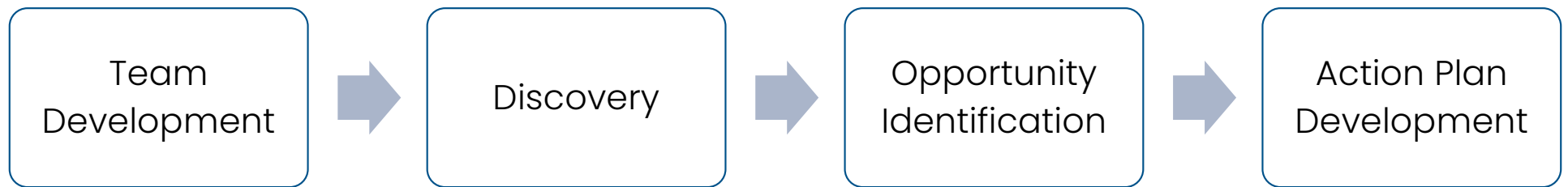
# Identification of Focused Department





# Solutions – 4 Parts

# Effective Process



# Team Development

**3 – 3 – 3 Method** – Selection of members should include:

- One third *front line staff* of focus department i.e., floor nurse or MA in clinic
- One third *key stakeholders* i.e., others who interact with focused department such as lab personnel or registration staff
- One third *other members* i.e., others who have no working knowledge or direct interaction with focus department
- *Sponsor* i.e., a leader who can authorize organizational change (CEO, Physician, CNO)
- *Facilitator* i.e., select a neutral person to keep team on track (educator, HR)



"FRESH  
EYES"



# Team Development



## How many members?

Size of area or department matters



## Establish YOUR rules of engagement

Examples:

- No rank—leave your title at the door
- No cell phones—put them in a box at the door
- Use the Golden Rule
- If you oppose, you must propose
- No sidebar conversations
- No such thing as a bad idea
- Be respectful
- Be on time
- Vegas rules
- Everyone participates
- Stay on track, no lost in the weeds (use your parking lot)
- Never leave in silent disagreement
- Laugh a little. Have fun!

# Discovery



WHAT IS  
PURPOSE???



WHAT IS THE  
BURNING  
PLATFORM?



WHY NOW?



WHAT ARE WE  
TRYING TO  
ACCOMPLISH?

# Discovery

Your “burning platform” should:

- Single out a specific process to focus your efforts in a manageable way
- Identify the starting and ending points of your process to keep the team focused on the right goals
- List benefits of what your team hopes to accomplish by improving your process(es)
- List the imperatives to lend a sense of urgency to the work your team will do
  - “Why does our team get together?”
  - “Why do we need to improve this starting today?”

# Discovery

We aim to improve \_\_\_\_\_ *(name the process)* in  
\_\_\_\_\_ *(clinical / administrative location)*. The process begins with  
\_\_\_\_\_ *(where/when the process begins)* and the process ends with  
\_\_\_\_\_ *(where/when the process ends)*.

By working on this we expect to: *(list future benefits)*

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

It's important to work on this now because: *(list present reasons)*

|       |       |
|-------|-------|
| _____ | _____ |
| _____ | _____ |

# Discovery

## Retrieve baseline data

- Department specific data may include utilization data, department scheduling, staffing matrix, turnaround/throughput times, current benchmarks/goals, and other information to assist in the development of a gap analysis of current and future state

## Interview and observe

- Gain insight regarding current processes, roles and responsibilities, and results, with a focus on perceived strengths, gaps, barriers, and improvement opportunities
- Directly observe current activities , communication processes, collection of time-study data on work volumes, shrinkage or unavailability and workflows

# Opportunity Identification

## Value Stream Mapping (VSM)

- › Provides an opportunity to analyze a current process and identify inefficiencies (steps that do not add value to the customer/process)
- › Document and fully understand a current process
  - › “I already do that step, why does he/she do it again?”
  - › “I didn’t know this many people were involved ...”
  - › “Why do we do that step?”
  - › “I didn’t realize we did it that way...”

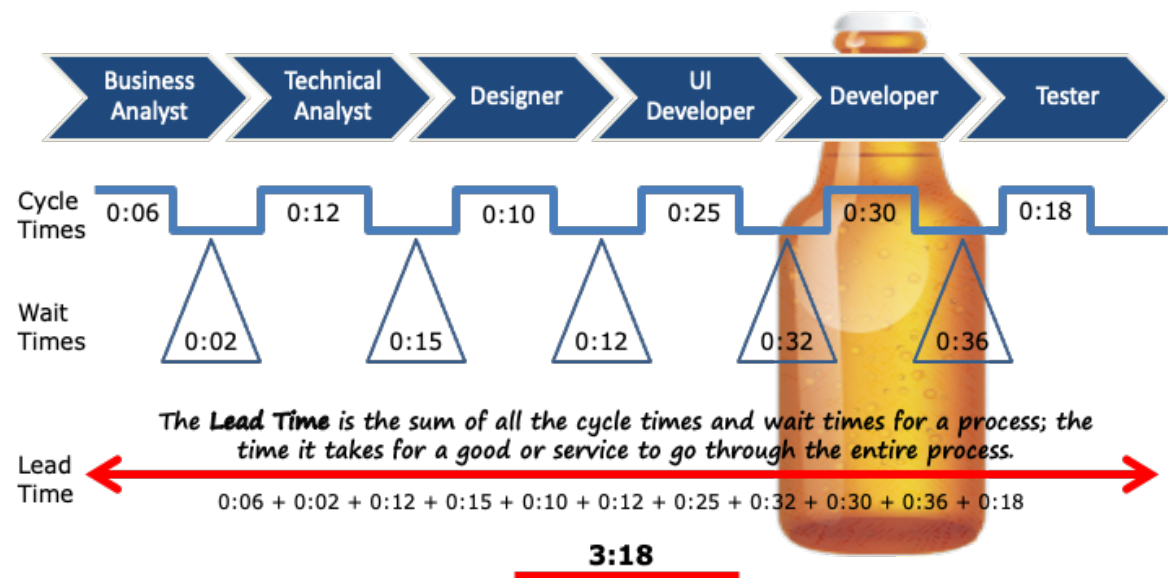
"Whenever there is a product for a customer, there is a value stream. The challenge is in seeing it."

– Rother and Shook

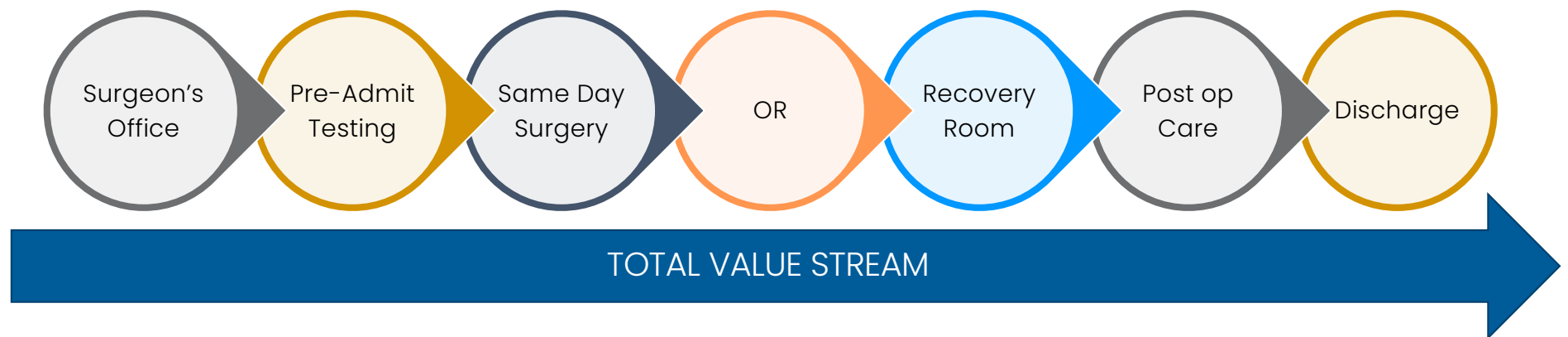
# Opportunity Identification

Mapping of the current and future state including capacity models (workforce needs to support defined activities) for individual and aggregate processes of a specific department.

This mapping includes, but is not limited to, a gap analysis by which we identify non-value added activities, variability in practices, silos, and areas of suboptimization within workflows. The VSM will be used to identify the areas where focused Rapid Improvement Events (RIEs) are needed.

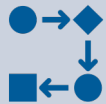


# Opportunity Identification





# Action Plan Development



What changes can we make that will result in an improvement?



Utilizing a priority matrix will help to determine the sequencing of Rapid Improvement Events (RIEs) with recommended gap closing options and expected impacts based on VSM



For each RIE action steps will be determined by the team

Where appropriate, immediate (short-term) process changes will take place and be monitored for success  
For more complicated action steps (medium-term and long-term), an implementation plan with owners and timelines for completion will be created

# Action Plan Development

## IMPROVEMENT IMPLEMENTATION

- Determine how will we know that a change is an improvement?
- Monitoring will assist with the sustainment of processes changed/improvements made or proactively address areas where countermeasures may need to be created
- Meeting standards can help maintain a rhythm of improvement
- Develop the discipline and pace of improving based on your team/unit's needs
  - Types of events to keep the rhythm going:
    - **Daily:** 5–7-minute huddles to focus on the day, review the change that the team is testing
    - **Weekly:** Improvement meetings to lead initiatives, brainstorm and select change ideas to test
    - **Monthly:** All-staff meetings to reflect on prior and current month, overall progress of improvements, etc.
    - **Yearly:** All-staff retreat to review the past year, plan for the upcoming year, celebrate as an organization

A large, light blue silhouette of a lighthouse is positioned on the left side of the slide, extending from the top to the bottom. The lighthouse has a multi-tiered lantern room with a grid pattern.

# Applications to Workflow

# Applications to Workflow

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Standardization of supply room to access supplies with ease and decrease waste of expired supplies (6S) and ensure needed supplies are “just in time”

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Identify redundancies within the documentation process to eliminate wasted time

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Explore opportunities to centralize functions to provide increased efficiency

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Decrease unnecessary physical movement of staff such as searching for equipment and walking to pharmacy for medications to improve process time and fatigue

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Reduce dysfunctional silos that encourage batching and delays

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Decrease delays in OR start times to improve flow and volume

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Ensure appropriate tests and diagnostics are resulted in a timely manner to decrease delays

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# Questions?



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