

The Network for Exceptional Care

# The use of lean methodology to improve ED collections

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Presenters: Mike Simms Steve Matteson



### Mike Simms

Joined Cone Health in March, 2013. As System Vice President of Revenue Cycle, Mike is responsible for patient pre-services and access; hospital and physician billing, collections and customer service. Cone Health is a not for profit 6 hospital health system with 1,253 beds along with various outpatient clinics and over 300 employed physicians.

Mike has 30 years of health finance background including serving as Pacific Region CBO Director for Universal Health Services, Murrieta California, Administrative Director of Patent Financial Services, Frye Regional Medical Center, Hickory, North Carolina, Patient Financial Services Director at Hilton Head Regional, Hilton Head Island, South Carolina, and Business Office Director, Houston Northwest Medical Center, Houston, Texas.

Mike is an advisory board member to Patientco, HIMSS Revenue Cycle and Experian Health Client. In July, 2016, Mike was recognized by Becker's Hospital Review as one of the "Top 15 RCM leaders to know".

Mike holds a Bachelor of Science from the University of Akron and a Master of Business Administration in Healthcare Management from University of Phoenix. Mike is a current member of HFMA.



### **Steve Matteson**

Steve Matteson joined Simpler in 2005 with decades of experience across a variety of industries. During this time he led and delivered multiple successful Lean transformations. Steve's Lean journey started with a visit to Japan in 1989. At three different companies he was partnered with a Japanese company to produce automotive parts in the US. His lean development includes sensei guidance from Shingijutsu.

Throughout his career in Lean transformations, Steve has held various leadership positions as Production Manager, Plant Manager, Division Manufacturing Manager, General Manager, VP and Executive VP.

Steve started his career at Simpler by supporting Healthcare clients and has been focused on this industry ever since. He has served in multiple progressive positions at Simpler: Senior Consultant, Director, VP, GM and was a Simpler Partner at the time of the Truven acquisition in 2014. He remains with the Simpler group, now part of the IBM Watson Health division, after IBM acquisition of Truven in 2016. Presently he leads Simpler's Consulting Revenue Cycle Practice partnered with the global IBM revenue cycle practice.

Steve serves on multiple Advisory Boards: ISE Group at RIT, Rochester, NY - HVN Group at Thedacare, Appleton, WI and the Simpler Healthcare Council.

He has been a speaker at IHI (Institute of Healthcare Improvement), AME (Association for Manufacturing Excellence – healthcare track), Guest Lecturer at Columbia University Executive MPH class – lean primer.

Steve earned his Master of Business Administration at the University of Toledo and a Bachelor of Science degree in Industrial Engineering from Rochester Institute of Technology. He was inducted into the Industrial Systems Engineering Hall of Fame at RIT in October 2016.



### **Cone Health**



The Network for Exceptional Care

Cone Health is a 6 hospital, 1,253 bed health system with various outpatient clinics and over 400 employed physicians. Cone Health is located in Greensboro, North Carolina. Key statistics ending June, 2017. FY ends September, 2017

| Net Revenue                 | \$1,370,206 million |  |  |
|-----------------------------|---------------------|--|--|
| Discharges                  | 44,075              |  |  |
| Average Daily Census        | 779                 |  |  |
| Observations and Recoveries | 15,342              |  |  |
| ER Visits                   | 270,238             |  |  |
| OR Cases                    | 30,825              |  |  |
| Physician Visits            | 164,562             |  |  |
| Paid FTE's                  | 8,558               |  |  |

### Our approach to improvement

- The patient defines value
- Deliver value to the patient on demand (flow)
- Standardize and solve to improve
- Transformational learning requires deep personal experience
- Mutual respect and shared responsibility enable higher performance
- Based on two simple concepts
  - Respect for people and society
  - Continuous Improvement



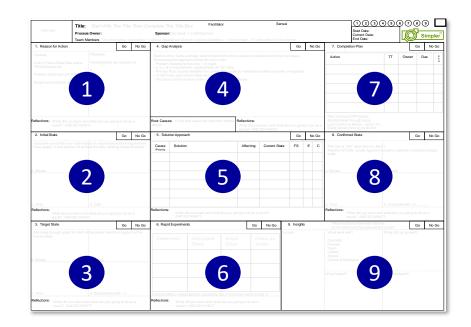
# A3 Thinking

#### An A3 is:

- logic distilled on to 1 sheet
- story without a story-teller
- structures the activity
- sharing knowledge
- built in quality

#### Steps to create an A3

- 1. State the problem
- 2. Measure the initial state
- 3. Set the target state
- 4. Find the root cause
- 5. Develop a solution
- 6. Test the hypothesis
- 7. Create a plan
- 8. Track the benefits
- 9. Share the knowledge



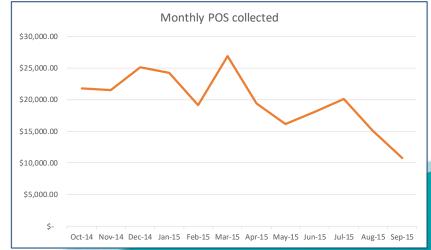
#### **Remember:**

- if you can't read it, there is too much
- it's live, lasting at least 90 days until confirmed state = target state



## **Current State of ED collections**

- Average daily visits of 315
- Only 15% of patients go through the D/C & POS Collection process; collecting only on 0.5 % of eligible patients.
- Clinical and Clerical staff perceive that they have conflicting priorities.
- High employee turnover rate resulting in having a portion of the team in constant training mode.
- Lack of standard work





## The use of lean to improve collections

- 4.5 days RIE and A3 thinking to solve a complex issue
- Multidisciplinary team lead by a lean expert
  - Registration
  - ED Lead
  - Physician
  - Financial counselor
  - Training leader
- Aimed to streamline the process and improve the total collections
- Align to the overall Revenue Cycle goal of improving collections as a % of Net patient revenue



### Understanding the current state



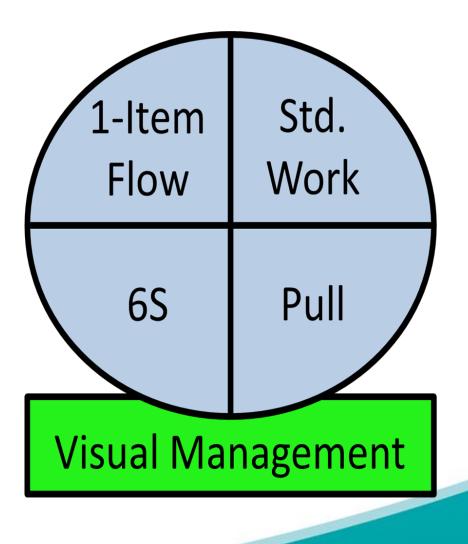
- Review data gathered and prep cycle
- Discuss and update the current state map
- Perform team Gemba walks to observe the process
- Identify waste



# Creating the target solutions

- Identified the key requirements
  - Registration and financial discharge done in 1 step
  - Ensure referrals for financial counseling
- Identify gaps from current state
- Brainstorm possible solutions





# **Experimenting in the Gemba**

- Developed solutions to close the gap between target and current state
- Experimented in the Gemba the more feasible solutions

| Experiment   | Anticipated Effect   | Actual Effect  | Follow-up Action   |
|--|--|--|--|
| Create a flow to see the patient for Full Reg and<br>Financial Discharge in 1 touch + conduct<br>Financial Counselling in the room at the end of<br>the visit            | All Patient Access services provided to the<br>patient in the exam as part of the ED visit                         | Financial Counselling is long an ties-up the<br>exam room. Pt not in a state of health to<br>participate in F/C conversation nor do they have<br>the appropriate documentation | Model rejected. Will be modified to o Financial<br>Counselling outside the Exam Room   |
| Create a flow to see the patient for Full Reg and<br>Financial Discharge in 1 touch + conduct<br>Financial Counselling in an office setting<br>outside the exam room     | All Patient Access services provided to the patient as part of the ED visit. Reduce patient touches for registrars | Pt not in a state of health to participate in F/C conversation nor do they have the appropriate documentation  | Model rejected. Will be modified to do short<br>Financial Counselling discussion and refer the<br>patient for a future F/C visit |
| Create a flow to see the patient for Full Reg and<br>Financial Discharge in 1 touch + a short<br>Financial Counselling discussion and refer for a<br>follow-up F/C visit | Full Reg & Financial Discharge conducted in 1  | 100% of patients seen, collected on 66% of the patients with financial liability   | Continue testing and deploy  |



# **Creating Standard Work**

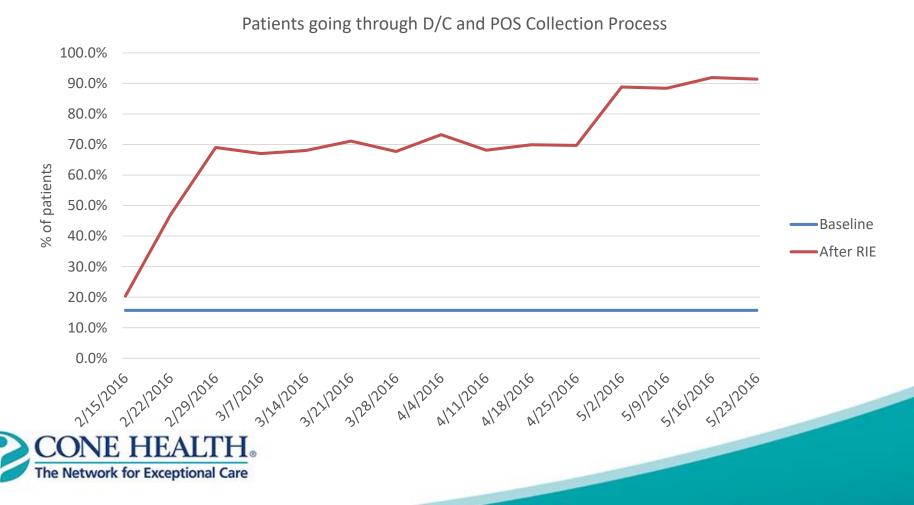
- Based on the learning of the experiments the team developed:
  - Standard work
  - Training plan
  - Communication plan
  - Audit process

| Purpose: To provide the steps<br>necessary to complet<br>Registration and Fin<br>Clearance Process |  |   | Standard Work Sheet                       |                                      |                             |  |
|--|--|---|---|--------------------------------------|-----------------------------|--|
|  |  | complete the<br>and Financial   | Process:                                  | ED Full Re<br>Financial              |                             | tration and<br>charge                                      |
| Step   | Description/Trigger  | Imag  | e/Key Poir                                | nt/Verbiage                          | Who                         | When   |
| 7  | Review the patient's account, to review insurance information.<br>Should you determine the patient has the following insurance coverage Medicaid, dual insurance, Med pay. Worker's comp you can complete the registration process as Jong as, the triage process has been completed. In assistant has not seen the patient.<br>(Note: if no insurance is found, check the kiel/kaid wessile to determine if the patient has Medicaid. You will need to verify the Insurance information when f3.) |   |   |                                      | Patient<br>Access<br>Team   | Prep<br>account<br>before<br>visiting<br>patient's<br>room |
| 5  | Pull up SurePay Health to<br>determine patient liability, based<br>on insurance information.   |   |   |                                      | Patient<br>Access<br>Team   | Obtain<br>Patient<br>Liability<br>using<br>SurePay         |
| 9  | FOR PATIENTS WITH<br>FINANCIAL LIABILITY ONLY<br>Using the ED Registration Log.;<br>write the following for patient:<br>+ HAR #<br>• Insurance Type<br>• Copay/Coinsurance amount  | No.         No.           1         14 mg dot           2         2           4         2           5         2           6         2           7         2           8         2           9         2           1         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           2         2           3         2           3         2           3         2           3         3           4         3           5         3           5         4           5         < |   | Nex closer te                        | Patient<br>Access<br>Team   | Prep<br>account<br>before<br>visiting<br>patient's<br>room |
| 10   | Go to the patient's room.     Knock to enter.  Introduce yourself following AIDET and determine if the patient has seen the doctor or physician assistant yet.   | Script: "Hello. I'm<br>[padent's name]:<br>yet?"  | [ <mark>NAME, TITI</mark><br>7 Has a docu | LE]. Are you<br>or been in to see yo | Patient<br>Access<br>u Team | Before<br>determine<br>if a patien<br>has seen<br>a Dr     |



### **Results obtained and sustained**

# Increase the % of eligible patients that went through financial discharge from 15% to 91%



### Results obtained and sustained

### Increase the % of eligible patients that paid from 0.5% to 8%



### **Results obtained and sustained**

### Improved POS collections – from \$48K to \$96K monthly Average Standard Work developed at Moses Cone spread to other ED's



ED POS Collections Fiscal 15, 16 & 17 July YTD



## **Top Lessons Learned**

- 1. It is important to really understand the current state
- 2. People involve in the process daily have the best solutions
- 3. Create a model and then spread
- 4. This is a continuous journey; there is always room for improvement



## Acknowledgements

- Charlynne Lynch
- Revenue Cycle Leadership
- Patient Access VSST
- Dr Allen
- ED nursing staff & ED Patient Access team





