



CONE HEALTH®

The Network for Exceptional Care

The use of lean methodology to improve ED collections

September 21, 2017

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



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

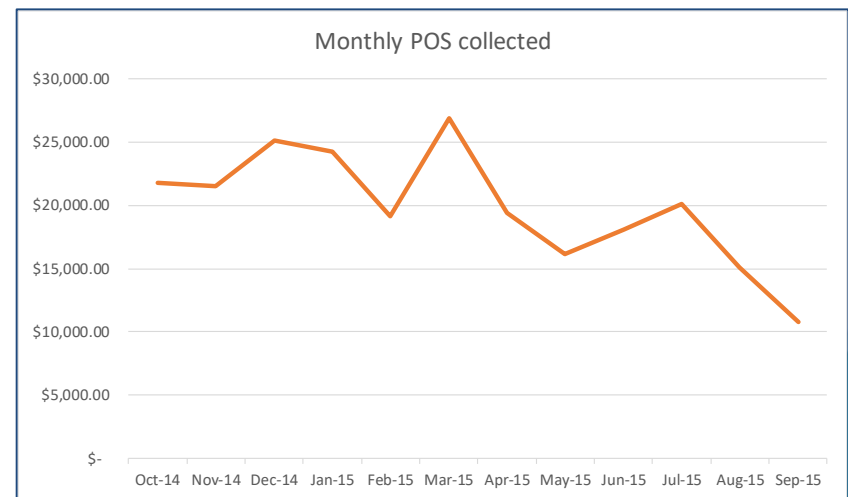
Title: How Will We Use Then Complete The Use Box		Facilitator	Sponsor	
1. Reason for Action <input type="checkbox"/> Go <input type="checkbox"/> No Go Current: Link to Future State Map and/or Process Map(s) Problem statement and the problem location Scope and boundaries		4. Gap Analysis <input type="checkbox"/> Go <input type="checkbox"/> No Go Goal to achieve: Root causes identified to root cause The top 3 root causes are in order		7. Completion Plan <input type="checkbox"/> Go <input type="checkbox"/> No Go Action TT Owner Due
2. Initial State <input type="checkbox"/> Go <input type="checkbox"/> No Go Measure one of the key numbers to gain information on current state How many in that location in that time period, relative to target?		5. Solution Approach <input type="checkbox"/> Go <input type="checkbox"/> No Go Cause Priority Solution Affecting Current State FS E C		8. Confirmed State <input type="checkbox"/> Go <input type="checkbox"/> No Go Monitor ACTUAL results against the metrics defined in initial and target state
3. Target State <input type="checkbox"/> Go <input type="checkbox"/> No Go Set target through goals for each of the above metrics Future State		6. Rapid Experiments <input type="checkbox"/> Go <input type="checkbox"/> No Go Experiment Anticipated Effect Actual Effect Follow up Action		9. Insights <input type="checkbox"/> Go <input type="checkbox"/> No Go What have we learned? What did we not learn?

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



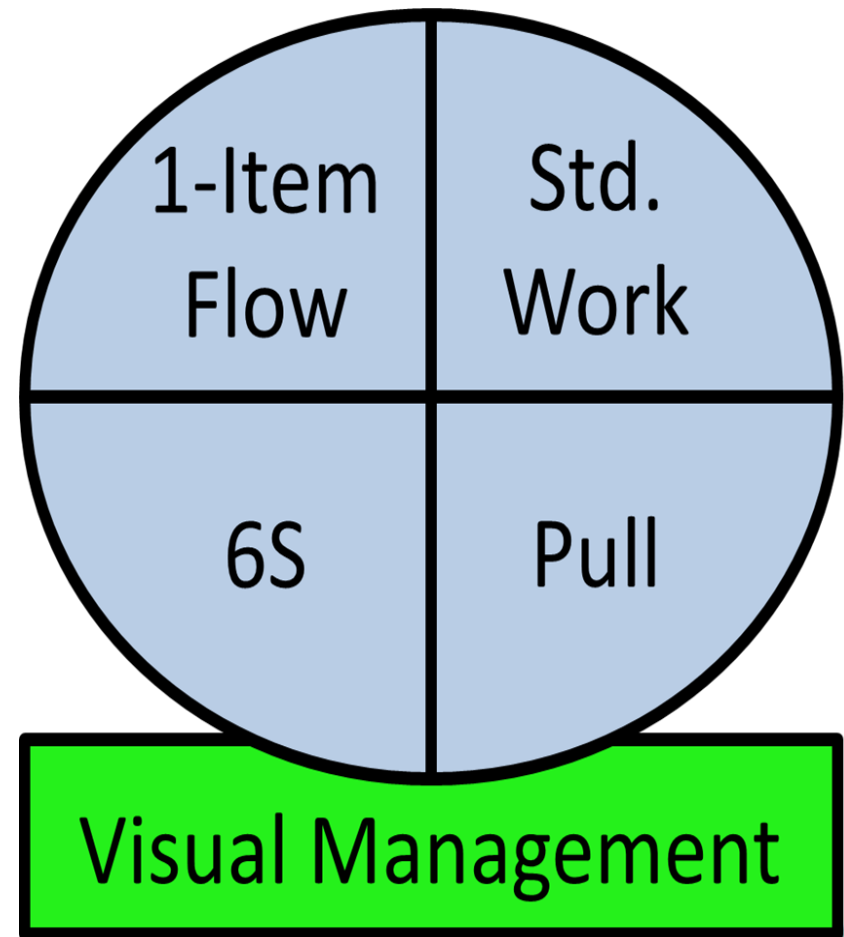
Day 1

- 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

Day 2

- 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

Day 3

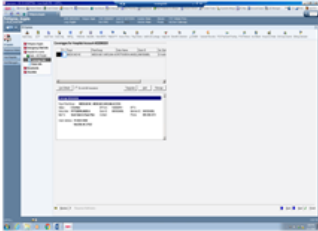
- Developed solutions to close the gap between target and current state
- Experimented in the Gemba the more feasible solutions

Experiment	Anticipated Effect	Actual Effect	Follow-up Action
Create a flow to see the patient for Full Reg and Financial Discharge in 1 touch + conduct Financial Counselling in the room at the end of the visit	All Patient Access services provided to the patient in the exam as part of the ED visit. Reduce patient touches for registrars	Financial Counselling is long an ties-up the exam room. 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 o Financial Counselling outside the Exam Room
Create a flow to see the patient for Full Reg and Financial Discharge in 1 touch + conduct Financial Counselling in an office setting 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 Financial Counselling discussion and refer the patient for a future F/C visit
Create a flow to see the patient for Full Reg and Financial Discharge in 1 touch + a short Financial Counselling discussion and refer for a follow-up F/C visit	Full Reg & Financial Discharge conducted in 1 patient touch. Capture new Medicaid potentials for further Financial Counselling	100% of patients seen, collected on 66% of the patients with financial liability	Continue testing and deploy

Creating Standard Work

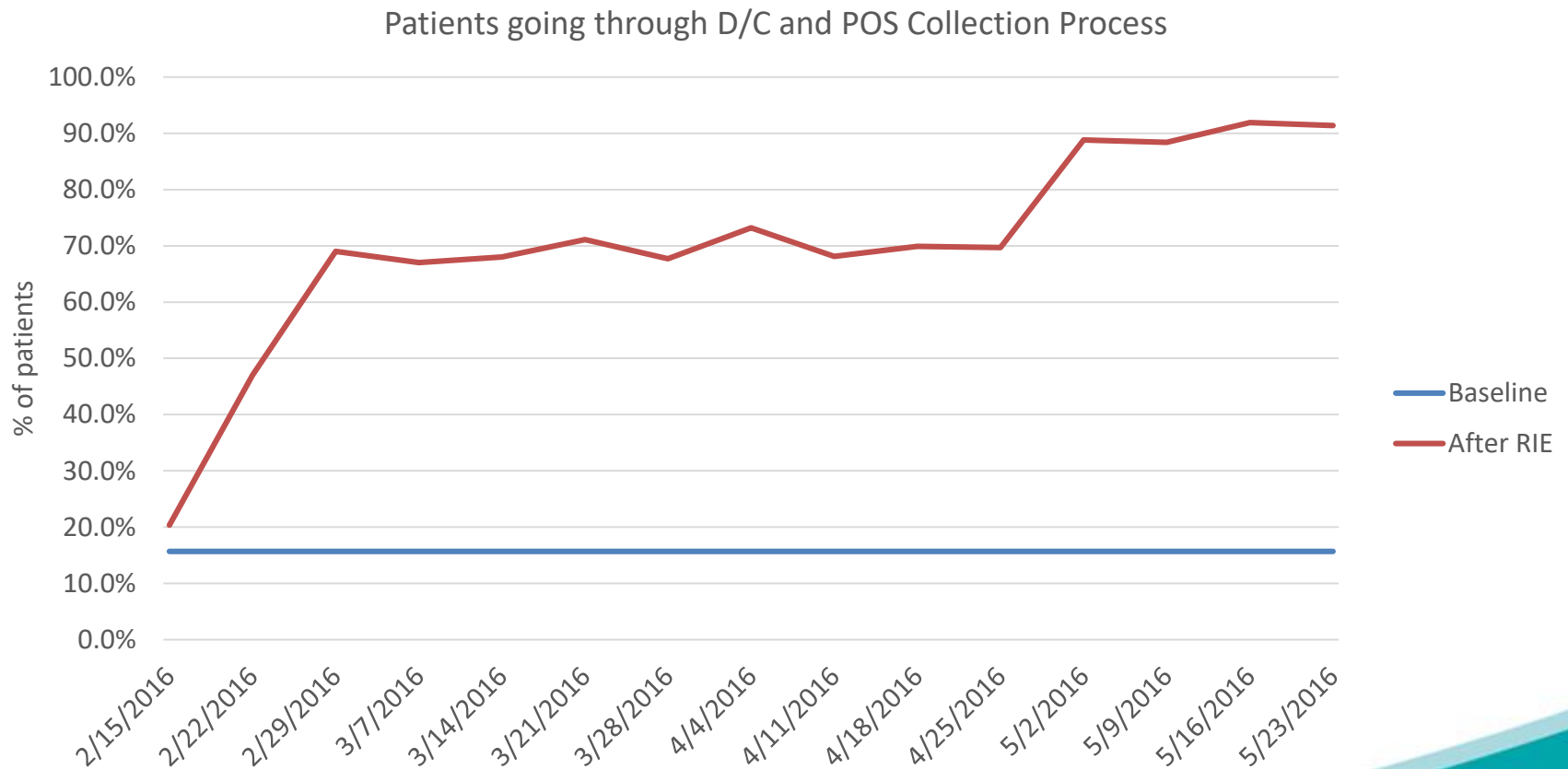
Day 4

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

Standard Work Sheet																																																																																																																																																																																																																																																																																																																										
Purpose: To provide the steps necessary to complete the Registration and Financial Clearance Process		Process: ED Full Registration and Financial Discharge																																																																																																																																																																																																																																																																																																																								
Step	Description/Trigger	Image/Key Point/Verbiage	Who	When																																																																																																																																																																																																																																																																																																																						
7	<p>Review the patient's account, to review Insurance information.</p> <p>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 long as the triage process has been completed, an assistant has not seen the patient.</p> <p>(Note: If no insurance is found, check the Medicaid website to determine if the patient has Medicaid. You will need to verify the insurance information when speaking to the patient in step 13.)</p>		Patient Access Team	Prep account before visiting patient's room																																																																																																																																																																																																																																																																																																																						
8	Pull up SurePay Health to determine patient liability, based on Insurance information.		Patient Access Team	Obtain Patient Liability using SurePay																																																																																																																																																																																																																																																																																																																						
9	<p>FOR PATIENTS WITH FINANCIAL LIABILITY ONLY</p> <p>Using the ED Registration Log, write the following for patient:</p> <ul style="list-style-type: none"> HAR # Insurance Type Copay/Coinsurance amount 	<table border="1"> <thead> <tr> <th>Step</th> <th>Initial</th> <th>Last Reg Date</th> <th>Medicaid</th> <th>Medicare</th> <th>Other</th> <th>None/Uninsured/No Insurance</th> <th>Insurance Code</th> <th>Amount</th> <th>Other</th> </tr> </thead> <tbody> <tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>16</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>17</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>18</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>19</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>20</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>21</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>22</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>23</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>24</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>25</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>26</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>27</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>28</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>29</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>30</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Step	Initial	Last Reg Date	Medicaid	Medicare	Other	None/Uninsured/No Insurance	Insurance Code	Amount	Other	1										2										3										4										5										6										7										8										9										10										11										12										13										14										15										16										17										18										19										20										21										22										23										24										25										26										27										28										29										30										Patient Access Team	Prep account before visiting patient's room
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10	<ul style="list-style-type: none"> Go to the patient's room. Knock to enter. <p>Introduce yourself following AIDET and determine if the patient has seen the doctor or physician assistant yet.</p>	<p>Script: "Hello, I'm [NAME, TITLE...]. Are you [patient's name]? Has a doctor been in to see you yet?"</p>	Patient Access Team	Before determine if a patient has seen a Dr																																																																																																																																																																																																																																																																																																																						

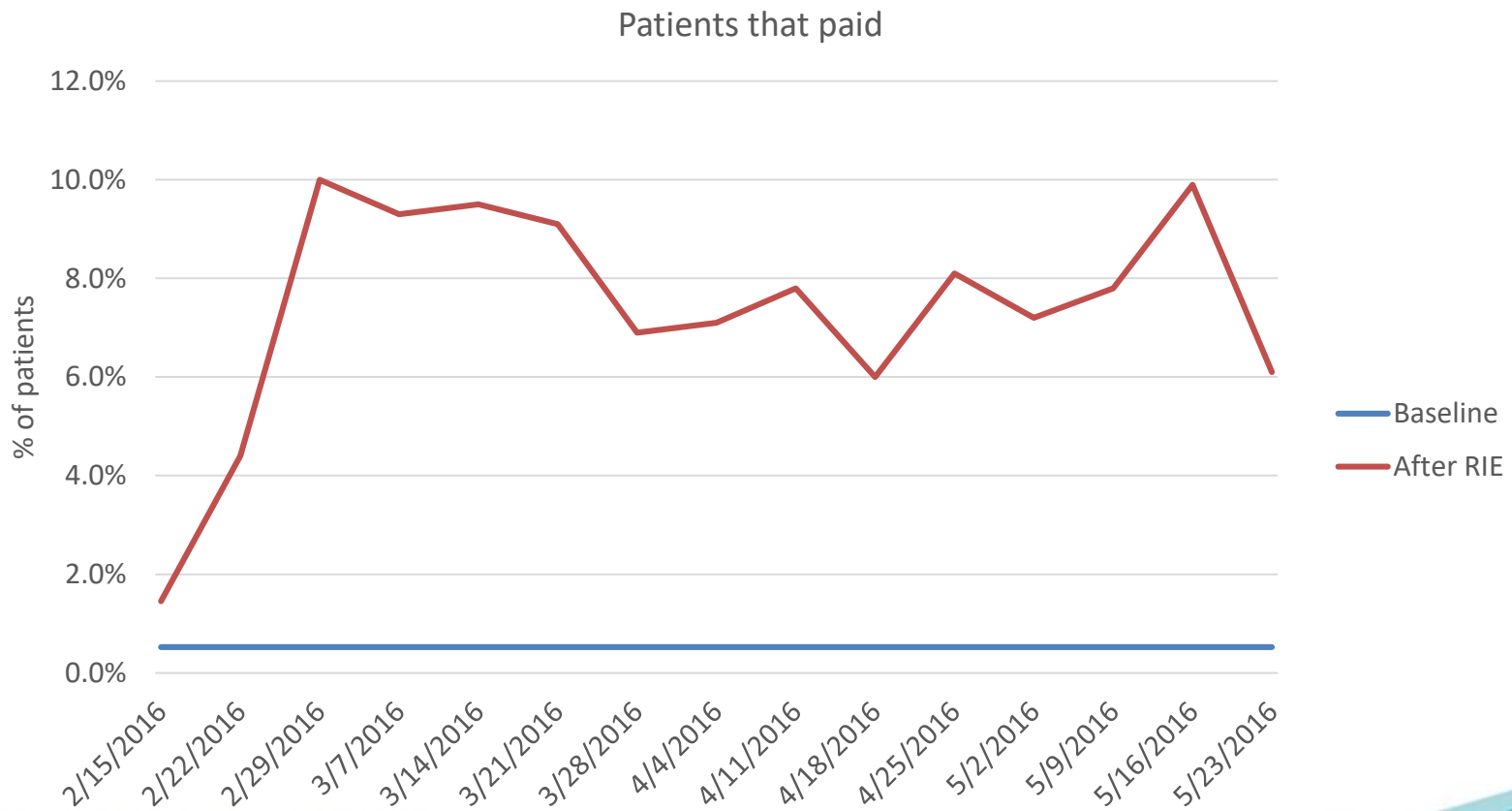
Results obtained and sustained

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



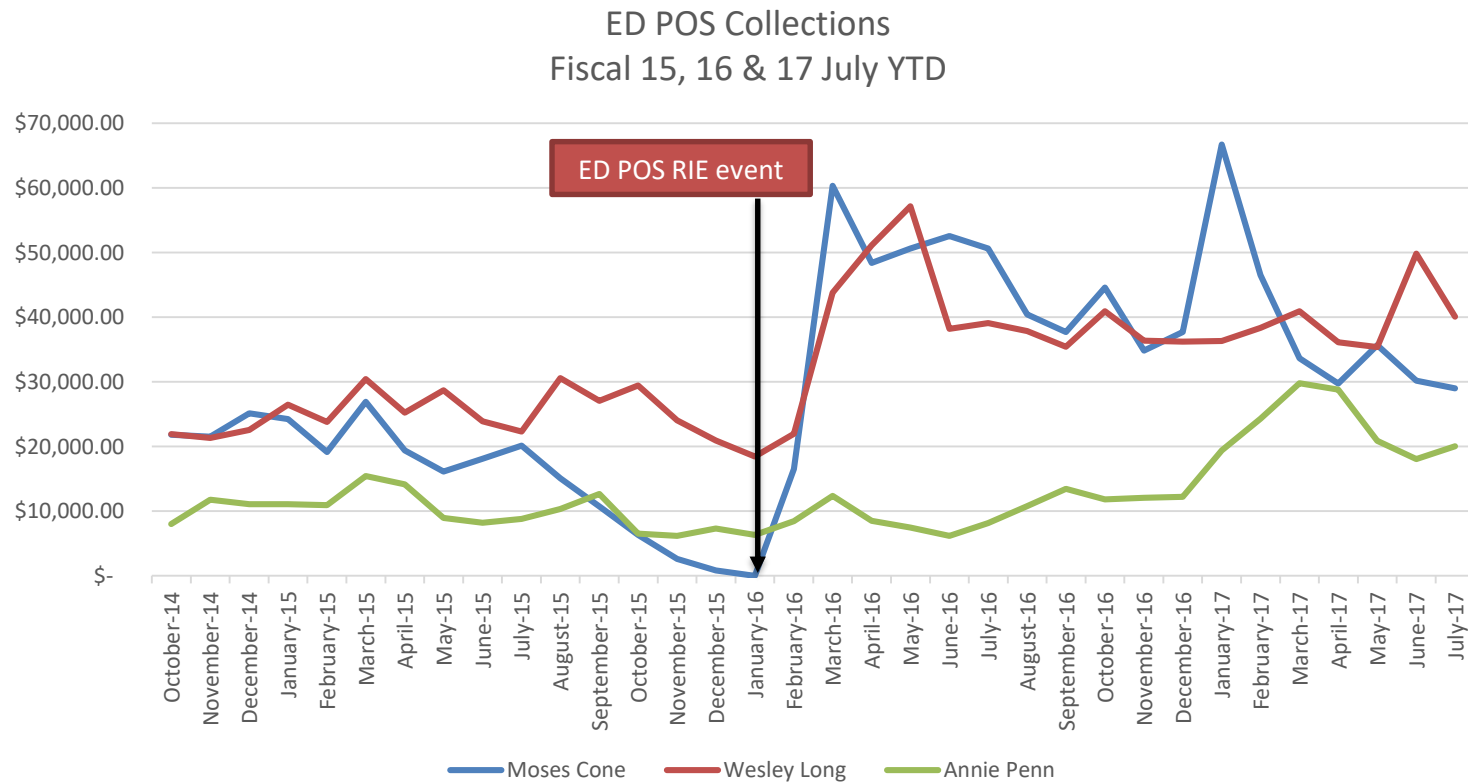
Results obtained and sustained

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



Top Lessons Learned

1. It is important to really understand the current state
2. People involved 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

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

