

# *ASCO's Quality Training Program*

Project Title: Utilizing a Case Management System to Reduce the Response Time for Symptom Management Calls

Presenter's Name: Natalie Dickson, MD

Institution: Tennessee Oncology

Date: October 8, 2015

# Institutional Overview

- Tennessee Oncology is a community medical and radiation oncology practice based in Middle and East Tennessee, with 87 physicians and 35 mid-level providers in 33 locations across the state.<sup>1</sup>
- The clinical site for the Tennessee Oncology ASCO QTP is the Saint Thomas West location.
- The Saint Thomas West office has 5 physicians, 3 nurse practitioners and sees over 5000 unique patients annually.<sup>2</sup>

*1 – Provider and clinic count as of June 2015; includes all medical and radiation clinics and all scanning facilities.*

*2 – Site provider count as of June 2015; patient data for 2014.*



# Problem Statement

- The Saint Thomas West clinic receives on average 500 calls daily. There is not an effective process for appropriately categorizing or prioritizing incoming patient phone calls, or to address symptom management calls according to evidence-based protocols. Additionally, there is neither a system to track symptom management calls, nor a procedure to determine whether they are being handled correctly and on a timely basis.

# Team Members

## Team Leader:

- Natalie Dickson, MD, *CMO*

## Team Facilitator:

- Larry Bilbrey, *Regional Operations Manager*

## Team Members:

- Linda Hays, RN, *Clinical Supervisor*
- Pam Lesikar, RN, *Triage Nurse/Care Coordinator*
- Aaron Lyss, *Director of Value Based Care*
- Kathy McGee, MSN, RN, *CCOO*
- Jani Sarratt, *Process Improvement Specialist*
- David Scrugham, *Application Support Manager*
- Ansley Tillman, RN, *Triage Nurse*

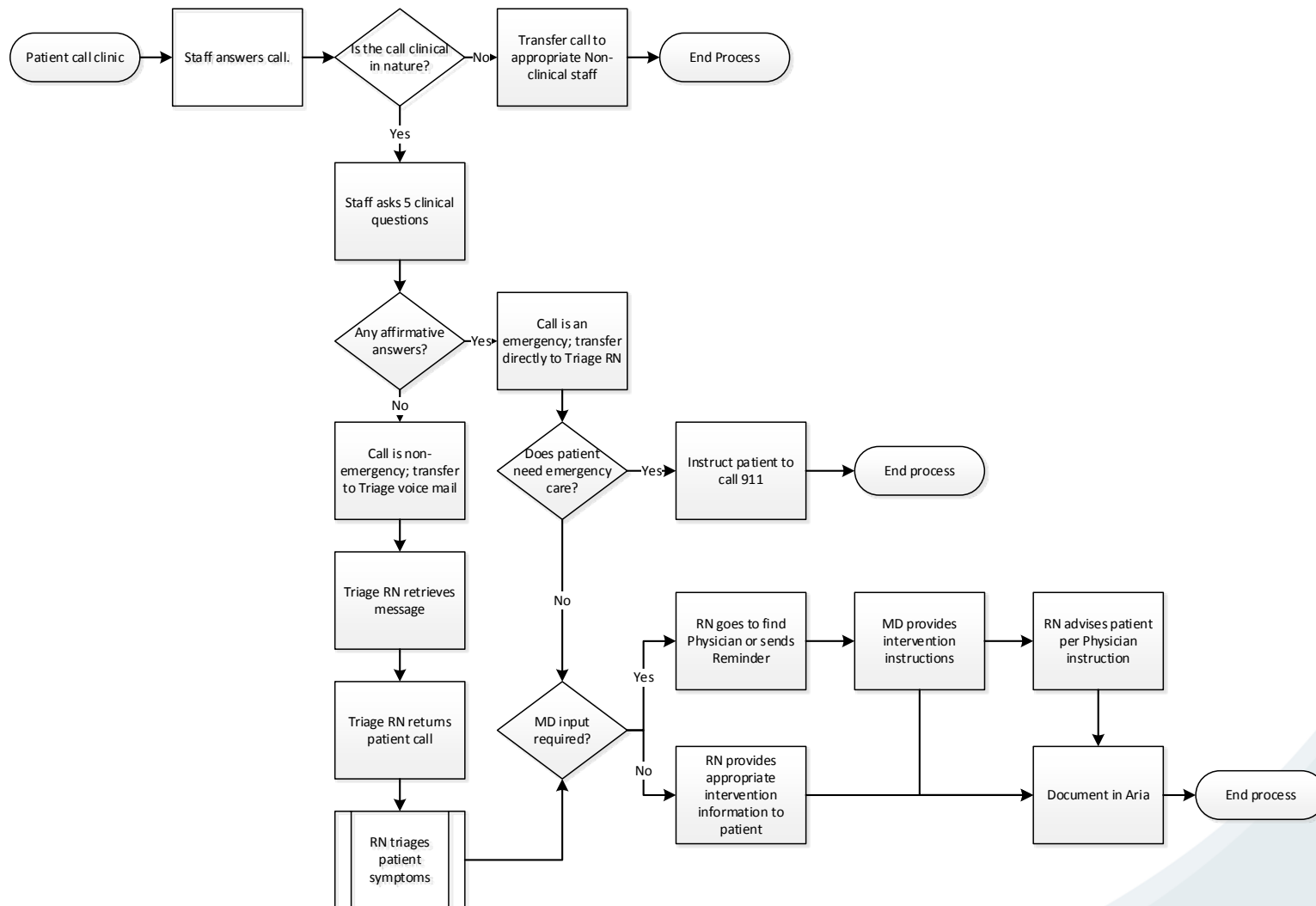
## Project Sponsor:

- Jeff Patton, MD, *CEO*

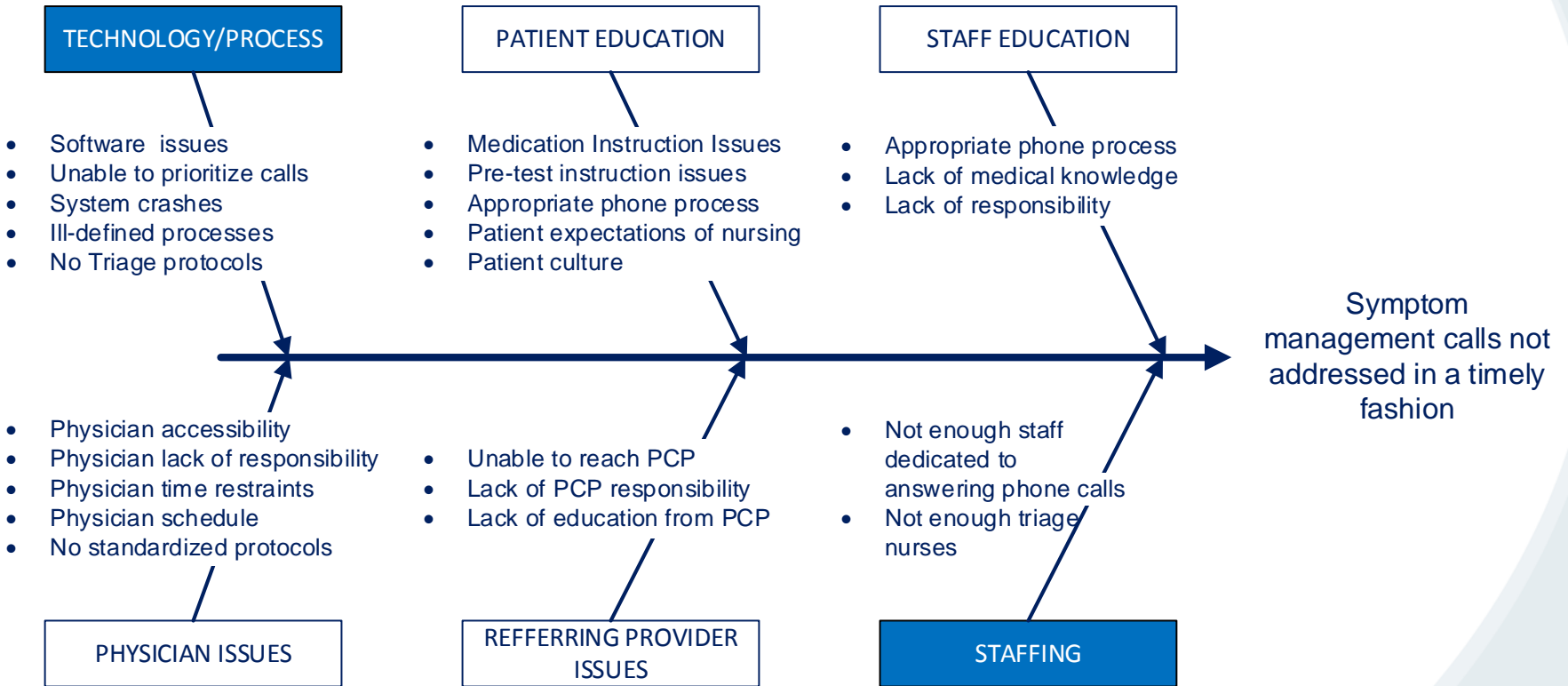
## Improvement Coach:

- Laurie Kaufman, MSN, RN

# Process Map



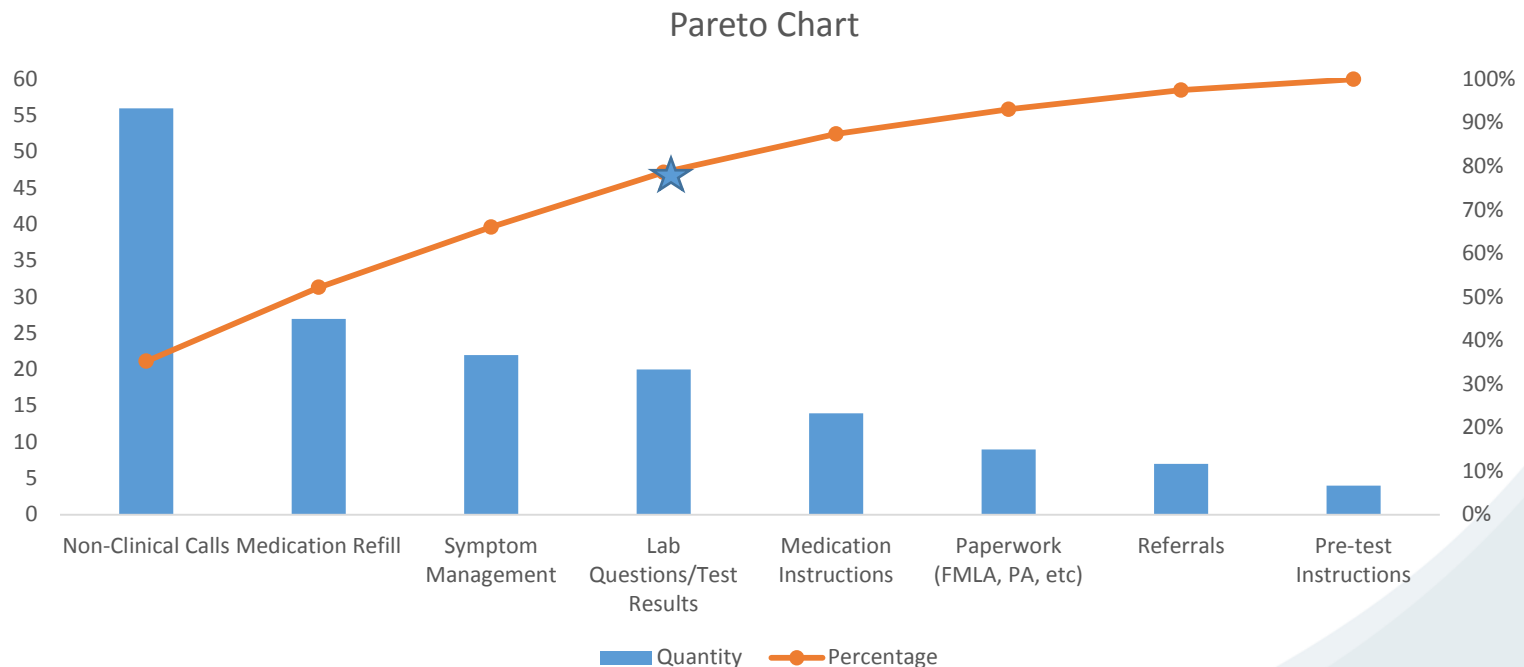
# Cause & Effect Diagram



# Diagnostic Data

Data was manually collected for the week of April 20, 2015 for 159 sequential triage calls. Two members of the team listened to all the messages on the triage nurse voicemail and placed them into 8 categories. Of the 22 Symptom Management calls, 12 (54%) were answered within 2 hours.

- 56 – Non-Clinical: deemed inappropriate for nursing (Appointments, Directions, Medical Records, Other Office, Hospital Issues, Demographics, Portal, Informational Calls)
- 27 – Medication Refills
- 22 – Symptom Management
- 20 – Lab Questions/Test Results
- 14 – Medication Instructions
- 9 – Paperwork (FMLA, Pre-Authorization, etc)
- 7 – Referrals
- 4 – Pre-test Instructions



# Aim Statement

- Increase the percentage of symptom management calls that receive a clinical intervention within 2 hours from 54% to 80% by October 8, 2015.



# Measures

- Outcome Measure: Percentage of calls receiving clinical intervention within 2 hours
- Patient population: All patients that call for symptom related issues
- Calculation methodology: Number of calls with clinical intervention within 2 hours (numerator); All symptom management calls received (denominator)
- Data source: EMR, Telephone System, Case Management System
- Data collection frequency: Variable
- Data quality limitations: Manual process initially; Sampling of data

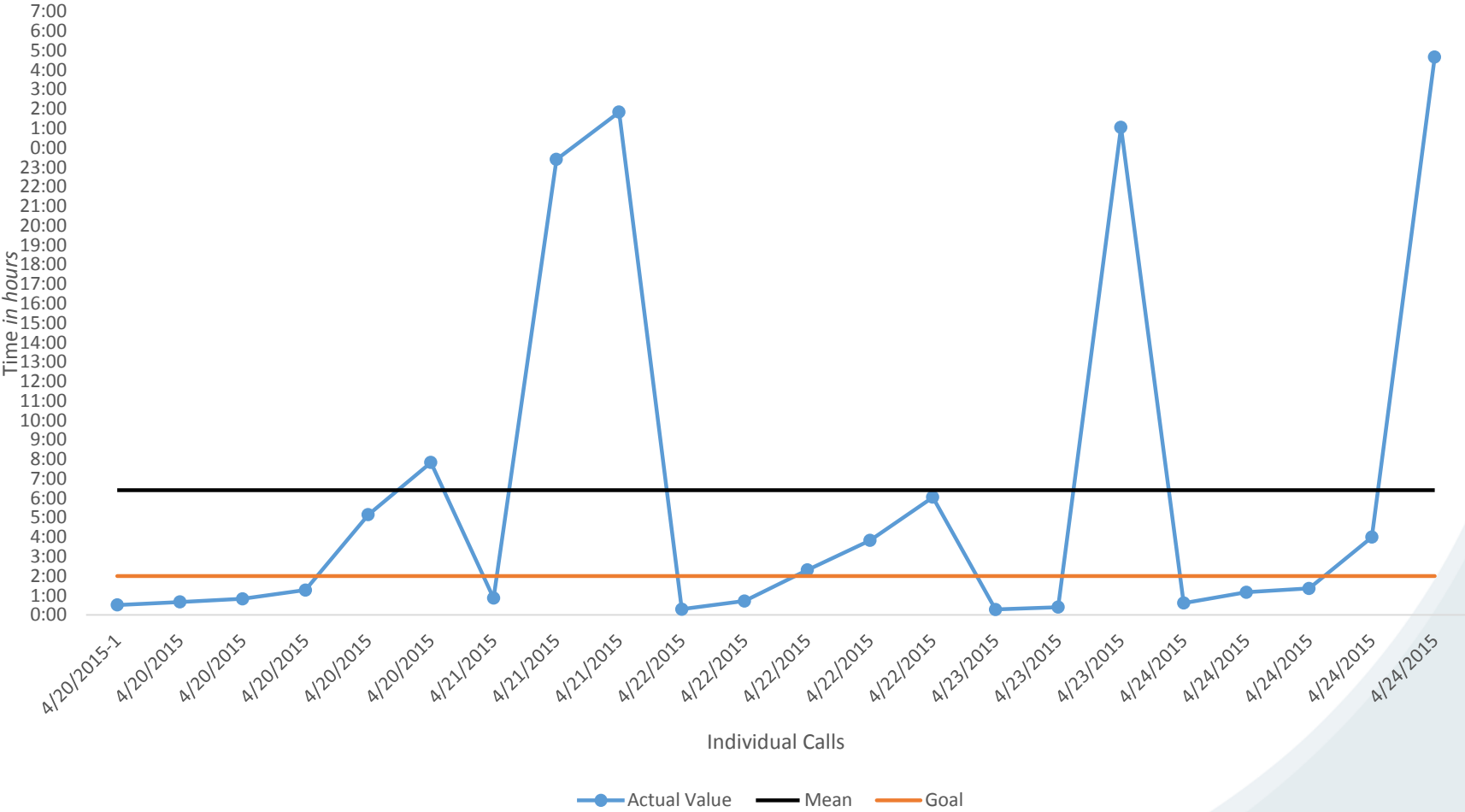
# Measures

- Process Measure: Percentage of non-clinical calls routed to triage nurse
- Patient population: All calls referred to triage nurse
- Calculation methodology: Number of non-clinical calls routed to triage nurse (numerator); Total numbers calls routed to triage nurse (denominator)
- Data source: Manual Triage Log, Telephone System, and Case Management System.
- Data collection frequency: Daily
- Data quality limitations: Baseline data based on manual reporting.

# Baseline Data

## Time from Origin of Symptom Management Call to Clinical Intervention

(determined from the time call was received in phone system to the closeout time stamp on the triage questionnaire in the EMR)



# Prioritized List of Changes (Priority/Pay-Off Matrix)

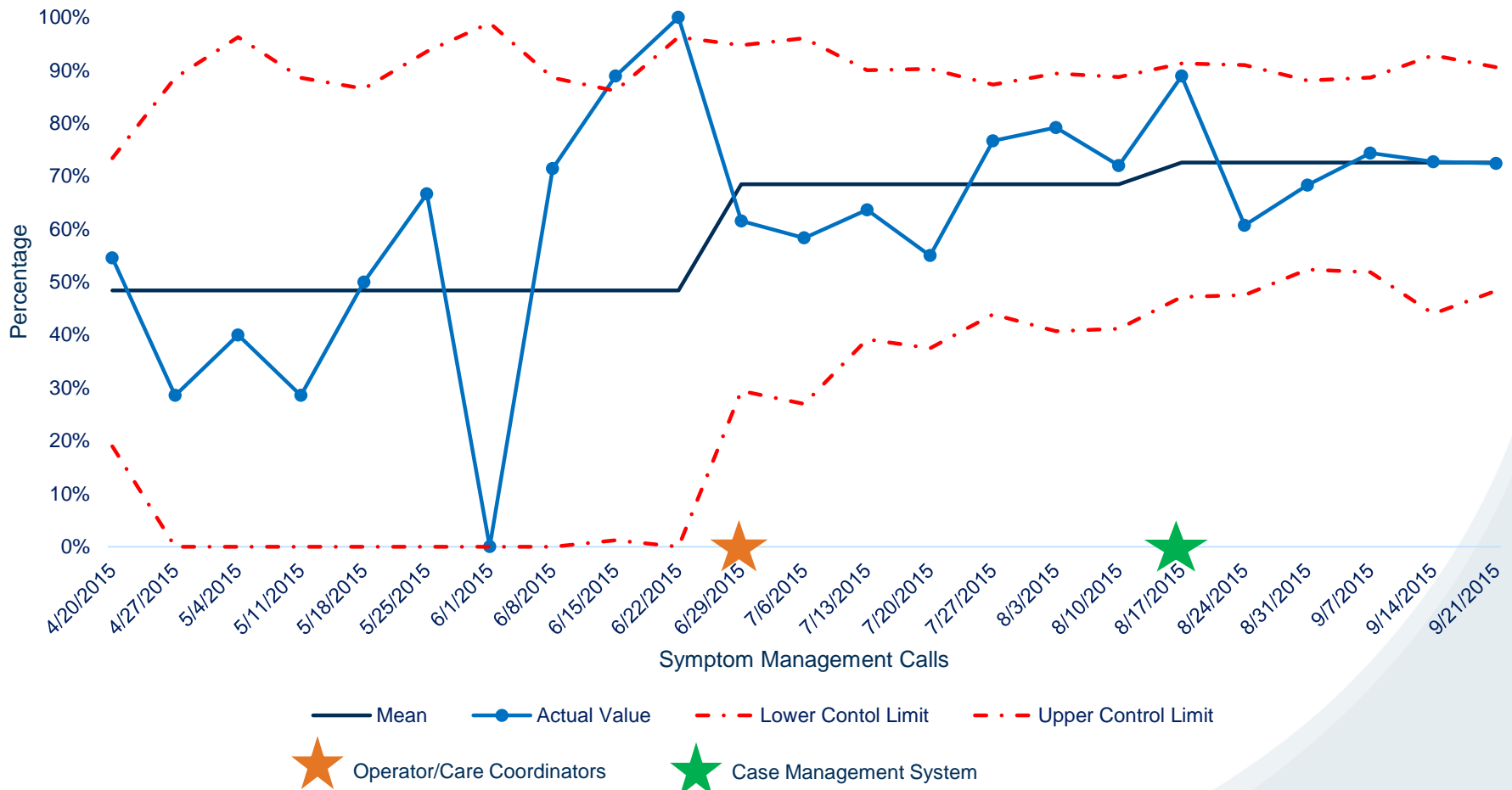
Impact	High	<ul style="list-style-type: none"> <li>• Redesigned escalation: automated phone tree</li> <li>• Reassigned additional triage nurse</li> <li>• Reassigned staff as operator</li> </ul>	<ul style="list-style-type: none"> <li>• Address Lync/IT issues</li> <li>• Expand patient portal access</li> <li>• Physician education &amp; engagement</li> <li>• Create triage protocols</li> </ul>
	Low	<ul style="list-style-type: none"> <li>• Allowing additional staff to take calls</li> <li>• Measuring staff satisfaction</li> <li>• Triage access to G4</li> </ul>	<ul style="list-style-type: none"> <li>• Patient education on phone process</li> <li>• Staff Education</li> <li>• Patient education on meds</li> </ul>
		Easy	Difficult
		Ease of Implementation	

# PDSA Plan (Tests of Change)

Date of PDSA cycle	Description of intervention	Results	Action steps
July 1, 2015	Operator assigned. 2 Care Coordinators allocated. Expanded portal access.	Staff satisfied with roles.	Training on Case Management System for Operator and Care Coordinators. ONS based Triage protocols created.
August 17, 2015	Case Management System (CMS) implementation Test decision support tool for triage nurses.	Nurse satisfaction improved with CMS but commercial decision tool inappropriate for our practice. Significant reduction in routing of inappropriate calls to nursing. Improved symptom management response times.	Decision support tool not purchased. ONS based Triage protocols implemented.

# Change Data

Symptom Management Calls receiving Clinical Intervention within 2 Hours  
(p-chart, 3 sigma)



# Conclusions

- The percentage of symptom management calls that received a clinical intervention within 2 hours increased from 54% in April 2015 to 73% in September 2015.
- The percentage of non-clinical calls that reach the triage nurse has been reduced significantly with the use of the Case Management System.
  - Before: 56/159, 35%
  - After: 3/643, < 1%

# Plan for Sustainability

- Emphasize that the changes are aligned with Tennessee Oncology's mission statement to provide the highest quality of care and service to our patients.
- Train all the nurses on new triage processes.
- Train all front office staff on operator processes.
- Update triage policies and procedures.
- Reports to be reviewed by management at weekly physician meeting.
- Develop tool in Case Management System to prioritize physician worklist.
- Integrate Case Management System with telephone system and EMR.



# Our Team



# Appendix A:

## Lessons Learned

- Eliminate manual data collection in all areas possible.
- Determine method of data collection before project kick-off.
- Small PDSA cycles beneficial to identify what works early.
- Technology will not solve all problems.
- Must address the workflow of all team members involved.

# Appendix B: Materials Developed

1. Telephone Triage Protocols
2. Case Management System workflows