

ASCO's Quality Training Program

Project Title: Improving Phone Triage System for Oncology Outpatients

Presenters' Name: Preeti Sudheendra MD; Tracey Evans MD; Elizabeth Gilbert PA-C; Dawna Gillespie BS

Institution: University of Pennsylvania Abramson Cancer Center

Date: March 6, 2014

Abramson Cancer Center Institutional Overview

- Penn Medicine is one of the world's leading academic medical centers, dedicated to the related missions of medical education, biomedical research and excellence in patient care. As a world leader in cancer research, patient care, and education, the Abramson Cancer Center of the University of Pennsylvania is a very integral part of Penn Medicine. The Cancer Center has had continuous designation as a Comprehensive Cancer Center by the National Cancer Institute since 1973 and is dedicated to innovative and compassionate cancer care.
- Overview of the program:
 - 36 attending medical oncologists and hematologists
 - 24 advanced practice providers (i.e. nurse practitioners and physician assistants)
 - 400+ basic, translational and clinical scientists
 - Other staff: nurses, administrative assistants, social workers, physical therapists, dietitians, patient care coordinators, research personnel
 - 90,000 outpatient visits annually
 - 11,800 inpatient admissions annually
 - 37,000 chemotherapy treatments annually
 - 66,000 radiation treatments annually

Problem Statement

- Abramson Cancer Center outpatients are dissatisfied with the management of their phone correspondences to the oncology practices. Delays in symptom and medication management result in frequent patient complaints and low Press Ganey access ranking.

Team Members

Team Leader:

- Preeti Sudheendra, MD

Core Team Members:

- *Physician representative* – Tracey Evans, MD
- *Advanced practice provider representative* – Beth Gilbert, PA-C
- *ACC operations representative* – Dawna Gillespie

Ancillary Team Members:

- *Quality Improvement* – Mary Coniglio
- *Web Developer* – Nina Childress
- *Administration* – Elda Ford, Amanda Smith
- *Epic liaisons* – Deb Reardon, Kelly Esposito, Senthil Balasubramanian
- *Subject matter experts* – Shannon Grube and Jim Sauerbaum (Intake office), Archel Collier and Jackie Augustine (Admin assts), Theresa Sabato (Triage RN), Dan Landsburg (Heme/Onc fellow), Linda Miller (Nurse navigator), Lisa Figueroa (Infusion RN), Dena Torrente (Practice coordinator)

Project Sponsor:

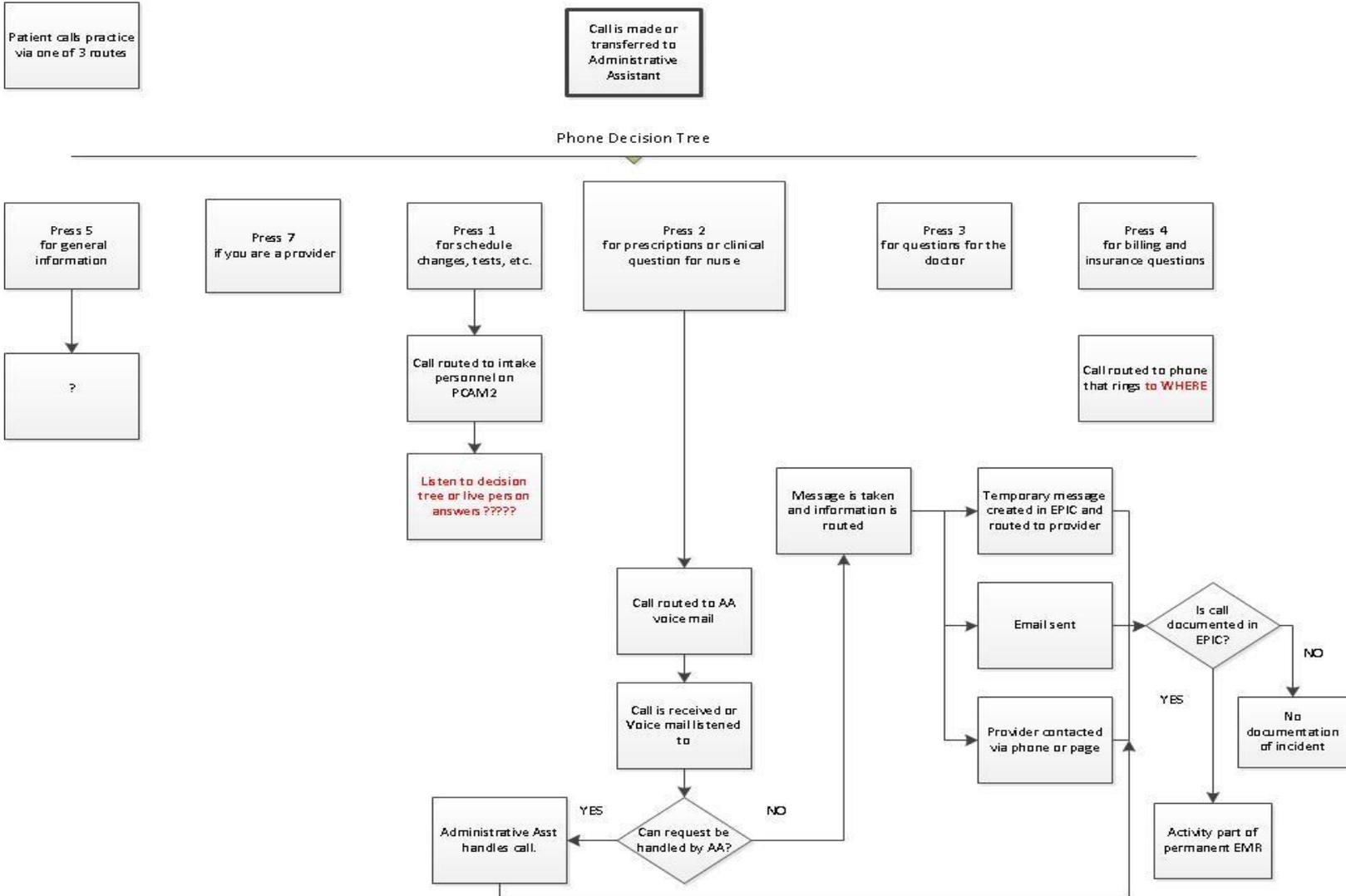
- Regina Cunningham, PhD, RN, AOCN

Improvement Coach:

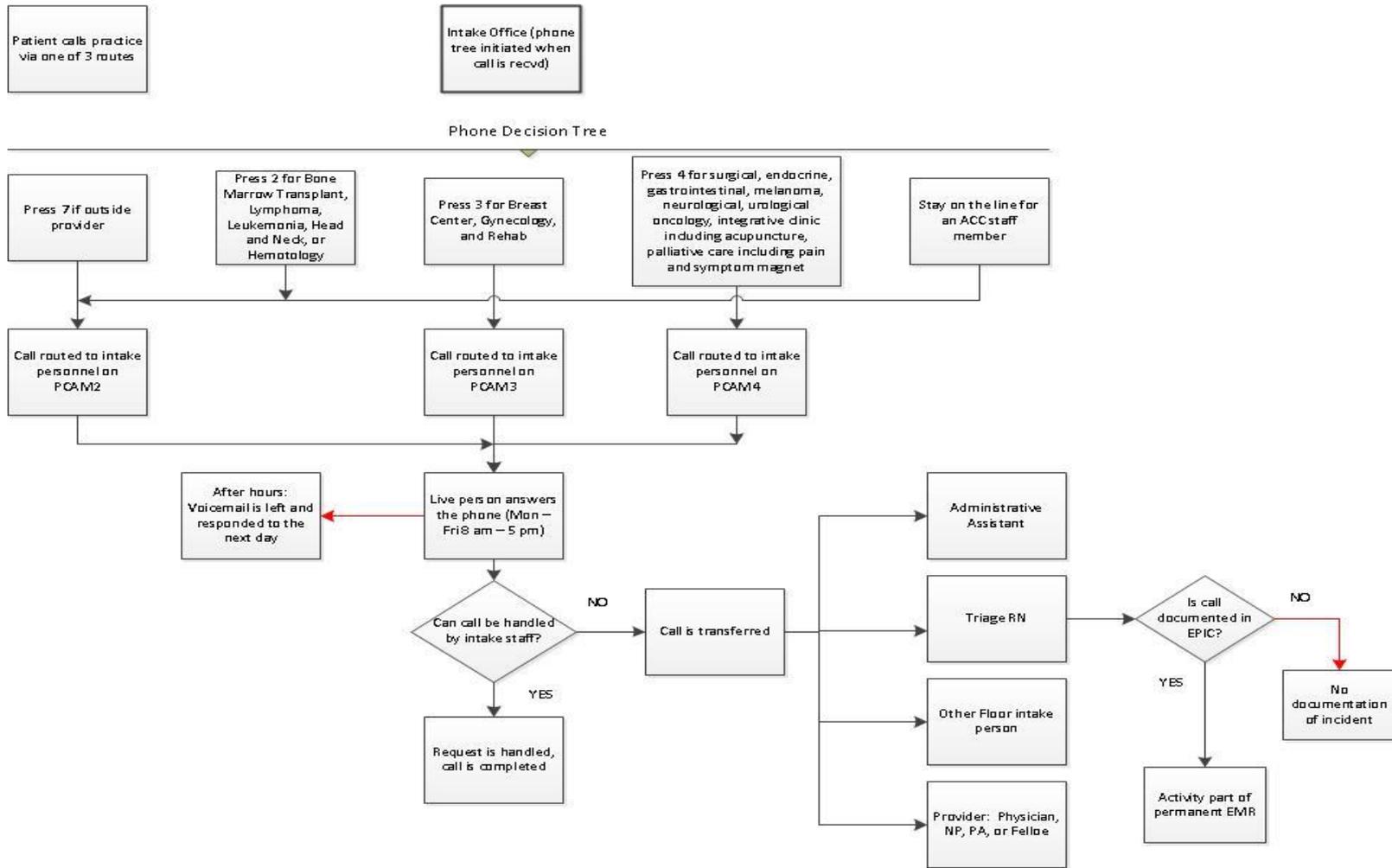
- Amy Guthrie, MSN, ACHPN



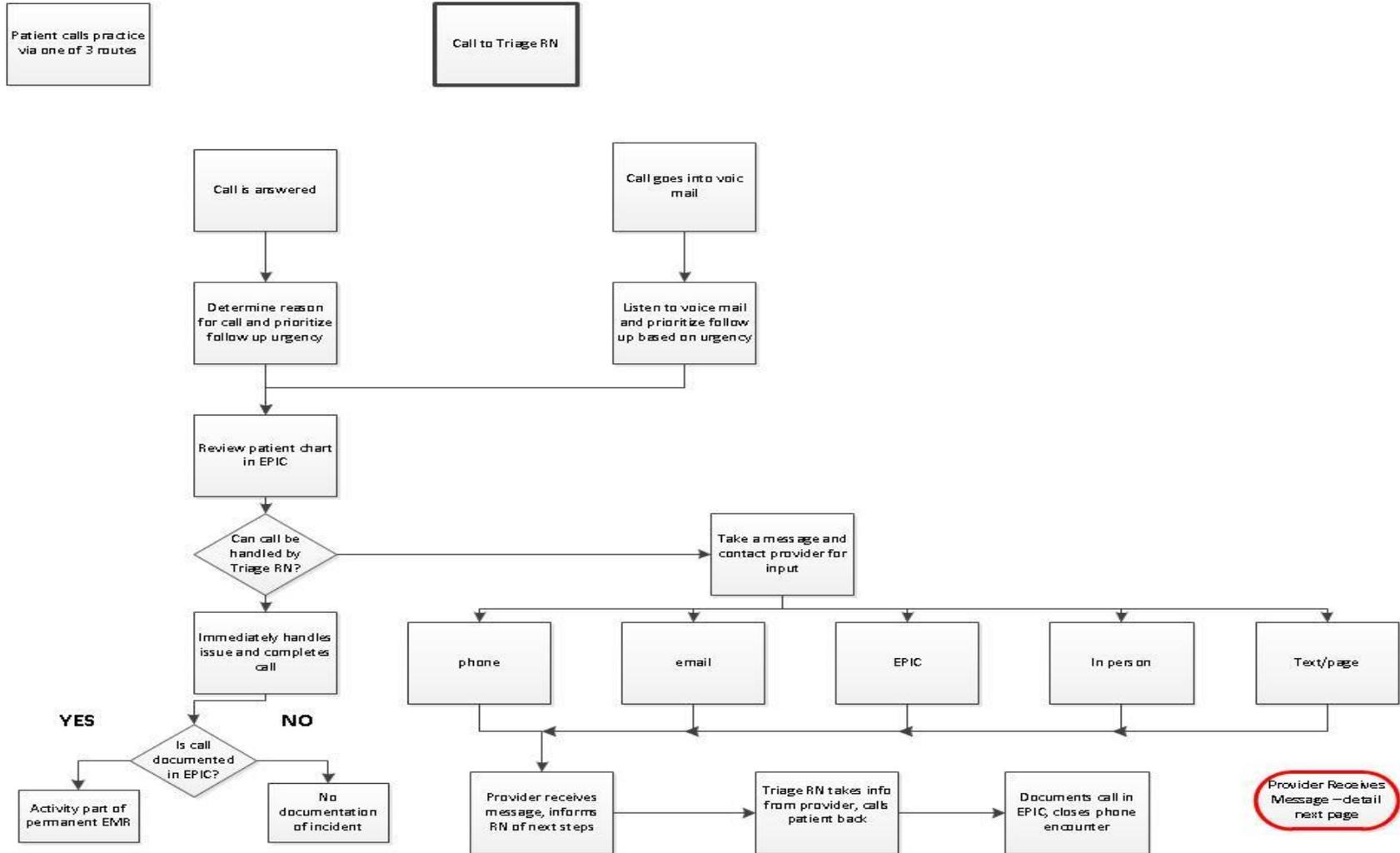
Process Map – Admin Assts



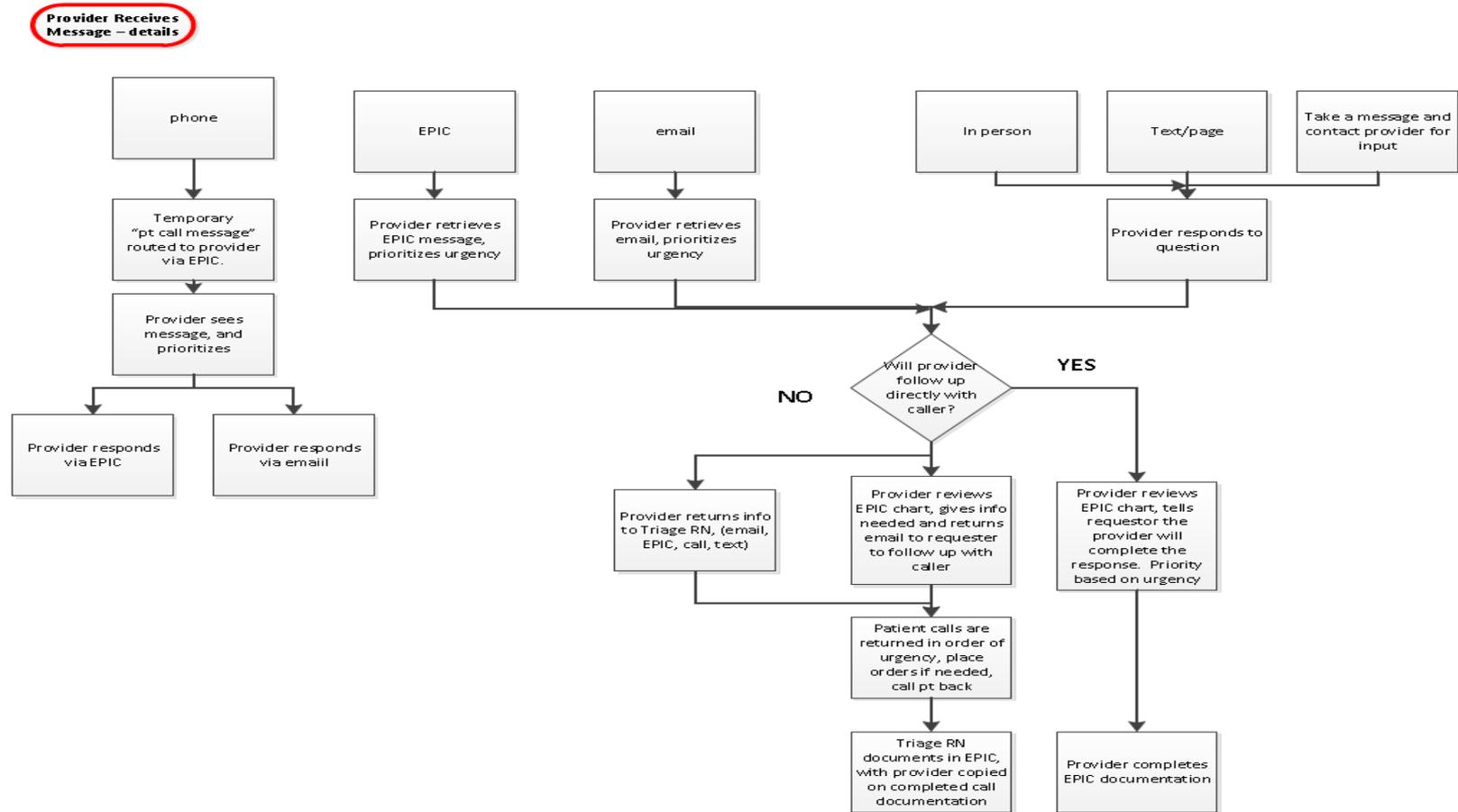
Process Map – Intake office



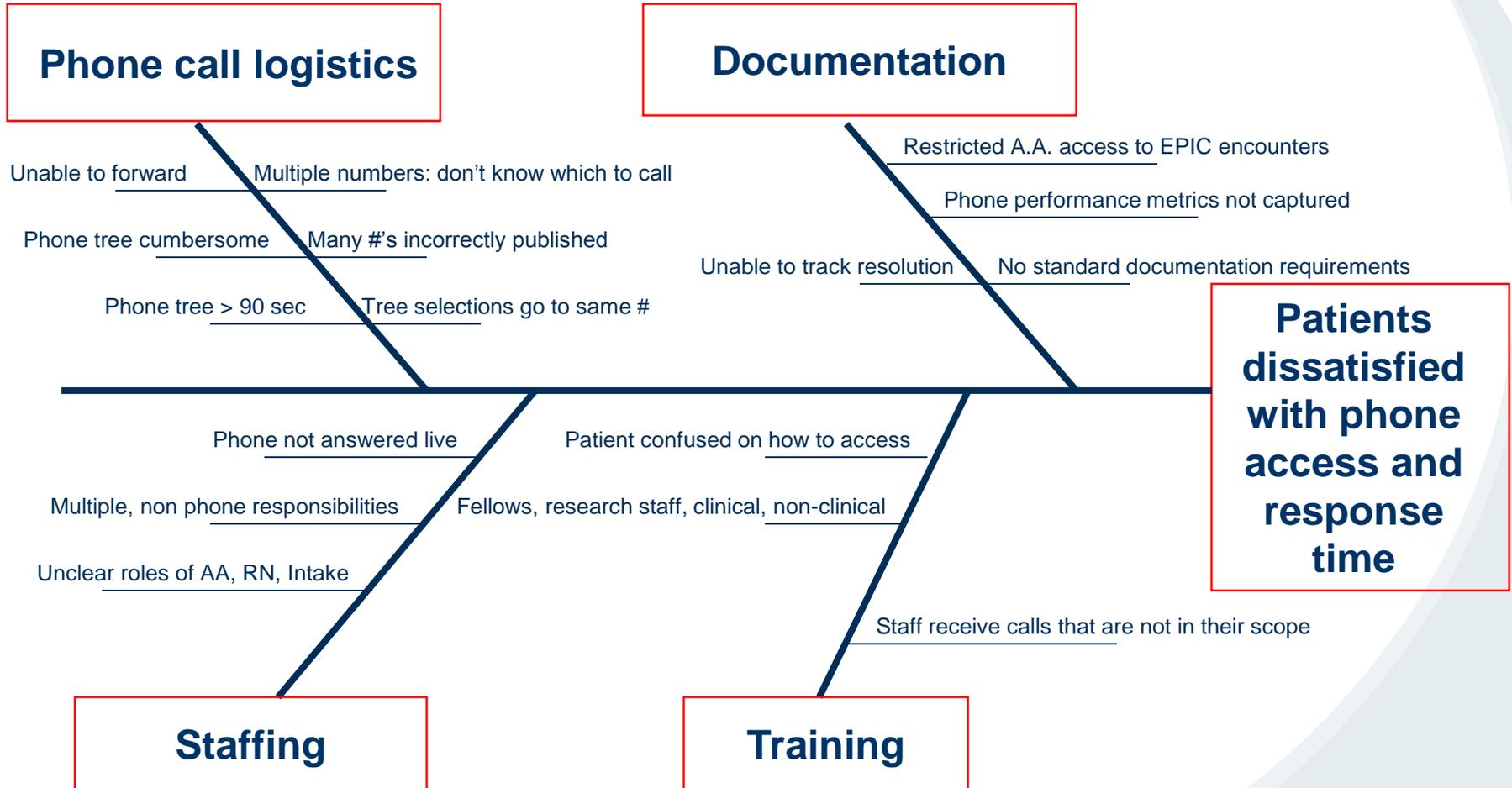
Process Map – Triage Nurses



Process Map – Triage Nurses cont'd



Cause & Effect Diagram



Diagnostic Data

| Press Ganey Patient Satisfaction Scores and Comparative Rank Jan - Oct 2013 | | | | |
|---|-------|-----------------|----------|------------|
| | Score | Percentile Rank | | |
| | | All Sites | Teaching | Geographic |
| Ease of getting clinic on phone | 79.1 | 12 | 14 | 21 |
| Our helpfulness on the telephone | 87.1 | 24 | 24 | 35 |
| Our promptness in returning calls | 81.0 | 17 | 18 | 17 |
| | | | | |
| | | | | |

“Communication needs to be more effective.”

The phone system is the biggest problem.”

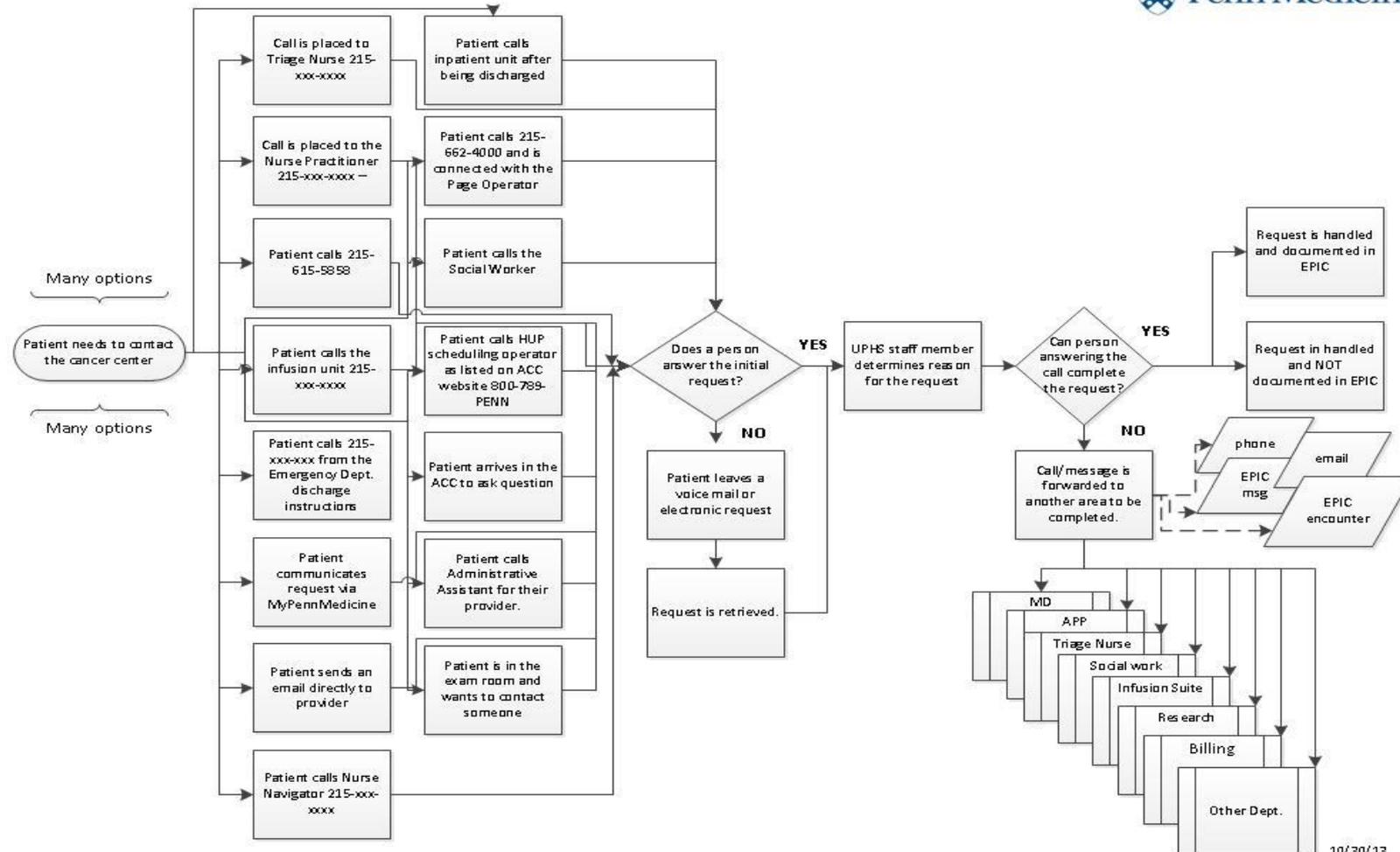
“I didn’t get a call back.”

“... made several calls to try to reach the right person”

“The telephone system is so inefficient and frustrating to use.”

Diagnostic Data

ABRAMSON CANCER CENTER PHONE ACCESS FLOWCHART



10/30/13

Diagnostic Data

Penn Medicine

Hospital of the University of Pennsylvania

Stephen J. Schuster, MD
Associate Professor

Department of Medicine
Hematology-Oncology Division

**Perelman Center for
Advanced Medicine**

2nd Floor, West Pavilion
3400 Civic Center Blvd
Philadelphia, PA 19104

615 Tel: 215-662-1846
Fax: 215-615-5888
After Hours: 215-662-4000

Penn Medicine

Hospital of the University of Pennsylvania

Corey J. Langer, MD
Professor of Medicine

Department of Medicine
Hematology-Oncology Division

**Perelman Center for
Advanced Medicine**

2 West Pavilion
3400 Civic Center Boulevard
Philadelphia, PA 19104

Tel: 215-615-5121
Fax: 215-615-5122
After Hours: 215-662-4000
Mobile: 215-806-6152
corey.langer@uphs.upenn.edu

Penn Medicine

David L. Porter, M.D.

Department of Medicine
Hematology-Oncology Division

**Perelman Center for
Advanced Medicine**

2nd Floor West Pavilion
3400 Civic Center Boulevard
Philadelphia, PA 19104-4283

Tel: 215-662-2862
Appts: 215-615-5858
After Hours: 215-662-4000
Fax: 215-615-5888

Penn Medicine

Hospital of the University of Pennsylvania

Susan Domchek, M.D.

Executive Director,
Basser Research Center for BRCA
Director, MacDonald Women's
Cancer Risk Evaluation Center
Basser Professor in Oncology

Department of Medicine
Hematology-Oncology Division

**Perelman Center for
Advanced Medicine**

3rd Floor, West Pavilion
3400 Civic Center Boulevard
Philadelphia, PA 19104-4283

Office: 215-615-3360
Fax: 215-662-4300

Penn Medicine

Hospital of the University of Pennsylvania

David J. Vaughn, M.D.

Professor of Medicine
Department of Medicine
Hematology-Oncology Division

Perelman Center

4th Floor West Pavilion
3400 Civic Center Blvd.
Philadelphia, PA 19104-4283

Adm. Office: 215-349-8498
Appointments: 215-349-8140
Fax: 215-662-7804
After Hours: 215-662-4000

Penn Medicine

Hospital of the University of Pennsylvania

Kenneth M. Algazy, MD

Clinical Professor of Medicine
Hematology-Oncology Division

Administrative Assistant: Tanya Williams

**Perelman Center for
Advanced Medicine**

4th Floor, West Pavilion
3400 Civic Center Blvd
Philadelphia, PA 19104

Tel: 215-615-5811
Fax: 215-662-2431
kenneth.algazy@uphs.upenn.edu



Aim Statement

- By March 2014, we aim to have:
 - 80% of patient phone calls answered live
 - 50% of symptom management calls resolved within 2 hours
 - 100% of symptom management calls documented in Epic

in one sample pilot practice.

Measures

- Measure #1: Time to resolution of patients' calls for symptom management
- Patient population: Oncology outpatients
 - Exclusions (if any):
- Calculation methodology: time of call receipt as documented on call log to time of closed phone encounter in Epic; % of total such calls resolved within 2 hours
 - Numerator & Denominator (if applicable):
- Data source:
 - Phone call logs from admin assts, triage nurses, intake office
 - Epic chart review
- Data collection frequency:
 - Baseline
 - 2 weeks into improvement process
- Data quality (any limitations):
 - Phone calls taken by Administrative assistants are being recorded as encounters that are not a permanent part of the patient's Epic chart and do not have time stamps
 - Phone calls from the Intake Office are forwarded to providers via phone call/page, which cannot be tracked
 - Some Administrative Assistants were not recording call times

Measures

- Measure #2: % of symptom management calls being recorded in Epic
- Patient population: Oncology outpatients
 - Exclusions (if any):
- Calculation methodology: comparison of call logs to patient's Epic charts
 - Numerator & Denominator (if applicable):
- Data source:
 - Phone call logs from admin assts, triage nurses, intake office
 - Epic chart review
- Data collection frequency:
 - Baseline
 - 2 weeks into improvement process
- Data quality (any limitations):
 - Phone calls taken by Administrative assistants are being recorded as encounters that are not a permanent part of the patient's Epic chart and do not have time stamps
 - Phone calls from the Intake Office are forwarded to providers via phone call/page, which cannot be tracked

Measures

- Measure #3: % of calls being answered live vs voicemail
- Patient population: Oncology outpatients
 - Exclusions (if any):
- Calculation methodology: time lapse between call receipt to time call listened to as documented on call log
 - Numerator & Denominator (if applicable):
- Data source: call logs
- Data collection frequency:
 - Baseline
 - 2 weeks into improvement process
- Data quality (any limitations):
 - Some Administrative Assistants were not recording call times

Baseline Data

| All Symptom Management Calls in 1 week | | | |
|---|------------------------------------|----------------------------------|---|
| Phone call source | Resolved in 0 - 2 hours | % calls answered live | Epic documentation completed |
| Administrative Assistant | 24% | 59% | 73% |
| Intake Office | 16% | 100% | 22% |
| Triage RN | 33% | 27% | 75% |

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

| | | | |
|-------------------------------|-------------|--|---|
| Impact | High | <ul style="list-style-type: none">• Document calls as standardized Epic telephone encounters• Educate staff on answering, routing, and documenting calls• Triage and distribute calls to correct person at initial patient contact | <ul style="list-style-type: none">• Devote clinical staff to answer calls live• Minimize transfer of calls to voicemail• Dedicate duties of triage nurses as either taking calls live or doing paperwork |
| | Low | <ul style="list-style-type: none">• Minimize options in the phone tree• Measure and monitor phone metrics | <ul style="list-style-type: none">• Provide patients clear and consistent information on what to call for and the appropriate phone number to call• Obtain, confirm, update, and publish phone numbers for each provider |
| | | Easy | Difficult |
| Ease of Implementation | | | |

PDSA Plan (Tests of Change)

| Date of PDSA cycle | Description of intervention | Results | Action steps |
|--------------------|---|--|--|
| 1/23/14 - present | All admin assts (AA's) began documenting calls in Epic as "Telephone encounters" which are part of permanent medical record | Trained successfully. Variations on call documentation minimized. | Continue documenting as Telephone encounters |
| 1/29/14 | Intake office personnel trained on creating and routing all symptom and medication calls as Epic "telephone encounters" | Trained successfully. Epic symptom management phone encounter time monitored in a sustainable fashion. | Proceed with using training to document calls re-routed to Intake office |
| 2/4/14 – 2/26/14 | Calls from Dr. Evans' AA main line routed to Intake office so that they would be answered live | Calls routed successfully but did not account for calls on AA's back line; concerns about division of workload | Request new staff or re-allocate current staff to fulfill need |

Materials Developed (optional)

Zzz-Epic, Test
 33 y.o., Male, 07/08/1980, 440057859
 PCP: DOUGHERTY, KATIE M

Adv Dir: No Allergies: **Penicillin G, ...** Patient FYIs: **FYI** myPennMedicine: Active CSN: 83722152
 Code: **DNR** Health Maintenanc... **retinal detachment**
 P Ins: IBC
 Research: Active

2/10/2014 visit with Evans, Tracey L, MD for Telephone

Images Questionnaires Admin Benefits Inquiry References Scans Open Orders Care Teams Print AVS Pre

Allergies: **Penicillin G, Gluten, Shellfish-derived Products, Simvastatin, Sulfa Antibiotics** Reviewed on 10/21/2013: Mark as Reviewed

Incoming Call Outgoing Call Other

Permanent Comments
retinal detachment

Telephone (Incoming)
 03:37 PM 2/10/2014 Now
 Type: Telephone (Incoming)
 Relationship: Self Self: Zzz-Epic, Test Father: Claus,Santa
 Contact name: Zzz-Epic, Test
 Phone: 267-344-4212 1- Home: 267-344-4212 3- Mobile: 267-344-4255
 Contact comments:

Reason for Call

| Reason for Call | Onset | Comment |
|-------------------------|-----------|---------|
| New/Continuous Symptoms | 2/10/2014 | |

Priority Sent On
2/5/2014 4:19 PM

Created by

Evans, Tracey L, MD on 2/5/2014 4:18 PM

Encounter Scans - 02/05/2014

There are no scans attached to this encounter.

Detail Routing History

Encounter Created by: Tracey L Evans, MD on Wed Feb 5, 2014 4:18 PM

Routed by: Tracey L Evans, MD on Wed Feb 5, 2014 4:19 PM

Routed to: Pri: Routine on Wed Feb 05, 2014 4:19 PM

Opened by: Beth A Sandy, CRNP *Pool member* on Wed Feb 5, 2014 4:19 PM

Doned by: Beth A Sandy, CRNP *Pool member* on Wed Feb 5, 2014 4:19 PM

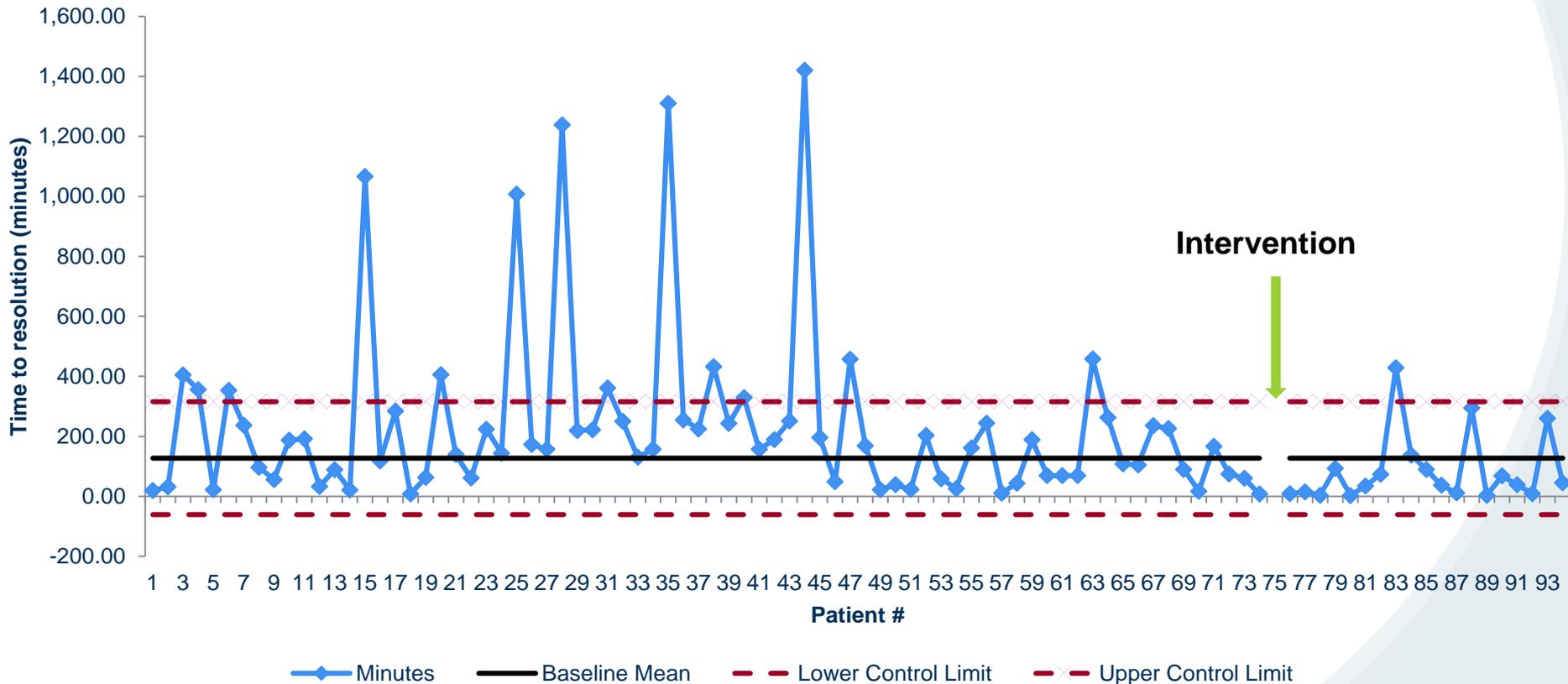
Encounter Status

Closed by Evans, Tracey L, MD on 2/6/14 at 12:57 PM



Change Data

Time to Resolution for Symptom Management Calls xMR chart, 3 sigma



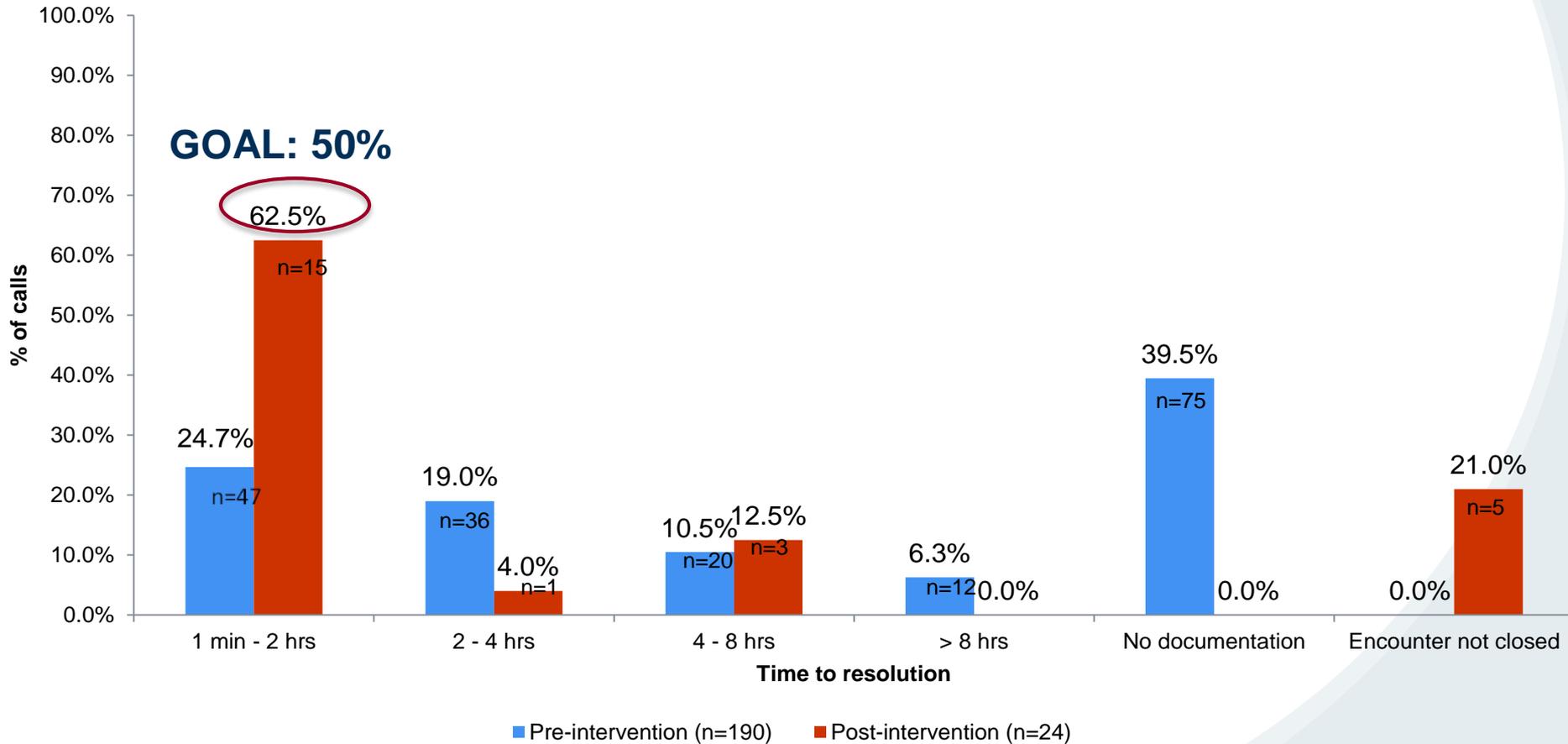
Baseline mean:

Pre-intervention = 127 minutes

Post-intervention = 87 minutes

Change Data

Time to Resolution of Symptom Management calls



Conclusions

- We exceeded our goal of resolving 50% of symptom management calls within 2 hours by 12.5%
- We lowered our baseline mean time to resolution of symptom management calls from 127 minutes to 87 minutes (> 2hrs to less than 1.5 hrs)

Next Steps/Plan for Sustainability

- Collaborate with Epic liaisons to understand the workflow of messages better
- Utilize performance improvement engineer to examine the job duties of key personnel so that distribution of workload is better understood
- Create Epic report template to make it easier to pull data for each of our metrics
- Engage all departmental leaders to review and reinforce the documentation changes already initiated with the AA's, triage RN's and intake personnel so that everyone is educated
- Allow for ongoing input and revision of the changes from all disciplines so that workflow is minimally disrupted and impact of changes is maximized
- Continue to directly engage Cancer center leadership to financially and administratively support changes to the current system

Improving Phone Triage System for Oncology Outpatients

AIM: By March 2014, we aim to have: 80% of patient phone calls answered live; 50% of symptom management calls resolved within 2 hours; and 100% of symptom management calls documented in Epic in one sample pilot practice.

INTERVENTION:

- All admin assts (AA's) began documenting calls in Epic as "Telephone encounters" which are part of permanent medical record
- Intake office personnel trained on creating and routing all symptom and medication calls as Epic "telephone encounters"
- Calls from Dr. Evans' AA main line routed to Intake office so that they would be answered live

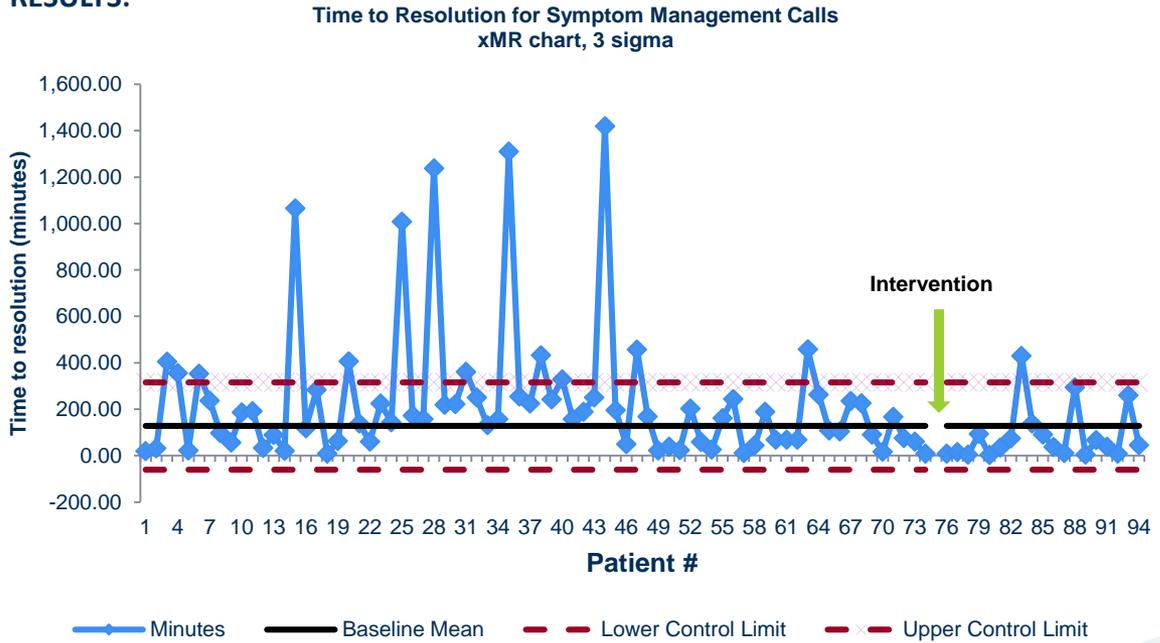
TEAM:

- Quality Improvement - Mary Coniglio
- Web Developer - Nina Childress
- Administration - Elda Ford, Amanda Smith
- Epic liaisons - Deb Reardon, Kelly Esposito, Senthil Balasubramanian
- Subject matter experts - Shannon Grube and Jim Sauerbaum (Intake office), Archel Collier and Jackie Augustine (Admin assts), Theresa Sabato (Triage RN), Dan Landsburg (Heme/Onc fellow), Linda Miller (Nurse navigator), Lisa Figueroa (Infusion RN), Dena Torrente (Practice coordinator)

PROJECT SPONSORS:

- Regina Cunningham, PhD, RN, AOCN

RESULTS:



CONCLUSIONS:

- We exceeded our goal of resolving 50% of symptom management calls within 2 hours by 12.5%
- We lowered our baseline mean time to resolution of symptom management calls from 127 minutes to 87 minutes

NEXT STEPS:

- Collaborate with Epic liaisons to better understand workflow of messages
- Utilize performance improvement engineer to examine the job duties of key personnel so that distribution of workload is better understood
- Engage all departmental leaders to review and reinforce the documentation changes already initiated with the AA's, triage RN's and intake personnel so that everyone is educated
- Allow for ongoing input and revision of the changes from all disciplines so that workflow is minimally disrupted and impact of changes is maximized
- Continue to directly engage Cancer center leadership to financially and administratively support changes to the current system