



# CAH Quality Improvement and Care Transitions Collaborative

Lean Concepts and TeamSTEPPS®  
Tools Working Together to Improve  
Quality Outcomes

July 14, 2016



North Carolina  
Quality Center

# How to Participate in the Session

- If you have called in by phone, you can “raise your hand” by selecting the hand icon
- If you would like to call in by phone, select the “phone” icon to receive call in information
- Select the “Chat Bubble” icon to show the comments box and type your comments and questions in the chat box throughout the session

The screenshot shows a Zoom meeting interface with the following elements and annotations:

- Participants:** Shows 5 participants, including "NC Quality Center (Host)" and "Christi Beals (me)".
- Hand Icon:** A red arrow points to the hand icon in the bottom toolbar with the text: "Click the 'Hand' icon to raise your hand".
- Phone Icon:** A red arrow points to the phone icon in the bottom toolbar with the text: "Click the 'Phone' icon to receive phone line call-in information".
- Chat Bubble Icon:** A red arrow points to the chat bubble icon in the bottom toolbar with the text: "Show the chat box".
- Chat Box:** A red arrow points to the chat input field with the text: "Type Comments/Questions into the Chat box".



SALEM HEALTH

*An OHSU Partner*

West Valley Hospital

Lean Concepts and Team STEPPS Tools  
Working Together to Improve Quality Outcomes

06:30:16

Presented By: Penny Edwards,  
RN, MSN, CPHQ

# Objectives

By the end of the presentation, participants will be able to;

1. Identify at least one Team STEPP tool and one LEAN tool that can be utilized with quality process measures
2. Describe how Team STEPPS and LEAN can drive the process to provide improved outcomes when used for quality metrics

# The Beginning- FY 2013

- Senior Leadership and Quality Coordinator met - wanted a quality metric that related to Rural Hospitals
- Reviewed AHRQ and found several studies done on communication on transfer from ED to another facility
- Established parameters to be measured based on studies (Vital signs, Allergies, Home Med List reviewed, Time Meds given in ED, Copies of Records sent or faxed within 60 minutes)
- Started with baseline review (88%) and set initial goal of 95%
- Communication
  - ED Staff Meeting – presented what we were measuring, why it was important to ensure information available within 60 minutes
  - ED Medical Staff – Met with ED Medical Director. Explained metric and need to have ‘STAT’ dictation completed prior to or within 60 min. of patient transfer

# The Beginning – FY 2013

## Positives

- EPIC – allergies had to be reviewed or could not proceed in ED assessment navigator
- ED already working on ensuring vitals signs documented within 60 min. of D/C or transfer
- ED Navigator already built to include review of Home meds

Date	MRN	Destination	Time of Transfer	Time last Temp	Time last Pulse	Time last RR	Time last BP	Time last SAO2	Time last GCS if applicable	Allergies Reviewed	Home Med List Available & Reviewed	Time Meds given in ED in EPIC	Copy of records S=Sent F=Faxed E=Epic	Does /Does Not Meet Criteria
10/21			2006	1956	1956	1956	1956	1956	1956	Y	Y	Y	1959	Y
10/4			2125	1740	2100	2100	2100	2100	2100	Y	Y	Y	2125	Y
10/9			1508	1330	1430	1430	1430	1430	1430	Y	Y	Y	1441	Y
10/13			1620	1531	1531	1531	1531	1531	1618	Y	Y	Y	1629	Y
10/15			1657	1514	1616	1616	1616	1616	1656	Y	Y	NA	1705	Y
10/25			1726	1612	1612	1612	1612	1612	NA	Y	Y	Y	1645	Y
10/26			302	243	243	243	243	243	na	Y	N	Y	255	N
10/2			1910	1730	1730	1730	1730	1730	1452	Y	Y	Y	E	Y
10/3			2036	2013	2013	2013	2013	2013	2013	Y	Y	Y	E	Y
10/4			1255	1237	1237	1237	1237	1237	1237	Y	Y	Y	E	Y
10/4			1040	N	1023	1023	1023	1023	NA	Y	Y	Y	E	N
10/4			1625	1608	1618	1618	1618	1618	1513	Y	Y	Y	E	Y
10/4			2020	1800	1919	1919	1919	1919	NA	Y	Y	NA	E	Y
10/4			2257	2217	2242	2242	2242	2242	2217	Y	Y	NA	E	Y
10/4			2455	2338	2454	2454	2454	2454	NA	Y	N	Y	E	N
10/5			1309	1147	1147	1147	1147	1147	1147	Y	N	Y	E	N

## Areas Needing Improvement

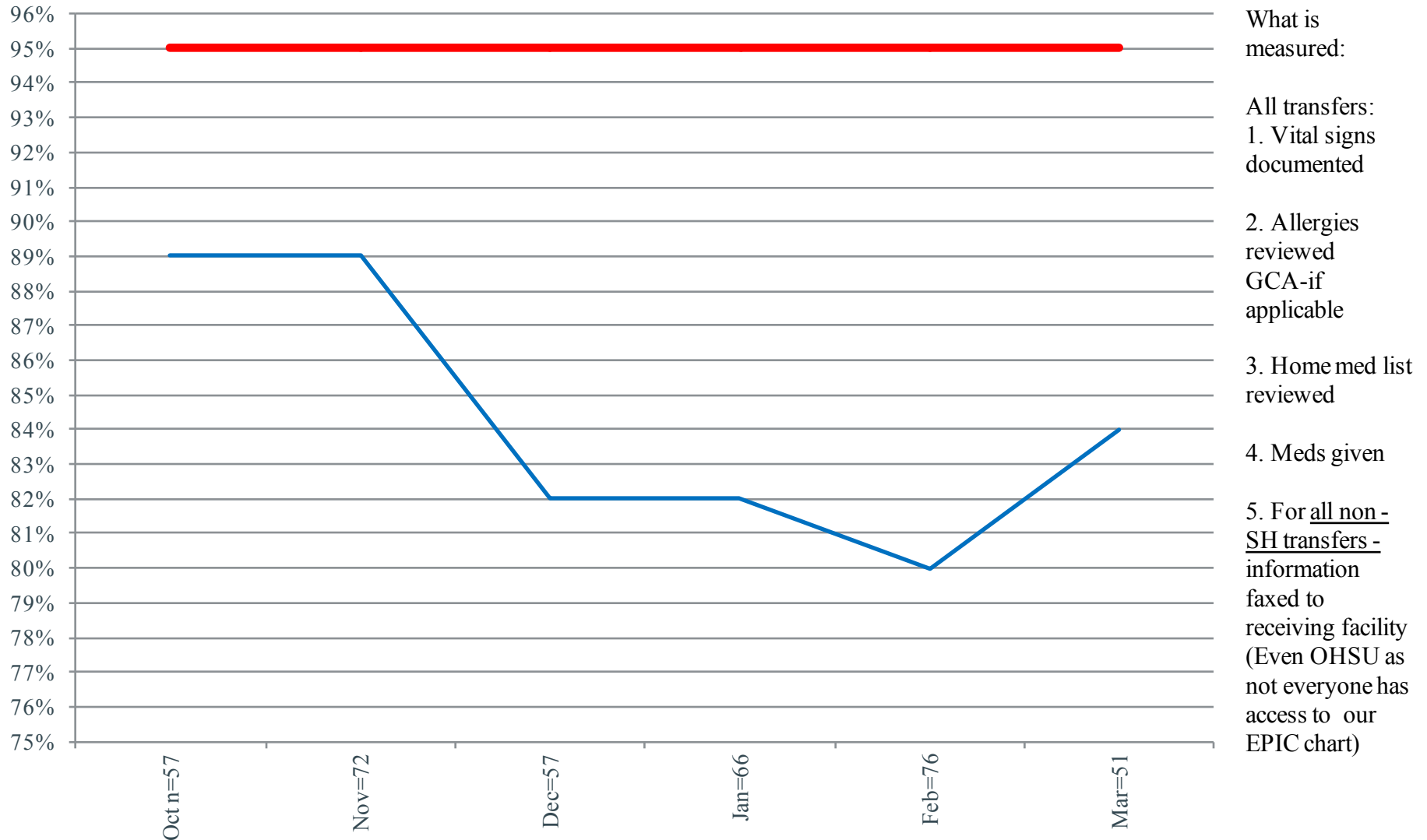
- ED physicians dictated notes. Delays in getting dictation completed, especially at night
- No standard work for checking that all documentation was completed and then sent/faxed to receiving hospital



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# Results and Actions FY 2013

## ED Transfer Communication - FY 2013. - Goal 95%



- What is measured:
- All transfers:
1. Vital signs documented
  2. Allergies reviewed  
GCA-if applicable
  3. Home med list reviewed
  4. Meds given
  5. For all non-SH transfers - information faxed to receiving facility (Even OHSU as not everyone has access to our EPIC chart)



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# Team STEPPS Tool- Checklist- 2013



## WEST VALLEY HOSPITAL EMERGENCY DEPARTMENT TRANSFER CHECKLIST

Date of Transfer: \_\_\_\_\_  
 RECEIVING FACILITY: \_\_\_\_\_  
 TRANSFERRING RN: \_\_\_\_\_

Check List: **Salem Hospital Transfers:** Print only Face Sheet, ED Summary, and copy any paper documentation  
**Transfers Outside SH:** Print entire chart (use hyperlinks as this prints all documentation), copy all paper documentation

- Admitting/Accepting Physician Notified
- Interfacility Transfer form completed
- Face Sheet Printed
- EKG Copied
- Any Lab results not on ED Summary to be faxed to receiving facility when resultd
- Copy any X-ray, CT, and/or US preliminary reports not in EPIC (or CD sent)
- ID band on and blackened out (SH Transfer Only)
- STAT PHYSICIAN DICTATION COMPLETED
- HOME MEDS REVIEWED AND MARKED AS REVIEWED
- FOR NON SALEM TRANSFERS** – all above information must be faxed to receiving facility: **Time faxed:** \_\_\_\_\_
- STAT DICTATION** faxed or sent with patient to receiving facility immediately upon receipt from DenMed:

**Time Faxed:** \_\_\_\_\_  
**Time Sent with patient:** \_\_\_\_\_

### ADULT and/or PEDIATRIC TRANSFERS

- Report called: Time: \_\_\_\_\_
- Transportation Called: Time: \_\_\_\_\_

### Method of Transportation:

- Private Care       Ambulance
- Transport Team       Lifelight/Reach
- Emmanuel Children’s Transportation Team or OHSU Panda Team notified of need for transfer: Time: \_\_\_\_\_

### MENTAL HEALTH:

- Mental Health Screener Notes
- Transport Hold
- Police Hold
- Voluntary

### CHARGE NURSE: Completes Audit of Transfer, prior to Patient’s transport

1. Are all boxes and spaces filled on Interfacility Transfer Form       Yes    No
2. Confirms with ED physician STAT Medical Dictation completed prior to patient transport    Yes    No
3. Confirms HIM/DenMed notified of STAT Dictation       Yes    No
4. Has Home Med list been reviewed?       Yes    No
5. Is the mode of transport appropriate?       Yes    No
6. If no, how was this resolved? \_\_\_\_\_

CHARGE RN INTIALS: \_\_\_\_\_

Send this form to ED Nurse Manager when complete  
NOT A PERMANENT PART OF MEDICAL RECORD

Patient Label

Tool developed to be used by ED Tech & RN to be sure all elements of transfer completed within 60 minutes of transfer.

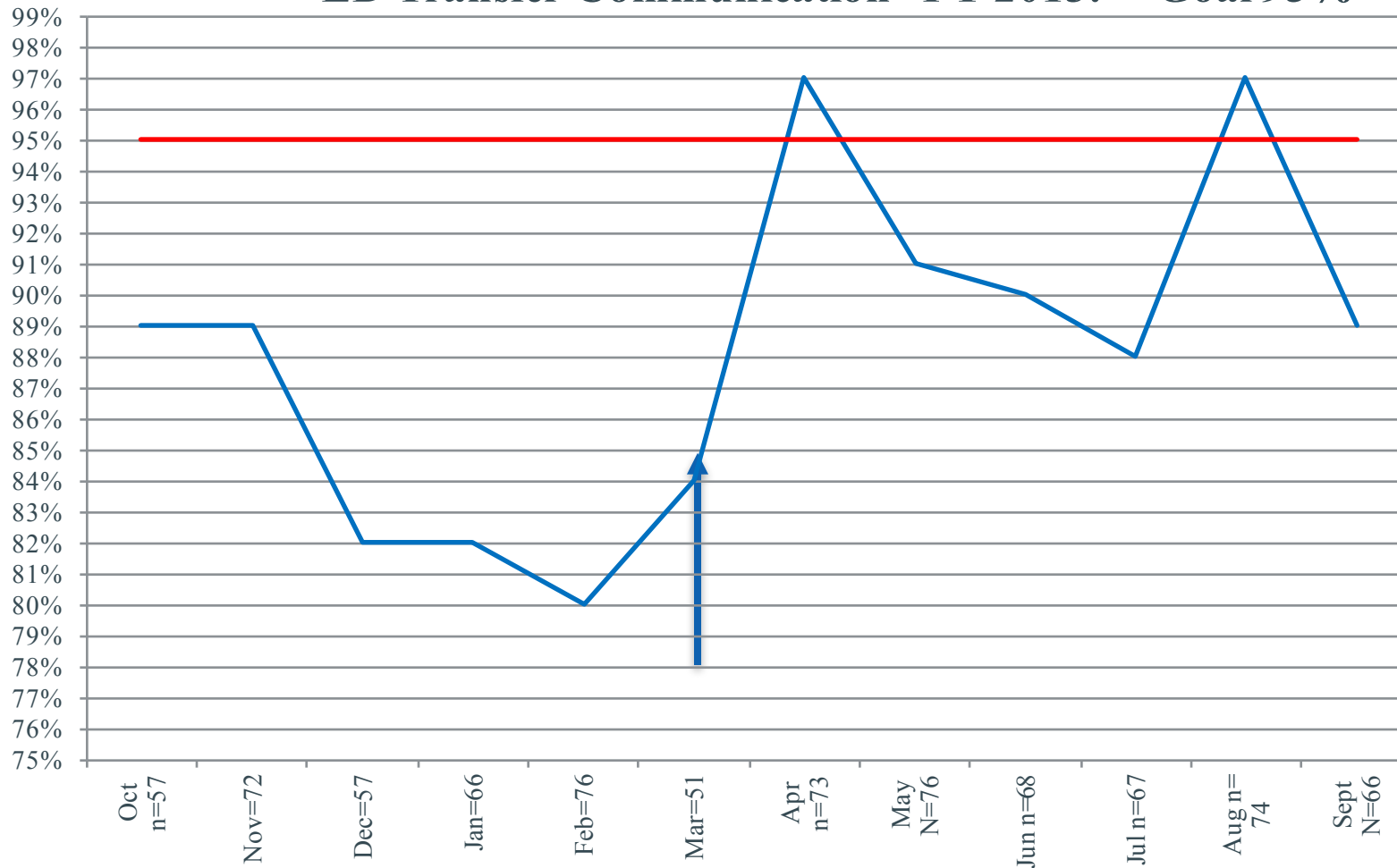


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# Results and Actions FY 2013

**ED Transfer Communication - FY 2013. - Goal 95%**



What is measured:

- All transfers:
1. Vital signs documented
  2. Allergies reviewed  
GCA-if applicable
  3. Home med list reviewed
  4. Meds given
  5. For all non-SH transfers - information faxed to receiving facility (Even OHSU as not everyone has access to our EPIC chart)

1. Ended 2013 with YTD percentage of 67.2%
2. Team met for FY 2014 – ED Transfer Communication became part of Strategy Deployment and would be the hospital wide metric for FY 2014.



# FY 2014- Quality Metric.

Using Lean principle, had same outcome measure, but developed hypothesis and process measure

## Outcome Measure

**ED Transfer Communication to Receiving Hospital within 60 min of transfer**

**Baseline (2013): 88%      Target: 95%**

## Hypothesis

**“ If transfer checklist completed and submitted Then: Would meet ED Transfer Communication within 60 minutes of departure  $\geq 95\%$ ”**

## Process Measure

Dashboard indicating number of completed transfer checklist

Goal: 100%

Dashboard indicating number of transfers with faxed information

Goal: 100%

## Results with Hypothesis and Outcome Measure- FY 2014

Month	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
ED Transfer Communication within 60 min Goal – 95% YTD Results	94%	96%	93.3 %	90.8%	91%	90%						

### Not meeting outcome process for 4 months

- a) Reviewed and updated goal (reduced to 90% based on baseline of 67% in 2013), process measure, and Hypothesis
- b) Watched staff (GEMBA) do transfers
- c) Asked ED staff what they thought would help them meet outcome measurement
- d) Reviewed process of dictation by physicians
- e) At this same time clarification on MBQIP Measures occurred

# Action # 1 – Developed New Hypothesis Statements for Process Measures

**Hypothesis Statement – Revised 5/21/14**

**Transfer Communication**

**IF:**

**Nurses complete all documentation, use the transfer checklist, and receive consistent individual feedback on any missed documentation**

**Then: Would meet ED Transfer Communication within 60 minutes of departure  $\geq 90\%$**

**Hypothesis Statement – Revised 5/21/14**

**Transfer Communication**

**IF:**

**Physicians follow standard work and complete their dictation/note prior to/immediately upon patient discharge**

**Then: Would meet ED Transfer Communication within 60 minutes of departure  $\geq 90\%$**

# Action Plan #2- Clarification of MBQIP Measures to ED Staff- May 2014

## Changes to ED Transfer Communication Requirements

**S:** Requirements for communication on transfer from the ED have changed effective April 1, 2014. The requirement now also includes patients discharged back to any healthcare facility (nursing homes, assisted living etc).

**B:** The Medicare Beneficiary Quality Improvement Project (MBQIP) -ED Transfer Communication is a quality improvement project selected by the Centers for Medicare & Medicaid Services. The goal of MBQIP is to improve patient care in Critical Access Hospitals. We are required to participate in MBQIP measures.

**A:** ED Transfer Communication is one of our quality measures and over the last year we have added some of the requirements, (impairment assessment and oral restriction) to meet MBQIP. The final report on all requirements for MBQIP has been issued with the additions/changes we will now implement noted below.

**R:** **Starting April 25, 2014** the following changes/additions will be implemented:

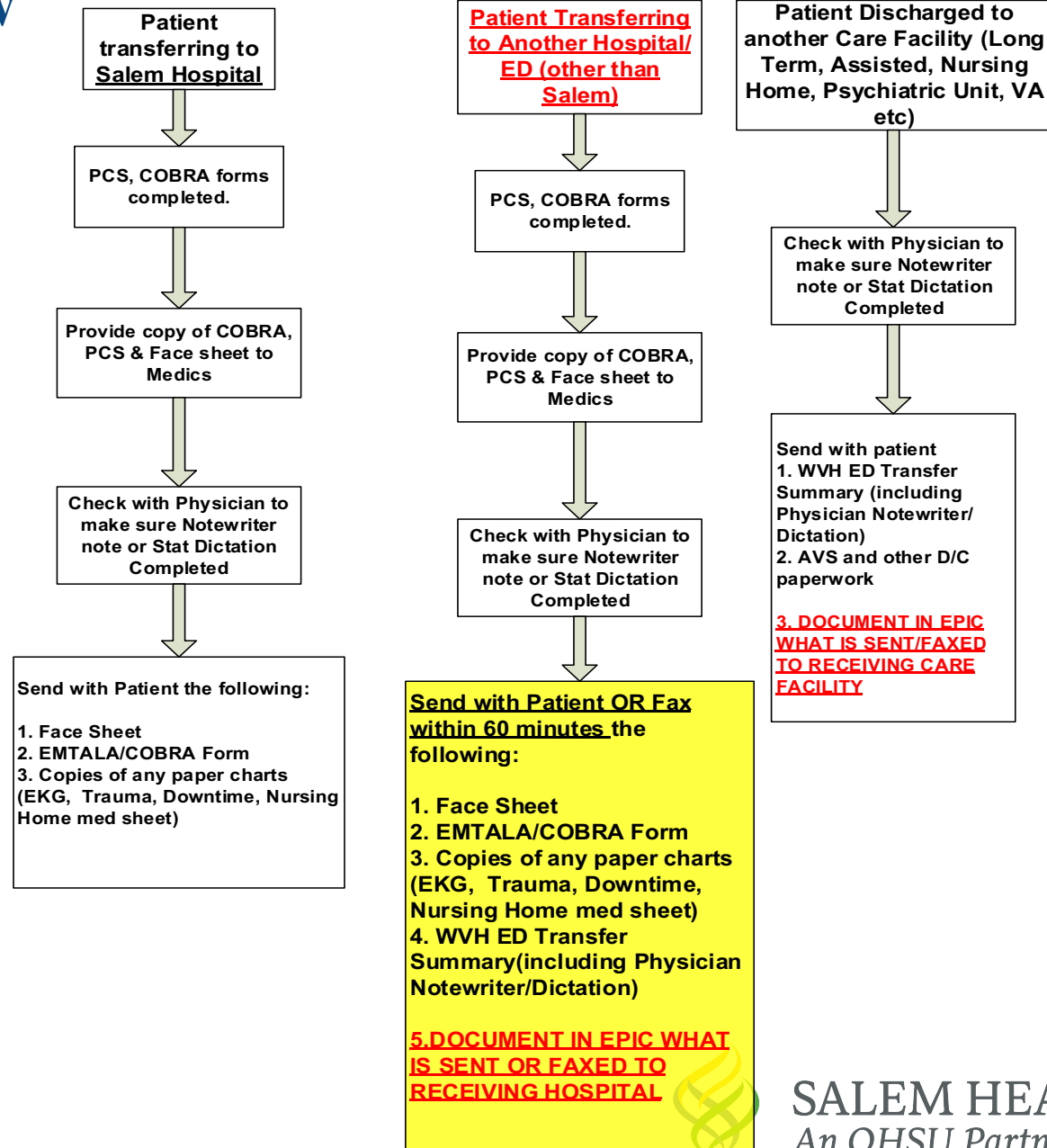
1. **CHANGE: Salem Hospital transfers** –
  - Do not need to copy or fax any part of the medical record except what you normally send (face sheet, PCS, any paper chart forms, and EMTALA paperwork and STAT Dictation)
2. **CONTINUE: All Other Hospital transfers**
  - Send/fax information as currently doing – ensure within 60 min of leaving
3. **NEW: All Discharges to any Healthcare Facility** (Long term Care, Nursing Homes, Assisted Living, Rehabilitation Facilities, Veterans Facilities, Psychiatric Facilities)
  - **Send WVH ED Transfer Summary with patient**
  - On Discharge/ Disposition section choose #15 – transfer another facility
  - On Destination – choose facility patient being discharged to (example: Evergreen, DRV, Avemere etc.)
4. **For all transfers/discharges in above, ED RN or Tech must document in patient chart:**
  - A. Paperwork sent/faxed to receiving hospital/other care facility (examples include EMTALA forms, any paper chart forms and WVH ED Transfer report)
  - B. RN must document who SBAR was given to (must document both name and title – ex. Shirley RN)
  - C. If no meds given during the ED encounter then a note on discharge must be entered stating, “No meds given”. I have asked that this requirement be reviewed by National Committee (if there are no orders for medications and thus no MAR then why document, No Meds Given?) For now please include in your discharge note “No meds given”.
  - D. How you sent any labs/imaging studies that were pending when pt transferred, this may be a note added to the patient EHR after they are transferred.

Team STEPP  
Tool for  
Communication

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## ED Transfer to Healthcare Facility Process

# Action Plan # 3–Flow Sheet with ED/Tech Specialty Practice Team



# Action # 4 – More Immediate Feedback to Nurses

- Instead of waiting until end of month – do weekly chart audits
- Manager or Assistant Nurse Manager met with each RN who did not complete all nursing portions of transfer communication

## WVH Transfer Communication Grading Sheet

ED Transfer Communication Audit Tool

MRN# \_\_\_\_\_

Transferring RN \_\_\_\_\_

Transferring MD \_\_\_\_\_

Process Measure	MET	NOT MET	N/A	Comments
Physician to Physician communication prior to transfer				<i>documented on inter-facility transfer form</i>
RN to RN communication within 60 minutes of patient departure				<i>includes documentation of name and designation of RN in the note</i>
Face sheet sent with patient				<i>ensures name, age, address, gender, insurance, and contact information is communicated</i>
Vital signs within 60 minutes of patient departure				<i>communicated by transfer form and/or charted telephone update</i>
GCS is charted if applicable				<i>for cognitively altered or neuro patients only</i>
Allergies reviewed and updated				<i>must check the box if “No Known Allergies” is applicable and click “Mark as Reviewed”</i>
Home med list is available and reviewed				<i>must click “Mark as Reviewed” to show meds were addressed and updated as able</i>
Completed MAR with medication administration times or documentation that “no meds were given” if applicable				<i>click “no medications given during this encounter” if applicable</i>
Nursing documentation includes assessments, interventions, and pt response				<i>in assessments and/or nursing notes</i>
Nursing documentation of patient impairments or lack of impairments				<i>completed EPIC checklist of “patient impairments”</i>
Nursing documentation of LDAs, patient input and output				<i>in doc flow sheets</i>
Nursing documentation of oral restrictions if applicable				<i>in nurses notes or click “NPO initiated” in assessment</i>
Nursing documentation of immobilization devices if applicable				<i>in doc flow sheets and/or nursing notes</i>
Lab and x-ray data sent with patient				<i>any results received after pt departure must be sent to facilities other than SH and documented in nursing notes</i>
Copies of patient record sent to receiving facility within 1 hour of patient departure				<i>must document how and when record was sent to facilities other than SH</i>
Physician note or stat dictation sent to receiving facility within 60 minutes of patient departure				<i>must document how and when it was sent to facilities other than SH or must appear in EPIC within 1 hour of pt departure</i>



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## Action # 5 – Physician Deficiencies

Provided data analysis to ED Medical Director as to issues with dictation

ED Medical Director met with HIM and IT to use Note-Writer and Dragon Speak to do computer note in EPIC

ED Medical Director worked with EPIC Specialist to develop standardized ED Physician Note

ED Medical Director trained all ED physicians on how to use Note-writer and Dragon Speak by end of 3<sup>rd</sup> Q FY 2014.



## 2014- Visual Wall – ED Transfer Communication – Outcome Metric

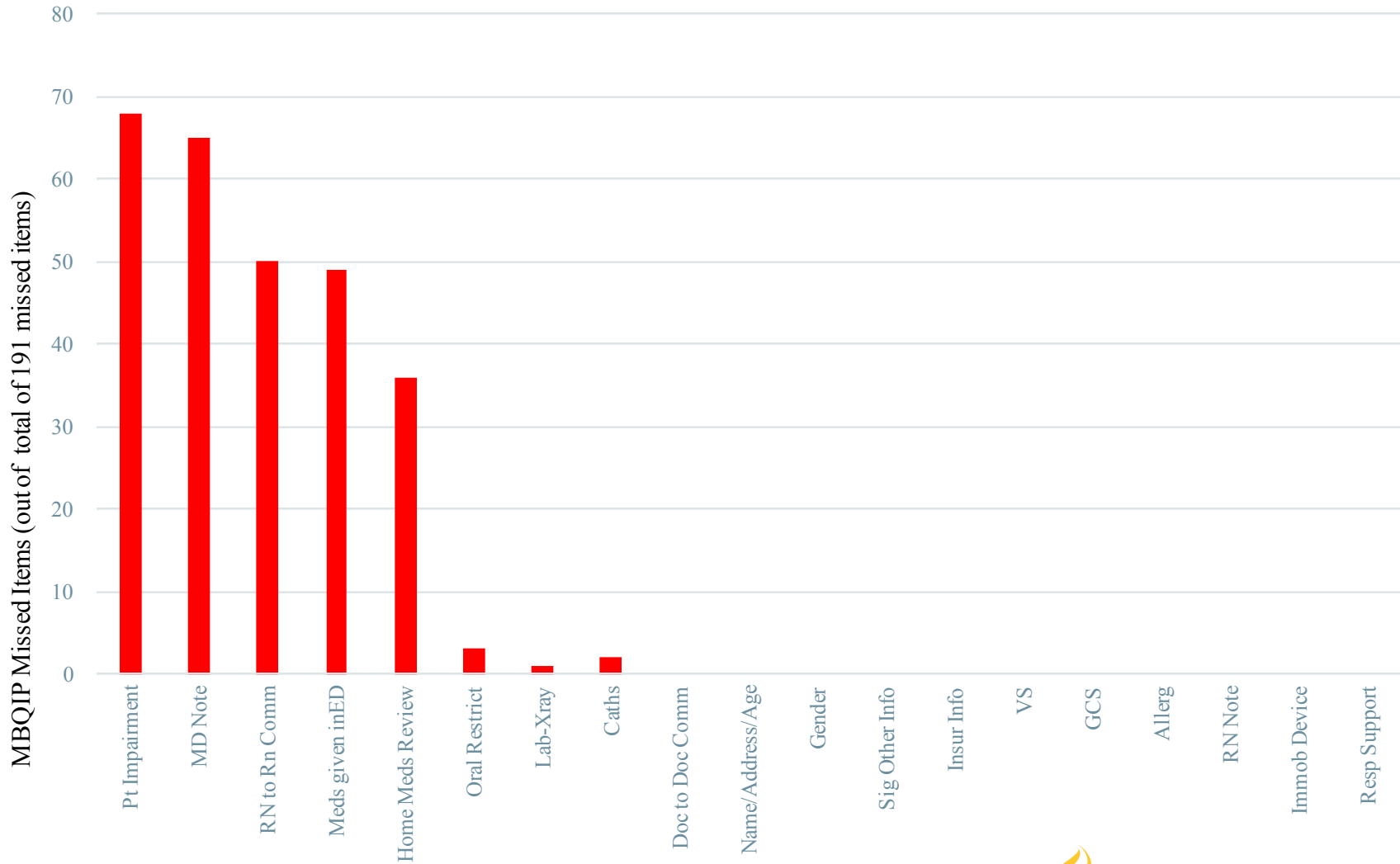
ED Transfer Communication (lowest of 7 metrics) <b>GOAL: &gt; 90%</b>	93%	93%	81%	82%	73%	87%	93%	94%	94%	94%	100%	94%
ED Transfer Communication <u>YTD:</u>	YTD: 93%	YTD: 93%	YTD: 89%	YTD: 87%	YTD: 84%	YTD: 85%	YTD: 86%	YTD: 87%	YTD: 88%	YTD: 88%	YTD: 89%	YTD: 90%

**Sustained improvement for 6 months and met Outcome Process**

**Decided to keep ED Transfer Communication as Quality Metric for an additional year but increased outcome metric to 92.5%**

# Pareto Chart – Area to Focus for Process Metric for FY 2015

MBQIP ED Transfer Metrics FY 2015 - YTD



# Action # 1

## Sensory Assessment

- ED RN SPT identified what should be in Epic Navigator
- Then suggested one button to click if no impairments

The screenshot displays the Epic EMR interface for a patient named Cakes, Rice. The main window is titled "Patient Impairments - Patient Impairment" and shows a form for recording sensory impairments. The form includes fields for "Patient Condition", "Physical Impairment", "Hearing Impairment", "Vision Impairment", "Speech Impairment", "Sensation Impairment", and "Mental Impairment". Each field has a "Yes/No" selection and a "Show Last Filed Value" checkbox. The "Patient Condition" field is currently selected and contains the text "Unable to assess due to current patient condition". A blue oval highlights this field. The "Physical Impairment" field is currently set to "No". The "Hearing Impairment" field is currently set to "No". The "Vision Impairment" field is currently set to "No". The "Speech Impairment" field is currently set to "No". The "Sensation Impairment" field is currently set to "No". The "Mental Impairment" field is currently set to "No". The interface also shows a "Meds (2)" section with "Acetaminophen" and "Lisinopril" listed. The "Allergies (0)" section shows "No Known Allergies". The "Problems (0)" section shows "None". The "Patient" section shows "143:59", "7/7/7", "00:00", "3/3", "142:33", and "143:43". The "Date" is "1/13/2015" and the "Time" is "0909". The "Show Last Filed Value" and "Show Row Info" checkboxes are checked. The "Add Group", "Add Row", and "Add LDA" buttons are visible. The "Values By" dropdown is set to "Values By". The interface also shows a "Patient Impairments" table with columns for "Patient Condition", "Physical Impairment", "Hearing Impairment", "Vision Impairment", "Speech Impairment", "Sensation Impairment", and "Mental Impairment". The "Patient Condition" row is highlighted. The "Physical Impairment" row is currently set to "No". The "Hearing Impairment" row is currently set to "No". The "Vision Impairment" row is currently set to "No". The "Speech Impairment" row is currently set to "No". The "Sensation Impairment" row is currently set to "No". The "Mental Impairment" row is currently set to "No". The interface also shows a "Patient Impairments" table with columns for "Patient Condition", "Physical Impairment", "Hearing Impairment", "Vision Impairment", "Speech Impairment", "Sensation Impairment", and "Mental Impairment". The "Patient Condition" row is highlighted. The "Physical Impairment" row is currently set to "No". The "Hearing Impairment" row is currently set to "No". The "Vision Impairment" row is currently set to "No". The "Speech Impairment" row is currently set to "No". The "Sensation Impairment" row is currently set to "No". The "Mental Impairment" row is currently set to "No".

# Action Plan # 2 - Team STEPPS Tools – Checklist- Updated

## WEST VALLEY HOSPITAL EMERGENCY DEPARTMENT TRANSFER CHECKLIST

Date of Transfer: \_\_\_\_\_

Receiving Facility: \_\_\_\_\_

Transferring RN: \_\_\_\_\_

### Check List:

**Salem Hospital Transfers Packets:** Face Sheet, Yellow Copy Interfacility Transfer Form (Cobra), copies of all paper documentation.  
**Packets for Transfers Outside Salem Hospital:** ED Transfer Report Summary, Yellow Copy Interfacility Transfer Form, copies of all paper documentation.

- Admitting/Accepting Physician notified
- Interfacility Transfer Form completed (Cobra) – have charge nurse view document before separating (\_\_\_\_) Charge initial
- Face Sheet printed
- EKG Copied
- Copy any X-ray, CT, and/or US preliminary reports not in EPIC (or CD sent)
- ID band on and blackened out (Salem Transfers ONLY)
- Physician Note with H&P and Plan of Care Completed
- Nursing Documentation Completed
- FOR NON-SALEM HOSPITAL TRANSFERS:** Fax all documentation to receiving facility within 1 hour of departure
  - **Time Faxed:** \_\_\_\_\_
  - **Any LABS not resulted on ED Transfer Report need to be faxed to receiving facility when resulted**
  - **Time Faxed:** \_\_\_\_\_
- Complete Ambulance Form (PCS)
- Contact Dispatch for EMS Transportation
  - **Time Called:** \_\_\_\_\_
- Document Cobra/Transfer in the notes
- ENTER in the Transfer Log

### RN Documentation Checklist: (RN check below)

- Vital signs within 60 minutes of patient departure
- Allergies reviewed and updated
- Home medication list up to date and “REVIEWED” is clicked
- “No Medications Given” clicked if applicable
- Patient Impairment Assessment completed
- Functional Cognitive Assessment completed
- NPO documented if applicable
- LDA documented if applicable
- I/O documented (IV fluid Stop time \_\_\_\_\_ or Continue at Transfer \_\_\_\_\_)
- SBAR report to receiving facility within 1 hour of patient departure (chart credentials of receiving caregiver in the note)
  - **Time Called:** \_\_\_\_\_

### Method of Transportation

- Private Care                      Ambulance
- Secure Transport                Lifeflight/Reach
- Randall Children’s Transport Team or OHSU Panda Team notified of need for transfer: **Time:** \_\_\_\_\_

### Mental Health

- Mental Health Screener Notes      Charge Nurse Signature: \_\_\_\_\_
- Transport Hold                              (Signature signifies that you have reviewed this document and can attest that documentation is complete.)
- Police Hold
- Voluntary

Send this form to ED Nurse Manager when complete  
**NOT A PERMANENT PART OF THE MEDICAL RECORD**

Patient Label
---------------

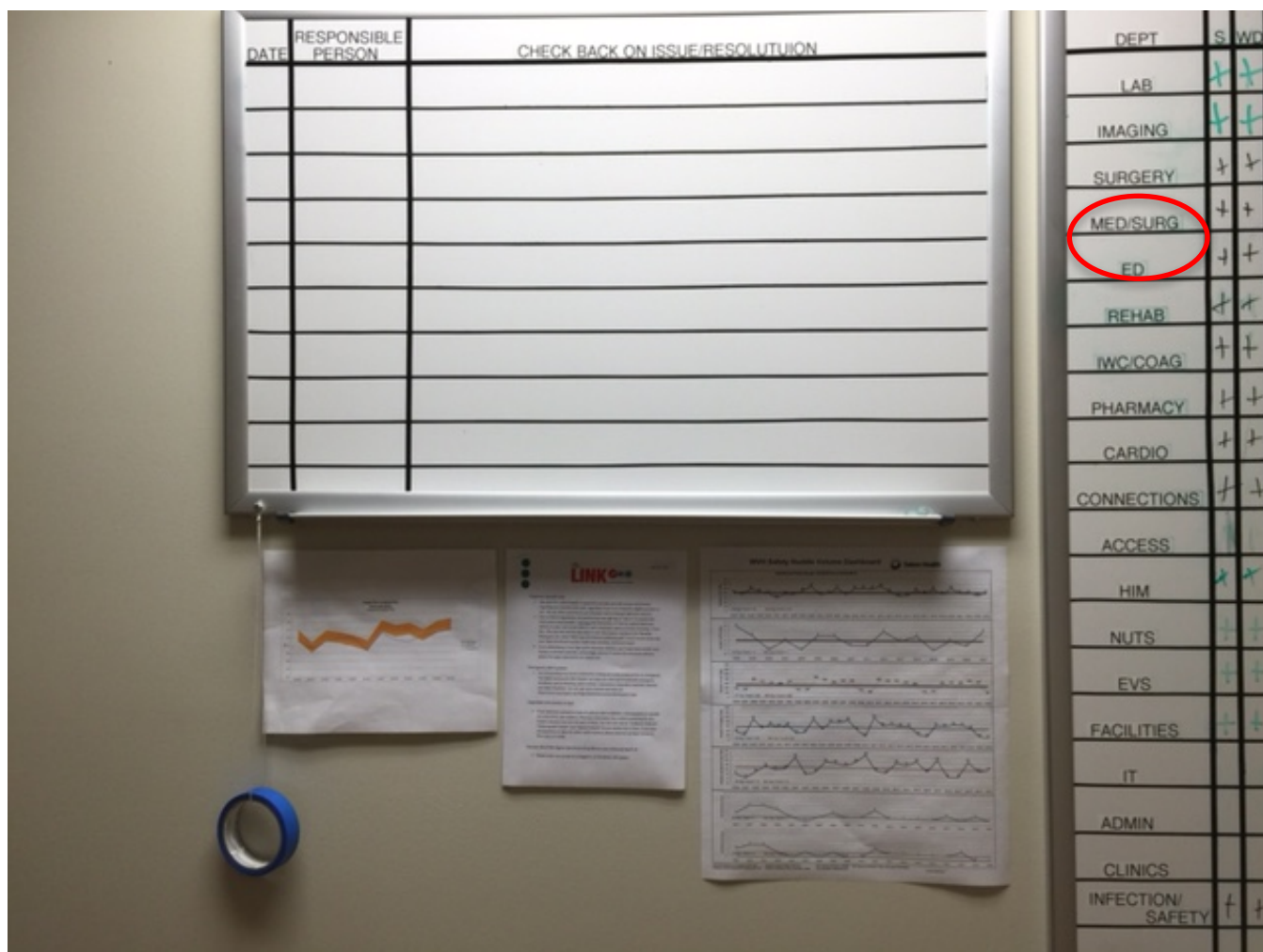


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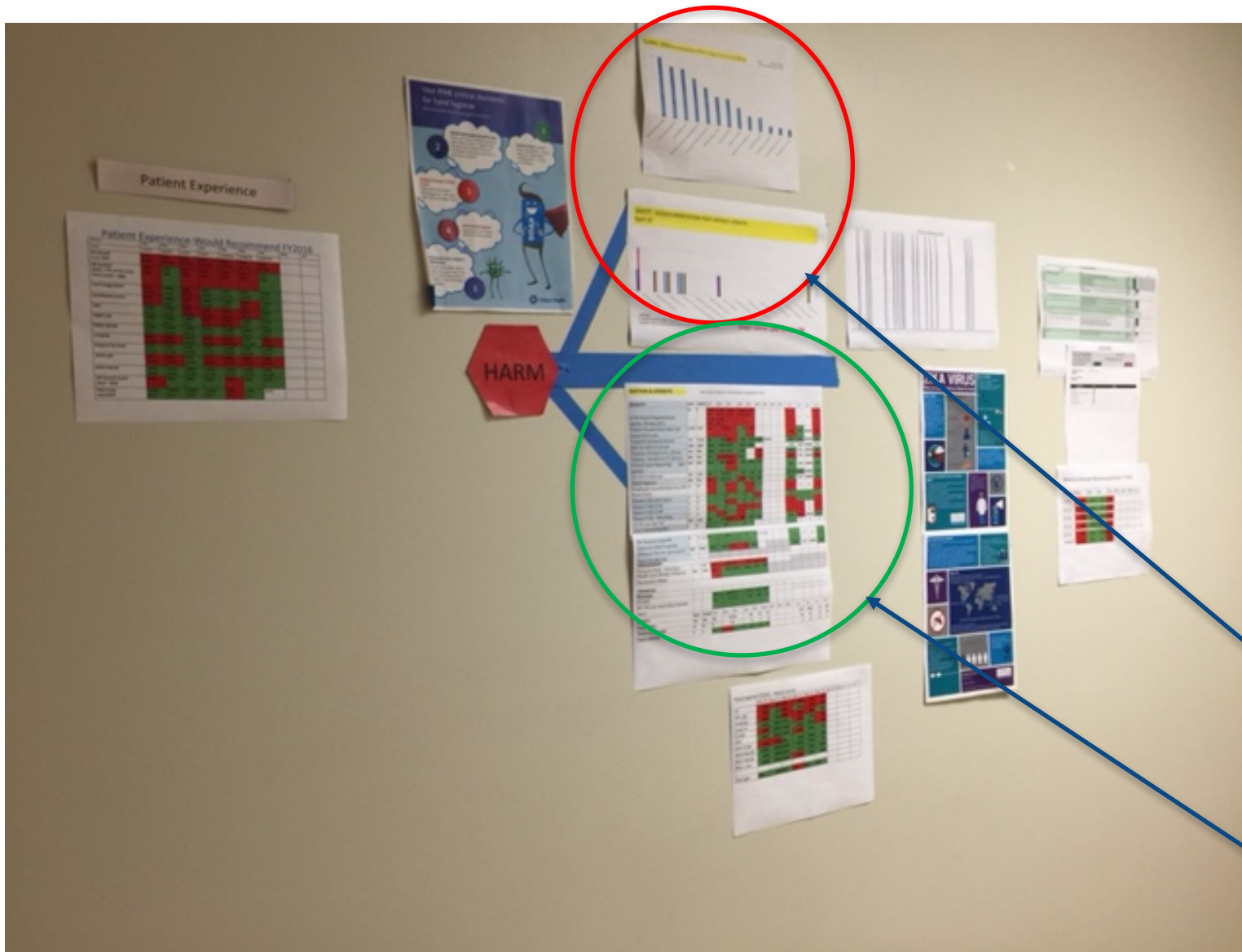
# Action Step # 3- Lean and Team STEPPS Tools - Daily Board- Daily Report and Safety Board

Daily Brief at 0815:

- ED Manager reviews all transfers in last 24 hrs. by 0815 each morning
- Completes data tracking tool with all elements MBQIP ED Transfer Communication
- Number that met all criteria and overall percentage communicated to all
- Same data posted on ED Lean Visual Board in the ED



# Lean Tools and Team STEPPS Tools – Outcome Measures



Monthly Quality Coordinator responsible for reviewing Quality, Patient Experience, & Infection Prevention data for all of leadership:

1. R&I data (Regenerate & Improve)
2. S&O data (Sustain and Operate)

# FY 2106 – Year to Date

REGENERATE & IMPROVE														
FY 2016 OUTCOME METRICS	TARGET	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Q1	Q2	Q3	YTD
QUALITY AND SAFETY														
ED Transfer Communication (MBQIP Criteria 7 measures)	95.0%	94.3%	95.0%	96.5%	95.7%	95.6%	96.2%	93.0%	93.0%	97.0%	95.3%	95.8%	94.3%	95.1%



# What We Learned on our Journey

1. Observe work done as it is being done (GEMBA). It is valuable when looking at process changes. It clarifies the difference between what the process is on paper and what is really happening
2. Involve staff who actually do the work when you are looking to improve a process
3. SBAR communication about change at monthly meetings is not enough – need to have in each shift change for several weeks to ensure all staff learn of changes
4. Track the elements missed most often in your process (Pareto Chart). It helps focus where need to educate/look at process
5. Give individual feedback as soon as possible as it increases likelihood that changes to the process will be successful (we went from monthly feedback to daily and have sustained meeting our goal)





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**Thank You**



# Reminder

- **July 15<sup>th</sup>** – Submission Deadline for **Q2 2016 EDTC** Measures to NC Quality Center via QDS
- **August 1<sup>st</sup>** – Submission Deadline for **Q1 2016 Outpatient Measures** to QualityNet
- **August 19<sup>th</sup>** – In-Person Collaborative meeting in Winston-Salem

# Thank You!

## QUESTIONS?



# NC Quality Center Team

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