

# **Same Day Discharge after Percutaneous Coronary Intervention Nurses' Role in an Inter-Professional Practice Change**



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# Objectives

- To understand and describe the important role nursing has in the implementation of a successful practice change
  - Understand how a translation model guides the practice change process
  - Discuss the importance of data collection, evaluating and reporting of the results to identify and target on those barriers that need to be addressed for successful implementation of the practice change
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# Background

- Patients undergoing an outpatient Percutaneous Coronary Intervention (PCI) spent one night in the hospital for observation
  - The Ambulatory Cardiac Care Unit (ACCU) was chosen for this patient population
  - The literature showed - Same Day Discharge (SDD) after a PCI in patients who meet specific criteria, was as safe as routine overnight observation
  - Planning and implementation of the SDD PCI program was an interprofessional collaborative process
  - Goals were to: provide a safe procedure, decrease length of stay and increase patient satisfaction
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# **Collaborative Model for Evidence Translation**

## **CoMET Model**



**A collaboration process for:**

- Reviewing
- Planning
- Implementing
- Monitoring & Evaluating
- Reporting & Sharing





# The CoMET Model

## Systematic process

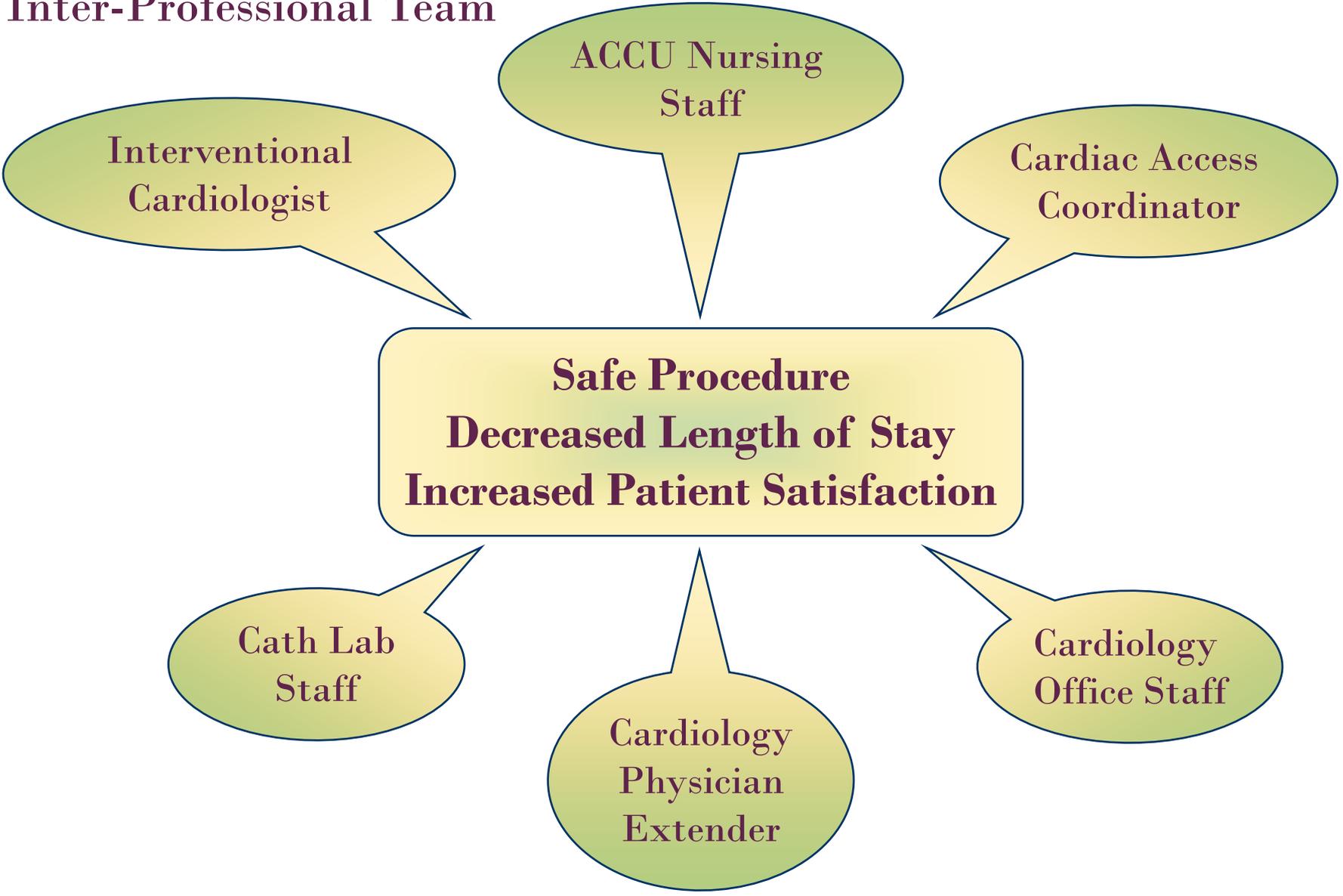
- Consistent understanding of the process

## Emphasis on work done at the unit level

- Provides mechanism for feedback
- Improves understanding of the data in a meaningful way
- Promotes ownership of the practice initiative
  - sustained practice with quality outcomes



# Inter-Professional Team



**ACCU Nursing Staff**

**Interventional Cardiologist**

**Cardiac Access Coordinator**

**Safe Procedure  
Decreased Length of Stay  
Increased Patient Satisfaction**

**Cath Lab Staff**

**Cardiology Physician Extender**

**Cardiology Office Staff**

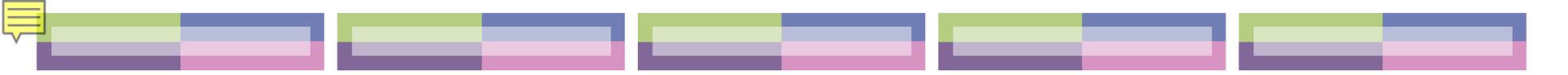




# Getting Started and Use of the CoMET Model

<b>Steps</b>	<b>Inter-Professional Team</b>
<b>Identify</b> the practice initiative	Initiated by Interventional Cardiologist
<b>Critically appraise</b> the evidence	Nursing and Cardiologist – Reviewed current literature for implementation of the Same Day Discharge (SDD) PCI program.
<b>Determine</b> appropriateness of the practice initiative	Ambulatory Cardiac Care Unit (ACCU) - the best place for this patient population Preliminary Data – Inclusion criteria for patients to be considered for SDD PCI





Selection Criteria of ACCU Patients who qualify for  
Same Day Discharge after PCI

## Pre Procedure Criteria

- Patient of 2 interventional cardiologist
- Resides 1 hour drive from Maine Medical Center
- Support person to stay overnight
- Transportation availability
- Normal Heart Function
  - Ejection Fraction greater than 50%
- Normal Kidney Function

**\*\*Coumadin Patients will not fall into this category  
and therefore will be staying overnight**





Selection Criteria of ACCU Patients who qualify for  
Same Day Discharge after PCI

## Procedural Criteria

- Radial Access
  - Normal flow after stent
  - Uncomplicated procedure
  - No Chest Pain
  - No ECG changes
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Selection Criteria of ACCU Patients who qualify for  
Same Day Discharge after PCI

## Post Procedure Criteria

- Monitor ST segments
- Creatine Kinase drawn 3 hours after return to floor
- Patient can be discharged 4 hours after returning to the floor if:
  - No Chest Pain
  - Access site without complications
  - No changes on the ECG or telemetry
  - No major arrhythmias
  - Normal Creatine Kinase 3 hours post procedure

**All need to be answered yes for the patient  
to be discharged the same day**





# Pre Practice Change Data Collection

March 2014 – August 2014

- Over 500 patient records were reviewed using the selection criteria
  - Approximately 50 patients met the criteria for SDD
  - 15 of these 50 patients, who had a PCI, met procedural criteria for same day discharge
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# Implementation of the New Initiative in ACCU Using the CoMET

<b>Steps</b>	<b>Unit Level</b>
<b>Planning the Education</b>	ACCU Unit Based Educator planned staff education based on the staff's needs Planned patient education
<b>Data Collection Tool</b>	Quality and Research Council members collaborated with the cardiologist to design the data collection tool – post discharge follow up calls
<b>Facilitate &amp; Implement</b>	Practice Council member facilitated the implementation of the new practice
<b>Monitor, Report &amp; Evaluate</b>	All RNs were responsible for the data collection Results were evaluated by nursing & the Cardiologist





# Content of the Education and Data Collection Tool

## **Staff education**

- Difference between cardiac catheterization and PCI
- ST segment monitoring
- Increased risk of neuro changes after stent

## **Patient education**

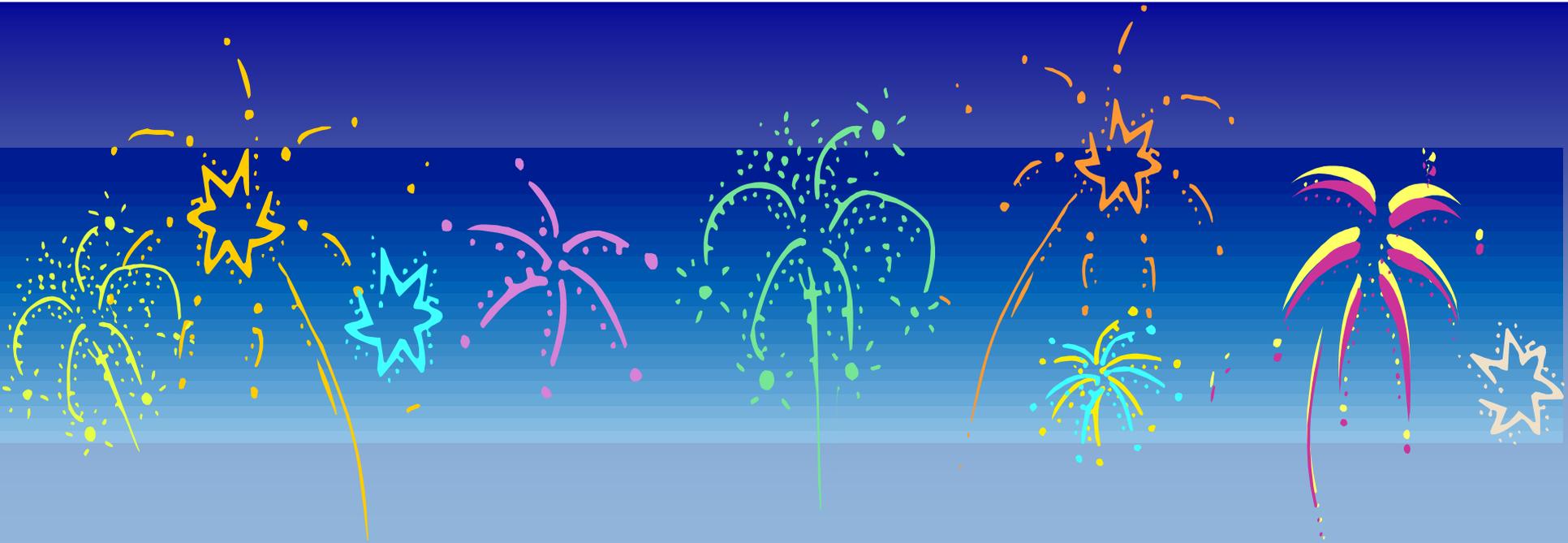
- In addition to routine post procedure information  
- emphasis on treatment of chest pain and medication compliance with clopidogrel (platelet inhibitor)

## **Post call sheet assesses for**

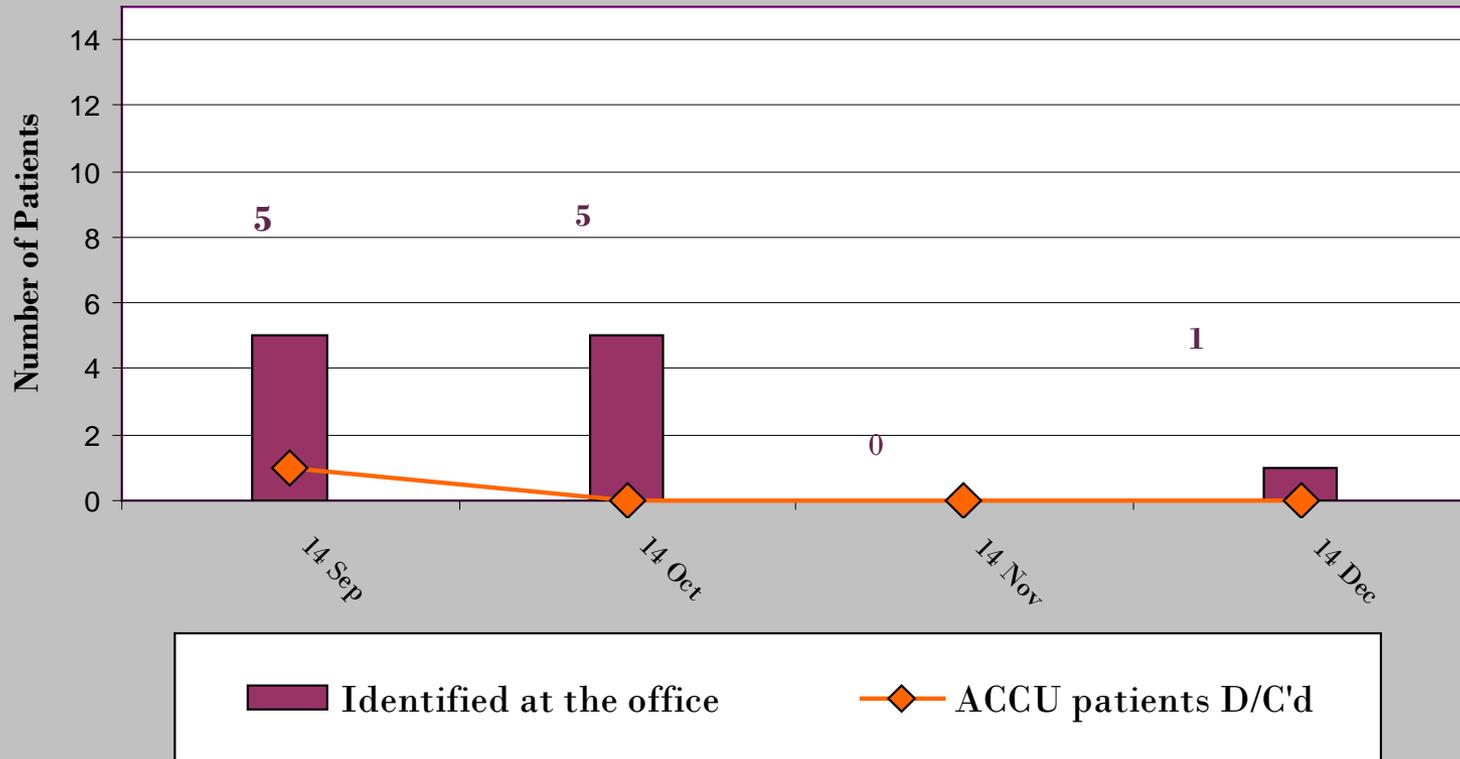
- Clopidogrel compliance
  - Chest Pain
  - Access Site
  - Patient Satisfaction
- 



**Same Day Discharge PCI program was  
implemented September 2014**



**Number of PCI Patients Eligible for  
Same Day Discharge & Number of Patients Discharged  
September 1, 2014 - December 31st 2014**



**One patient discharged in September**





Realizing that there was only the one discharge

# Physicians Change Some Protocols

## Changes made in October 2014

- Any Interventional Cardiologist could discharge a patient on the same day

## Changes made in December 2014

- Patient needed to live within 1 hour of any hospital
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# Review of the Data

December 2014

- Minimal number of patients being identified
  - This was reported to Nursing and Cardiac Interventional by ACCU RN
  - Data were not reported to the cardiology office
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# Nurse Driven Protocols

- ACCU nurses recognized the opportunity to use the pre-procedure admission time
  - New Protocol – ACCU nurses assess low-risk patients using the selection criteria, those who had not been previously screened at the office, as potential candidates for same day discharge.
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# Nurse Driven Protocols

- The goal of the new protocol: to identify more patients who are eligible for same-day discharge, therefore increase the number of patients discharged the same day

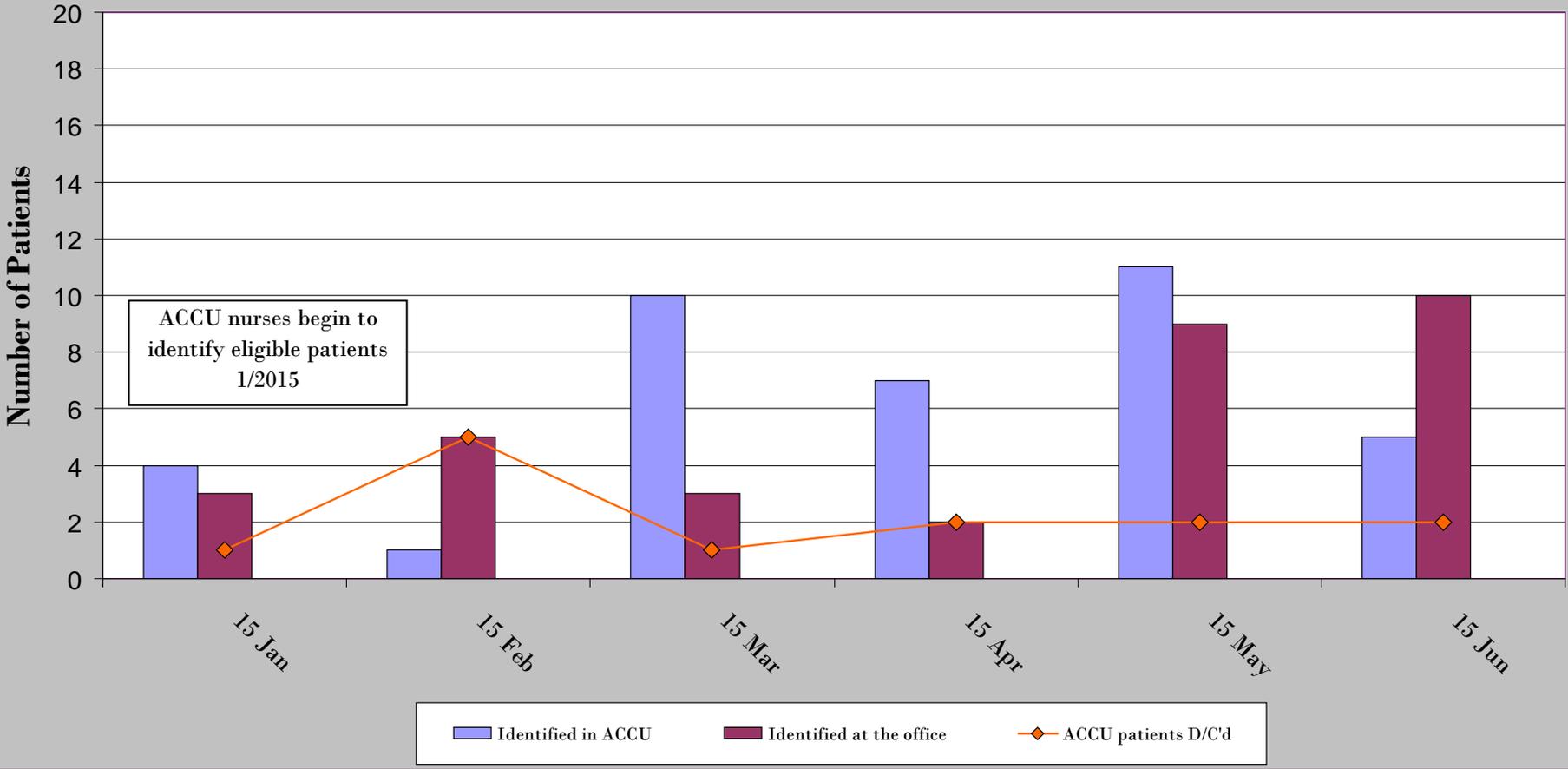




# Reporting

- Starting in January 2015 - the data were reported weekly to all members of the team including the office
  - By June 2015 the number of patients identified in the office was equal to or more than those identified in ACCU
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# ACCU Nurses improve identification of PCI patients eligible for Same Day Discharge January 2015 - June 2015



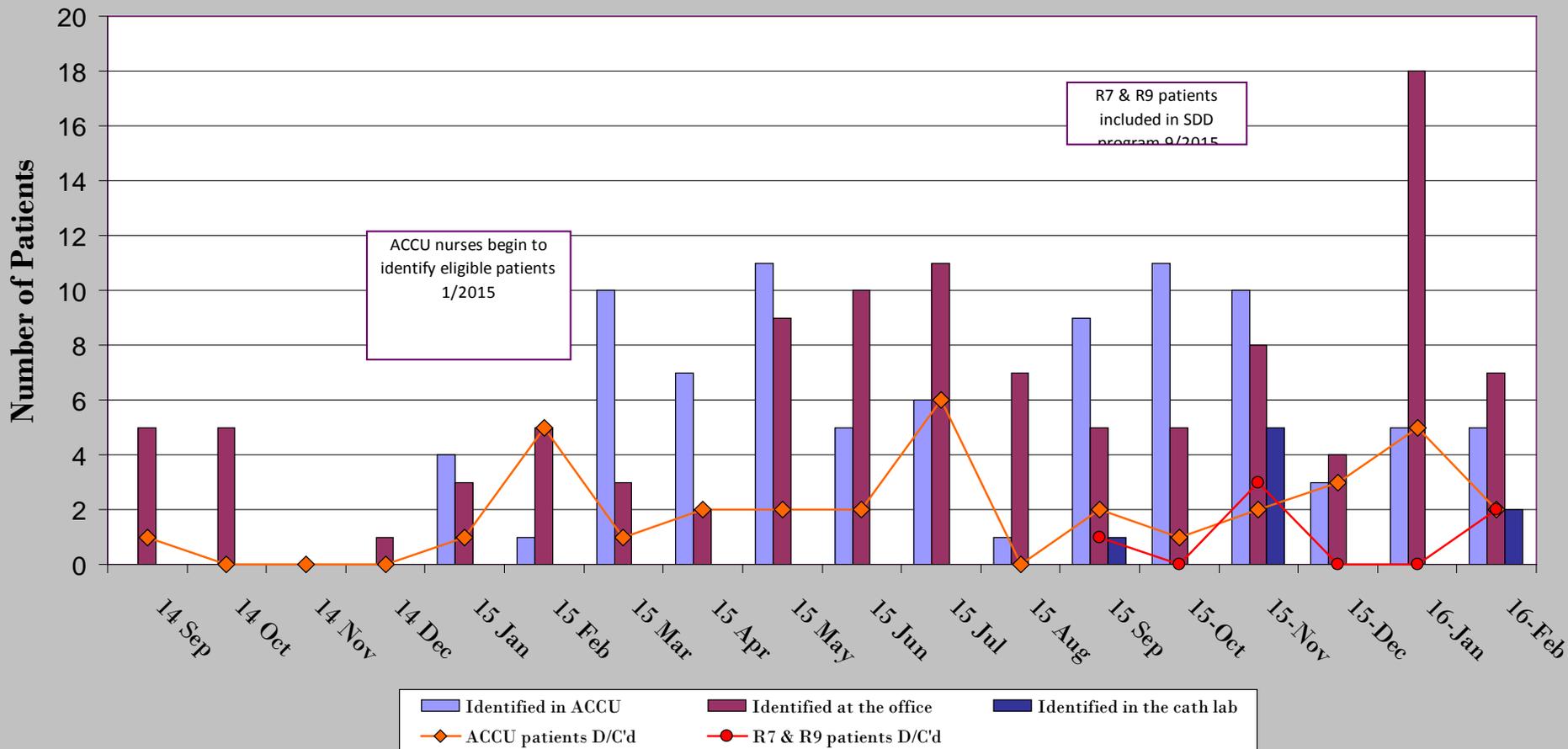


# One Year Later

September 2015

- Reviewed and adjusted the selection criteria to include more patients
    - Patients with mildly decreased heart function were included – EF greater than 40%
  - The protocols were expanded: inpatients on cardiology units
  - The patients who met the criteria could be discharged the same day as their PCI
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## Patients Eligible and Discharged the Same Day as their PCI September 2014 - February 2016





# Post Call Assessment

- No access site complications
  - No patient reported chest pain
  - Clopidogrel adherence is 100%.
  - Patient satisfaction of the hospital stay on a scale of 0-10 (10 being the best):
    - 81.5 % have rated their experience ‘the best/10’
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# Significance & Impact

- Following the implementation of a new physician-driven process to identify low-risk, post-PCI patients, ACCU nurses recognized that few patients were identified pre-procedure and discharged the same day
  - ACCU nurses proposed an innovative process to identify eligible patients in the immediate pre-procedure setting
  - This innovation resulted in more patients being identified and discharged the same day
  - The SDD PCI program has now been expanded to the other cardiac units allowing low risk inpatients to go home the same day after their PCI
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# Questions?

**“Tell me and I’ll forget,  
Show me and I’ll remember,  
Involve me and I’ll understand.”**

**Confucius**

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in the subject line include SDD PCI**



# References

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