

# Evaluation of Pharmacy Post Percutaneous Coronary Intervention Education at an Urban Safety-Net Hospital

Jamie Prashek, PharmD Candidate, Rexford Benson, PharmD Candidate, Nguyen Cao PharmD Candidate, Hamada Elmashhady, PharmD Candidate, and Andrew J. Smith, PharmD, FCCP, BCCP, BCPS  
University of Missouri – Kansas City School of Pharmacy, Truman Medical Centers – Hospital Hill

## Background

- Roughly 6.7% of the United States population can be classified as having coronary heart disease (CHD)<sup>1</sup>
- Percutaneous coronary intervention (PCI) with stent placement is performed for revascularization of diseased arteries
- Guideline directed medical therapy is also utilized for prevention of recurrence in these patients

## Objectives

- To examine patient specific demographics in those who received a PCI in 2018 at a local safety-net hospital
- To evaluate the medications prescribed for patients post PCI
- To assess the number of patients receiving post PCI education compared to readmission to the hospital or an emergency room (ER) visit within 30 days

## Methods

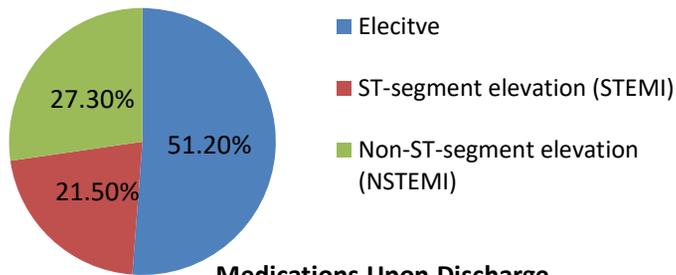
- This retrospective study was conducted at a local safety-net hospital where charts of patients undergoing a PCI from January 1<sup>st</sup> to December 31<sup>st</sup> 2018 were reviewed
- Education was provided prior to discharge via pharmacist, pharmacy resident, or pharmacy students. Verbal and written education was provided. A follow up phone-call was completed post discharge
- Medications at discharge were compiled in comparison to guideline directed therapy
- Data was collected using a standardized form

## Results

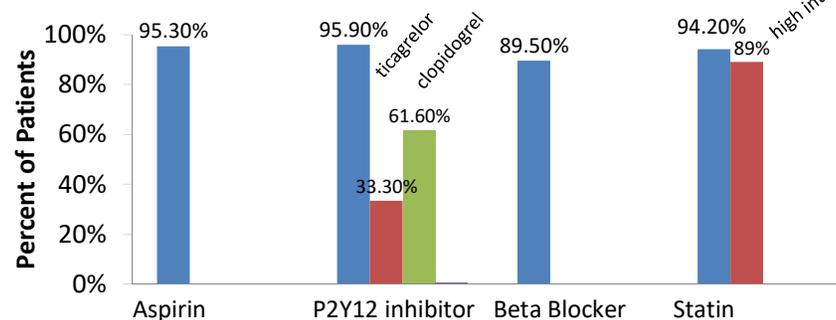
### Patient Demographics (n=155)

Male gender (%)	111 (71.6%)
Age (yrs., SD)	56.8 ± 10.6
Inpatient education completed (%)	108 (62.8%)
Follow-up phone call (%)	116 (67.4%)

### PCI Indication



### Medications Upon Discharge



### PCI Inpatient Education

Result	Education Completed (n=108)	Education Not Completed (n=64)	p-Value
Readmission within 30 days	17 (15.7%)	12 (18.8%)	0.61
ER visit within 30 days	13 (12%)	7 (10.9%)	0.828

### PCI Follow-Up Phone Call

Result	Phone Call Completed (n=116)	Phone Call Not Completed (n=56)	p-Value
Readmission within 30 days	20 (17.2%)	9 (16.1%)	0.848
ER visit within 30 days	14 (12.1%)	6 (10.7%)	0.795

## Discussion

- Nationally stent placement is more common in males vs females; 294,000 vs. 140,000 respectively<sup>1</sup>
- Majority of stents are placed in patients between the age of 45 and 64 years old<sup>1</sup>
- At this urban-safety net hospital the data was consistent with the national average; males made up 71.6% and the average age was 56.8 ±10.6 years
- Guideline directed medical therapy was initiated in nearly all patients
- Clopidogrel was the more common P2Y12 inhibitor prescribed
- Nearly all statins prescribed were classified as high intensity
- Inpatient education was completed with 62.8% of patients, and follow up phone call with 67.4%
- Statistical significance was not identified comparing education or phone call with hospital readmission or ER visit within 30 days

## Resources

- Benjamin, E., Muntner, P., Alonso, A., et.al. Heart disease and stroke statistics--2019 update: a report from the American Heart Association. *Circulation*. 2019;139(10):1-473

## Disclosures

All authors have nothing to disclose in concerns to possible financial or personal relationships with commercial entities that may or may not have a direct or indirect interest in the subject matter of this presentation