

CathPCI Registry® Poster Abstract

Topic of Poster:

Quality Improvement Initiative

Title:

Process Improvement to Meet Appropriate Use Criteria (AUC) for Elective Patients in the National Cardiovascular Data Registry (NCDR®) CathPCI Registry®

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Summative Statement:

Proper documentation is vital to insure appropriate percutaneous coronary intervention (PCI) procedures via the NCDR CathPCI Registry dashboard and reports.

Story Idea:

We looked at methods to increase the rate of "appropriate" PCI for patients WITHOUT Acute Coronary Syndrome (ACS). Prior to Quarter 1 2013, there were no data to report for this metric due to issues with definition interpretation. The question was, "how do we know that our patients were receiving appropriate PCIs?"

Findings

- All PCI were coded as urgent hence, no patients were reported in metric 34
- There were no processes in place to address PCI appropriateness.

Innovations

- HPH hired one full time equivalent (FTE) Cardiac Reviewer specifically for the NCDR CathPCI Registry.
- A team consisting of members from the cardiology clinic, the cardiac cath lab and the quality department was formed to identify, analyze and fix gaps in the workflow.
- Interventional cardiologists' and referring cardiologist were educated on the use of the AUC worksheet and smartphase.
- Stress test interpretation was standardized to include quantifying ischemia.
- A paper worksheet was used for the documentation of AUC using The Society for Cardiovascular Angiography and Interventions' Quality Improvement Toolkit (SCAI-QIT) AUC calculator. Subsequently, this worksheet was built into a smart phrase in electronic medical record system for the MDs to document.
- A pre-cath checklist was implemented in the EMR for admission nurses to verify that labs and stress testing were completed within the NCDR time constraints.
- A workflow was built to take the AUC smart phase documentation for all elective outpatients, enter it into the SCAI-QIT AUC tool, and print results of the tool for use in the cardiac cath lab.
- A second time out was implement if a PCI was indicated to address PCI appropriateness
- The printed AUC tool is collected to monitor MD and staff compliance of the AUC workflow

Results:

The Quarter 1 2013 score was 25% which was far below the national median. After implementing the AUC workflow, the Quarter 3 2013 score increased to 75% with a rolling 4 quarter score of 54.17 which is above the national median.

Conclusion:

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We found that documentation and MD/staff compliance is vital to improving scores. Building the AUC workflow affected the AUC scores positively by getting the multidisciplinary team involved and by increasing the cardiology clinic and cardiac cath lab communication.

Caveats:

- Physician and staff consensus (buy-in)
- There are unusual cases that will create “noise” in the data. These cases are reviewed to identify the area of opportunity.
- Staged PCI cases are rare in our facility; typically they are the fall out cases.

Whats next:

In 2014, we are looking at many projects to increase the NCDR scores:

- Looking at the staged PCI cases to see what the best practices are for making sure they are appropriate.
- Using the Physician level scores to have individual conversations
- Implementing Grand rounds and educational forums for staff that focuses on cardiac cath patients
- Reviewing all inappropriate and uncertain cases to identify gaps in the process.

SCAI-QIT Appropriate Use Criteria Tool

		Pt sticker
http://scai-qit.org/content/clinical-presentation		
Non ACS		Definitions
Ischemic Symptoms		Canadian Cardiovascular Society Angina Classification System
Asymptomatic (no ischemic symptoms)		
CCS I (ordinary physical activity does not cause angina symptoms)		CCS I - Ordinary physical activity does not cause angina, such as walking, climbing stairs. Angina occurs with strenuous, rapid, or prolonged exertion at work or recreation.
CCS II (slight limitation of ordinary activity)		CCS II - Slight limitation of ordinary activity. Angina occurs on walking more than 2 blocks on the level and climbing more than one flight of ordinary stairs at a normal pace and in normal condition.
CCS III (marked limitation of ordinary activity)		CCS III - Marked limitations of ordinary physical activity. Angina occurs on walking one or two blocks on the level and climbing one flight of stairs in normal conditions and at a normal pace.
CCS IV (inability to carry in any physical activity without discomfort)		CCS IV - Inability to carry on any physical activity without discomfort—anginal symptoms may be present at rest.

Anti-ischemic/anginal Therapy		Anti-anginal meds within 2 weeks
No therapy		Beta blockers Ca Channel Blockers
Minimal therapy (1 class of medication)		Ranexa Long Acting Nitrates (SL nitro not included) Other
Maximal therapy (2 or more classes of medications)		

Non-invasive Test Results (performed within six months of cath procedure)		Non-invasive Test Examples
No non-invasive testing performed		Exercise Stress Test Stress Echocardiogram
Low-risk stress test findings: cardiac mortality <1%/year		Stress Testing with SPECT MPI Stress Testing with CMR
Intermediate-risk stress test findings: cardiac mortality 1-3%/year		Cardiac CTA
High-risk stress test findings: cardiac mortality >3%/year		Coronary Calcium Scoring
Equivocal test results		

Prior CABG	
No prior CABG	
Previous CABG	

Smart Phrase built in EMR

Non-ACS

{Ischemic symptoms: 13910}

{Anti-ischemic Therapy: 13911}

{Non-invasive Test Results: 13912}

{Prior CABG: 13913}

Asymptomatic (no ischemic symptoms)

CCS I (ordinary physical activity does not cause angina symptoms)

CCS II (slight limitation of ordinary activity)

CCS III (marked limitation of ordinary activity)

CCS IV (inability to carry in any physical activity without discomfort)

Sample Documentation in H&P

Non-ACS

CCS III (marked limitation of ordinary activity)

Minimal therapy (1 class of medication)

Intermediate-risk stress test findings: cardiac mortality 1-3%/year

No prior CABG

Patients WITHOUT ACS: Proportion of evaluated PCIs that were appropriate

