Reduce the Risk: PCI Bleed

A Campaign of the American College of Cardiology
ACC REDUCE THE RISK: PCI BLEED

Webinar # 5
USING THE PCI BLEEDING RISK CAMPAIGN TO AFFECT PATIENT OUTCOMES

August 23, 2018
12:00-1:00pm EST
Hosted by;
Andrea Price MS, CPHQ, RCIS, AACC
Director- Quality Databases, Indiana University Health
Reduce the Risk PCI Bleed Steering Committee Chair

Sunil Rao MD, FACC
Reduce the Risk PCI Bleed Steering Committee Member
Agenda

1. ACC Quality Campaign Framework and Design and History
2. Reduce the Risk: PCI Bleed Campaign Goals
3. Campaign Metrics
4. The Change Package/the Campaign Features
5. Getting Started
Quality Campaign Goals...

• Help hospitals improve cardiovascular care.

• To improve the quality and value of cardiovascular care and outcomes.

• Leverage evidence-based practices.
What’s in an ACC Quality Campaign? 4 Parts

1. Change Package
   - Evidence reviews
   - Assessment survey
   - Intervention tools

2. Learning Network
   - Education
   - Feedback (e.g., NCDR dashboard)
   - Listserve
   - QI website
   - Conferences
   - Chapter meetings
   - Receptions

3. Recognition
   - Quality Leaders
   - Press kits
   - QII, ACC.org
   - Cardiology
   - Blogs
   - Performance based (gold/silver)

4. Evaluation
   - Program reach
   - Goal attainment
   - Adoption

*Key characteristics of a successful QI program

- Influential
- Credible
- Simple
- Strategically aligned for participant
- Offers practical implementation tools
- Offers Networking
- Sets Attainable goals

Potential Quality Campaign
Feasibility Framework

- Need to improve
- Strategic alignment
- Internal/external levers
- Measureable Outcomes
- Evidence-based implementation strategies
- Champions
- Funding
## Reduce the Risk: PCI Bleed—Feasibility Assessment

### A. Primary Purpose
- **bleeding adverse events**

### B. Aligned with ACC strategic plan and mission
- **Purposeful Education**
- **Member Value**
- **90th percentile of hospitals**
- **½ CathPCI sites have median RAB = 4.16% or higher.**
- **90th percentile of hospitals have RAB - 1.6% or lower.**

### C. Evidence of need to improve
- **2.65% to 9.36%**
- **70% of hospital variability due to unexplained causes**

**Guidelines**
- Evaluate bleeding risk (1C PCI)
- ACS treated with DAPT after stent and not high risk of bleeding and no hx of stroke/TIA use prasagrel over clopidogrel (IIa DAPT)

**NCDR dashboard**
- **½ CathPCI sites have median RAB = 4.16% or higher.**
- **90th percentile of hospitals have RAB - 1.6% or lower.**

### D. Drivers
- **BCBSA**
- **MACRA CPI**
- **NQF**
- **MOC**

### E. Draft QI aim statement(s)
- **widespread adoption of evidence-based practices to improve quality of care.**

### F. Outcome measures
- **pts**
  - #1289) Post proc bleeding
  - (1602) Bivalirudin w/I 24hrs of all PCI pts
  - #1827 Unadjusted bleeding events
  - #1871 Post proc bleeding for STEMI pts

**ACTION**
- #42 In-hospital RAB

### G. Evidence based implementation metrics
- **CathPCI**
- **ACTION**
- **Guideline references**
  - PCI
  - DAPT
- **Accreditation**
  - CathLab related standards
  - Tools
  - PCI bleeding toolkit
  - ACC Quality programs
  - PMAC pathway

### H. Internal levers
- **CathPCI**
- **ACTION**
- **Guideline references**
  - PCI
  - DAPT
- **Accreditation**
  - CathLab related standards
  - Tools
  - PCI bleeding toolkit
  - ACC Quality programs
  - PMAC pathway

### I. Funding
- **ACC/NCDR at the moment.**
  - **Pharma:**
    - **AZ-Brillinta**
    - Daiichi Sankyo/Eli Lilly – Prasugrel
    - TMC – Bivalirudin
  - **Transradial:**
    - St. Jude, Medtronic, BSC

### J. Program champions and experts

### K. Overall program design
- **Assessment survey**
- **Intervention tools**
- **Education**
- **Feedback**
- **Learning Network**
- **Listserv**
- **QII website**
- **Conferences**
- **Chapter meetings**
- **Receipts**
- **Recognition**
- **Quality Leader Hospitals**
- **General recognition**

**Evaluation Plan**
- **Program reach**
- **Clinical care**
- **Adoption**
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Reduce the Risk: PCI Bleed Quality Campaign

- motivating widespread adoption of evidence-based practices to improve quality of care
- Improve bleeding rates and decrease variances in data

Decreasing Bleeding Rates
• All patients should be evaluated for risk of bleeding before PCI.

• Patients considered high risk for PCI should be part of a collaborative decision to use a radial approach.

• In patients with ACS treated with DAPT after coronary stent implantation who are not at high risk for bleeding complications and who do not have a history of stroke or TIA, it is reasonable to choose Prasugrel over Clopidogrel for maintenance P2Y12 inhibitor therapy.

• In patients with SIHD treated with DAPT after DES implantation who are at high risk for severe bleeding complications or develop significant overt bleeding, discontinuation of P2Y12 inhibitor therapy after 3 months may be reasonable.

• In patients with SIHD treated with DAPT after BMS or DES implantation who have tolerated DAPT without a bleeding complication and who are not at high bleeding risk (e.g., not taking DAPT, coagulopathy, or oral anticoagulant use), continuation of DAPT for longer than 1 month in patients treated with BMS or longer than 6 months in patients treated with DES may be reasonable.
Opportunity for Improvement

<table>
<thead>
<tr>
<th>PCI In-Hospital Risk Standardized Bleeding (all patients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My Hospital</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>2.21</td>
</tr>
</tbody>
</table>

Your hospital's risk adjusted rate of bleeding events for patients with PCI procedures using the NCDR® PCI bleeding risk adjustment model. [Detail Line:1822]
Steering Committee Members

Andrea Price, MS, RCIS, CCA  Indiana University  Committee Chair
Amit Amin, MD, FACC  Barnes Jewish Hospital
John Messenger, MD, FACC  University of Colorado Hospital
Julie Miller, MD, FACC  Johns Hopkins Hospital
Issam Moussa, MD, FACC  Robert Wood Johnson University Hospital
Sunil V. Rao, MD, FACC  Duke University Medical Center
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<table>
<thead>
<tr>
<th>#</th>
<th>Program Metric</th>
<th>Metric Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCI in-hospital risk-standardized rate of bleeding events for all PCI patients</td>
<td>Bleeding complications after PCI are associated with increased morbidity, mortality and costs. This measure is helpful in providing risk-adjusted feedback on bleeding complications, informing clinical decision-making, and directing the use of bleeding avoidance strategies to improve the safety of PCI procedures.</td>
</tr>
<tr>
<td>2</td>
<td>Proportion of PCI procedures with transfusion of whole blood or red blood cells</td>
<td>Numerator: Count of PCI procedures with a RBC/Whole blood transfusion procedure. Denominator: Count of PCI Procedures The purpose of this metric is to allow identification of potential overuse of transfusion after PCI procedures. In addition, it points out blood loss, which predicts poor outcomes.</td>
</tr>
<tr>
<td>3</td>
<td>Procedures with an observed bleeding event</td>
<td>Count of bleeding event post PCI procedure.</td>
</tr>
<tr>
<td>4</td>
<td>Anticoagulation utilization</td>
<td>All Anticoagulants Fonaparinux Low molecular weight heparin (any) Unfractionated heparin (any) Heparin-LMWH/Unfractionated(any) Direct thrombin inhibitors Bivalirudin</td>
</tr>
<tr>
<td>5</td>
<td>Access site utilization.</td>
<td>Femoral Brachial Radial Other</td>
</tr>
<tr>
<td>6</td>
<td>Method for closure for arterial access site.</td>
<td>Manual compression Mechanical compression Suture Staple Sealant Patch Other, unspecified device</td>
</tr>
</tbody>
</table>
Performance Measure #40:
A new, hierarchical risk-standardized model

PCI in-hospital risk standardized rate of bleeding events (all patients)
Performance Measure #40: What’s new

• Hierarchical model

• Fewer patient variables

• Risk relationships within and amongst hospitals

• Absolute Hgb decrease from pre-PCI to post-PCI of 4g/dL (previously 3g/dL)
Performance Measure #40: Model Details

Post-PCI bleeding defined as any ONE of the following:

1. Bleeding event w/in 72 hours OR
2. Hemorrhagic stroke OR
3. Tamponade OR
4. Post-PCI transfusion for patients with a pre-procedure Hgb >8 g/dL and pre-procedure Hgb not missing; OR
5. Absolute Hgb decrease from pre-PCI to post-PCI of ≥ 4 g/dL
Performance Measure #40: Model Details

Patient eligibility:

1. Patient’s with a PCI procedure performed during the Episode of Care.
2. Patients with multiple PCI procedures Include only index PCI procedure.
3. Include patient procedures with non-missing values for outcome variables of bleeding event w/in 72 hours AND transfusion.
4. Exclude patients who died on the same day of the procedure.
5. Exclude patients with CABG.
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QII Participant Change Package

Assessment
Includes benchmarking data, and is designed to identify opportunities for improvement.
Read more...

Toolkit
Specific tools and strategies designed to address or generalize topic areas for improvement.
Read more...

Calls & Webinars
Listen to community calls and on-demand webinars that review evidence-based tools and lessons learned.
Read more...

Listserv
Collaborate and interact with others on a listserv to share best practices and lessons learned.
Read more...

AMERICAN COLLEGE OF CARDIOLOGY
<table>
<thead>
<tr>
<th>Success Metric</th>
<th>Description</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PCI in-hospital risk standardized rate of bleeding for all patients</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Proportion of PCI procedures with transfusion of whole blood or red blood cells</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Procedures with an observed bleeding event</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>Anticoagulation utilization</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Access site utilization</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>Method for closure for arterial access site</td>
<td>7</td>
</tr>
</tbody>
</table>
Reduce the Risk: PCI Bleed Toolkit

The ACC has curated evidence-based tools to help you decrease PCI bleeding at your facility. Click on each section to find targeted tools for each Campaign metric:

- **Metric 1**: In-hospital risk-standardized rate of bleeding events for all PCI patients.
- **Metric 2**: Proportion of PCI procedures with transfusion of whole blood or red blood cells.
- **Metric 3**: Procedures with an observed bleeding event.
- **Metric 4**: Anticoagulation utilization.
- **Metric 5**: Access site utilization.
- **Metric 6**: Method for closure for arterial access site.

<table>
<thead>
<tr>
<th>Section</th>
<th>Tools to Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preprocedural</td>
<td>Metric #1 and 6</td>
</tr>
<tr>
<td>Intraprocedural</td>
<td>Metric #1, 5, and 6</td>
</tr>
<tr>
<td>Postprocedural</td>
<td>Metric #1, 5, and 6</td>
</tr>
<tr>
<td>Pharmacotherapy</td>
<td>Metric #1, 2, 3, 4, 5, 6</td>
</tr>
<tr>
<td>EHR Integration</td>
<td>Metric #1, 4, 5, and 6</td>
</tr>
</tbody>
</table>
## Reduce the Risk: PCI Bleed Toolkit

### Preprocedural (Tools to address Metric #1 and 6)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Tools</th>
</tr>
</thead>
</table>
| **Metric 1**: in-hospital risk-standardized rate of bleeding  
**Metric 3**: Procedures with an observed bleeding event | CathPCI Bleeding Risk Calculator App |
| **Metric 1**: in-hospital risk-standardized rate of bleeding events for all PCI patients  
**Metric 6**: Method for closure for arterial access site | Pre PCI-Procedure Orders |
| **Metric 1**: in-hospital risk-standardized rate of bleeding  
**Metric 3**: Procedures with an observed bleeding event | The Universal Protocol from the Joint Commission |
| **Metric 1**: in-hospital risk-standardized rate of bleeding events for all PCI patients  
**Metric 4**: Anticoagulation utilization  
**Metric 5**: Access site utilization | Risk-Concordant Framework for Bleed Avoidance Strategies |
Toolkit Aligned to Metrics
Webinar #1: September 18, 2018
Webinar #3: January 23, 2019
Webinar #5: August 23, 2019

Webinar #2: November 7, 2018
Webinar #4: May 22, 2019
Webinar #6: November 6, 2019
The Campaign Dashboard

*This is a draft*
### Dashboard Example

#### CathPCI Quality Campaigns > Reduce the Risk PCI Bleed Campaign

<table>
<thead>
<tr>
<th>Metric Key</th>
<th>Description</th>
<th>2017Q2</th>
<th>2017Q3</th>
<th>2017Q4</th>
<th>2018Q1</th>
<th>My Hospital RAIQ</th>
<th>US Val Group RAIQ</th>
<th>US Registry RAIQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>4934</td>
<td><strong>PCI In hospital risk-standardized rate of bleeding events</strong></td>
<td>934</td>
<td>1,000</td>
<td>383</td>
<td>435</td>
<td>406</td>
<td>416</td>
<td>2,257</td>
</tr>
<tr>
<td>4288</td>
<td>Proportion of PCI procedures with transfusion of whole or RBC</td>
<td>445</td>
<td>1,000</td>
<td>445</td>
<td>435</td>
<td>406</td>
<td>416</td>
<td>2,257</td>
</tr>
<tr>
<td>4928</td>
<td>Procedures with an observed bleeding rate</td>
<td>1,000</td>
<td>100</td>
<td>43</td>
<td>435</td>
<td>406</td>
<td>416</td>
<td>2,257</td>
</tr>
<tr>
<td>4466</td>
<td><strong>Anticoagulation Utilization</strong></td>
<td>374</td>
<td>100</td>
<td>374</td>
<td>381</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4467</td>
<td>Fondaparinux</td>
<td>5</td>
<td>1,000</td>
<td>0,5</td>
<td>2</td>
<td>435</td>
<td>416</td>
<td>0</td>
</tr>
<tr>
<td>4468</td>
<td>Low molecular weight heparin</td>
<td>451</td>
<td>1,000</td>
<td>0,5</td>
<td>446</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4469</td>
<td>Unfractionated heparin</td>
<td>50</td>
<td>1,000</td>
<td>0</td>
<td>1</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>8944</td>
<td>Heparin-LMWH/Unfractionated</td>
<td>374</td>
<td>100</td>
<td>374</td>
<td>381</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4471</td>
<td>Bivalirudin</td>
<td>374</td>
<td>100</td>
<td>374</td>
<td>381</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4159</td>
<td>Femoral access site</td>
<td>1,000</td>
<td>100</td>
<td>100</td>
<td>435</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4161</td>
<td>Brachial access site</td>
<td>374</td>
<td>100</td>
<td>374</td>
<td>381</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4163</td>
<td>Radial access site</td>
<td>5</td>
<td>1,000</td>
<td>0,5</td>
<td>2</td>
<td>435</td>
<td>406</td>
<td>416</td>
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<tr>
<td>4165</td>
<td>Other access site</td>
<td>451</td>
<td>1,000</td>
<td>0,5</td>
<td>446</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4167</td>
<td><strong>Manual compression</strong></td>
<td>394</td>
<td>1,000</td>
<td>394</td>
<td>383</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4169</td>
<td>Mechanical compression</td>
<td>445</td>
<td>1,000</td>
<td>445</td>
<td>435</td>
<td>406</td>
<td>416</td>
<td>2,257</td>
</tr>
<tr>
<td>4171</td>
<td>Suture closure method</td>
<td>1,000</td>
<td>100</td>
<td>100</td>
<td>435</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4173</td>
<td>Staple closure method</td>
<td>374</td>
<td>100</td>
<td>374</td>
<td>381</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4175</td>
<td>Sealant closure method</td>
<td>5</td>
<td>1,000</td>
<td>0,5</td>
<td>2</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
<tr>
<td>4177</td>
<td>Patch closure method</td>
<td>451</td>
<td>1,000</td>
<td>0,5</td>
<td>446</td>
<td>435</td>
<td>406</td>
<td>416</td>
</tr>
</tbody>
</table>
Earn “High” weighted credit for this MACRA MIPS Improvement Activity!
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Opt in today!

To become a Reduce the Risk: PCI Bleed facility”

1. Log into NCDR
2. Go to your CathPCI Registry® home page
3. Click “Start Here” on the left navigation bar
4. Opt in!

The Registry Site Manager will be required to log in to opt your facility into the program.
Reduce the Risk: PCI Bleed


The ACC’s Reduce the Risk: PCI Bleed Quality Campaign is focused on minimizing PCI-associated bleeding risks and saving patient lives through widespread adoption of evidence-based best practices.

Building on the ACC’s proven track record in helping hospitals and cardiovascular professionals take advantage of key strategies to close gaps in guideline-recommended care, Reduce the Risk: PCI Bleed leverages the power of the CathPCI Registry® to help hospitals and clinicians anticipate, prepare and save lives.

Join the Reduce the Risk: PCI Bleed Campaign

Join Reduce the Risk: PCI Bleed and be recognized for your commitment to Quality! Participation is easy and no additional cost to CathPCI Registry participants!
Opting in Link

Welcome CathPCI Registry Participants

Locate the v5 Pending Data Dictionary Updates

As dynamic, real-world scenarios are captured in the v5 dataset areas for improvement are rapidly being identified. Please locate the document: v5 Dynamic Lists and Definitions with Pending Data Dictionary Updates on the resource page. This document will support accurate data capture and be updated as needed until the Data Dictionary can be amended. Thank you for checking the announcement page frequently!

Posted Jun 11, 2018

NCDR.18 Annual Conference: Sessions on Demand (recordings)

Thank you again for attending the NCADR.18 Annual Conference in Orlando, Florida earlier this year.

For those of you who purchased the NCADR.18 Sessions on Demand (recordings) already, we received some feedback that the session titles did not completely mirror the ones used onsite. We appreciate your feedback and are happy to inform you that all session titles have now been updated. If you have not yet received your login credentials to access the recordings, please contact us at ncdr@acc.org or 800-257-4737.

If you have not purchased the NCADR.18 Sessions on Demand and wish to do so now, please use the following link: http://www.conferencemedia.net/stores/ncdr/

We look forward to seeing you at NCADR.19 in New Orleans!

Posted Jun 11, 2018

NCDR Orientation 101 Webinar Occurs Tuesday June 12th 2018

Please join us on June 12th 2018, from 1pm – 3pm Eastern Time as we walk you through getting started with NCDR. We’ll arm you with information about website navigation, business processes, available resources and much more!

Participants will be muted in this session, and are welcome to ask questions via the Q-and-A functionality displayed on the screen during the session. The NCDR Clinical Quality Advisor Team will lead this session, and will answer as many questions as possible!

Click Here to Join the April 10th 2018 Webinar!
Opt In

Reduce the Risk: PCI Bleed Campaign

Opt in Opt out page

OPT IN

Attention Registry Site Managers: To opt into the Patient Navigator Program Focus MI, please acknowledge your understanding of the program requirements by clicking the box below and submitting:

- [ ] Click here to accept the terms and conditions of the Patient Navigator Program Focus MI

Submit
QUESTIONS?
Reduce the Risk: PCI Bleed
A Campaign of the American College of Cardiology