

# Reduce Costs and Demonstrate Quality

## One System's Journey

### Presenters:

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Catholic Health Initiatives (CHI)**

**Dana Park, Business Development  
NCDR eReports Corporate**



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# American College of Cardiology (ACC)

- Trusted Cardiovascular Quality Leader
  - Transparent & Impartial
  - Third Party Credibility
- Preferred Source for Best-In-Class Cardiovascular Intelligence Data
  - Clinical Relevance
  - Clinical Data Innovators



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# NCDR

- **Preeminent Cardiovascular Data Repository**
  - Data Reviewed for Completeness, Consistency & Accuracy
  - Evidence-Based Quality Improvement Solutions
  - Standardized Data Elements and Definitions
  - Facilitate Performance Comparison and Communication
  - Comprehensive Network of Cardiovascular Care Providers
    - Ten Registries (inc: CMS approved ICD, TVT, LAAO, PVI)
    - 2,400+ Hospitals
    - 2,000+ Outpatient Providers
    - 25 million+ Patient Records



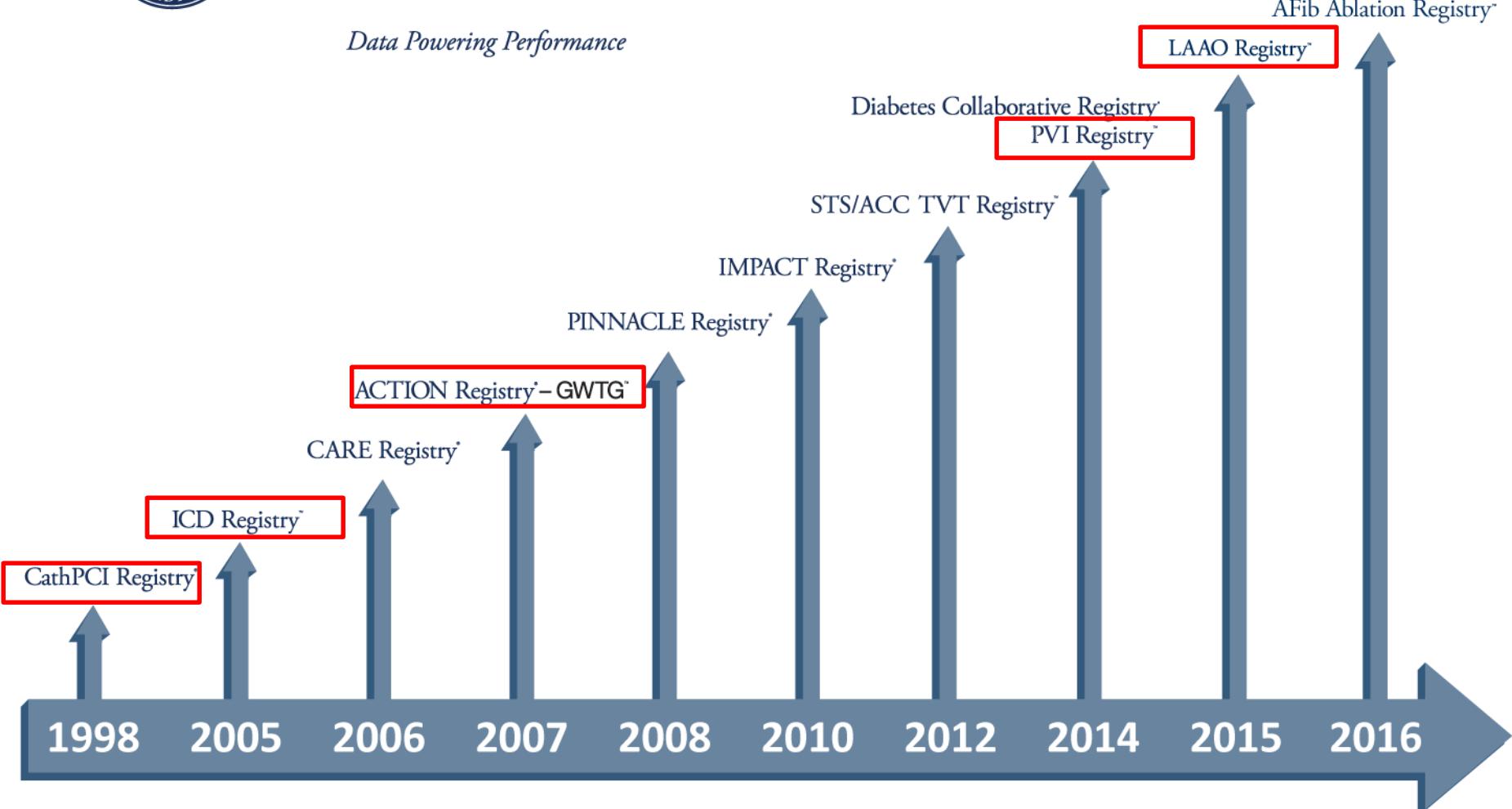
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*Data Powering Performance*



# Value of Success Metrics

## Market Need

## Our Solution

### Level Playing Field



- Standardized View Across the Health System
- Consistent Data Points and Elements

### Change Leadership



- Facilitate Communication and Comparison
- Fosters Culture of Quality

### Quality Care



- Improve Enterprise Wide Performance
- Monitor Credible, Impartial Performance Data

### Ease of Use



- One Stop Dashboard to Easily Identify Trends
- User-Friendly Guide to Engage all Audiences



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# NCDR Corporate eReports

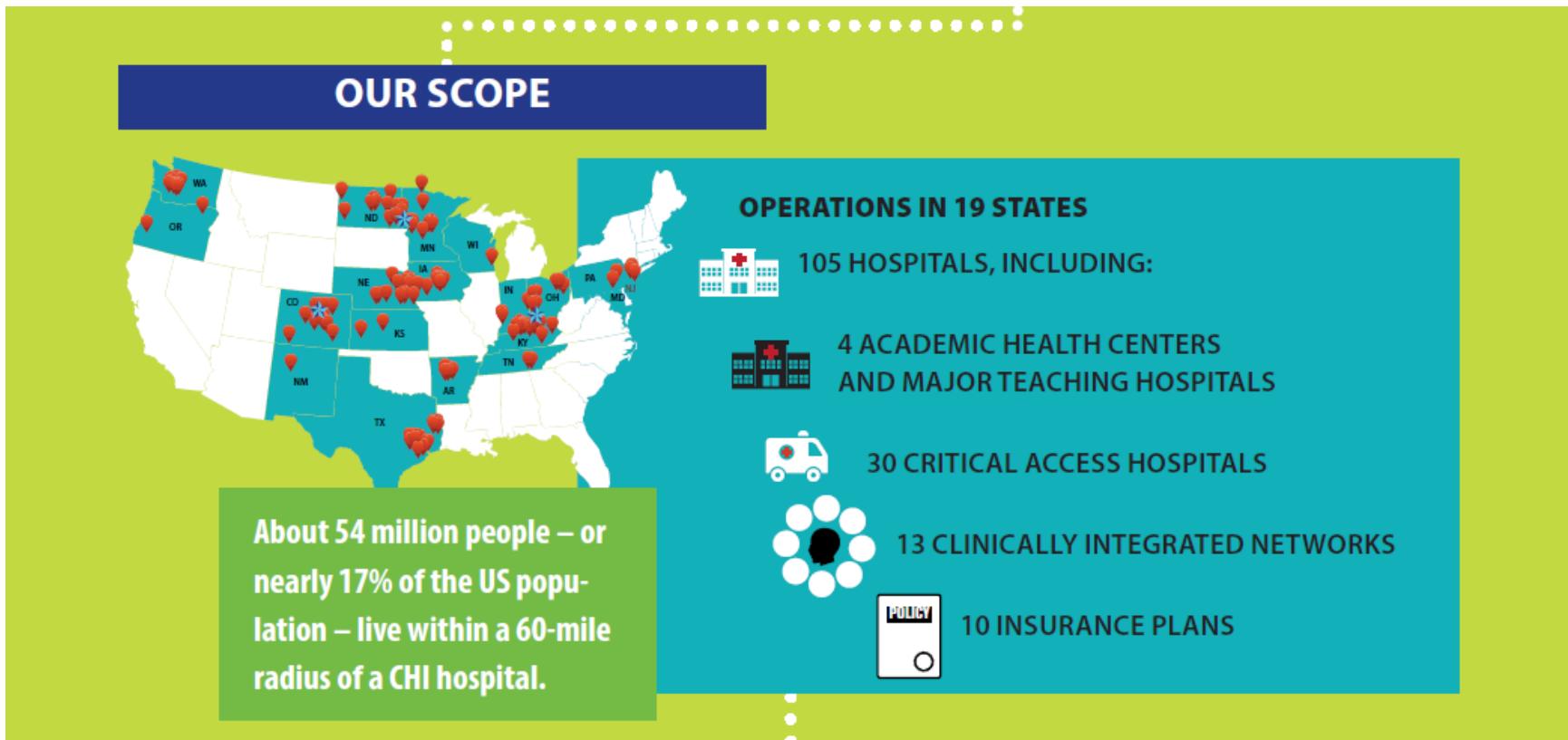
Mary Osborne, RN MBA MSN CPHQ  
National Director CVSL  
September 21, 2016

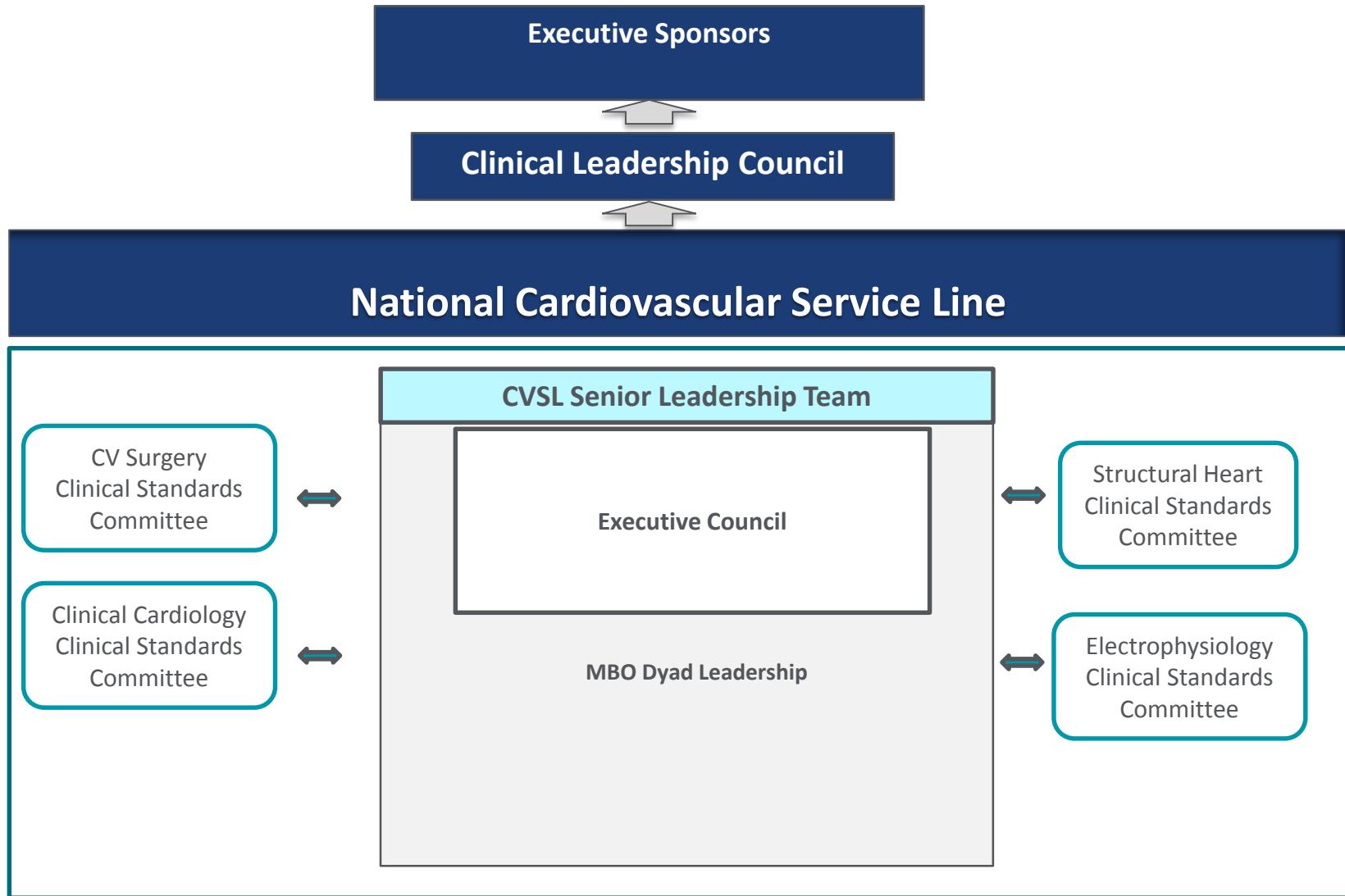
# Learning Objective

Describe how a large healthcare enterprise uses the NCDR registry data through a quality improvement initiative:

- Discuss the benefits of a standardized approach for reducing the risk of bleeding in patients undergoing percutaneous coronary intervention (PCI)
- Quantify the potential benefit of using an evidenced-base tool at the point-of-care to guide treatment options
- Explain the benefits of having service lines work collaboratively on clinical initiatives

# Catholic Health Initiatives Overview





# Data Challenges

- Large health care system
- No standard platform for CV registry data
- Acquisition mode
- Need to demonstrate quality of CV services as a system
- Ability to measure improvement with new initiatives

NCDR eReports provided an option for us!

# Clinical Standards Committee

## Cardiology Committee

- ✓ Appropriate use of Bivalirudin
- ✓ Increase radial access
- ✓ Increase same day discharge PCI
- ✓ Decrease contrast induced nephropathy

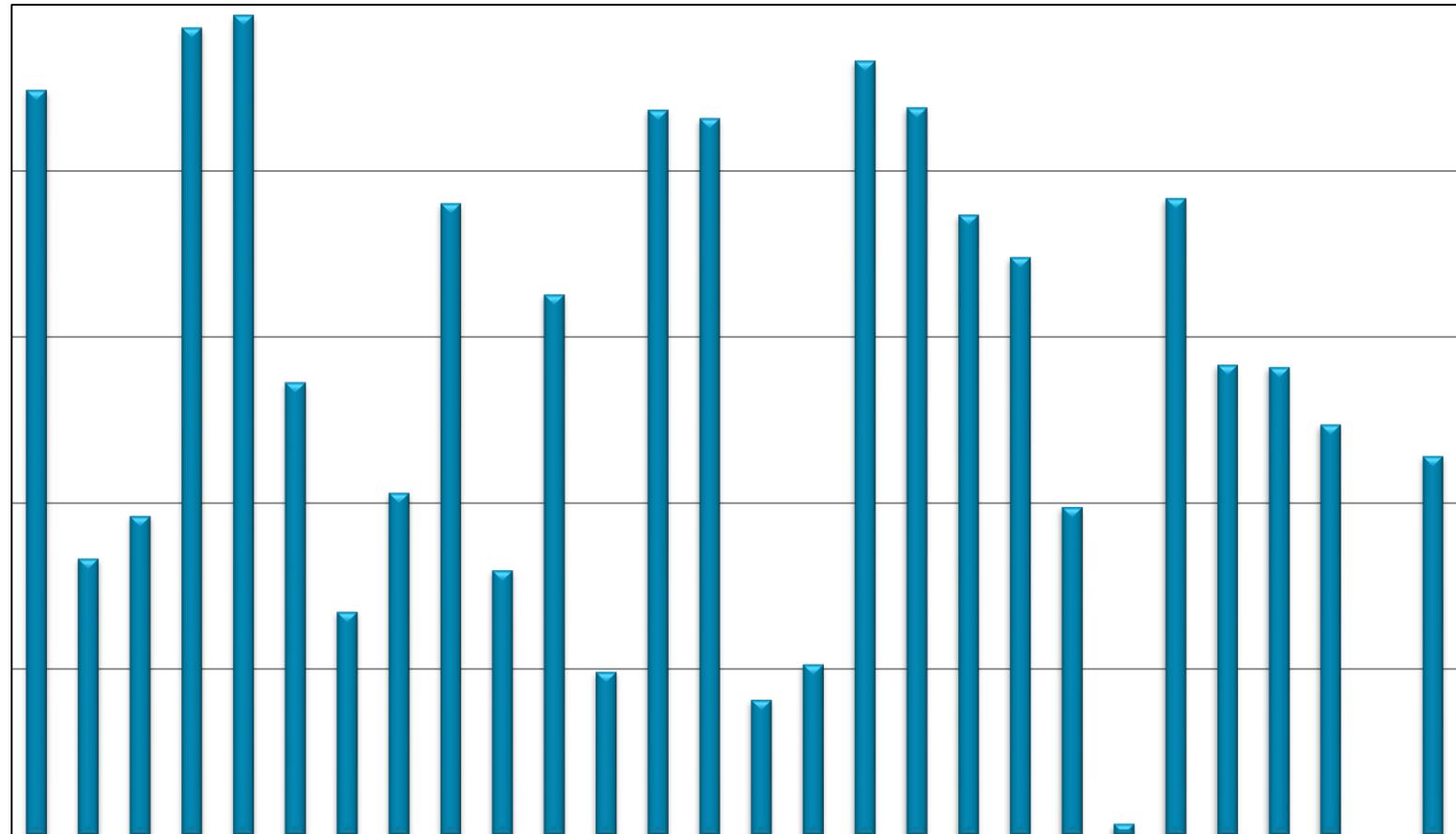
## Electrophysiology Committee

- ✓ Improve ICD documentation
- ✓ Use of MRI conditional devices
- ✓ Evaluate AF Ablation Registry
- ✓ Increase same day discharge PPM

# Opportunity for Improvement

- CHI Pharmacy and CHI Cardiovascular Service Line started discussion in 2013 based on high utilization of bivalirudin (\$8M spend)
- Reviewed utilization variation and questions were posed
- Lack of correlation in CHI between bivalirudin use and bleeding rates
- Work group established to review data and explore possibilities

# Bivalirudin Use Variation in PCI



# Example

Risk Adjusted Bleeding Rate 1.74% ACC 90th	Percent Bivalirudin Use 60% ACC 50th	Percent Radial 26% ACC 50th
4.58%	86%	3%
4.92%	27%	66%

- Large hospitals greater than 1000 PCIs annually
- No correlation of bivalirudin use and bleed rate

Data Source: NCDR CathPCI eReports

# The New Era: Volume to Value

Volume	Value
Volume is volume	Volume is secondary
Quality is assumed	Quality must be proven
Let someone else worry about finance	Cost is everything
Individual patient transactions	Patient populations
Patient satisfaction	Patient experience

# Value in the Cardiac Cath Lab

## Hospital Drivers

- Medication cost
- Supply cost
- Two midnight rule
- Variation in care

## Patient Drivers

- High deductibles
- Copays
- Hospital stay charges
- Quality

# Opportunities to Reduce Cost per PCI Case and Quality

**Medications - Bivalirudin**



**Transradial Access**

**Supplies**

**Same Day Discharge PCI**

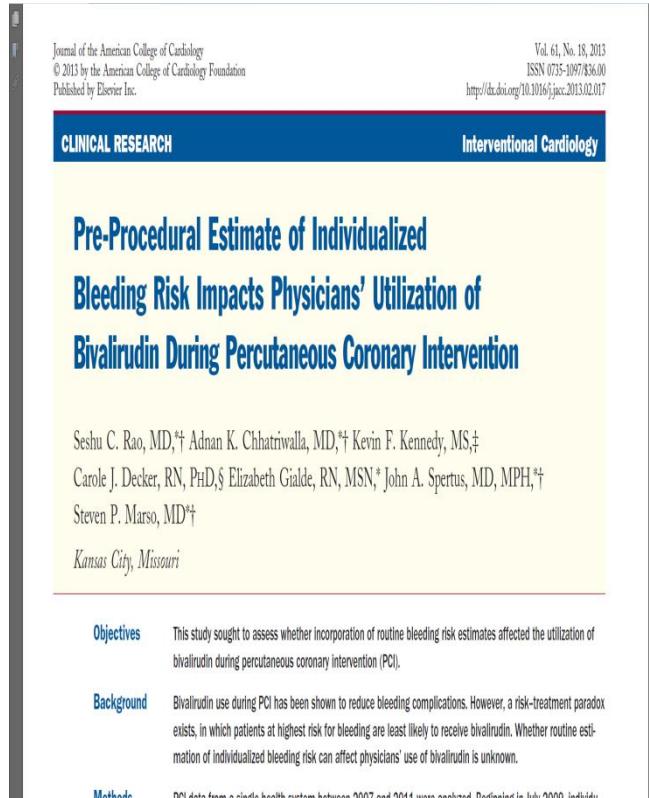
# Bivalirudin Use and Bleeding Risk

## Study:

- 1) Found patients at highest risk for bleeding did not receive bivalirudin
- 2) Through risk stratification and using the associated bleeding risk to guide decision making, bleeding complications were reduced

## CHI:

- 1) Variation in use
- 2) Lack of correlation with bleeding events
- 3) Bleeding risk not always calculated
- 4) High cost



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**CLINICAL RESEARCH** **Interventional Cardiology**

**Pre-Procedural Estimate of Individualized Bleeding Risk Impacts Physicians' Utilization of Bivalirudin During Percutaneous Coronary Intervention**

Seshu C. Rao, MD,<sup>\*,†</sup> Adnan K. Chhatriwala, MD,<sup>\*,†</sup> Kevin F. Kennedy, MS,<sup>‡</sup>  
Carole J. Decker, RN, PhD,<sup>§</sup> Elizabeth Gialde, RN, MSN,<sup>\*</sup> John A. Spertus, MD, MPH,<sup>\*,†</sup>  
Steven P. Marso, MD,<sup>\*,†</sup>  
Kansas City, Missouri

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**Objectives** This study sought to assess whether incorporation of routine bleeding risk estimates affected the utilization of bivalirudin during percutaneous coronary intervention (PCI).

**Background** Bivalirudin use during PCI has been shown to reduce bleeding complications. However, a risk-treatment paradox exists, in which patients at highest risk for bleeding are least likely to receive bivalirudin. Whether routine estimation of individualized bleeding risk can affect physicians' use of bivalirudin is unknown.

**Methods** PCI data from a single health system between 2007 and 2011 were analyzed. Beginning in July 2009, individualized bleeding risk was estimated for each patient based on age, sex, and comorbidities. The rate of bivalirudin use was compared between patients with and without individualized bleeding risk estimates.

# CVSL Goal – Established April 2014

## Engaged the Cardiology Clinical Standards Committee

### Goal

Develop a unified CVSL position regarding the optimal use of bivalirudin in percutaneous coronary intervention

# Plan

- 1) Physician leader to provide evidence supporting bleeding avoidance strategies, which included identifying patients at risk for bleed
- 2) Formulate recommendation
- 3) Identify pilot sites to test the strategy
- 4) Pilot for three months
- 5) Share the pilot site data with committee
- 6) Roll-out

# Cardiology Clinical Standard Committee Recommendation

1. Utilize the National Cardiovascular Data Registry (NCDR) CathPCI Bleeding Risk Score Estimator in **all** patients undergoing PCI
2. In **Low Bleed Risk** patients:
  - a. Heparin use is preferred
  - b. Bivalirudin is not recommended
3. In **Intermediate Bleed Risk** patients:
  - a. Radial artery access and use of heparin is encouraged
  - b. An alternate approach is femoral artery access and bivalirudin use
4. In **High Bleed Risk** patients:
  - a. Bivalirudin use is preferred
  - b. Radial artery access should be strongly considered
5. Discourage **routine** use of GP IIb/IIIa inhibitors

# Process

- Develop a process at the point of care to calculate the risk for bleed
  - Timeout at the time of PCI
  - Pre-procedure area during nursing assessment
  - Use the recommendation to guide decision-making

# NCDR Bleeding Risk Calculator

NCDR CathPCI Bleeding Risk Score Estimator		
Variable	Response	Score
STEMI	No	0
Age, yrs	< 60	0
BMI	20 - 30	5
Previous PCI	No	10
Chronic Kidney Disease	No	0
Shock	No	0
Cardiac Arrest Within 24 h	No	0
Female	No	0
Hb	13 ≤ Hb < 15	0
PCI Status	Elective	0
Total Points	>>>>	15
Risk of Bleeding	LOW	1.50%

**FIGURE 4** NCDR Bleeding Risk Model

NCDR CathPCI Bleeding Risk Score			Risk of Bleeding Based on Point Totals from the NCDR CathPCI Registry Bleeding Risk Score			
Variable	Score		Total points	Risk of bleeding (%)		
STEMI	No	Yes	0	0.90		
	0	15	5	1.10		
Age (yr)	<60	60-70	71-79	10	1.30	
	0	10	15	15	1.50	
BMI	20	20-30	31-39	20	1.70	
	15	5	0	25	2.00	
Previous PCI	No	Yes	0	30	2.30	
	10	0	35	2.70	37.60	
Chronic kidney disease	No	Mild	Moderate	40	3.10	
	0	10	25	45	3.60	
Shock	No	Yes	0	50	4.20	
	0	35	55	4.90	60.40	
Cardiac arrest within 24 hr	No	Yes	0	60	5.60	
	0	15	65	6.50	64.00	
Female	No	Yes	0	70	7.50	
	0	20	75	8.60	67.50	
Hb	Hb <13	13 ≤ Hb <15	Hb ≥15	80	9.90	
	5	0	10	85	11.40	70.80
PCI status	Elective	Urgent	Emergency/salvage	90	13.10	73.90
	0	20	40	95	14.90	76.80
			100	17.00	79.40	
			205	84.00	81.80	
			210	86.00	84.00	

This contemporary model is derived from the National Cardiovascular Data Registry (NCDR), is integer-based, and is parsimonious. Reprinted with permission from Rao et al. (11). BMI = body mass index; Hb = hemoglobin; other abbreviations as in Figure 3.

# Adoption and Measures of Success

The CHI National CVSL bivalirudin use in PCI guidelines should be monitored for adherence as well as clinical outcomes

- Track adoption status
- Use standard scorecard and reporting template
- Collect data monthly
- Submit data to national CVSL

# Adoption

## Direct Thrombin Inhibitors Self-Assessment Tool

**1.0 - Communication** - Communication to cardiology team regarding the project; AIM determined and baseline measurement established.

**1.5 - Project Planning Started** - Team is meeting, discussion is occurring, and information is being shared.

**2.0 - Activity but No Changes** - Cardiology team is actively engaged in development of action plan, discussion but no changes have been tested.

**2.5 - Changes Tested but No Improvement** - At least one provider is actively engaged and implementing changes.

**3.0 - Modest Improvement** - One or more providers are actively engaged and implementing changes. Evidence of change is demonstrating decrease in use of DTIs in specific patient population.

**3.5 - Improvement** - Most providers are actively engaged and implementing changes. Evidence of change is demonstrating decrease in use of DTIs in specific patient population.

**4.0 - Significant Improvement** - Evidence of change is demonstrating significant decrease in use of DTIs in specific patient population.

**4.5 - Sustainable Improvement** - Decrease in use of DTIs in specific patient population is sustained and moving toward achieving AIM.

**5.0 - Outstanding Sustainable Results** - All providers are engaged and action plan is fully implemented. The AIM is met.

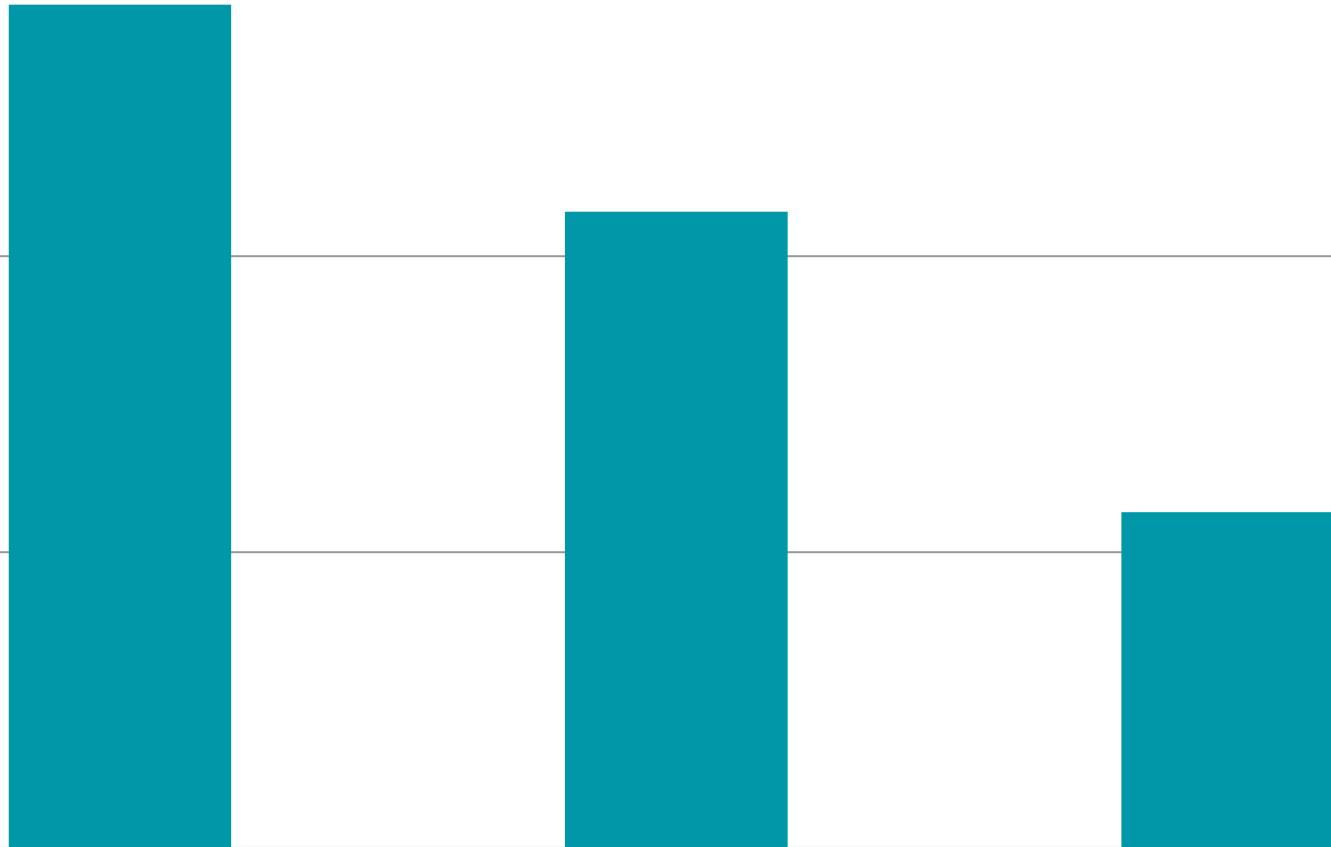
# Measures of Success: Monthly Scorecard

Bleed Risk Calculator Use	Goal	July 2014	August
Number PCIs with Bleeding Risk Calculated		96	74
Total Number of PCIs per Month		96	74
Percent NCDR Bleed Risk Calculator Use	100%	100%	100%
Low Risk for Bleed			
Number PCIs Identified as Low Risk for Bleed		19	16
Percent Identified as Low Risk for Bleed		20%	22%
Number Received Bivalirduin		14	6
Number Did Not Receive Bivalirudin		5	10
Percent Received Bivalirduin	< 5%	74%	38%
Percent Did Not Receive Bivalirudin	> 95%	26%	63%
Intermediate Risk for Bleed			
Number PCIs Identified as Intermediate Risk for Bleed		44	33
Percent Identified as Intermediate Risk for Bleed		46%	45%
Number Received Bivalirduin		38	28
Number Did Not Receive Bivalirudin		6	5
Percent Received Bivalirduin	TBD	86%	85%
Percent Did Not Receive Bivalirudin	TBD	14%	15%
High Risk for Bleed			
Number PCIs Identified as High Risk for Bleed		33	25
Percent Identified as High Risk for Bleed		34%	34%
Number Received Bivalirduin		30	24
Number Did Not Receive Bivalirudin		3	1
Percent Received Bivalirduin	> 90%	91%	96%
Percent Did Not Receive Bivalirudin	< 10%	9%	4%

# Measures of Success: Monthly Scorecard

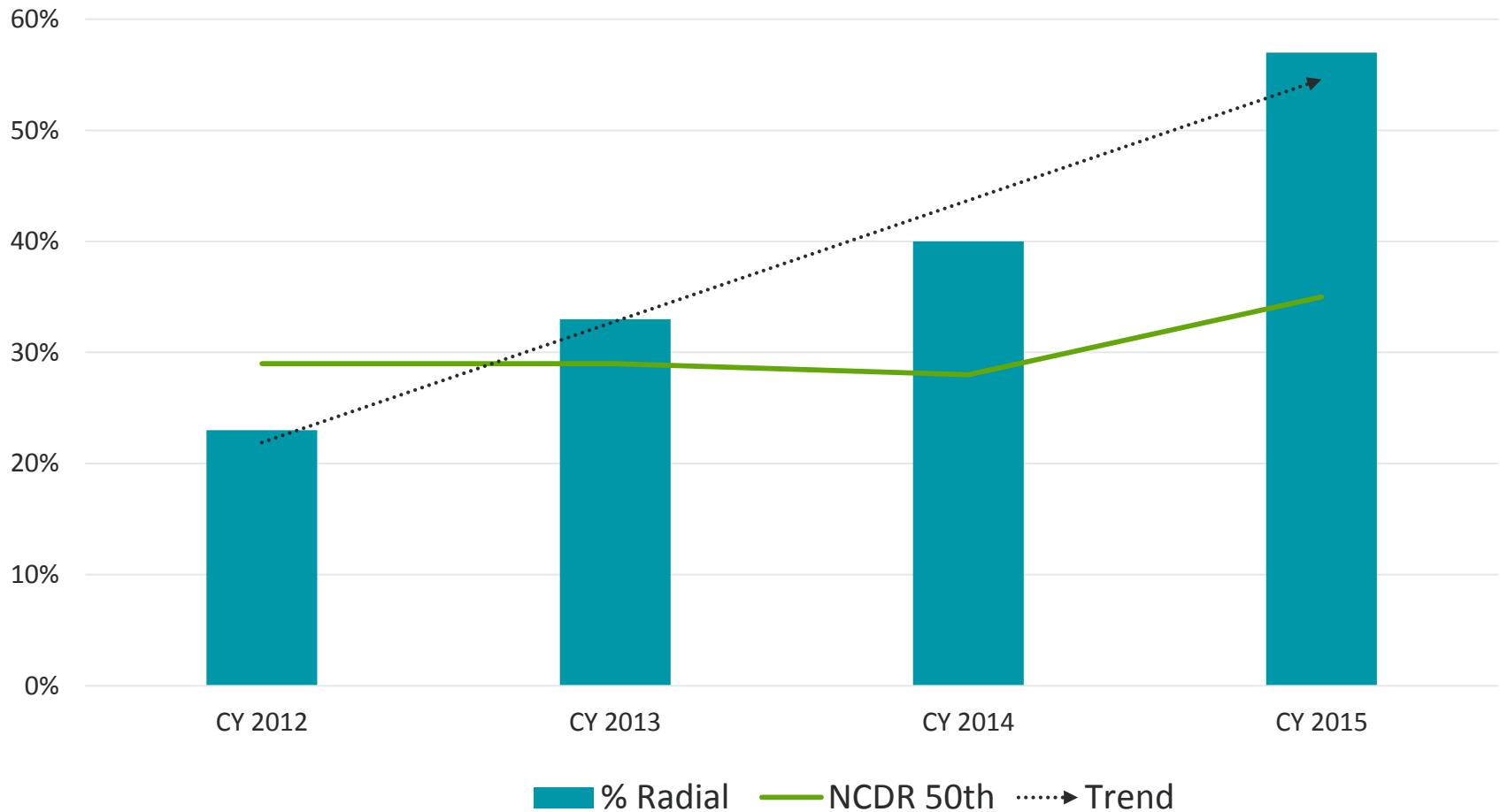
Low Risk for Bleed		July 2014	August
Percent Received Bivalirudin	< 5%	74%	38% 
Percent Did Not Receive Bivalirudin	> 95%	26%	63% 

# Bivalirudin Use



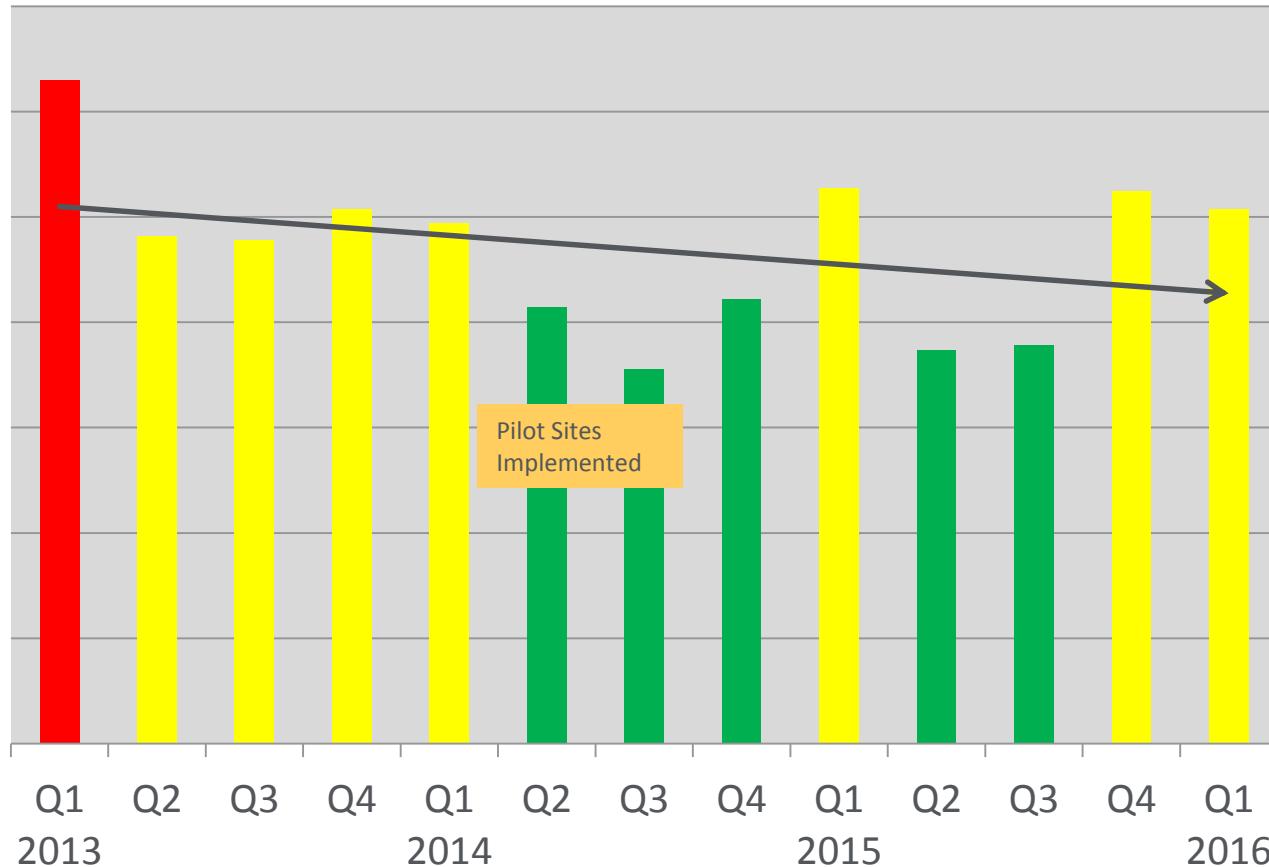
Data Source: NCDR CathPCI

# Arterial Access Site: % Radial



Data Source: NCDR CathPCI eReports

# PCI Risk Adjusted Bleeding Events



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**50<sup>th</sup> Percentile 4.16**  
**90<sup>th</sup> Percentile 1.68**

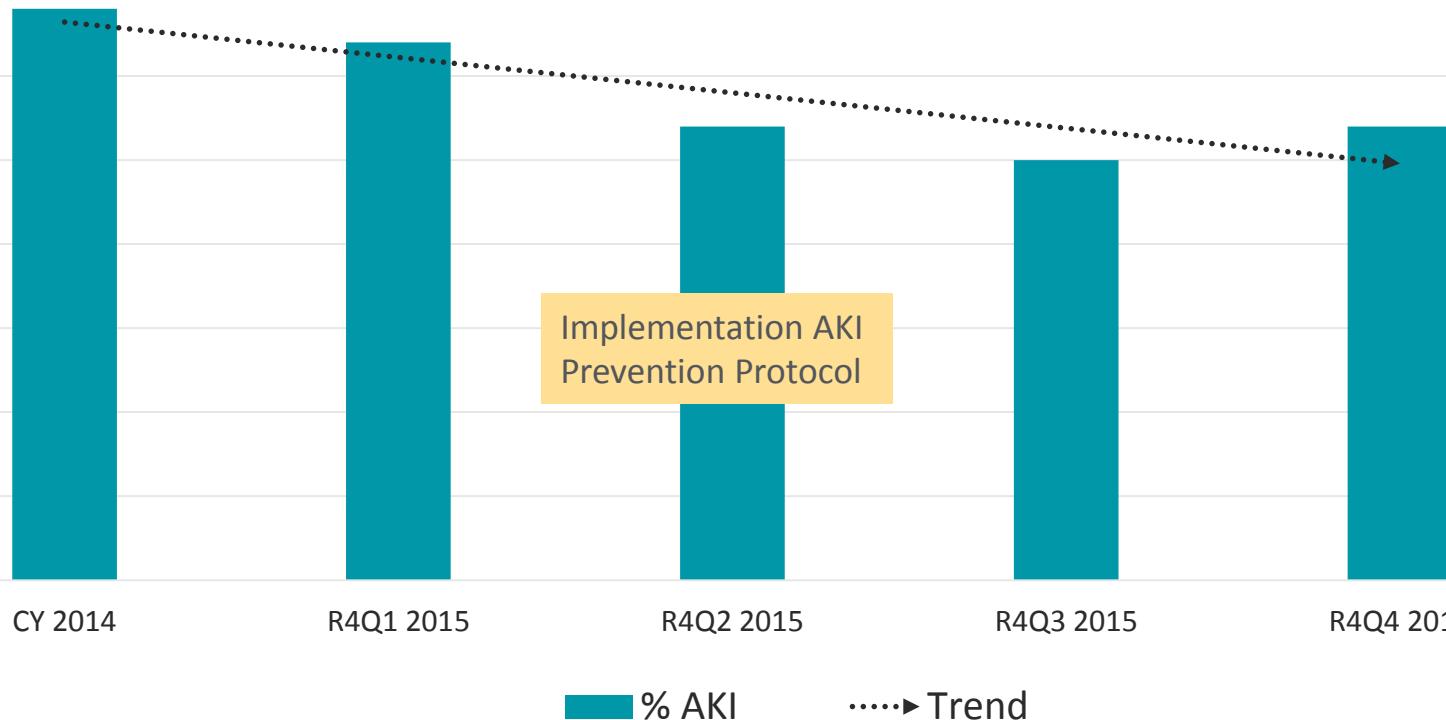
## Definition

1. Bleeding event w/in 72 hours
2. Hemorrhagic stroke
3. Tamponade
4. Post-PCI transfusion
5. Absolute hgb decrease  $\geq 3$  g/dl

# Proportion Acute Kidney Injury ( $LOS > 1$ )\*

Proportion (%) AKI By Quarter

Another example of a project using NCDR CathPCI eReports



Data Source: NCDR CathPCI eReports

# Key Points

Evidence to support

Engage physicians early

Develop process

Trial on small scale

Measure.....measure.....measure!

# Conclusion

A patient's risk for bleed is an important factor in determining treatment

Bivalirudin impacts cost per PCI case

The largest savings is realized through cost avoidance by preventing a bleeding event

Collaboration between service lines helps to achieve the best organizational outcomes

# eReports Corporate Overview



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# From Single to Multi-Site Perspective

The screenshot shows the NCDR CathPCI Registry eReports-Dashboard. The top navigation bar includes the NCDR logo and the CathPCI Registry logo. The main dashboard features a map of the United States with regions labeled: Pacific, Western, Northeastern, Southern, Midwest, Eastern, and Chicago. The 'Pacific' and 'Western' regions are highlighted with a red border. Below the map is a table titled 'PCI Outcome Metrics' with various data points. A large red arrow points to the map area, with the text 'Multi-Site Perspective' overlaid in red. The left sidebar contains navigation links for 'eReports', 'Year/Quarter', 'Detail Data', 'Year/Quarter', 'Notify', 'My Metrics', and 'My Markets'.



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# Key eReports Corporate Concepts



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# Monitor Metrics

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**CathPCI Registry**  
switch registry

Callie Cagney | American College Of Cardiology | Logout

CathPCI Registry / Corporate Dashboard (Beta)

NCDR Home / Corporate Dashboard (Beta)

eReports-ICD eReports-CATHPCI eReport-ACTION

DQR Submission Status

Current Historical (As of current date/time)

Quarter ending 2013Q3 My Group All US Hospitals

	Count	%	Count	%
Green In All 4 Qtrs	###	###%	###	###%
Yellow or Red or No Submissions In Any Qtrs	###	###%	###	###%
No Submission In All 4 Qtrs	###	###%	###	###%
Total Hospitals	###	100%	###	100%

Notify Reports Files

The CathPCI 2013Q2 Outcomes Report has been published and is available for review as of October 16th, 2013.

Test Notification\_3 for CathPCI Registry.

This is a Notification for Payer System on CathPCI Registry.

Set Preferences

My Metrics My Markets

CathPCI eReports Dashboard

Ending Timeraframe: 2013Q3 include: Green in All 4 Quarters

My Metrics Executive Metrics Market Analysis

Export Metric Name My Group U.S. Hospitals 50th Pctile U.S. Hospitals Excl. My Group Pacific Western Northeastern Southern Midwest Eastern Chicago

PCI Performance Measures

1 - PCI In-hospital risk adjusted mortality (all patients)	#.##	51-75	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##
--	------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

PCI Process Metrics

7 - Median fluoro time (In minutes)	##	26-50	##	##	##	##	##	##	##	##	##
10 - Statins prescribed at discharge	##.##	51-75	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##

PCI Outcome Metrics

18 - PCI In-hospital risk adjusted mortality (patients with STEMI)	#.##	51-75	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##
19 - PCI In-hospital risk adjusted mortality (STEMI patients excluded)	#.##	51-75	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##

PCI Appropriate Use Criteria (AUC) Metrics

30 - Proportion of PCI procedures not classifiable for AUC reporting	#.##	26-50	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##
31 - Patients WITH Acute Coronary Syndrome: Proportion of evaluated PCI procedures that were appropriate	##.##	26-50	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##

Detail Line Metrics

10001 - Expected Mortality (among eligible) (LFHS) - all patients	####.##		####.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##	##.##
---	---------	--	---------	-------	-------	-------	-------	-------	-------	-------	-------

My Hospital Ranking Range <10 10-25 26-50 51-75 76-90 >90

1



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# Monitor Executive Summary Metrics

NCDR Home / Corporate Dashboard (Beta)

eReports-ICD eReports-CATHPCI eReport-ACTION

DQR Submission Status

Quarter ending 2013Q3

	My Group	All US Hospitals		
Count	%	Count	%	
Green in All 4 Qtrs	0000	0000	0000	
Yellow or Red, or No Submissions In All Qtrs	0000	0000	0000	
No Submission In All 4 Qtrs	0000	0000	0000	
Total Hospitals	0000	100%	0000	100%

Notify Reports Files

The CathPCI 2013Q2 Outcomes Report has been published and is available for review as of October 16th, 2013.

Test Notification\_3 for CathPCI Registry.

This is a Notification for Payer System on CathPCI Registry.

Set Preferences

My Metrics My Markets

CathPCI eReports Dashboard

Ending Timeframe: 2013Q3 Include: Green in All 4 Quarters

Executive Metrics

Market Analysis

(Aggregation Date: Jan 10, 2014 11:59:59 PM)

PCI Performance Measures

Metric Name	My Group	US Hospitals 90th Pctile	US Hospitals Excl. My Group	Pacific	Western	Northeastern	Southern	Midwest	Eastern	Chicago
1 - PCI in-hospital risk adjusted mortality (all patients)	# ##	51-75	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
38 - Composite: Discharge Medications in Eligible PCI Patients	# ##	51-75	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##

PCI Process Metrics

2 - Proportion of elective PCIs with prior positive stress or imaging study	# ##	26-50	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
3 - Median time to immediate PCI for STEMI patients (in minutes)	# ##	26-50	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
4 - Proportion of STEMI patients receiving immediate PCI w/in 90°	# ##	51-75	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
5 - Median time from ED arrival at STEMI transferring facility to ED arrival at STEMI receiving facility among transferred patients	# ##	26-50	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
6 - Median time from ED arrival at STEMI transferring facility to immediate PCI at STEMI receiving facility among transferred patients (in minutes)	# ##	26-50	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
7 - Median fluor time (in minutes)	# ##	26-50	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##
8 - Proportion of patients receiving PCI w/in 90°	# ##	26-50	# ##	# ##	# ##	# ##	# ##	# ##	# ##	# ##

Full Metric List



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# Monitor Metrics

Client Targets for Registry Metrics

**CathPCI eReports Dashboard**

Ending Timeframe: 2013Q3      Include: Green in All 4 Quarters

**Pre-Defined Groups**

My Metrics      My Group      Export

“US Hospitals 90th Pctl (Registry Aggregate)”      “US Hospitals Excluding My Group” (Aggregation Date: Jan 10, 2014 11:59:59 PM)

Metric Name	My Group	US Hospitals 90th Pctl	US Hospitals Excl. My Group	Pacific	Western	Northeastern	Southern	Midwest	Eastern	Chicago
-------------	----------	------------------------	-----------------------------	---------	---------	--------------	----------	---------	---------	---------

**PCI Performance Measures**

1 - PCI In-hospital risk adjusted mortality (all patients)	#.##	51-75	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
--	------	-------	------	------	------	------	------	------	------	------

**PCI Process Metrics**

7 - Median fluoro time (In minutes)	##
10 - Statins prescribed at discharge	##.##

**PCI Outcome Metrics**

18 - PCI In-hospital risk adjusted mortality (patients with STEMI)	#.##
19 - PCI In-hospital risk adjusted mortality (STEMI patients excluded)	#.##

**PCI Appropriate Use Criteria (AUC)**

30 - Proportion of PCI procedures not classifiable for AUC reporting	##.##
31 - Patients WITH Acute Coronary Syndrome: Proportion of evaluated PCI procedures that were appropriate	##.##

**Detail Line Metrics**

10001 - Expected Mortality (among eligible) (LFHS) - all patients	##.##
---	-------

**CathPCI Registry - My Metrics Setup**

My Metrics set up screen allows you to create custom list of metrics to meet your organization's specific goals and objectives. Note, My Metric list is generally reflected in the dashboard by the next day. The my metric list is specific to your organization, not individual user logins, so any changes will be reflected in the dashboard when accessed by all authorized users. My Metric list may include only metrics from the list of metrics available to your organization.

Available Metrics:

- 2 - Proportion of elective PCIs with prior positive stress or imaging study
- 3 - Median time to immediate PCI for STEMI patients (in minutes)
- 4 - Proportion of STEMI patients receiving immediate PCI w/in 90°
- 5 - Median time from ED arrival at STEMI transferring facility to ED arrival at S
- 6 - Median time from ED arrival at STEMI transferring facility to immediate PC
- 8 - Proportion of patients with aspirin prescribed at discharge
- 9 - Proportion of patients with a P2Y12 inhibitor prescribed at discharge
- 12 - Proportion of PCI patients with emergency CABG
- 13 - Proportion of PCI procedures with a post procedure MI (among hospitals to
- 14 - Proportion of PCI procedures with post procedure MI (among hospitals who
- 15 - Proportion of PCI procedures with acute kidney injury\*\*
- 16 - Proportion of PCI procedures with post procedure stroke
- 17 - Composite Proportion of PCI patients with death, emergency CABG, stroke
- 20 - Incidence of non-obstructive CAD (elective patients only)
- 21 - Proportion of Diagnostic Catheterization procedures with vascular access si
- 22 - Median post-procedure length of stay (in days) for PCI patients with STEMI
- 24 - Proportion of PCI procedures with creatinine assessed pre and post PCI
- 25 - Proportion of PCI procedures with transfusion of whole blood or RBCs
- 26 - Test Data Quality Metric: Proportion of PCI procedures with biomarkers ass
- 32 - Patients WITH Acute Coronary Syndrome: Proportion of evaluated PCI pro
- 33 - Patients WITH Acute Coronary Syndrome: Proportion of evaluated PCI pro

My Metrics:

- 7 - Median fluoro time (in minutes)
- 10 - Statins prescribed at discharge
- 1 - PCI In-hospital risk adjusted mortality (all patients)
- 18 - PCI in-hospital risk adjusted mortality (patients with STEMI)
- 19 - PCI in-hospital risk adjusted mortality (STEMI patients excluded)
- 10001 - Expected Mortality (among eligible) (LFHS) - all patients
- 31 - Patients WITH Acute Coronary Syndrome: Proportion of evaluated PCI pro
- 30 - Proportion of PCI procedures not classifiable for AUC reporting

ADD      REMOVE

Save      Close

My Hospital Ranking Range: <10 10-25 26-50 51-75 76-90 >90

# Monitor Metrics: “My Markets”

The screenshot shows the CathPCI Registry Corporate Dashboard (Beta) interface. At the top, the NCDR logo and the CathPCI Registry logo are visible. The dashboard features a grid of eight market segments: Pacific, Western, Northeastern, Southern, Midwest, Eastern, and Chicago. A red box highlights the first four markets (Pacific, Western, Northeastern, Southern), and a red arrow points to the 'Market Analysis' tab in the navigation bar. A blue callout box on the right side of the dashboard header contains the text: "Client Defined Markets" and "Up to 30 visible client defined markets". A blue circle highlights the "My Markets" link in the bottom-left corner of the dashboard. The bottom of the dashboard displays a "My Hospital Ranking Range" with categories: <10, 10-25, 26-50, 51-75, 76-90, >90.



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# Analyze Market – Result by Market

NCDR Home / Corporate Dashboard (Beta)

eReports-ICD eReports-CATHPCI eReport-ACTION

DQR Submission Status

Current Historical

(As of current date/time)

Quarter ending 2013Q3	My Group		All US Hospitals	
	Count	%	Count	%
Green In All 4 Qtrs	###	###%	###	###%
Yellow or Red, or No Submissions in Any Qtrs	###	###%	###	###%
No Submission In All 4 Qtrs	###	###%	###	###%
Total Hospitals	###	100%	###	100%

Notify Reports File

The CathPCI 2013Q2 Outcomes Report has been published and is available for review as of October 16th, 2013.

Test Notification\_3 for CathPCI Registry.

This is a Notification for Payer System on CathPCI Registry.

Set Preferences

My Metrics My Markets

CathPCI eReports Dashboard

Ending Timeframe: 2013Q3 Include: Green in All 4 Quarters

My Metrics Executive Metrics Market Analysis

Metric: 7 - Median fluoro time (in minutes)

Group Result By: By Market

Export

My Group Market Performance

Click on Market Graph to drilldown to Hospital Level Detail.

7 - Median fluoro time (in minutes)

US Exclude My Group

Pacific Western

Northeastern Southern Midwest

Eastern Chicago

2

The dashboard displays the following data for the 'Median fluoro time (in minutes)' metric across different regions and quarters:

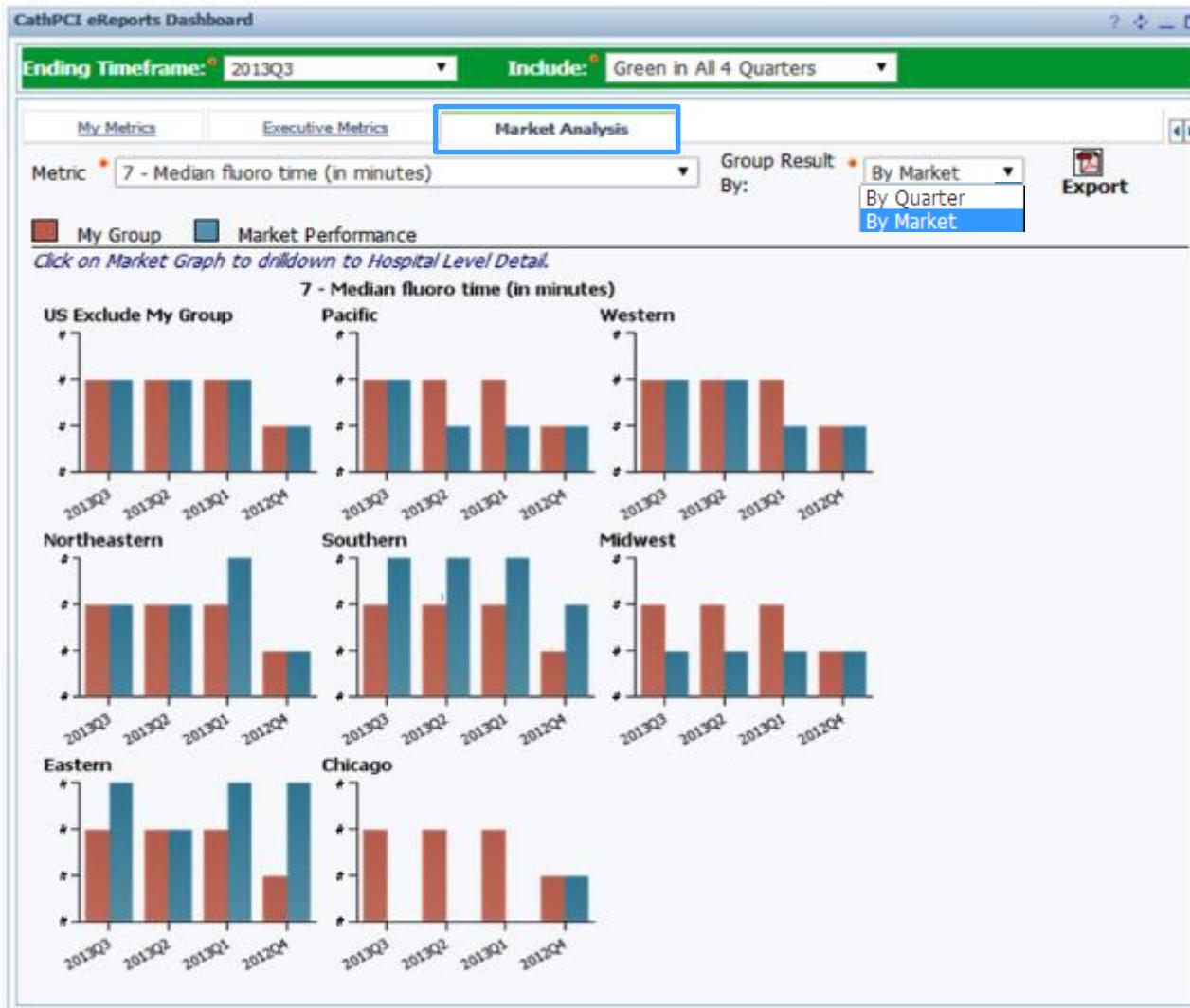
Region	Quarter	My Group (Red)	Market Performance (Blue)
US Exclude My Group	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Pacific	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Western	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Northeastern	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Southern	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Midwest	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Eastern	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###
Chicago	2013Q3	###	###
	2013Q2	###	###
	2013Q1	###	###
	2012Q4	###	###



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# Analyze Market – Result by Market



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# Drilldown to Hospital Level Detail

CathPCI Registry®  
Hospital Summary Report  
Pacific

**Filter Panel**

Ending Timeframe: 2013Q3 Metric: 14 - Proportion of PCI procedures with post procedure MI (amo.)

Include: All Hospitals Market: Green

Retrieves Export

**Include**

**All Hospitals**

**Green in All 4 Quarters**

**All Hospitals**

2013Q1			2013Q2			2013Q3		
Num	Den	%	Num	Den	%	Num	Den	%
#	###	###	#	###	###	#	###	###

Q1			2013Q2			2013Q3			2013Q3 R4Q		
Num	Den	%	Num	Den	%	Num	Den	%	Num	Den	%
#	##	##	#	##	##	#	##	##	#	##	##

Hospital Name											
111111 - Hospital Name	#	##	##	#	#	##	##	#	#	##	#
222222 - Hospital Name											
333333 - Hospital Name	#	##	##	#	#	##	##	#	##	##	#
444444 - Hospital Name	#	##	##	#	#	##	##	#	##	##	#
555555 - Hospital Name	#	##	##	#	#	##	##	#	##	##	#
666666 - Hospital Name											
777777 - Hospital Name											

Red Submissions Yellow Submissions (Red or Yellow indicates that the hospital number has been excluded from the Market number.)

Top Page up Page down Bottom



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# Monitor Data Quality

**3**

The CathPCI 2013Q2 Outcomes Report has been published and is available for review as of October 16th, 2013.  
Test Notification\_3 for CathPCI Registry.  
This is a Notification for Payer System on CathPCI Registry.

**DQR Submission Status**

	Current	Historical	
<b>Quarter ending 2013Q3</b>			
<b>My Group</b>		<b>All US Hospitals</b>	
<b>Count</b>	<b>%</b>	<b>Count</b>	<b>%</b>
<b>Green In All 4 Qtrs</b>			
<b>Yellow or Red, or No Submissions in Any Qtrs</b>			
<b>No Submission In All 4 Qtrs</b>			
<b>Total Hospitals</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

**CathPCI eReports Dashboard**

Ending Timeframe: 2013Q3 Include: Green in All 4 Quarters

(Aggregation Date: Jan 10, 2014 11:59:59 PM)

**DQR Submission Status**

	Current	Historical	
<b>Quarter ending 2013Q3</b>			
<b>My Group</b>		<b>All US Hospitals</b>	
<b>Count</b>	<b>%</b>	<b>Count</b>	<b>%</b>
<b>Green In All 4 Qtrs</b>			
<b>Yellow or Red, or No Submissions in Any Qtrs</b>			
<b>No Submission In All 4 Qtrs</b>			
<b>Total Hospitals</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>



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# Additional Features

**Quality Improvement. Quantified.™**

**DQR Submission Status**

Current		Historical	
(As of current date/time)			
Quarter ending 2013Q3	My Group	All US Hospitals	
Count	%	Count	%
<a href="#">Green in All 4 Qtrs</a>	340	94.44%	1257
<a href="#">Yellow or Red, or No Submissions in Any Qtrs</a>	17	4.72%	175
<a href="#">No Submission in All 4 Qtrs</a>	3	0.83%	154
<b>Total Hospitals</b>	<b>360</b>	<b>100%</b>	<b>1586</b>
<b>Total Hospitals</b>	<b>360</b>	<b>100%</b>	<b>1586</b>

**CathPCI eReports Dashboard**

Ending Timeframe: [2013Q3](#) Include: [Green in All 4 Quarters](#)

My Metrics Executive Metrics Market Analysis

**PCI Performance Measures**

Metric Name	My Group	US Hospitals 90th Pctl	US Hospitals Excl. My Group	Pacific	Western	Northeastern	Southern	Midwest	Eastern	Chicago
1 - PCI in-hospital risk adjusted mortality (all patients)	#.##	51-75	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
38 - Composite: Discharge Medications in Eligible PCI	#.##	51-75	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
PCI 90th percentile time to first angiogram, stress or imaging	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
3 - Median time to immediate PCI for STEMI patients (in minutes)	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
4 - Proportion of STEMI patients receiving immediate PCI w/in 90'	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
5 - Median time from ED arrival at STEMI transferring facility to ED arrival at STEMI receiving facility among transferred patients.	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
6 - Median time from ED arrival at STEMI transferring facility to immediate PCI at STEMI receiving facility among transferred patients (in minutes)	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
7 - Median fluoro time (in minutes)	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##
8 - Proportion of patients with STEMI who had	#.##	26-50	#.##	#.##	#.##	#.##	#.##	#.##	#.##	#.##

**Report Download**

CathPCIv4 Executive Summary

Facility Demographics

Report Links

- [Hospital Detail Report](#)
- [Participating Programs](#)
- [Participating Registries](#)
- [Data Collection Vendor](#)
- [Release Notes Report](#)

# Individual Hospital Detail Access

CathPCI Registry®  
Hospital Detail Report  
##### - Hospital Name

**Filter Panel**

Ending Timeframe Hospital  
\* 2013Q2 \* ##### - Hospital Name

**Facility Demographic**

Address1	Address2	City	State	Zip	AHA	NPI
		VA				

**Hospital Data Submission Status**

2012Q3	2012Q4	2013Q1	2013Q2

**PCI Performance Measures**

1 - PCI in-hospital risk adjusted mortality (all patients)	
38 - Composite: Discharge Medications in Eligible PCI Patients	>90

**PCI Process Metrics**

2 - Proportion of elective PCIs with prior positive stress or imaging study	
3 - Median time to immediate PCI for STEMI patients (in minutes)	51-75
4 - Proportion of STEMI patients receiving immediate PCI w/in 90'	>90
5 - Median time from ED arrival at STEMI transferring facility to ED arrival at STEMI receiving facility among transferred patients.	
6 - Median time from ED arrival at STEMI transferring facility to immediate PCI at STEMI receiving facility among transferred patients (in minutes)	
7 - Median fluoro time (in minutes)	26-50
8 - Proportion of patients with aspirin prescribed at discharge	>90
9 - Proportion of patients with a P2Y12 inhibitor prescribed at discharge	>90
10 - Statins prescribed at discharge	>90

**PCI Outcome Metrics**

12 - Proportion of PCI patients with emergency CABG	>90
13 - Proportion of PCI procedures with a post procedure MI (among hospitals routinely collecting post-PCI biomarkers)	
14 - Proportion of PCI procedures with post procedure MI (among hospitals who do not routinely collect post-PCI biomarkers)	>90
16 - Proportion of PCI procedures with post procedure stroke	>90
17 - Composite: Proportion of PCI patients with death, emergency CABG, stroke or repeat target vessel revascularization.	>90
18 - PCI in-hospital risk adjusted mortality (patients with STEMI)	
19 - PCI in-hospital risk adjusted mortality (STEMI patients excluded)	
25 - Proportion of PCI procedures with transfusion of whole blood or RBCs	>90
37 - PCI in-hospital risk adjusted rate of bleeding events (all patients)	51-75

**Hospital Ranking Range** <10 10-25 26-50 51-75 76-90 >90



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# Current eReports Registries

The screenshot displays the NCDR Corporate Dashboard (Beta) interface. The top navigation bar includes links for Home, Administration, Corporate Dashboard (Beta), Resources, Logout, and User Name Evaluation Client 2 (Other Corp.). The main content area is titled "Quality Improvement. Quantified." and features four distinct eReport modules:

- CathPCI Registry®**: Ending Timeframe: 2013Q3, Include: Green in All 4 Quarters
- ICD Registry™**
- ACTION Registry®- GWTG™**
- PVI Registry™**

Each module has a "DQR Submission Status" section with "Current" and "Historical" tabs. The "PVI Registry" section is highlighted with a large white circle. A dropdown menu for "Include" is open, showing options: All Hospitals, Premier in All 4 quarters, Limited in All 4 quarters, and All Hospitals (selected). The bottom navigation bar includes links for eReports-ICD, eReports-CATHPCI, eReport-ACTION, and eReport-PVI.



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# Upcoming Product Upgrades

## Short Term: Q3 – Q4 2016

- **LAAO Registry Dashboard**  
(Dec 2016)

Monitor LAAO outcomes via new system-wide view; complete with Data Quality Report, My Markets and My Metrics reports

- **Public Reporting Dashboard**  
(Nov 2016)

Track your hospitals' public reporting efforts and preview publicly reported metrics

## Medium Term: Q1 – Q2 2017

- **Physician Dashboard**

Track physicians' performance metrics across hospitals and at the hospital level

## Long Term: Q3 – Q4 2017

- **AFib Ablation Registry Dashboard**

System-wide view for your AFib Ablation Registry. Will also include Data Quality Report, My Markets and My Metrics reporting capabilities.

- **Competitive Benchmarking**  
Compare your system's performance against national leaders and local competitors



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# Client Satisfaction

“eReports Corporate has top quality, high-level data....to me it is one of the premier sources for getting good, executive summary metrics of your current performance versus the national performance.”

-- Director of Cardiovascular Services of a For-Profit System

“eReports Corporate gives us the data at our fingertips.” “Whenever we have a payer that wants to know how we perform as a national company, I can pull that information out readily because it’s an ideal place to get our health system’s national data.”

-- National Director of the Cardiovascular Service Line of a Not-for-Profit System

“I think eReports Corporate is incredibly powerful....I think it was a homerun when the ACC created this.”

-- Assistant Vice President of Cardiovascular Services of a For-Profit System



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# Questions



# Learn More

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