The mission of the NCDR® is to improve the quality of cardiovascular patient care by providing information, knowledge, and tools; implementing quality initiatives; and supporting research that improves patient care and outcomes.

CONFIDENTIALITY NOTICE

This document contains information confidential and proprietary to the American College of Cardiology Foundation. This document is intended to be confidential communication and may involve information or material that may not be used, disclosed, or reproduced without the written authorization of the ACCF. Those so authorized may only use this information for a purpose consistent with the authorization.

Reproduction of any section of this document with permission must include notice.
Table of Contents

Version History: ........................................................................................................................................... 3
1. CDM Overview ........................................................................................................................................... 4
   1.1. Common Data Model (CDM) for NCDR ............................................................................................... 4
   1.2. Compatibility with external standards ................................................................................................. 4
   1.3. Shortened development cycle, easier to incorporate Registry Version changes ............................... 5
2. Introduction to the eReports Health Systems Dashboard ........................................................................... 6
   2.1. Definitions ........................................................................................................................................ 6
   2.2. User Privileges .................................................................................................................................. 7
3. Registry Login ........................................................................................................................................... 7
   3.1. On-boarding ..................................................................................................................................... 7
   3.2. Login .................................................................................................................................................. 8
4. Administration ........................................................................................................................................... 11
5. Health Systems Dashboard ....................................................................................................................... 23
   5.1. eReports Health Systems – Market Analysis ..................................................................................... 26
   5.2. eReports Health Systems – Hospital Detail ....................................................................................... 30
   5.3. Patient Level Detail Report ................................................................................................................ 32
   5.4. eReports Health Systems – Executive Summary view ..................................................................... 38
   5.5. eReports Health Systems – Metric Detail .......................................................................................... 43
   5.6. eReports Health Systems – Detail Lines ............................................................................................ 47
   5.7. Report Download – Executive Summary Export ............................................................................... 48
   5.8. Report Download – Facility Demographics ....................................................................................... 48
   5.9. Report Download – Technical Specifications ..................................................................................... 48
   5.10. How To: Setup My Markets .............................................................................................................. 49
   5.11. How To: Add a New User .................................................................................................................. 49
   5.12. Report Links: Hospital Summary ....................................................................................................... 50
   5.13. Report Links: Participating Registries ............................................................................................... 51
   5.14. Report Links: Data Collection Vendor .............................................................................................. 52
   5.15. Report Links: Release Notes ............................................................................................................ 52
5.16. Report Links: Notifications .............................................................................................................. 53
5.17. Report Links: Files ............................................................................................................................. 53
5.18. Set Preferences: My Markets ............................................................................................................. 54

Questions and Comments .......................................................................................................................... 56
### Version History:

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Details</th>
<th>Publish Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>V0.1</td>
<td>Original Version</td>
<td>Oct 1, 2020</td>
</tr>
</tbody>
</table>
1. CDM Overview

1.1. Common Data Model (CDM) for NCDR

The National Cardiovascular Data Registry (NCDR®) is an American College of Cardiology (ACC) suite of registries and is arguably the foremost set of cardiovascular registries with over 60 million records in 11 programs. With this, the NCDR has become a key source of clinical data to assess quality and outcomes for cardiologists and cardiovascular sections of healthcare systems and allows cardiologists to lead in evidence-based quality measures.\(^1\)

The genesis of the CDM for NCDR at ACC, was an idea to nurture a better organized and clinically driven culture for exceptional patient care. The new CDM methodology is distinctly different from the Legacy DW (Data Warehouse) and has been implemented for the Clinical, Information Technology, and Analytical Frameworks. It includes the implementation of an adaptive Data Warehouse Platform to allow users to report on a variety of clinical metrics from various Registries in a structured manner to support clinical analytic use.

With CDM we can help put the patients first, because now there is clear, better organized data.

1.2. Compatibility with external standards

The Enterprise Data Warehouse (EDW) designs and stores data within CDM to support analysis and reporting by implementing design principles like stability of purpose and quick turnaround.

The CDM includes data elements from the NCDR registries for inpatient and outpatient cases. The information in the data warehouse supports the informatics platform for NCDR.

---

\(^1\) The source of this information is the (ACCF Internal) NCDR Informatics Document
1.3. Shortened development cycle, easier to incorporate Registry Version changes

In addition to newly structured data, the CDM allows for a new Registry or an existing Registry's version changes to be incorporated in a shorter timeframe as compared to the previous data warehouse structure. The shortened development lifecycle is achieved with Single Standardized Data Intake Process, Registry-specific adapters for transformation, and Standardized Vocabulary and Content Structure, that gets arranged in fewer tables and columns. From the Analytics perspective, a Single Standardized Export Program (Format) and Single Standardized Aggregation Process (Metrics) has been implemented.
2. Introduction to the eReports Health Systems Dashboard

NCDR® eReports Health Systems Dashboard is designed to support hospitals, health systems, private health insurance payers, and other stakeholders who value a multi-hospital view into quality of cardiovascular care being provided within a specific system or region.

A web-enabled business intelligence data report dashboard and quality improvement program, the NCDR® eReports Health Systems Dashboard is designed to serve as an enhanced customizable reporting mechanism by which clients can tailor NCDR® reports for comparison purposes, monitor the quality of data submissions from the hospital and perform comparative analyses by utilizing customized markets.

This user help guide will familiarize you with the eReports Health Systems Dashboard and assist you in using this tool to better improve the quality of cardiovascular care for your patients. An overview of the features of the eReports Health Systems Dashboard National Cardiovascular Data Registry’s (NCDR®) features and how to access them has been detailed. Below are the definitions and types of user privileges that will help you work through this guide. Thanks for your interest in the American College of Cardiology’s NCDR® eReports Health Systems Dashboard.

2.1. Definitions

**Client:** This is an entity external to the American College of Cardiology Foundation (ACCF) who has a contract in place that will allow them to access the reports published on www.ncdr.com

**Participant:** This is a legal entity with a physical location that has a valid master agreement and registry specific addendum in place. In addition, all fees are paid and current and the participant offers a service that would meet inclusion for participation

**Bookmarked Metrics:** These are the metrics your organization decides to bookmark because they will be most referenced.

**My Markets:** These are user defined based on the hospitals participating in their program

**Limited:** This signifies hospitals who submit a form with a reduced set a data to the registry (only applicable for some registries). These hospital submissions are reviewed based on the benchmark quality for limited data submissions only.
Premier: This signifies hospitals who submit forms with more extensive datasets to the applicable registry (only applies to some registries). These hospital submissions are reviewed based on the benchmark quality for premier submission forms.

2.2. User Privileges

**eReports – Admin:** Users with this privilege have the option to change preferences for ‘My Metrics’ and ‘My Markets’ for that institution.

**eReports:** Users with this privilege have the option to view the reports for that institution.

**Corporate Profile – View:** Users with this privilege have the option to see the Corporate Profile of the institution.

**Corporate Profile – Update:** Users with this privilege have the option to update that institution’s corporate profile.

**Corporate Site User Administration:** Users with this privilege have the option to add new users and change user account information including which users have what privileges for that institution.

3. Registry Login

3.1. On-boarding

To access the NCDR eReports Health Systems Dashboard, the client must complete the on-boarding process. Upon receiving the counter executed agreement, the client relationship advisor will send you a welcome email which will include the counter executed agreement, Appendix B which has a list of participants and registries covered under the Corporate Level Master Agreement, and the client contact form which is needed to setup the eReports dashboard. Once the client contact form is completed by the client and remitted back to ACC, the client relationship advisor will set up a one hour implementation call to walk through the onboarding process as well as provide a deep dive of the eReports dashboard. The “Super User” noted as the primary contact in the client contact form, will receive log-in credentials via email after the implementation call has been completed. The email will confirm account activation and will provide a Participant ID, username and a temporary password associated with the account.
Login:

To access a registry and/or the Health Systems Dashboard, go to www.NCDR.com. Click the **Registry Participant Login** button in the lower left-hand corner of the web page.

Note: If a user has not yet been associated with an account, they should first contact their Corporate Site Administrator (see Administration -> Corporate User Administration below):

Type **www.NCDR.com** in the web browser.
Data Powering Performance

The National Cardiovascular Data Registry (NCDR) is the ACC suite of cardiovascular data registries helping hospitals and private practices measure and improve the quality of care they provide.

Learn about the NCDR's suite of registries
Cardiology's most established, comprehensive registry offering, the NCDR consists of eight hospital-based registries and two outpatient registries.

Learn about the benefits of participating
NCDR participation benefits individual providers, care teams and administrators. The NCDR offers the most relevant data elements and metrics, actionable reports, voluntary public reporting and other opportunities to do even more with your data through quality improvement programs.

Learn about data collection
NCDR registries cover a wide range of clinical topics and cardiovascular procedures, with each registry featuring standardized, evidence-based data elements and definitions. Options for data collection vary based on your setting.

Learn about NCDR research
Limited datasets from the NCDR's vast repository of clinical data are available for cardiovascular research. NCDR data holds answers to complex questions about patient risk factors and outcomes, procedure and treatment trends, adherence to guidelines, device use and performance, and facility and provider characteristics. A new COVID-19 dataset has been developed for the CardiOncology and Chest Pain - MI Registries to advance the clinical understanding and knowledge of the cardiovascular impact on patients with COVID-19. To learn more and submit your COVID-19 proposal, click on the above "Learn about NCDR research" header.

Learn about NCDR Analytic and Reporting Solutions
The NCDR offers eReports Corporate, an online business intelligence data report for hospital and health systems, payers and other stakeholders to access tailored NCDR reports. Additionally, the NCDR's custom analytic solutions provide custom-made analysis on many issues including safety, effectiveness and quality.

_registry Participant Login

Join a Registry
Enroll in a registry or get more information.

Go

ALREADY AN NCDR PARTICIPANT?
Registry Login
Login Credentials:

After Login:

After successful Login to the User account, you will land on this page which provides a list of registries under Hospital Registries, EP Registry Suite, and Outpatient Registries categories. You will only be able to select the registries that you have NCDR eReports Health System Dashboards for. Each Registry landing page provides users with the latest registry announcements, helpful registry
specific resources, and a navigational panel located on the left-hand side for setting up users and accessing the health systems dashboard.

4. Administration

The Administration menu options may include Individual Profile, Corporate Profile, and Corporate User Administration depending on the User’s access level.
4.1 Individual Profile: This link allows each user to update their Individual Profile information. The Individual Profile contains demographic information about each individual user including name, street address, email address, phone number, password, etc. This information should be kept up to date so the institution’s site manager and ACC staff can contact each site user. Additionally, each user can see the functions on the website for which they have privileges. This is located on the bottom of the page and is adjustable by the appropriate administrators on the Corporate User Administration page.
On the Individual Profile page under the administration tab, a user can change the password by clicking the **Change Password** button under the Username. Enter the temporary/current password and the new password and click submit to save new password.

**Change Contact Information**

A user can update their contact information including their email, from the Individual Profile page under the Administration tab. Editable individual profile information includes the user’s name, organizational role, contact information and address.
4.2  Corporate User Administration: (Corporate Site User Administrators only) This link allows those with Corporate Site User Administration privileges to access the list of users for that system’s accounts. In Corporate User Administration, those with Corporate Site User Administration privileges may add, edit, or disable users as well as grant privileges for viewing eReports and updating the Corporate Profile.

4.2.1  Search User: A user with Corporate Site User Administrator privileges can search for each user that belongs to their account by first name, last name, username, or email address to look up what privileges that user has.
4.2.2 Add User: For each specific Registry, the User Administrator can add a new user by clicking on the Add New User button at the bottom of the Corporate User Administration page. This will navigate the administrator to the Corporate User Setup page where they need to fill out all the required fields and assign roles and privilege(s) to the new user. Once
the administrator clicks Save an automated email is sent to the email address provided for the new user for activation. The user must then follow the steps outlined above to complete activation of the user account.
Corporate User Setup

Add users to the website, specify a user's role, and assign privileges to view and/or update different administration functions.

- Username
  - NoAdmin

- Registry Access:  Yes  No

- Prefix
- First Name *
- MI
- Last Name *
- Suffix

- Title
- Function *
- Department

- Country *
  - UNITED STATES

- Address 1 *

- Address 2

- City/Town *
- State/Province *
- ZIP/Postal Code *

- Phone and Ext
- Fax
- Email *

Role(s)
- Primary Point of Contact
- Secondary Point of Contact
- Billing/Contracts Representative
- Program Relations Representative
- IT Representative
- Registry Site Manager

Privilege(s)
- eReports Corporate - Admin
- eReports Health Systems - Admin
- eReports Corporate
- eReports Health Systems
- Corporate Profile - View
- Corporate Profile - Update
- Corporate Site User Administration
- Chapters eReports - View
- Chapters eReports - Admin

Preference(s)
- Email me when a new file/document is available for download in the Dashboard.

Return to Search

* denotes a required field
4.2.3 Edit User: The User Administrator can change the privileges of the users from the Corporate User Administration page by clicking on the Edit link next to each user. The administrator is taken to the Corporate Site User Administration – User Setup page for that user where they can then change the username, registry access setting, contact information, role(s), privilege(s), or reset the user’s password. New temporary passwords are sent to the user’s email address. The administrator must click Save at the bottom of the page to keep the changes that are made.
Congratulations! You are now set up and ready to use the eReports Health Systems Dashboard. We are thrilled that you have joined our community of users of the NCDR® eReports Health Systems Dashboard. Learn more about the Health Systems Dashboard in the next section.
4.3 Corporate Profile: (requires the appropriate user privilege) This link allows the user to maintain vital information about the subscribing institution required for participation in the NCDR®. The Corporate Profile should be completed by the Corporate Site User Administrator after initially logging into the site. At a minimum, a user with “Corporate Profile – Update” privileges will be required to update the Corporate Profile on an annual basis. Users with “Corporate Profile – Update” privileges should also update the Corporate Profile as information about the institution changes throughout the year.

The Corporate Profile page begins with a reference box that contains the systems Corporate ID and Encryption Key. Additionally, the user will see three sections including a Corporate Info section with further reference data including the Participant Name and Contract Start date. Below the Corporate Info Section find the Hospital(s) Information and Contact Information sections where users with the necessary privileges can update the account profile.

4.3.1 Hospital(s) Information: Those granted Corporate Profile editing privileges should keep the Corporate Profile information updated as the institution changes the number of hospitals that perform various cardiology procedures including PCIs, Diagnostic Catheterizations, Transcatheter Aortic Valve Replacements/Implantations, Pediatric Interventional Cardiac Catheterization, and vascular surgery as well as maintaining the number of hospitals with Electrophysiology Programs and Emergency Departments relative to the number of unique hospitals in the institution.

4.3.2 Contact Information: The contact information can also be updated for each user in the participating institution by clicking on the Update link next to each of the User roles listed.
5. Health Systems Dashboard

Based on the permissions configured during the Corporate Site User Administration settings, the Health Systems Dashboard is made available to the users. Click the Health Systems Dashboard to navigate to the eReports Health Systems Dashboard.
Hamburger Menu:

- **Dashboards:**
  - Market Analysis – The landing page that provides health systems the opportunity to view their organization’s performance as well as the performance of their customized subgroupings compared to other U.S. hospitals. There is a heat map on the market analysis page and graph icons next to each metric that give granular insight into performance and quality of care. This is a registry-specific report.
  - Executive Summary – The executive summary page includes the DQR Submissions, volume summary information, and the facility’s performance for the R4Q is plotted in a bullet graph. This is a registry-specific report.
  - Detail Lines – a detailed view of the Detail Lines rolling 4 quarters data for the Hospital Systems and their Markets with selected parameters. This is a registry-specific report.

- **Report Download:**
  - Executive Summary Export – An Excel report that details all the Executive Metrics for all the Markets and includes the R4Q Numerator, Denominator, and all the US percentiles. This is a registry-specific report.
  - Facility Demographics – provides facility information that belong to your Hospital System. This is a registry-specific report.
  - Technical Specifications – provides the information on the technical elements included in the Executive Summary and Facility Demographics Reports. This is a registry-specific report.

- **How To**
  - Setup My Markets – instructional video on how to setup My Markets
  - Add a New User – instructional video on how to Add a New User

- **Report Links**
o **Hospital Summary** – accessible at the participant level and allows organizations to see their specific institutions’ performance metrics. This is a registry-specific report

o **Participating Registries** – Provides the number of hospitals and RSM contact information per registry

o **Data Collection Vendor** – report breaks down the vendors by the registries they are associated and the number of hospitals using that vendor

o **Release Notes** – provides the latest development changes in the dashboard

o **Notifications** – check this section for any communications from the NCDR dashboard team.

o **Files** – space to upload your files to be accessed by the NCDR dashboard team

- **Set Preferences**

  o **My Markets** - allows eReports Administrators to set the Markets that are shown in the My Markets tab.
5.1. eReports Health Systems – Market Analysis

The Heath Systems Dashboard, at default, displays the eReports Health Systems – Executive Summary page:

**Top Navigation Bar:**

- Administration – link to the Administration landing page
- Dashboard – link to the legacy dashboard (v4.4) landing page
- Data – link to the Data Home Page
- Resources – link to the Resources Home Page

**eReports Health Systems – Market Analysis**

**Select Parameters:** Users shall be provided with the following parameters to choose in the Filter Panel (defaults are in Bold):

- View (Executive Summary/Detail Lines)
- Ending Timeframe (defaults to latest (Not Published) Qtr)
- Submission Type (Base)
- Submission Status (Green in All 4 Quarters/All Hospitals)
- Category (All/Categories)
When selecting the Ending Timeframe quarter:

- Quarter with (Not Published) indicates that the combined metric value of these 4 quarters have not yet been included in a quarterly report cycle and aggregated to the registry benchmark.

- Quarter without a notation (as in the above screen shot) indicates that the combined metric value of these 4 quarters have appeared in a published historical Outcomes Report or a quarterly report cycle on the dashboard that produced the US Registry benchmark.

- Dashboard Aggregation Date is found in the upper right corner (see above red arrow). When an unpublished timeframe is selected, it will reflect the last weekly refresh date. A published timeframe will reflect the Data Deadline for the Ending Timeframe (as above). The Data Deadline is found on the CathPCI Website by navigating to Data → Call for Data Schedule.

After selecting certain parameters from the Filter Panel (e.g. Timeframe, Category etc.) the report will automatically process the change in parameters and update accordingly.

The Executive Summary displays the rolling 4 quarters aggregate data for the Executive Metrics in the following columns:

- Corporate Group for Health System
- US Exclude – Corporate Group for Health System
- US Hospitals
- All Individual Markets

**Market Analysis:** The market analysis allows participants to compare institutions and markets relative to all U.S. hospitals based on the markets set up by eReports Corporate Administrators from My Markets preferences. The first 30 Markets created by existing users shall be displayed here. For new users, when the Markets have been created, the first 30 shall display here.

**How to Customize Metrics:** Click the bookmark icon on the left of the Metric. Then click on to view the bookmarked Metrics in the Dashboard. To unbookmark a metric, click on the bookmarked metric.
After the user clicks on “view bookmarked metrics” the bookmarked metrics can be viewed immediately vs. 24 hours. i.e.

In the new interface, the user can view bookmarked metrics after clicking on view bookmarked metrics in the dashboard. To unbookmark a metric, click on the bookmarked metric.

View Bookmarked Metrics to view selected Metrics OR View All Metrics to view all the Metrics.

This applies the same for the Detail Lines selection.

For Existing Users: the transition is seamless, previously My Metrics can now be viewed as Bookmarked Metrics with this option.

For New Users: the default is to display all the Metrics, these can be Bookmarked.

The bottom of the screen displays the Ranking Range for all the percentiles displayed in this screen: Ranking Range 10th 25th 50th 75th 90th. All the percentiles for each metric can be viewed in the Excel export of this screen. Additionally, the 10th, 25th, 50th, 75th and 90th percentiles for each metric can be viewed in the Executive Summary.
Clicking on any Executive Metric navigates to the Data Display view of the Hospital Detail report.

To the right of the metric click on the bar graph icon 📊 navigates the user to the Graph Display of the Hospital Detail.

Excel and PDF Exports:

The user has the option to export the report to Excel, this is a non-formatted version and displays all the markets upto 100.

The user also has the option to export the report to PDF, this is an as-is version of the screen displayed and displays the same number of markets, upto 30, as you would see on your screen.
5.2. eReports Health Systems – Hospital Detail

The Hospital Detail is accessible at the participant level, the Market Summary displays the hospital data submission status and Hospital Detail displays the rolling 4 quarters data and R4Q data for all Hospitals in the Health System, for the Metric selected.

---

**Data Display View**

**Graph Display View**
Select Parameters: Users shall be provided with the following parameters to choose in the Filter Panel (defaults are in Bold):

- Metric
- Ending Timeframe
- Submission Type (Base)
- Submission Status (Green in All 4 Quarters/All Hospitals)
- Market
- Report View (Data Display/Graph Display)
5.3. Patient Level Detail Report

The Patient Level Detail Report can be accessed from the Hospital Detail page, it is available for download in Excel and PDF formats.

The Patient Level Detail Report provides the opportunity to review the patients and/or procedures included in the metric denominator and identify those included or excluded from the metric numerator as well as filter on other parameters. Click on 'Patient Detail' from the Hospital Detail page. Once you have navigated to the Patient Level Detail Report the desired metric will display. Filters to adjust the display are located by clicking on the 'down arrow' and include:

- **Year/Quarter** – the R4Q Ending Timeframe selected on the eReports page will determine the quarters available for review from the patient drilldown list, only quarters with data are available for review
- **Patient Display** - chose from: all patients in metric, patients in numerator, patients not in numerator
- **Age** – age groups available: 18-64, 65-79 or 80 years or older
- **Sex** – male, female or all
• **Race** – White, Black/African American, American Indian/Alaskan Native, Asian, Native Hawaiian/Pacific Islander, Hispanic or Latino, all races will be shown if ‘race’ appears in the display window
• **Insurance Payor Type** – sort by payor

Click **Retrieve** to update the patient drilldown list. The display options can be hidden by clicking on the ‘up arrow’.

The **Patient Level Detail Report** list will display:

• The **Metric Name/Description**

• The **Benchmark Inclusion Status** obtained for each quarter included in the 4 quarters selected

• The **quarterly performance** and the **My Hospital R4Q** performance

• Select columns are consistent e.g. Year/Quarter, Patient ID etc. however the remaining columns are unique for the metric

***Data found on the Patient Level Detail Report reflects what was provided to the NCDR by the user***
Numerator/Denominator Metrics

When reviewing the Patient Level Detail Report FIRST analyze the metric name/description to determine how the metric reports performance; Positively or Negatively:

Example: The metric numerator below reflects the desirable outcome or ‘positive’ performance. Review the patients NOT included in the numerator to identify opportunities for improvement.

![Metric Summary Image]

Example: The metric numerator below reflects an undesirable outcome or ‘negative’ performance. Review the patients INCLUDED in the numerator to identify opportunities for improvement.

![Metric Summary Image]
Risk Adjusted Metrics

Risk Adjusted Metrics report a **Risk Adjusted Rate** thus the Patient Level Detail Report does not provide the traditional numerator/denominator information as other metrics.

The Patient Level Detail Report for a risk adjusted metric will provide the list of all patients reviewed by the metric. Patients/procedures who meet the metric Inclusion/Exclusion criteria will be identified as **Risk Eligible**. If the patient had the outcome being assessed (mortality or bleeding or acute kidney injury) it will be identified in the **Observed** row.

Reviewing the detail lines for risk adjusted metrics will help you understand opportunities for improvement in these measures. The detail line definitions are provided in the Executive Summary Measures & Metrics Companion Guide.

Appropriate Use Criteria Metrics

Appropriate Use Criteria Metrics provide an “appropriateness” rating for PCI procedures.

- The AUC provides procedure ratings based on the patient’s symptoms:
  - Acute Coronary Syndrome (ACS); or,
  - Stable Ischemic Heart Disease (SIHD)
- Each procedure is listed in the drilldown with the AUC Indication Number and score it received
  - Exception: some procedures were successfully mapped to a rating of Appropriate, May Be Appropriate or Rarely Appropriate but the specific Indication could not be determined. This is identified in the drilldown by a ‘blank’ Indication Number and ‘0’ Indication Score.
• The number of PCI procedures reviewed by the AUC for your facility is relayed in the
denominator count of Metric 30

• Each AUC Metric displays only the number of procedures that are in the numerator

• Review all metrics that pertain to the same population (ACS or SIHD) to identify the
denominator

Example: Metric 30 identifies 740 PCI procedures received an AUC rating. Of those, 78
procedures were ‘not classifiable for AUC reporting’.  

Example:

Metrics 34, 35 & 36 (below) provide the appropriateness rating for all patients who presented
with Stable Ischemic Heart Disease (SIHD). The AUC Patient Level Detail Reports will list the PCI
procedures which are in the numerator for each appropriateness rating, in this example
Appropriate, May Be Appropriate and Rarely Appropriate, respectively. The sum of the
numerators from Metrics 34, 25, & 36 equals the number of procedures who received an
appropriateness rating from the AUC for patients with SIHD.

**My Hospital R4Q**

Appropriate 173

May Be Appropriate 172

Rarely Appropriate 5

Denominator = 350
Putting it all together

**Total PCI procedures evaluated by AUC = 740** – 78 unclassifiable PCI procedure = 662 PCI procedures

Denominator for Metric 31, 32, 33 Patients with ACS 312 (not pictured)

**Denominator Metric 34, 35, 36 Patients with SIHD 350**

**Total PCI procedures which received an AUC rating = 662**
5.4. eReports Health Systems – Executive Summary view

**#1 Select Parameters:** Users shall be provided with the following parameters to choose in the Filter Panel:

- View (Executive Summary/Detail Lines)
- Ending Timeframe
- Submission Type (Base)
- Submission Status (Green in All 4 Quarters/All Hospitals)
- Category (All/Categories)

The report runs to update the page to display all the Executive Metrics based on the selections in the filter panel.

**#2 View Bookmarked Metrics** to view selected Metrics OR View All Metrics to view all the Metrics. Refer to: [How to Customize Metrics](#)

**DQR:** Participants of the registries submit data to the NCDR® for quality review. This quality review is known as the Data Quality Reporting (DQR) process. The DQR checks submitted patient records and returns a green, yellow, or red status for their submission. Data are first
checked for errors then checked for “completeness” thresholds. Passing the DQR ensures well-formed data and a statistically significant submission. Green light submissions will be displayed in the quarterly reports along with yellow light submissions displayed in the details section of the report. Following successful submission to the DQR, the data is included in the current data set and the dashboard includes data submitted with a green light status. The user can view the DQR summaries for both current and historical DQR submissions. For a complete DQR reference guide, click on the Resources tab at the top of the screen and select the Data Call for Submission Guide

**Note:** The quarter will not be reaggregated if a hospital resubmits data after the Call for Data deadline passes. The resubmitted data will be included in the next quarter when the data is reaggregated.

### #3 Historical DQR:

The Historical DQR submission status of institutions as of the harvest date for the published aggregation is displayed on the Executive Summary view. The final submission date of the four historical quarters is provided at the top of the historical DQR table. Note: NCDR® Registries permit hospitals to resubmit data for prior periods but submissions made after the harvest date will not be included in the historical data.

**Example:** If a user selects to view data ending in quarter 2012Q3 as the user has done in the image above, then they will see all submitted data for that quarter and the three quarters prior to it until the harvest date for submissions for that selected ending quarter. The date for that data harvest is shown above the DQR grid. For a complete guide of harvest dates for your registries click on the Resources tab at the top of the screen.
#4 View DQR As of Today: The View DQR As of Today tab shows the up to date DQR submission status of member institutions as of the current date and time. Note: The View DQR As of Today tab is not available on all dashboards.

DQR Drilldown Reports:

The user can view submission statuses at the hospital level by clicking on one of the status links in the DQR Summary table. Any of the three links will navigate the user to the Hospital Data Submission Status Report with the defaulted link set as the submission status. This report allows the user to see the submission status for each institution. From this page the user can also change the filter to see the report for other timeframes and statuses. The Ending Timeframe filter designates the final quarter of a 4-quarter period for which the report is generated. The Submission Status filter allows the user to generate a report that includes only green submissions, yellow or red, or no submissions in any quarters, no submissions in all four quarters, or all submission statuses. For applicable registries, each hospital submission is also identified as a limited submission (L) or a premier submission (P). The sorting options include Hospital Name, City and State. Additionally, a version of the report may be exported by clicking on the Excel Export Button.
#5 Patient Volume: The user can view the R4Q Patient Volume for a few metrics in this section

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Dx coronary angiop patients</td>
<td>4378</td>
</tr>
<tr>
<td>Number of PCI Patients</td>
<td>10035</td>
</tr>
<tr>
<td>Pts w/ Dx coronary angiop and PCI in the same lab visit</td>
<td>9077</td>
</tr>
<tr>
<td>Pts w/ Dx coronary angiop then a PCI in a subsequent lab visit</td>
<td>272</td>
</tr>
</tbody>
</table>

#6 Volume Summary: The user can view the R4Q Volume Summary for a few procedures in this section

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left atrial appendage occlusion (LAAQ)</td>
<td>0</td>
</tr>
<tr>
<td>Mitral clip procedure</td>
<td>1</td>
</tr>
<tr>
<td>Number of dx coronary angiop and PCI procedures during same lab visit</td>
<td>9242</td>
</tr>
<tr>
<td>Number of dx coronary angiop procedures</td>
<td>4766</td>
</tr>
<tr>
<td>Number of PCI procedures</td>
<td>10402</td>
</tr>
<tr>
<td>Structural repair</td>
<td>13</td>
</tr>
</tbody>
</table>

#7 Roll up: The Executive Summary view provides the DQR Submission status and Volume Summary metrics; this table can be collapsed by clicking the ‘up arrow’
#8 Dashboard Aggregation Date is found in the upper right corner.

- When an unpublished timeframe is selected, it will reflect the last weekly refresh date
- A published timeframe will reflect the Data Deadline for the Ending Timeframe (as above). The Data Deadline is found on the CathPCI Website by navigating to Data → Call for Data Schedule.

#9 Metrics: Each Executive Summary Measure/Metric is identified by its number and name; the available links include:

- Metric Detail – Health Systems metric performance is compared to the US Registry benchmark and to the facilities specific volume group, historical metric performance is provided in a quarterly trend or R4Q trend
- Hospital Detail – Hospital Level Drilldown for the Metric
- Bookmark – click on the bookmark symbol (color it) to identify metrics you would like to appear in your specific view. Refer to: How to Customize Metrics
#10 Bullet Graph: Understanding the Bullet Graph

Each metric display will provide the Health System’s R4Q performance and plot it in a bullet graph. The dark blue line demonstrates Health System performance and will end where the Health System’s R4Q metric performance appears in relation to all US Registry hospitals. The table below the bullet graph will provide the 10th, 25th, 50th (benchmark), 75th and 90th percentiles for the metric. The percentiles shown here will correlate to the results identified in the box and whisker plot of the Executive Summary Report with the same quarter as the ending timeframe quarter.

![Bullet Graph Example](image)

#11 Performance Trend: A Performance Trend, plotting the Health System’s quarterly performance appears to the far right. The last four quarters (shaded) are utilized to determine the R4Q metric value.

5.5. eReports Health Systems – Metric Detail

The Metric Detail report provides you the selection parameters (1), a view into the Executive Summary Measures & Metrics Companion Guide or the Outcomes Report Companion Guide (2) (whichever is available for the Registry), additionally three graphs (per metric) are displayed that break down your Health System’s performance by:
• Metric Performance (3)
• Your Health System’s Volume Trend (4)
• Historical Performance (5)

#3 Metric Performance: Health Systems Metric performance for the R4Q is plotted in a bullet graph. The dark blue line demonstrates health system performance and will end where the health system’s R4Q metric value appears in relation to all US Registry hospitals. The table below the bullet graph will provide the 10th, 25th, 50th (benchmark), 75th and 90th percentiles for the metric. The percentiles shown here are the US Hospital R4Q Performance Distribution for the 4-quarter period defined by the ending timeframe.

#4 Volume Trend: The selected metric’s Volume Trend shall display the following: * Blue Line for Numerator OR Observed for Risk Adjusted Metrics OR Mean/Median Metrics
Green Line for Denominator OR Expected for Risk Adjusted Metrics for 8 rolling quarters based on the ending timeframe.

#5 Historical Performance: A three-year trend of your Health System’s performance in the metric is provided in a:

• Quarterly Trend – metric performance for a single quarter is plotted in the graph. The Patient Level Detail report can be accessed from this location, as it will provide the patients included in each quarter that comprised the metric results.
• R4Q Trend – cumulative metric performance for 4 quarters is plotted in the graph. This result corresponds to the Executive Summary Report Performance or provides the projected R4Q performance.

Example: Metric 1 Composite: PCI in-hospital risk adjusted mortality (all patients)

• Quarterly Trend graph provides health system performance of 1.81 for 2019Q1

• R4Q Trend graph provides health system performance of 1.88 for the 4 quarters ending in 2019Q1 (these include: 2018Q2, 2018Q3, 2018Q4 & 2019Q1)
Understanding a Bullet Graph

As discussed, health system metric performance for the R4Q is plotted in a bullet graph. The dark blue line denotes a health system’s performance and will end where their R4Q metric value appears in relation to all CathPCI Registry participating facilities (US Registry). Health system performance is displayed against a scale that is arranged in ascending order. In both Figure 1 and Figure 2 the quantitative scale (red highlight) below the colored graph, goes from least to greatest. The colors placed in the bullet graph demonstrate desirable performance as dark green and least desirable performance as pale blue and will appear left to right, or right to left as determined by the metric. In both instances the dark blue line demonstrates health system performance and should be the focus of attention.

Figure 1 – Metric 38 Composite: Guideline medications prescribed at discharge is oriented to a “positive” outcome. Desirable performance will have a higher percentage; thus, the desirable performance color of dark green corresponds with the ascending numbers on the quantitative scale and appears to the right. Health system performance is demonstrated by the dark blue line which ends at 96.3% falling within the 50th percentile, and this is clearly demonstrated in the graph.

Figure 2 – Metric 25 Transfusion post PCI is oriented to a “negative” outcome. Desirable performance will have a lower percentage; thus, the desirable performance color of dark green does not correspond with the ascending numbers but appears to the left, aligned with the lower numbers which signify better performance. Health system performance feels incongruous with the graph display however, performance can be observed in the dark blue line which ends at 0.59% falling within the 75th percentile, and this is clearly demonstrated in the graph.

***In both figures, health system performance is identified by where the dark blue line ends on the quantitative scale***
5.6. eReports Health Systems – Detail Lines

The Detail Lines report can be accessed from the Hamburger Menu, it is available for download in CSV and Excel formats.

- Detail Line metrics will display quarterly data for the 4 quarters defined by the Ending Timeframe and the sum of this data is displayed in the My Group R4Q column.
- R4Q data can be evaluated against the Health System PCI volume group and the US Registry.
- Detail lines can be bookmarked (shown) to support specific evaluations. Note: when bookmarking metrics on multiple pages ‘refresh’ each page before proceeding to save the bookmark so its visible on navigating back and forth between multiple pages or bookmark and proceed directly to ‘View Bookmarked Metrics’.
- The Category selections also support filtering the results to return specific details lines.
- Detail line headings are bolded (below), these are the ‘parent’ fields on the Data Collection Form. The numerator in the heading subsequently becomes the denominator of the ‘child’ field.
- Click on the Hospital Detail to view the data display of the report. Click on the graph icon to view the graph display of the Hospital Detail.
Report Download:

5.7. Report Download – Executive Summary Export

The Executive Summary Export can be accessed from the Hamburger Menu, it is available for download in CSV and Excel formats.

The data elements included in this report are referred in the eReports Health System Dashboard Technical Specifications. This is a registry specific report.

5.8. Report Download – Facility Demographics

The Facility Demographics report can be accessed from the Hamburger Menu, it is available for download in CSV, Excel and PDF formats.

This report provides you with a summary of the demographics data for the facilities reporting data in that registry. Like the Executive Summary Report, this report is registry specific.

5.9. Report Download – Technical Specifications

The Technical Specifications can be accessed from the Hamburger Menu, it is available for download in PDF format. This report details the data elements of the Executive Summary Export and Facility Demographics.
How To:

5.10. How To: Setup My Markets
A link to the YouTube video is provided to walk you through the process to set up Markets.

5.11. How To: Add a New User
A link to the YouTube video is provided to walk you through the process to add a new user.
Report Links:

5.12. Report Links: Hospital Summary

The Hospital Summary report can be accessed from the Hamburger Menu, it is available for download in Excel and PDF formats.

The Hospital Summary report is accessible at the participant level and allows organizations to see their specific institutions’ performance metrics as well as be able to compare them to the 90th, 75th, 50th, 25th and 10th percentiles for all US hospitals. The report can be filtered by ending the timeframe for four quarter data submissions as well as by hospital. Reselecting the parameters, the report will run showing the facility demographics, the hospital data submission status for the last four quarters and the institution’s metrics for all metrics tracked.
5.13. Report Links: Participating Registries

The Participating Registries report can be accessed from the Hamburger Menu, it is available for download in Excel and PDF formats.

The Participating Registry Report is a system level report that provides a breakdown of the number of hospitals that participate in each NCDR® registry. Further breakdown is provided in the second level data table which provides a listing of each hospital and information on Registry Site Managers, including their contact information, organized by registry.
The Data Collection Vendor report can be accessed from the Hamburger Menu, it is available for download in Excel and PDF formats.

The Data Collection Vendor report provides a system level overview of the vendors used for data collection by the submitting institutions within the system. The report breaks down the vendors first by the registries that they are associated with followed by the number of hospitals using that vendor for that registry.

5.15. Report Links: Release Notes
The Release Notes report can be accessed from the Hamburger Menu, it is available for download in Excel and PDF formats.

The Release Notes report lists all the changes in the dashboard reports or metrics.
5.16. Report Links: Notifications
The Release Notes report can be accessed from the Hamburger Menu, it is available for download in Excel and PDF formats.

Notifications are used to inform NCDR® eReports Health Systems clients of any updates regarding participants or the dashboard itself. This feature is also used as a vehicle for communicating any upcoming events or site maintenance. Notifications are set by ACC staff with an expiration date so that once the expiration date is reached, the notification is no longer visible.

![Notification](image)

5.17. Report Links: Files
The Files can be accessed from the Hamburger Menu.

Files provides another feature that enhances the communication capabilities between the American College of Cardiology and its clients. The files tab is where the ACC will post files for distribution to client Health Systems Dashboard users. Here, the system will list the file name which will be linked to the associated uploaded file as well as the load date of that file and both the last time the file was accessed and the user that accessed that file. There is also a “More” link at the bottom of the file tab area for accessing full lists of loaded files.

<table>
<thead>
<tr>
<th>Load Date</th>
<th>File Name</th>
<th>Last Access Date</th>
<th>Last Access User</th>
</tr>
</thead>
<tbody>
<tr>
<td>08/04/2020</td>
<td>CathPCI HS&amp;Coro File Upload Test</td>
<td>04/02/2020 8:43 PM</td>
<td></td>
</tr>
<tr>
<td>09/20/2013</td>
<td>CathPCI Report Release Notes June 2013</td>
<td>01/23/2013 10:54 AM</td>
<td></td>
</tr>
<tr>
<td>01/22/2013</td>
<td>Test File for Evaluation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Set Preferences:**

Users with eReports Administration privileges have access to set Preferences while all users can view preferences. NCDR® eReports contain features that are customizable at the client level. However, it is important to note that these features are customizable at the organization level and not at the individual level. Any update to My Markets definitions will be reflected in the dashboard by the next business day after the reporting data mart is updated as part of the nightly refreshing process.

5.18. **Set Preferences: My Markets**

This link allows eReports Administrators to set the Markets that are shown in the My Markets tab. While only the eReports Administrators will have access to make changes to the My Markets preferences, all users for that participant will be able to view the markets listed under the My Markets tab of the eReports Dashboard. NOTE: The user is limited to 100 markets total and 30 markets which are visible on the dashboard.

The eReports Administrators sets the preferences for My Markets by clicking on the My Markets tab at the bottom of the left panel of the Health Systems Dashboard page under “Set Preferences”. This navigates the user to the My Markets Setup page.

The initial My Markets setup page provides a list of the user’s markets including the market name, a caption, the markets Active Status and links to Edit the market or move the market up or down the list in order to make adjustments to the viewing order of the markets. From this page the user can add new markets by clicking New.
My Markets set up screen allows you to create custom groups of hospitals within your dashboard for comparisons that meet your organization’s specific goals and objectives. Note: Market definitions are generally refreshed in the dashboard by the next day. The markets are specific to your organization, not individual user logins, so any changes will be reflected in the dashboard when accessed by all authorized users. You may define up to 150 markets, while the export will include all the markets only the first 50 markets will appear on the dashboard.

<table>
<thead>
<tr>
<th>Market Name</th>
<th>Caption</th>
<th>Active</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Division</td>
<td>Capital Division</td>
<td>Yes</td>
</tr>
<tr>
<td>Central and West Texas Division</td>
<td>Central and West Texas Division</td>
<td>Yes</td>
</tr>
<tr>
<td>Continental Division</td>
<td>Continental Division</td>
<td>Yes</td>
</tr>
<tr>
<td>East Florida Division</td>
<td>East Florida Division</td>
<td>Yes</td>
</tr>
<tr>
<td>Far West Division</td>
<td>Far West Division</td>
<td>Yes</td>
</tr>
<tr>
<td>Gulf Coast Division</td>
<td>Gulf Coast Division</td>
<td>Yes</td>
</tr>
<tr>
<td>MidAmerica Division</td>
<td>MidAmerica Division</td>
<td>Yes</td>
</tr>
<tr>
<td>Mountain Division</td>
<td>Mountain Division</td>
<td>Yes</td>
</tr>
<tr>
<td>North Florida Division</td>
<td>North Florida Division</td>
<td>Yes</td>
</tr>
<tr>
<td>North Texas Division</td>
<td>North Texas Division</td>
<td>Yes</td>
</tr>
<tr>
<td>San Antonio Division</td>
<td>San Antonio Division</td>
<td>Yes</td>
</tr>
<tr>
<td>South Atlantic Division</td>
<td>South Atlantic Division</td>
<td>Yes</td>
</tr>
<tr>
<td>Tristar Division</td>
<td>Tristar Division</td>
<td>Yes</td>
</tr>
<tr>
<td>West Florida Division</td>
<td>West Florida Division</td>
<td>Yes</td>
</tr>
<tr>
<td>test15</td>
<td>test15</td>
<td>Yes</td>
</tr>
<tr>
<td>test16</td>
<td>test16</td>
<td>Yes</td>
</tr>
<tr>
<td>test17</td>
<td>test17</td>
<td>Yes</td>
</tr>
<tr>
<td>test18</td>
<td>test18</td>
<td>Yes</td>
</tr>
<tr>
<td>test19</td>
<td>test19</td>
<td>Yes</td>
</tr>
<tr>
<td>test20</td>
<td>test20</td>
<td>Yes</td>
</tr>
<tr>
<td>test21</td>
<td>test21</td>
<td>Yes</td>
</tr>
<tr>
<td>test22</td>
<td>test22</td>
<td>Yes</td>
</tr>
<tr>
<td>test23</td>
<td>test23</td>
<td>Yes</td>
</tr>
<tr>
<td>test24</td>
<td>test24</td>
<td>Yes</td>
</tr>
<tr>
<td>test25</td>
<td>test25</td>
<td>Yes</td>
</tr>
</tbody>
</table>

1 2 3 4

"Maximum market count reached"
Additional resources are available at the Resources tab at the top of the registry dashboard page. The American College of Cardiology is thrilled to have the opportunity to cooperate with you for the mutual goal of improving cardiology patient outcomes. And we look forward to further opportunities to help your efforts to improve cardiology care quality and information through the NCDR® and the eReports Health Systems Dashboard.

Questions and Comments

The ACC will respond to hospital and stakeholder questions and comments between the hours of 9:00 a.m. and 5:00 p.m. Monday through Friday Eastern Standard Time. There are two ways to reach us:

- By email at NCDRCorpsSolution@acc.org. Please include your full name, institution name, address, phone number and a brief description of your inquiry.

- By phone at (800) 257-4737

To ensure proper handling of inquiries, please reference "NCDR eReports Health Systems" when contacting the ACC regarding this initiative.

(End of Document)