

Digital Strategy and Data Visualization for Clinical Quality Insights

*Making the Case, Evaluating Options, and Designing Solutions to
Optimize Your Registry Program – Lessons from the American College
of Cardiology's NCDR Suite of Registries*

Session Overview

Brief presentations followed by open discussion



Session Moderator

Christina Koutras, RN, BSN, CPHQ
Director, NCDR Registry Products,
American College of Cardiology
[Linkedin.com/in/christina-koutras-a1515838/](https://www.linkedin.com/in/christina-koutras-a1515838/)



Evaluating Options

Ganesan Muthiah
Chief Technology Officer
American College of Cardiology
[Linkedin.com/in/ganesanmuthiah/](https://www.linkedin.com/in/ganesanmuthiah/)



Making the Case

Kelly May
CEO, May Strategy Group
[Linkedin.com/in/kellycmay](https://www.linkedin.com/in/kellycmay)



Designing the Solution

Justin Erickson
Principal, Slalom Consulting
[Linkedin.com/in/justin-erickson-580a3372/](https://www.linkedin.com/in/justin-erickson-580a3372/)

Disclosure Slide

The moderator and panelists for this session have no material financial relationships to disclose.



Council of Medical
Specialty Societies

CMSS Annual Meeting 2022
Specialty Societies: Stronger Together

November 9-11, 2022 | Washington, DC

Project Overview & Making the Case



Kelly May
CEO, May Strategy Group
[Linkedin.com/in/kellycmay](https://www.linkedin.com/in/kellycmay)



Kelly May

Consultant	Marketer	Founder	Trainer
 			

accenture High performance. Delivered. Founders Brewing verizon connect jonas paul Hudsonville PREMIUM ICE CREAM MIDWEST CRAFTED CREAMERY SINCE 1926 Amway
 AAOS AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS AMERICAN COLLEGE OF CARDIOLOGY American Heart Association aahpm AMERICAN ACADEMY OF HOSPICE AND PALLIATIVE MEDICINE ASAM American Society of Addiction Medicine
 POSNA PEDIATRIC ORTHOPAEDIC SOCIETY OF NORTH AMERICA AIP American Institute of Physics UT Health San Antonio ASH RESEARCH COLLABORATIVE Accelerating Progress in Hematology AMERICAN SHOULDER and ELBOW SURGERY GIQUIC
 Tolman's MEATS FULLBAR OrthoRPM ENVOYB2B Rentberry

NCDR is the premier source for cardiovascular quality data

NCDR Overview



- Largest, most comprehensive, outcomes-based CV registry in the world
- Launched in 1997
- Ten registries
- 1,873 sites, 100M clinical records
- 80+ system contracts
- Recognized by Federal/State Government and private payers thanks to ACC Advocacy efforts

The NCDR of the Future

Vision: A world where NCDR advances patient care, outcomes, and value through knowledge and innovation.

The NCDR of the Future is:



To achieve this vision, it is critical to understand and navigate threats



Tech Companies



EHR Companies



Changing Customer Expectations



Hospitals & Industry Building Own Solutions



Dependent on New Med. Devices, Procedures



CMS & FDA Decisions



Policy Changes

Example Threats to the NCDR

The NCDR kicked off an optimization project to ensure the registry was positioned for the future

NCDR Optimization Project Rationale

- 01**  **NCDR IMPORTANCE**
NCDR is critically important to the Success and Mission of the ACC
- 02**  **ASSESSMENT OPPORTUNITY**
Opportunity to Review Strategy, Identify Top Priorities, & Optimize Operational Efficiency
- 03**  **SECURE SUPPORT**
Ability to Secure Funding & Alignment Around Critical Priorities

NCDR Optimization:
Optimizing NCDR requires maintaining our current state as a world leader in cardiovascular registries, while simultaneously developing the means of transforming operations to reflect the changing needs of our stakeholders and evolving capacity of technology

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



Understood
Stakeholder
Needs



Compared
NCDR
Investment
to Industry
Benchmarks



Developed
Plan That
Addressed
Needs &
Outlined
Investment



Described
Plan's
Benefits /
Implications

RESULT: A
comprehensive,
insight-led plan that
received Board
support and
investment approval

← Stakeholder Alignment →

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



RESULT: A comprehensive, insight-led plan that received Board support and investment approval

← Stakeholder Alignment →

The team executed a comprehensive current state assessment to uncover pain points and key priorities for the NCDR

The Approach



50+ Artifacts Reviewed



28 + Interviews



85 Staff Surveyed



70 + Research Hours



7 Workshops & 8+ Jam Sessions



- NCDR Strengths
- Customer Pain Points & Needs
- Implications of Trends Impacting NCDR's Future
- Pressing Challenges for Staff
- Key Priorities to Address

NCDR Stakeholders:

- Hospitals & Health Systems
- Providers
- Researchers
- Patients
- Payers
- Employer Groups
- ASCs
- Industry
- FDA
- State Agencies
- ACC Staff

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



Understood
Stakeholder
Needs



Compared
NCDR
Investment
to Industry
Benchmarks



Developed
Plan That
Addressed
Needs &
Outlined
Investment



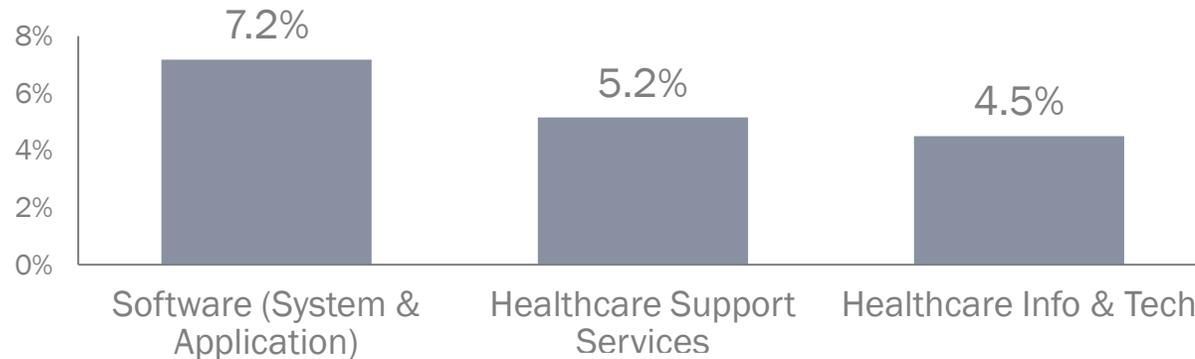
Described
Plan's
Benefits /
Implications

RESULT: A
comprehensive,
insight-led plan that
received Board
support and
investment approval

← Stakeholder Alignment →

A comparison to other organizations in healthcare and technology identified an opportunity for additional investment into the NCDR

Reinvestment by Industry Sector
(Net Capital Expenditure / Sales)



Sample organizations in sector:



Benefits of the Analysis

- Grounded the discussion in facts
- Demonstrated NCDR was underinvesting relative to other healthcare and tech organizations
- Increasing investment would enhance ability to compete in the healthcare technology landscape

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



Understood Stakeholder Needs



Compared NCDR Investment to Industry Benchmarks



Developed Plan That Addressed Needs & Outlined Investment



Described Plan's Benefits / Implications

RESULT: A comprehensive, insight-led plan that received Board support and investment approval

← Stakeholder Alignment →

The optimization plan is robust and ensures the NCDR is well positioned for the future

The NCDR Optimization Plan



The team demonstrated: the plan was aligned to ACC's and NCDR's strategies, addressed key needs uncovered in research, and required additional investment

NCDR Optimization Plan

		NCDR OPTIMIZATION PROGRAMS								\$ (thousands)	% of ask	
		REQUIREMENTS										
		1. Real-Time, Meaningful Data	2. Modernize Reporting	3. Ease Data Burden	4. Enhance Nimblieness	5. Signal Where to Focus	6. Communicate/Prove Value	7. Improve Data Integration	8. Support Value-Based Care			
ACC Strategic Plan NCDR Strategic Plan	 Reduce the Burden and Enhance the Scope of Data Collection	1.1. Program	✓	✓	✓	✓	✓		✓	\$XX	28%	
		1.2. Program	✓		✓				✓		In process	N/A
		1.3. Program	✓		✓	✓					\$XX	16%
		1.4. Program							✓	✓	\$XX	7%
	 Increase NCDR Value to Stakeholders	2.1. Program	✓	✓	✓	✓	✓		✓	\$XX	22%	
		2.2. Program						✓	✓	\$XX	5%	
		2.3. Program			✓			✓	✓	\$XX	8%	
		2.4. Program						✓	✓	\$XX	1%	
		2.5. Program						✓	✓	\$XX	1%	
		2.6. Program						✓		\$XX	1%	
	 Promote Quality Improvement	3.1. Program					✓	✓		In process	N/A	
	 Support Population Health Mgmt.	4.1. Program					✓		✓	\$XX	2%	
		4.2. Program	✓		✓	✓	✓			\$XX	10%	
	3-Year Incremental Investment :									\$XXXX		

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



Understood
Stakeholder
Needs



Compared
NCDR
Investment
to Industry
Benchmarks



Developed
Plan That
Addressed
Needs &
Outlined
Investment



Described
Plan's
Benefits /
Implications

RESULT: A
comprehensive,
insight-led plan that
received Board
support and
investment approval

← Stakeholder Alignment →

For each stakeholder group, the team outlined tangible benefits and improvements to make benefits clear to the Board

Stakeholder Groups



**Hospitals & Health
System Administrators**



Patients



**Providers &
Researchers**



Industry



Payers



**Regions, States,
Regulators**

For each stakeholder group, the team outlined tangible benefits and improvements to make benefits clear to the Board

Example Benefits:



**Providers &
Researchers**



- ✓ Improves the NCDR experience
- ✓ Increases access to data for research, QI, and ABMS credentialling
- ✓ Tightens integration of data into workflow
- ✓ Delivers more insights at the point of care

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



Understood
Stakeholder
Needs



Compared
NCDR
Investment
to Industry
Benchmarks



Developed
Plan That
Addressed
Needs &
Outlined
Investment



Described
Plan's
Benefits /
Implications

RESULT: A
comprehensive,
insight-led plan that
received Board
support and
investment approval



Stakeholder Alignment



The team utilized several tactics to ensure plan alignment and buy-in

Stakeholder Alignment Best Practices

- ✓ Established Member Project Task Force (TF)
- ✓ Involved Staff Project TF with Executive and Business Line Staff
- ✓ Interviewed Key Stakeholders to Get Insights/Vision/Opinions
- ✓ Leveraged Members to Socialize Plan Prior to Final Presentation
- ✓ Utilized Pre-Read Materials and Shared Analysis & Approach
- ✓ Members Presented Plan Along with Staff & Addressed Q&A

HOW WE MADE THE CASE:

Steps to Solidify Investment Support



Understood
Stakeholder
Needs



Compared
NCDR
Investment
to Industry
Benchmarks



Developed
Plan That
Addressed
Needs &
Outlined
Investment



Described
Plan's
Benefits /
Implications

RESULT: A
comprehensive,
insight-led plan that
received Board
support and
investment approval

← Stakeholder Alignment →



Council of Medical
Specialty Societies

CMSS Annual Meeting 2022
Specialty Societies: Stronger Together

November 9-11, 2022 | Washington, DC

Evaluating Options



*Ganesan Muthiah
Chief Technology Officer
American College of Cardiology
[Linkedin.com/in/ganesanmuthiah](https://www.linkedin.com/in/ganesanmuthiah)*

Business Intelligence Analytics

New Platform Selection: Power BI



Agenda

Why are we changing?

Compare Options

Tool Selection

Next Steps

Questions



Why?



Our Approach

- Using industry research and the Digital Strategy recommendations, the team narrowed the field to 3 products.
- A deeper dive investigation was then performed on the short list of products that could meet the NCDR customer needs.



Gartner Report

Cognos:

- Many customers looking to modernize Analytics and business intelligence (ABI) usage are using the opportunity to reevaluate and assess other vendors

Power BI:

- Viewed as a visionary tool and leader in the platform as a service (Cloud)
- Power BI Pro cloud service leads most of its competitors in terms of functionality, e.g., moving from self-service to Augmented Analytics which utilizes AI & machine learning

Tableau:

- Considered the king of visual-based exploration experience
- Have broadened the scope of its product offerings, e.g., augmented analytics and governance capabilities

Citation: <https://powerbi.microsoft.com/en-us/blog/microsoft-named-a-leader-in-the-2022-gartner-magic-quadrant-for-analytics-and-bi-platforms/>

Figure 1: Magic Quadrant for Analytics and Business Intelligence Platforms



Source: Gartner (March 2022)

Deeper Dive Investigation



Features



Hosting &
Security



Single Sign On
(SSO)



Maintenance &
Upgrades



Costs



Artificial
Intelligence (AI)



Features



Cognos

- Stable dashboard that has evolved over several years to meet current requirements featuring multiple lines of metrics with graphs
- Current custom solution meets the needs of the DAT team
- Slow, Non-Customizable, and limited visualization

PowerBI

- Rich visual exploration and interactive views
- Dashboards will require a redesign to utilize product features & design for optimal user experience
- PowerBI is fully integrated with office 365
- PowerBI is highly customizable, responsive and can scale to meet business needs

Tableau

- Rich visual exploration and interactive features
- Dashboards will require redesign to utilize the product features & design for optimal user experience
- Tableau has been purchased by Salesforce which may provide future integration benefits

Hosting & Security



Cognos

- On-Prem - HIPAA Compliant
- Cloud - HIPAA Compliant

PowerBI

- On-Prem – N/A (cloud only)
- Cloud – HIPAA Compliant

Tableau

- On-Prem - HIPAA Compliant
- Cloud - **Not HIPAA Compliant**

Single Sign On



Cognos

- Current on-premise solution has complex SSO integration with Motiocap
- Cost & complexity for the cloud SSO solution TBD

PowerBI

- Simple SSO integration via .net user control

Tableau

- Simple SSO integration via .net user control



Maintenance & Upgrade

Cognos (On Prem)

- Significant level of effort due to upgrade complexity & lack of support
- Impacts our reputation and ability to serve our customers
- 4 years behind on upgrade

PowerBI

- Included with the cloud solution

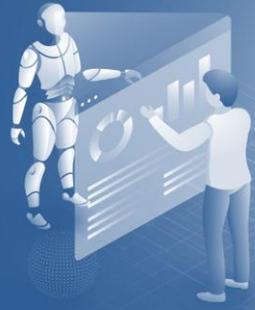
Tableau (On Prem)

- Level of effort unknown but may be like Cognos due to on prem hosting

Estimated Costs



Cognos	PowerBI	Tableau
<ul style="list-style-type: none">➤ Approximately \$90K for on-prem license renewal	<ul style="list-style-type: none">➤ Cloud license cost estimated at \$60 to \$70K	<ul style="list-style-type: none">➤ On-Prem license cost TBD (per Gartner report, estimated at double the cost of Cognos)
<ul style="list-style-type: none">➤ Additional cost for servers, storage & maintenance (\$30K)	<ul style="list-style-type: none">➤ License cost includes hosting and maintenance	<ul style="list-style-type: none">➤ Cloud license cost TBD
<ul style="list-style-type: none">➤ Cloud license cost TBD	<ul style="list-style-type: none">➤ Significant additional costs to rearchitect the existing Cognos reports	<ul style="list-style-type: none">➤ Significant additional costs to rearchitect the existing Cognos reports
<ul style="list-style-type: none">➤ Modification of existing reports TBD		



Artificial Intelligence (AI)

Cognos

- AI capabilities are available as part of IBM Cloud Pak for Data (additional product purchase)
- Current version does not support this feature
- Current version has limited functionality in reporting solution

PowerBI

- Included with PowerBI desktop solution
- Microsoft Quick Insights is available to enable AI capabilities

Tableau

- Tableau provides AI functionality via Ask Data/ Explain Data feature

Future Opportunities



Analytics as a Service



Predictive Analytics



Cloud Hosting



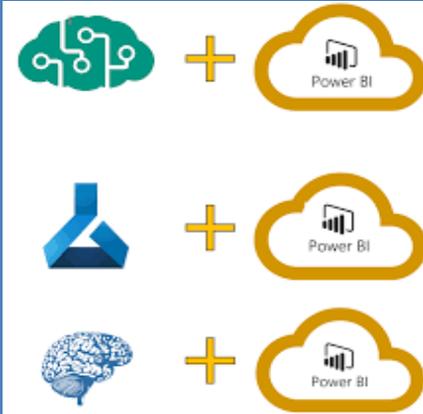
Rich Dashboard



Self Service Analytics
& Reporting

Note: Future opportunities will be considered based on the user need assessment

Tool Selection



Move to PowerBI Cloud Solution

Pros:

- Alleviate ACC IT staff from maintenance, upgrades, and support
- Rich set of features and capabilities are available and is rated as a top player in Gartner report
- With office 365 integration, it is a possible enterprise solution for reporting
- Cloud solution is HIPAA compliant
- Lower cost (excluding re-architecture costs for the dashboards)
- SSO integration is much simpler
- Easier to find qualified resources

Cons:

- Will require re-architecture for all existing NCDR dashboards
- Print and view features will function differently than the current dashboards

Next Steps



- Work with the hospital users and other stakeholders to redesign the dashboards - Completed
- Setting up ACC environments - In Progress
- Map out the redesign and migration timelines for all NCDR registries and dashboard solutions – In Progress



Council of Medical
Specialty Societies

CMSS Annual Meeting 2022
Specialty Societies: Stronger Together

November 9-11, 2022 | Washington, DC

Designing the Solution



Justin Erickson
Principal, Data & Analytics, Slalom Consulting
[linkedin.com/in/justin-erickson-580a3372](https://www.linkedin.com/in/justin-erickson-580a3372)

Reimagining the NCDR Experience

NCDR Optimization

Leveraging Design Thinking principles to
redesign the NCDR Clinical Dashboards

Today's agenda

- About Slalom + ACC
- NCDR Design Journey
- NCDR Archetypes
- Wireframes

About Slalom



WHAT WE DO

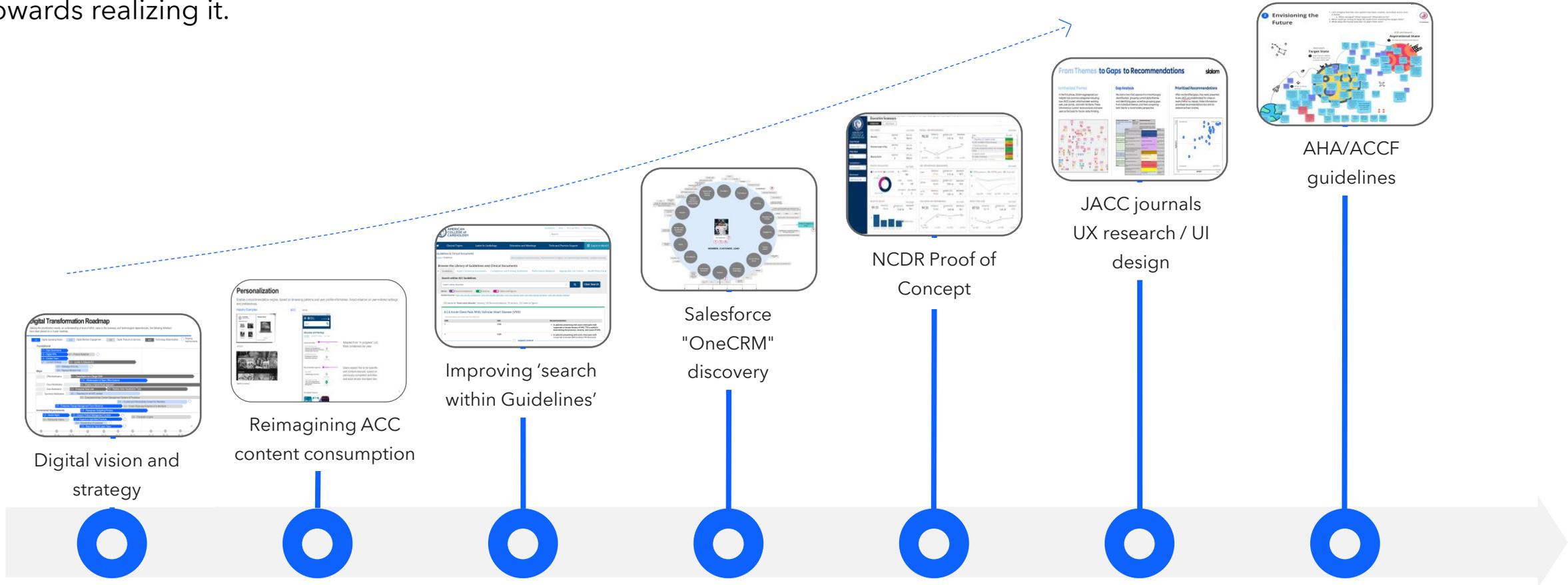
Slalom is a **purpose-led, global business and technology consulting company.**

From strategy to implementation, our approach is **fiercely human**. We deeply understand our customers—and their customers—to deliver practical, end-to-end solutions that drive meaningful impact.



We've supported ACC on a digital journey

Over the past 3 years, we've helped advance ACC's mission to transform cardiovascular care and improve heart health. Starting in 2019, we worked with ACCF's leadership to understand the digital vision for NCDR and taken the first steps towards realizing it.





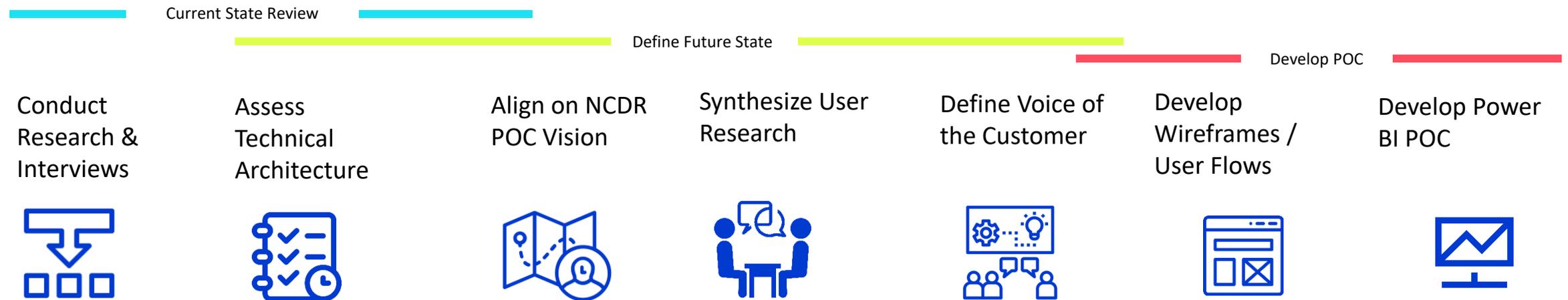
slalom

NCDR Design Journey

Our Challenge

ACC's flagship product, the National Cardiovascular Data Registry (NCDR), was **in need of modernization** due to **changes in customer expectations** and the **maturing of available technologies**.

ACC engaged with Slalom to provide expertise in **user experience design, data architecture, and data visualization**.



We Asked a Lot of Questions. **A Lot.**

We conducted 30+ interviews, deep dives, demos, and walkthroughs to better understand the wholistic NCDR experience



Facility / System Directors

Leaders of Hospital facilities / system of hospitals interested in their collective performance against benchmarks



Quality Program Coordinators

Employees leveraging NCDR for Quality Improvement initiatives within facilities / hospital systems



Physicians

The physicians performing cardio procedures being benchmarked within NCDR



Data Abstractors

Employees responsible for inputting data into NCDR



Researchers / Analysts

Users leveraging NCDR data (and other sources) for research / analytical purposes



Internal ACC Stakeholders

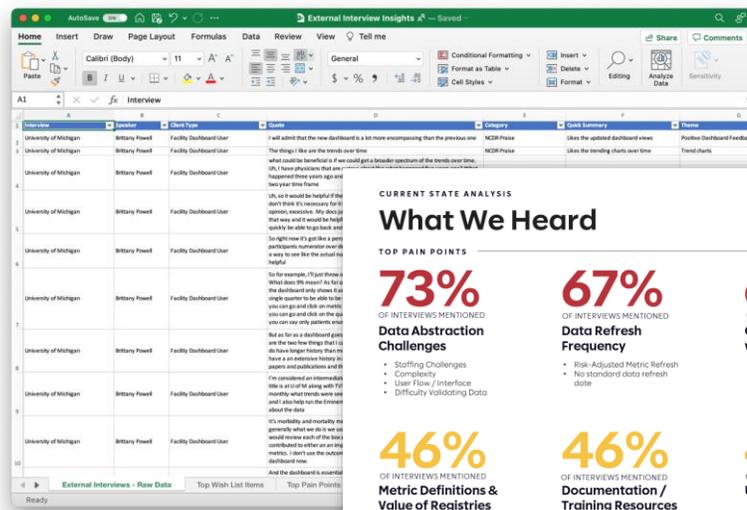
The ACC team members responsible for managing the NCDR platform (business / technology)

Topics

- User Experience
- Pain Points
- Wish List Items
- Current Technology / Data Landscape
- Walkthroughs / Demos of NCDR Usage
- "Day in the Life" Examples

We heard feedback, and compiled key quantitative and qualitative insights

Users provided honest insights about the NCDR reporting capabilities, as well as topics well-beyond our scope, to provide ACC with a wealth of information about the full NCDR experience, from procedures to abstraction to insight



VOICE OF THE CUSTOMER

Facility: [Selected] Health System: [Selected]
State: [Selected] Corporate/Payers: [Selected]

One Big Thing
They would like its aren't any entry...

We Spoke To...
System Director - National Cardiovascular Service Line

Notable Quotes

- "It's one thing to say we're operating at the 50th percentile as compared to the US, but when you say we're #9 of 10 facilities within the system...it sends a powerful message"
- "They give us an average or US average, and it's meaningless...I actually have to go into a facility report to see the percentile rankings to see if we're at the 25th percentile versus the 75th percentile"
- "We have deadlines to submit, but they don't have deadlines for us"-speaking about refresh dates

"If I Ruled NCDR, I Would..."

- Have presentation-ready reports with percentile scorecards so that we don't have to export the data on our own
- Enable users to export all underlying patient level data
- Be able to view the underlying measures as they are refreshed for the risk-adjusted metrics
- View simple bar graphs comparing facility performance to avoid exporting and converting to Google Sheets

Top Tasks

- Submitting data to NCDR each week
- Checking for report refresh and exporting NCDR data into Excel, then converting to Google Sheets to create system-wide graphics (bar charts) to compare performance
- Focuses on a subset of key metrics to identify the "Centers of Excellence", an internal initiative to brand the top performing facilities and enable them to use new surgical technologies / techniques

Pain Points

- Data Refresh Frequency: have had to push back internal Center of Excellence initiative due to delays
- Data Export - Patient Level Data: can't pull all 4 quarters of a metric from the patient drill-downs (240 exports in total for all facilities)
- Percentile Rankings: only available at the individual hospital view, not corporate
- Performance of the tools
- ACC Response: Have identified Calculation issues and not received responses in the past

Data Maturity: Medium

Exporting data to Excel on a weekly basis, checking for report refreshes to create scorecards for system-wide views for Centers of Excellence initiative

© SLALOM. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL.

We further synthesized our findings into 3 distinct **User Archetypes**

We realized quickly that ethnography and demography played a minor role - users' needs were very similar, albeit a little nuanced based on the span and maturity of their Quality Improvement programs and their roles interacting with NCDR

Gabriella "The MacGyver"
FACILITY DATA COORDINATOR

CONTEXT
Most users in this role are either doing this work in addition to their clinical role or have transitioned from a nursing background. There are typically not a lot of resources available to these individuals and they are sometimes left managing multiple registries by themselves. If they have a team they are working with, it's a small one comprised of 1-2 others. The breadth of responsibility in terms of managing the registries varies, most of them are doing the abstraction work while a handful are able to use third-party vendor/tools. These teams are experiencing a decent amount of turnover, which is making it difficult at times to meet submission deadlines, let alone have the opportunity to analyze what has been submitted.

"Our hearts are in it, but we need it to be user friendly because we're doing so much."

NEEDS

- Be able to customize my view to include metrics and detail lines that my hospital is focused on so I can get a quick temperature check
- Easily dive into the detail behind the metrics and line items to validate abstraction
- Receive obvious alerts when there are any changes,

PAIN POINTS

- Value of Registries - Hard to recognize problems quickly in registries without visualizations and the appropriate metrics
- User Experience - Forced to work in Excel because can't easily discover the data behind the measures
- Data Exports - exported onto multiple tabs that have

Jorgia "The Connector"
SYSTEM DATA COORDINATOR

CONTEXT
Users in this role are typically dedicated to working with the data and are acting under the leadership of someone with an Operations/Management background. These users either manage or work within teams, some of which include a dedicated data analyst. These users are more likely to have access to visualization and third-party vendor tools. A lot of these users are accessing the Facility Level Dashboards to gain insights because their organization didn't see the value in the System Level Dashboards. While many of these systems can afford to contract abstraction work out, they are still spending time validating the data and aligning third parties to any NCDR updates. Some systems believe it's important to keep the abstraction process in house to foster trust in the data, which requires even more time.

"We have to build a manual spreadsheet to compare...it's days of work and it's not a sustainable practice."

NEEDS

- Access to benchmarks for both metrics and line items
- Have a customized view of what my system is focused on and be able to drill down to the facility and patient/physician level from that same location
- Be able to efficiently validate data to ensure there are no abstraction or entry errors

PAIN POINTS

- Data Refresh Frequency - need to get as close to real time as possible, visibility into risk-adjusted metrics
- Data Exports - exported onto multiple tabs that have to be merged/cleaned up/checked for duplication
- Multiple Log-Ins - can't drill into the various levels of detail that I need to be looking at, from one location

Nia "The Visionary"
SYSTEM DIRECTOR

CONTEXT
The individuals at this level aspire to change patient care on a grand scale. Systems are fast-paced environments and stakeholders' definitions of timely are increasingly demanding. Trying to balance these demands and accomplish their lofty goals proves to be difficult when dealing with lag time on data that is critical to their quality improvement efforts. The primary value of NCDR to these individuals is the ability to benchmark themselves across their system as well as the nation. The registries are expensive for these systems to be a part of and then on top of that, they require a lot of resources to translate what is happening in their hospitals into something ultimately useful and capable of driving quality improvements. To deal with this, a lot of these systems have leveraged their resources to create work arounds/internal tools that help them move faster.

"Tell me how my hospitals are doing, in a bullet format"

NEEDS

- Identify our top performers as well as where we need to put the most resources to help
- Access timely data that allows the system to effectively strategize/goal-set and have conversations with facilities to improve
- View a roll up of the system and trend that over time to easily view how various PI initiatives are playing out
- Have visibility into a subset of measures the system is prioritizing to help mitigate risk of organizational penalties for missed benchmarks

PAIN POINTS

- Data Refresh Frequency - want their data to be as real time as possible so they can effectively track progress and have visibility into risk-adjusted metrics
- Abstraction - extremely tedious and resource intensive, FTEs not only entering data, but also validating and keeping third parties up to date on NCDR changes
- Value of Registries - expensive to be part of registries that are not providing the same level of value
- User Experience - cannot easily surface what is important

BEHAVIORAL OVERVIEW

TECHNOVICE	TECH SAVVY
REACTIVE	PREDICTIVE
REPORTING	STRATEGIZING
DEADLINE DRIVEN	LONG TERM VISION

DATA MATURITY High

DASHBOARDS USED: System Level, Internal Tools

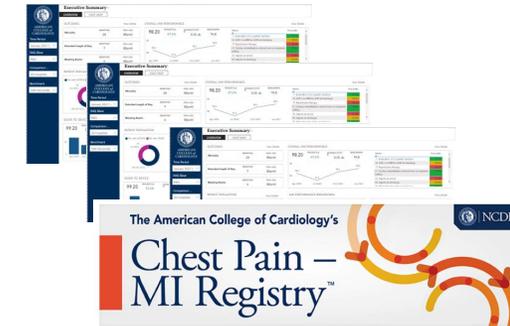
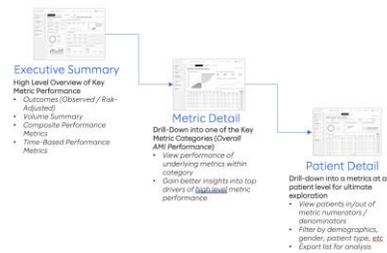
FREQUENCY OF USE: Daily - Weekly

OTHER DATA SOURCES: Financials, Claims, Patient Outcomes

ADDITIONAL TOOLS: Power BI, Tableau

To guide our wireframe designs (iteratively)

We went through numerous iterations to make sure that we were building the right design, keeping what we heard in mind



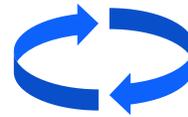
User Flows

Analyze metrics and create relationships/hierarchy between data



Wireframes

Test ideas, concepts, information architecture, layout, and initial usability



Power BI Dev.

Quickly test wireframe concepts and working with data to see if it can support the desired experience



Final POCs

Refined PowerBI POCs for Facility, Corporate, and Physician Dashboards showing one use case per each within a limited number of metrics for Chest Pain.

Outcomes & Reactions

We followed up with NCDR users to ensure our designs met their needs



“This would help us spend less time manually working with data and more time focusing on the patient and what we really could improve”

- Facility Client

“If ACC continues to move this along they'll put a lot of third party vendors out of business. This would save us a couple million dollars a year.”

- Health Systems Client

“There is a huge focus across the nation in disparity of care, having a view like this would be a really great opportunity to be able to see that.”

- Facility Client

What's Next

ACC is currently working to scale the Proof-of-Concepts to production across its suite of registries



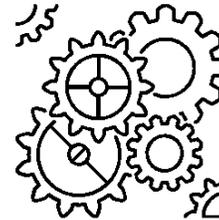
POC

Confirms art of the possible, technical feasibility, go/no go, informs product roadmap



MVP

Pilot initial Dashboard(s) with customers, gather feedback and refine



Full Production

All registries making effective use of PowerBI and all customers successfully transitioned



Continuous Innovation

Modern Data/Tech Stack & operating models enables nimble delivery of enhanced and new capabilities

Following the user-centric design approach is helping ACC deliver an impactful solution to end users, faster



Council of Medical
Specialty Societies

CMSS Annual Meeting 2022
Specialty Societies: Stronger Together

November 9-11, 2022 | Washington, DC

Questions