

Adult Congenital & Pediatric Cardiology

QUALITY NETWORK

Welcome and Introductions

Kathy Jenkins, MD, MPH, FACC

Robert Beekman, MD, FACC

Gerard Martin, MD, FACC



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Welcome to the 1st Quality Network Learning Session!

New from the American College of Cardiology

Adult Congenital and Pediatric Cardiology QUALITY NETWORK

Quality improvement for pediatric and adult
patients with congenital heart disease

Now you have the opportunity to join a national
network of CHD Centers dedicated to collecting
and sharing data, collaborating, and developing best
practices for your CHD patients.

Learn more at
ACC.org/QNet



Agenda

TIME	TOPIC	PRESENTERS
9:00 a.m.	Welcome and Introductions	Kathy Jenkins, Robert Beekman, Gerard Martin
9:15 a.m.	Milestones in the ACPC Quality Network	Kathy Jenkins, Robert Beekman
9:25 a.m.	ABP Requirements for Meaningful Participation	Kathy Jenkins
9:30 a.m.	QI 101 Key Driver Diagrams PDSA Cycles Activating the QI Team	Jeffrey Anderson
	Quality Improvement Activities	
10:00 a.m.	BMI Metric – Overview of Key Drivers & QI	Ashraf Harahsheh
10:15 a.m.	TOF Metric - Overview of Key Drivers & QI	Susan Saleeb
10:30 a.m.	BREAK	
10:45 a.m.	Collaborative QI Breakouts	
	Genetic Testing in TOF	Susan Saleeb
	Counseling for Elevated BMI	Ashraf Harahsheh
	Data Collection Strategies	Jessica Colyer
	Developing a Team	Pei-Ni Jone, Cindy Barrett

Agenda

TIME	TOPIC	PRESENTERS
	Breakout Reports	
11:30 a.m.	BMI Report from Breakouts: Results of Collaborative QI and Discussion	All Participants
12:15 p.m.	TOF Report from Breakouts: Results of Collaborative QI and Discussion	All Participants
1:00 p.m.	Working Lunch (<i>Sit with your team</i>)	
1:30 p.m.	Developing a Team: Report and Discussion	Pei- Ni Jone, Cindy Barrett
2:00 p.m.	Data Collection Strategies: Report and Discussion	Ashraf Harasheh, Jessica Coyler
2:30 p.m.	Reports from Centers	Robert Beekman, Gerard Martin
3:00 p.m.	Panel Discussion: Successful approaches to Overcoming Barriers	QNet Leaders
3:30 p.m.	Future Directions for ACPC Quality Network	QNet Leaders



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ACC Quality Network

- **Leadership:**

- Kathy Jenkins, MD, MPH, FACC
- Robert Beekman, MD, FACC
- Gerard Martin, MD, FACC

- **Quality WG Co-Chairs:**

- Jeffrey Anderson, MD, MBA, FACC
- Ariane Marelli, MD, MPH, FACC

- **ACC Staff:**

- Sean Hilscher, MA (Science & Quality)
- Stephanie Mitchell (Membership)
- Esteban Perla, MPH (Science & Quality)



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QNet Welcomes

Quality Network Leaders

- Robert Beekman, MD, FACC
- Kathy Jenkins, MD, MPH, FACC
- Gerard Martin, MD, FACC
- Jeffrey Anderson, MD, FACC

ACPC Quality Network Sites

Atlanta Children's (Sibley)

- Bill Cole

Boston Children's

- Susan Saleeb, MD, FACC

Children's Hospital of Philadelphia

- Shobha Natarajan, MD
- Andrea Kennedy, BS

Children's National Medical Center

- Jeffrey Becker, MD, FACC
- Jessica Colyer, MD (Associate Fellow)
- Ashraf Harahsheh, MD, FACC

Children's Hospital of Wisconsin

- David Saudek, MD, FACC

Children's Hospital Omaha

- Shaun Custard, MD, FACC

Cincinnati Children's

- Allison Divanovic, MD
- Jeffrey Anderson, MD, MBA, FACC

Colorado Children's

- Pei-Ni Jone, MD, FACC
- Cindy Barrett, MD (Associate Fellow)

Nationwide Childrens

- Brandis Thornton, MS

Primary Children's

- Michael Puchalski, MD, FACC
- Jennifer Marietta, RN

Nemours

- Samuel Gidding, MD, FACC
- Amanda Folk, MS

Nicklaus Children's Hospital

- Nao Sasaki, MD

NorthWest Congenital Heart Care

- Matthew Park, MD, FACC

Pediatric Cardiology Associates

- Sarah Chambers, MD
- Stephen Shapiro, MD, FACC

Non-ACPC Quality Network Sites

Mercy Children's (Kansas City)

- Elizabeth Turk
- Anitha Parthiban, MD, FACC

Massachusetts General Hospital

- Caitlin O'Callaghan, NP

Adult Congenital & Pediatric Cardiology

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Background & Milestones

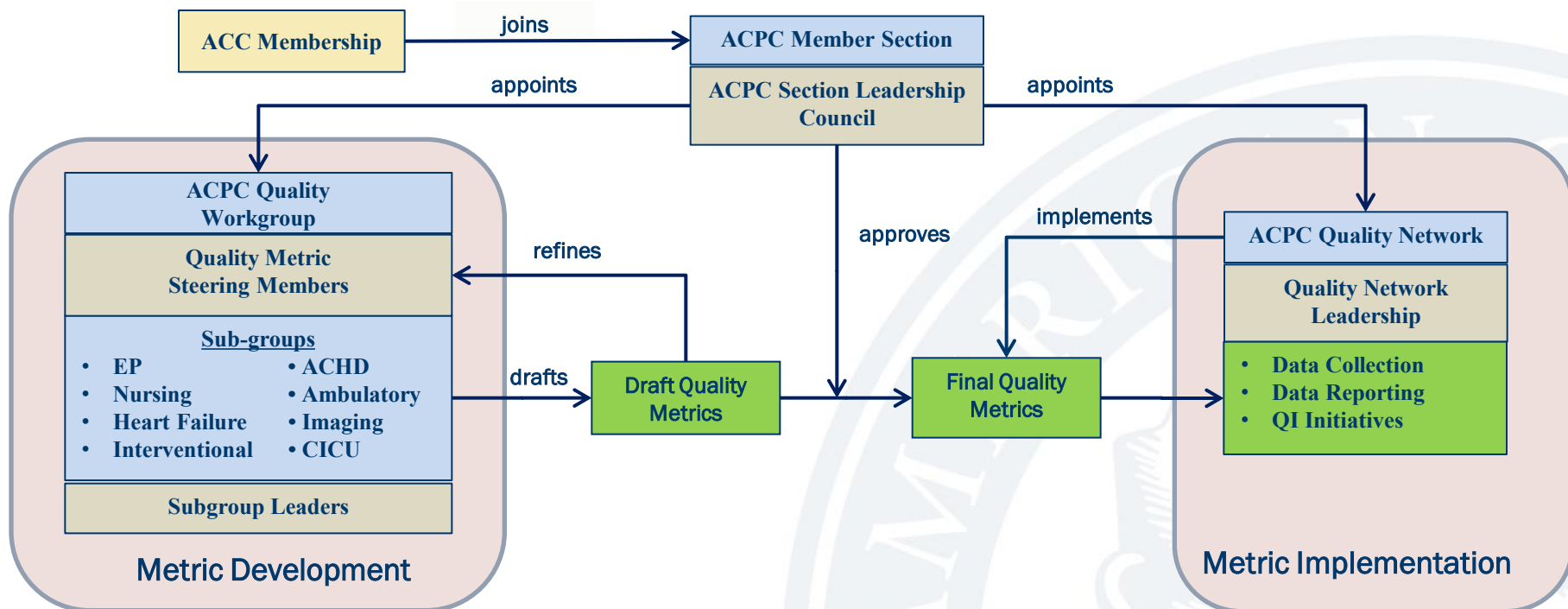
Kathy Jenkins, MD, MPH, FACC

Robert Beekman, MD, FACC



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Metric Development vs. Implementation



History ACPC Quality Metric Development

- ACPC Quality Metric WG established in 2008
- Intended to develop meaningful metrics of quality across a breadth of clinical areas for pediatric and adult congenital
- Established eight teams across pediatric and adult congenital cardiology
- Two processes to date of metric development and review



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Current QMWG Team Leaders

- Ambulatory – Devyani Chowdhury, MBBS, FACC
- CICU – Michael Gaies, MD
- EP – John Kugler, MD, FACC
- Heart Failure – Christopher Almond, MD
- Interventional Cardiology – Thomas Doyle, MD, FACC
- Non-invasive Imaging – Leo Lopez, MD, FACC
- Nursing – Jean Connor, NP
- Adult CHD - Curt Daniels, MD, FACC



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Development of Ambulatory Pediatric Cardiology Quality Metrics



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Ambulatory Pediatric Cardiology Process

- 2012: Working group teams consisting of a team lead and 10-12 team members
- Candidate quality metrics developed and submitted by teams
- Candidate metrics based on:
 - Review guidelines, articles and MEDLINE search
 - Documented strength of scientific evidence
 - Ensure adherence can be assessed from medical record
- Candidate metrics standardized by co-chairs
- Reviewed and vetted by 9 person expert panel using Rand Delphi Method
- 2014: Approved by ACPC Council
- 2015: Operationalized into ACPC Quality Network



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Ambulatory Pediatric Cardiology Teams

Chest pain	Roy Jedeikin, MD, FACC
Infection prevention	Jeffrey Anderson, MD
Kawasaki Disease	David Teitel, MD
Tetralogy of Fallot	Thomas Hougen, MD, FACC
Transposition with arterial switch	Dan Penny, MD



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Expert Panel Stakeholders

- American College of Cardiology (ACPC),
- American Heart Association (Cardiovascular Disease in the Young),
- American Academy of Pediatrics, (Cardiology and Cardiovascular Surgery)
- European Pediatric Cardiology Association
- Pediatrix
- National Pediatric Cardiology– Quality Improvement Collaborative
- Mended Little Hearts (Medical Advisory Board)
- American Board of Pediatrics
- Canadian Pediatric Association



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Approval Process for Metric Review following Expert Panel

- Review by ACPC Quality Metric Steering
- Solicit input from
 - ACPC Section membership
 - Affiliated Professional Societies
 - ACC/AHA TF on Performance Measures
 - Team leads refined the metric based on comments from ACPC Section members/TF on Performance Measures
- Seek approval from QMWG Steering Committee
- Seek approval from ACPC Council



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Acknowledgements

- BMI Project: Ambulatory Quality Metric Team

Devyani Chowdhury - Team Lead

Kerry Rosen

Shannon Rivenes

Maribeth Hourim

Maryellen Reilly-Druby

Roy Jedeikin

Nicole Sutton

Rohit Talwar

Matt Oster

Carolyn Altman

Elaine Urbina

John Rhodes

Stephen Cyran

Marie Shaner

Jeff Boris

- ToF Project: Tetralogy of Fallot Quality Metric Team

Thomas Hougen

Russell Cross

Karim Diab

Peter Karpawich

Wyman Lai

Matthias Peuster

Russell Schiff

Elizabeth Saarel

Gary Satou

Gerald Serwer

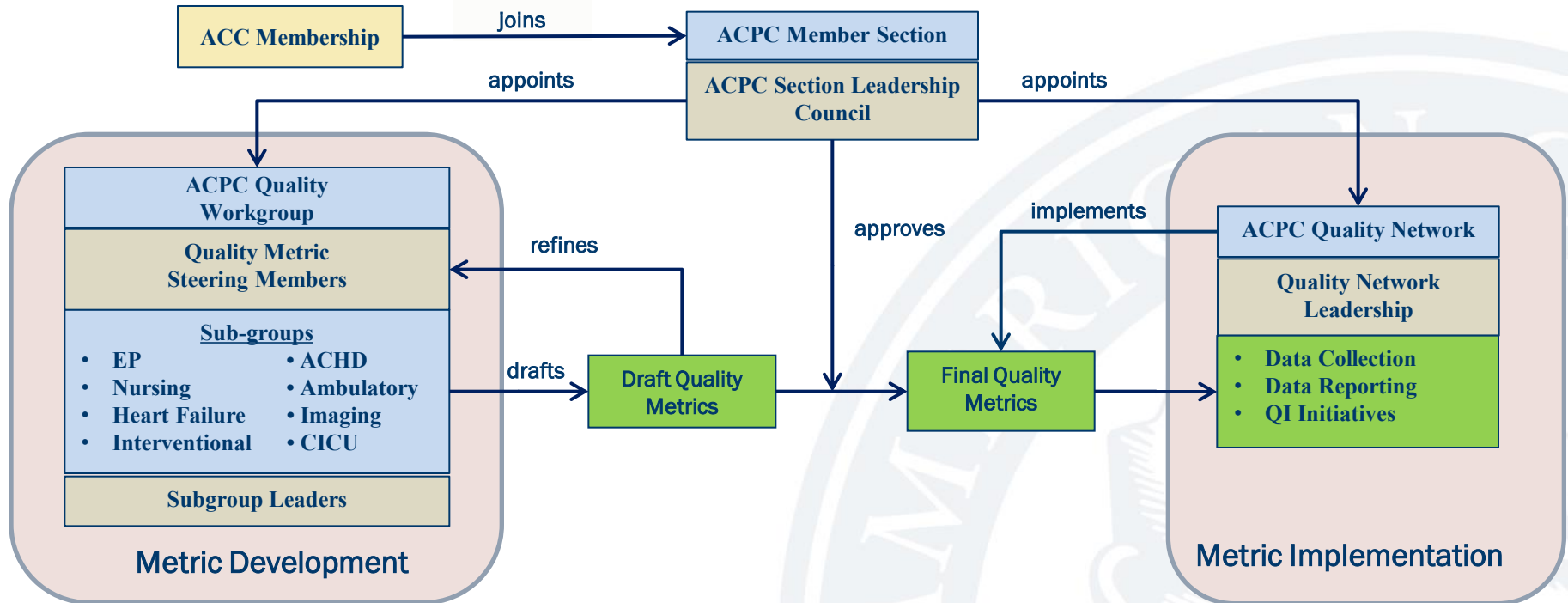
Juan Villafane

Tom Edwards



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Metric Development vs. Implementation



Quality Network Background

- The Adult Congenital & Pediatric Cardiology Quality Network™ is a national network of congenital heart disease (CHD) centers dedicated to collecting and sharing data, collaborating, and developing best practices for your CHD patients.
- The network welcomes large and small practices, academic and non-academic institutions, hospitals and health systems.



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Value Proposition



Data Collection and Reporting QI Program Providing a Broad Spectrum of Adult and Pediatric CHD Quality Metrics



Offers a Flexible, Standardized Data Collection Process



Provides Benchmarking to Understand Gaps and Improve Patient Care



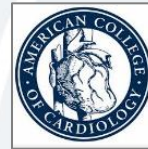
Allows Participants to Shape Metric Direction and the Ability to Influence Care Nationally



Enables Learning and Sharing of Trends and Best Practices via Learning Sessions, Webinars and a Listserv



Provides MOC Part IV Credit for Physicians (Future)

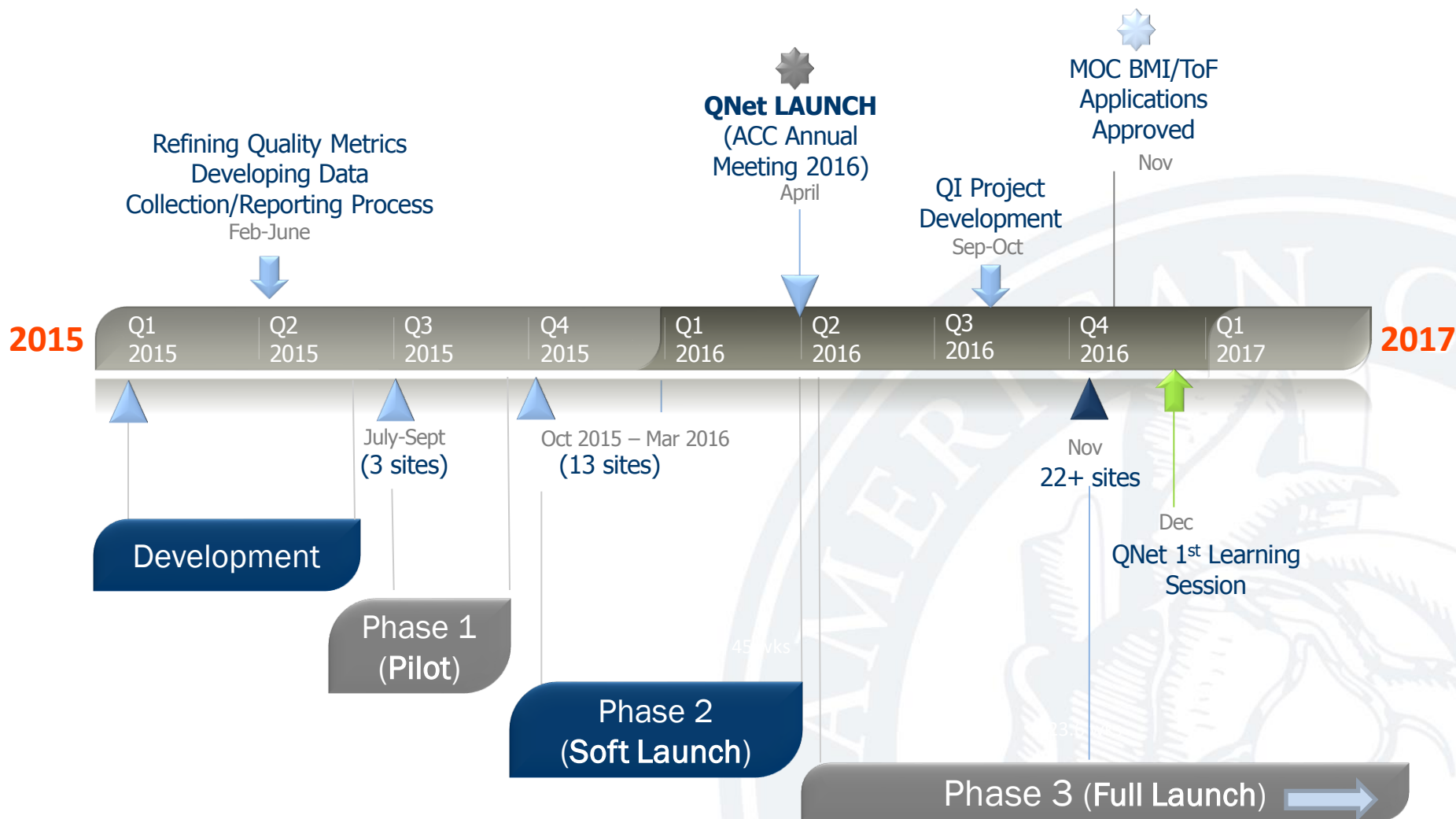


Developed by the ACC Adult Congenital and Pediatric Cardiology Members and Leaders



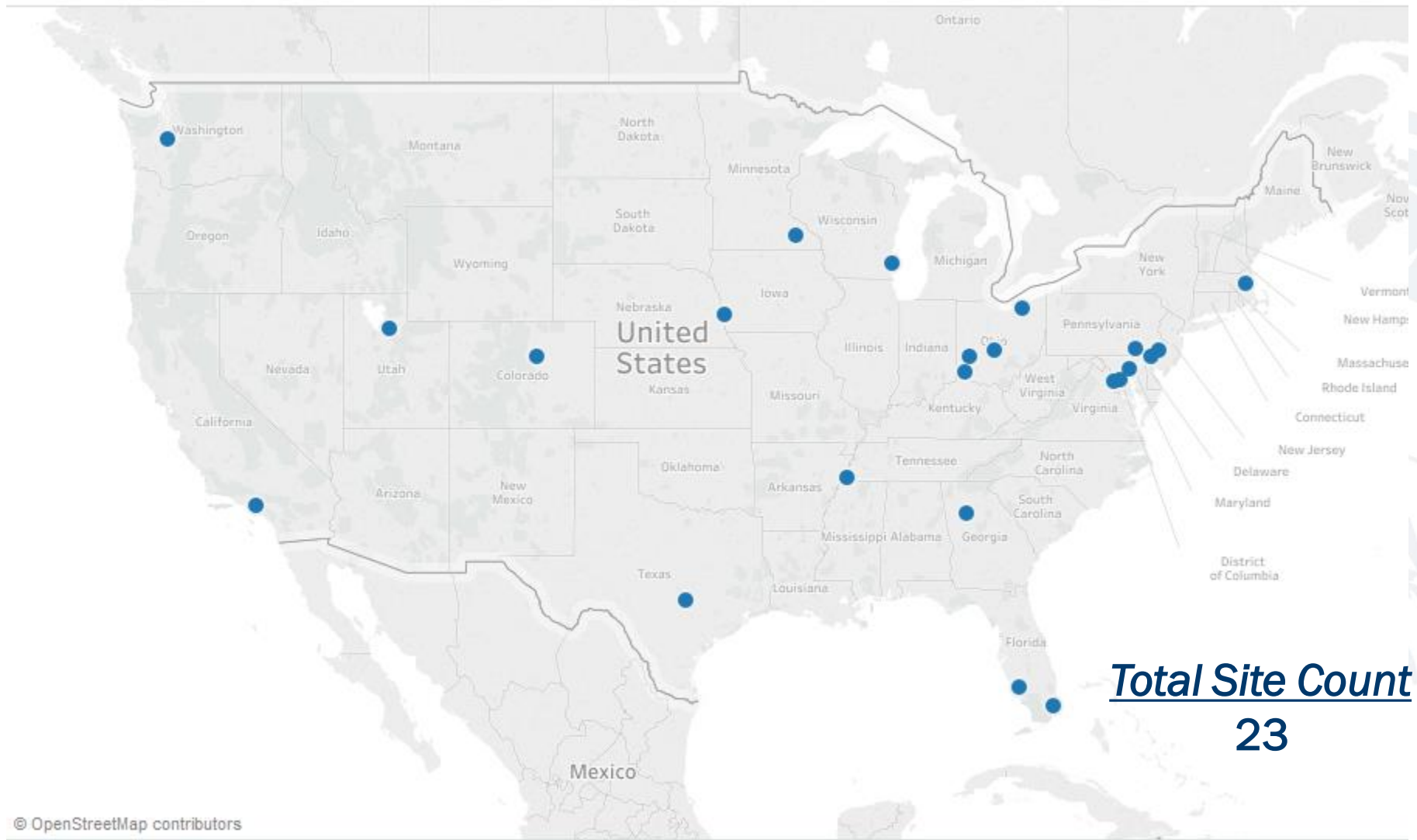
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Quality Network Milestones



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Quality Network Site Map



Current Participants

- Atlanta Children's (GA)
- Boston Children's (MA)
- Cardiology Care for Children (PA)
- Child Cardiology Associates (VA)
- Children's Cardiology Assoc. (TX)
- Children's National (DC)
- Children's Hospital Omaha (NE)
- Children's Hospital of Colorado (CO)
- Children's Hospital of WI (WI)
- Children's Hospital Los Angeles (CA)
- Children's Hospital of Phila. (PA)
- Cincinnati Children's (OH)
- Cleveland Clinic (OH)
- Dayton Children's (OH)
- Le Bonheur Children's (TN)
- Lee Memorial (FL)
- Mayo Clinic (MN)
- Nationwide (OH)
- Nemours (DE)
- Nicklaus Children's (FL)
- Northwest Children's Heart Care (WA)
- Primary Children's (UT)
- Univ. of Maryland (MD)

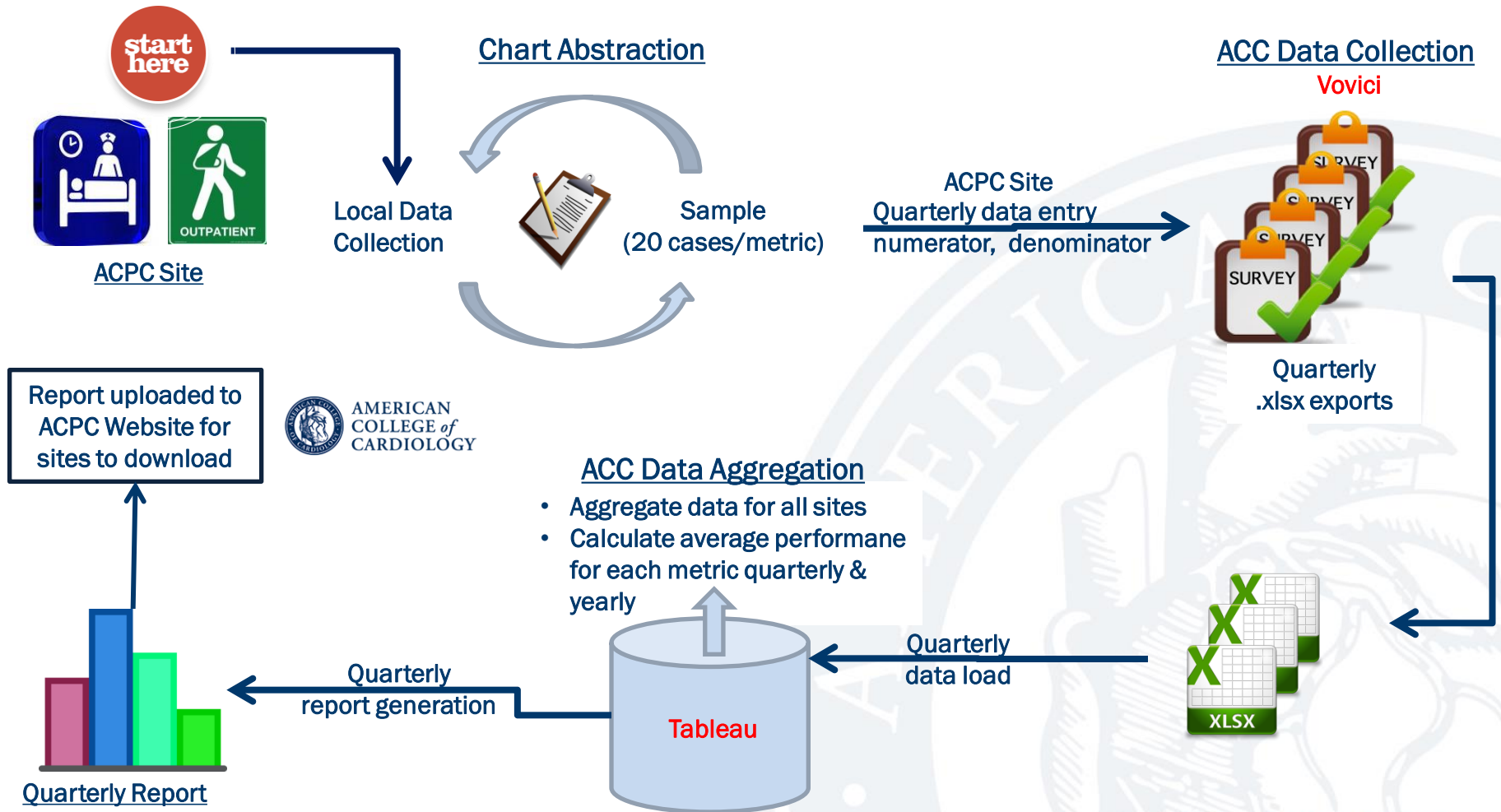


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List of Current Metrics

Metric #	Metric Name	Metric #	Metric Name
001	Complete Aortic Evaluation for Adults with Repaired COA.	013	Kawasaki Disease: Aspirin therapy in Acute and Subacute Phases
002	Appropriate counseling among pediatric cardiac patients with BMI greater than 85%.	014	Kawasaki Disease: Cardiac Evaluation
003	BMI measurement in ambulatory pediatric cardiac patients	015	Kawasaki Disease: Documentation of Fever
004	Non-invasive Imaging: Critical Results Reporting in Pediatric Echocardiography	016	Kawasaki Disease: No restriction on physical activities
005	Non-invasive Imaging: Adverse Events with Sedated Pediatric Echocardiography	017	Kawasaki Disease: Stress Evaluation with Aneurysms
006	Daily documentation of nutrition for infant cardiac admissions	018	Kawasaki Disease: Appropriate Follow-up for Patients with Giant Coronary Aneurysms
007	Chest Pain (Family history)	019	Kawasaki Disease: Complete Echocardiogram Evaluation
008	Electrocardiogram for chest pain	020	Genetic Testing in Tetralogy of Fallot
009	Echocardiogram for exertional chest pain	021	Echocardiogram performed during the first year of life for ASO Patients.
010	Infection Prevention: Recommendation for Antibiotic Prophylaxis in Patients with Heterotaxy and Asplenia	022	Periodic neurodevelopmental assessment for ASO patients
011	Infection Prevention: Influenza Vaccination Compliance of Health Care Personnel	023	Assessment of ASO patient lipid profile
012	Infection Prevention: Adherence to Recommended Regimens of Secondary Prevention of Rheumatic Fever	024	Transition planning for ASO patients

Data Collection/Reporting



*currently exploring options



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Data Collection

Key Features:

- Select and report as many metrics as you wish (must submit at least one to participate)
- Only numerator and denominator counts should be submitted (no patient identifiers or other PHI)
- Only the site and ACC will know your site's identity on performance reports (not other sites)
- Only metrics with at least 6 sites reporting data will be included in performance reports
- Sites need to have at least 5 eligible patients to submit data for any given metric



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ABP MOC (Part IV) Application

- Two QI projects submitted to ABP were recently approved:
 - To improve BMI measurement documentation and appropriate follow-up for patients with elevated BMI
 - To improve proportion of patients, with Tetralogy of Fallot, who received 22q11 testing



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QI Project Metrics

- **BMI Metrics:**

- Proportion of patients, 3-18 years old, who had their BMI measured and BMI percentile calculated
- Proportion of patients, 3-18 years old, with a BMI greater than 85% who received appropriate counseling

- **ToF Metric:**

- Proportion of Tetralogy of Fallot patients who received or had an order for a test for 22q11.2 deletion

ABP has awarded 25 points of Part IV credit to each QI project



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Next Steps

- **Recruitment**
 - Spread the word to get other centers to join
 - All info available on www.acc.org/qnet
- **American Board of Pediatrics (ABP)**
 - 2 QI projects approved
- **Collaborative QI activities**
- **New Measures in pipeline**



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ABP - Meaningful Participation

- Only centers/clinics participating in the ACPC Quality Network are eligible
- Center to confirm collecting/submitting data for BMI or ToF metrics
- Physician to declare participation on the center's BMI or ToF team
- Physician must receive communications through the Quality Network listserv
- Participate in design and implementation of change strategies toward the improvement aim
- Participate in reviewing reports for 2 PDSA cycles (i.e. 2 consecutive quarters/six months)
- Participate in at least **two** QI team meetings
- Complete **one** QI science training (e.g. the Model for Improvement; PDSA cycles) and tools to assist with data analysis and implementation of this QI project.
- Complete the BMI or ToF QI project orientation session
- Participate in at least **one** quarterly collaborative QI webinar, ACPC Quality Workgroup meeting addressing the BMI project, OR a specific Learning Session for the project



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Quality Improvement Activities (BMI & TOF)

Ashraf Harahsheh, MD, FACC

Susan Saleeb, MD, FACC



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BREAK



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Collaborative QI Breakouts Sessions

- Key Questions:
 - What activities will help achieve the project aim?
 - What barriers/challenges are there?
 - Examples of successes



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Breakout Reports ToF & BMI QI Projects



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Breakout Locations

- BMI Metric Breakout – Current location
- TOF metric breakout - MPR 122 (next door)
- Building a Team - Conference Room 114
- Data Extraction - Conference Room 118



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LUNCH TIME

- If possible, please sit with someone from your team to discuss the following during lunch:
 - Which of the metrics would you choose for collaborative QI?
 - Which key driver would you focus on?
 - What change strategies you anticipate to using?
 - Who would be on your team?
 - What challenges do you anticipate?



Breakout Reports

Data Collection Strategies & Developing a Team



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Report from Centers

- Which of the metrics would you choose for collaborative QI?
- Which key driver would you focus on?
- What change strategies you anticipate to using?
- Who would be on your team?
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Report from Centers

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Panel Discussion: Approaches to Overcoming Barriers



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Panel Discussion:

Future Directions for the ACPC Quality Network



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Future Directions

- Continuing recruiting Quality Network sites
- With input from CHD community, add or remove metrics Quality Network metrics as CHD field develop
- Expand portfolio of ABP MOC Part IV approved QI projects
- Expand collaborative QI activities
- Investigate opportunities for research and publications from Quality Network data



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