

September 2024



**NCDR<sup>®</sup>**

NATIONAL CARDIOVASCULAR DATA REGISTRY

**In Progress Projects Based on  
NCDR Registries**

**UNPUBLISHED, IN PROGRESS PROJECTS**

Table of Contents

AFib Registry ..... 3

Cath PCI Registry ..... 4

Chest Pain – MI Registry (formerly ACTION)..... 7

Diabetes Collaborative Registry ..... 9

EP Device Implant Registry ..... 10

IMPACT Registry..... 11

LAAO Registry..... 12

PINNACLE Registry ..... 14

STS/ACC TVT Registry..... 15

September 2024

**In Process, Unpublished NCDR Manuscripts**

The following pages list current research and publications proposals that have been recently approved, are under analysis, are under manuscript development, or submitted to a journal for review/publication. Items are listed by registry and include the ID number and title.

**AFIB REGISTRY**

<b>Manuscript Status</b>	<b>RPA ID #</b>	<b>Lead Author</b>	<b>Title</b>
In Preparation	21	Omar Yousuf	Catheter Ablation for Atrial Fibrillation in Patients with Heart Failure with Reduced Left Ventricular Ejection Fraction: Insights from the NCDR AFib Ablation Registry
In Preparation	49	Amneet Sandhu	National Trends in Use and Short-Term Outcomes of Same-Day Discharge Following Catheter Ablation for Atrial Fibrillation
In Preparation	50	Vincenzo Polsinelli	Use and Clinical Outcomes of Urgent versus Elective Catheter Ablation of Atrial Fibrillation
External	78	Gregory Marcus	Linking the NCDR Atrial Fibrillation Ablation Registry to Patient Follow-up Data Using the Eureka Digital Research Platform

**CATH PCI REGISTRY**

Manuscript Status	RPA ID #	Author	Title
Submitted	569	Bobak Mortazavi	ICH.2 Dynamic Changes to Risk of Post-PCI Major Bleeds Throughout a Cardiac Catheterization Laboratory Visit Using the CathPCI Registry
Submitted	632	Nadia Shaikh	Practice patterns and outcomes of women interventional cardiologists in the treatment of STEMI from the National Cardiovascular Data Registry
Submitted	639	Ravi Sharma	Procedural Outcomes of Percutaneous Coronary Interventions Post Transcatheter Aortic Valve Replacement: Insights from the National Cardiovascular Data Registry (NCDR) registry
Submitted	709	Reza Fazel	Radial Versus Femoral Arterial Access for Percutaneous Coronary Intervention in the United States: An Analysis from the NCDR CathPCI Registry
In Preparation	462	Sanket Dhruva	Changes in Practice Patterns for Non-Infarct Artery Revascularization in Patients with ST-Elevation Myocardial Infarction and Multivessel Coronary Artery Disease: Insights from the National Cardiovascular Data Registry
In Preparation	671	Reed Mszar	Symptom Burden Among Adults Undergoing Elective Percutaneous Coronary Intervention and Variations in Hospital Submission of Patient-Reported Outcomes
In Preparation	683	Devika Aggarwal	Predictors of and Outcomes associated with Ultra-low Contrast Volume and Zero Contrast Use During Percutaneous Coronary Interventions in Patients With Existing Renal Impairment
In Preparation	684	Ben Peterson	Frailty and Risk of Mortality Among Patients Undergoing High-Risk or Complex Percutaneous Coronary Intervention: Insights from the CathPCI Registry.
In Preparation	698	Zaid Almarzooq	A quasi-experimental study to assess the impact of door-to-balloon time delays on mortality
In Preparation	708	Javier Valle	Strategic: Contemporary Trends in Percutaneous Coronary Intervention at Facilities Without On-Site Cardiac Surgical Capabilities: Insights from the National Cardiovascular Data Registry
In Preparation	713	Anezi Uzendu	The Association between Pre-Procedural AKI Risk and Same-Day Discharge: Are we Safely Sending the Right Patients Home?

**September 2024**

In Preparation	740	Dean Kereiakes	The Shockwave Intravascular Lithotripsy Post-approval Study: Procedural safety from the NCDR/CathPCI Registry
In Preparation	763	Nobuhiro Ikemura	Changes in Contrast Volume among Patients at High Risk for Acute Kidney Injury after PCI
In Preparation	780	Ramya Mosarla	Temporal Trends and Patient Characteristics in Intra-Procedural Cardiac Arrest in Patients Undergoing Percutaneous Coronary Intervention: A Report from the NCDR-CathPCI Registry
In Preparation	785	Riyad Kherallah	Occluded Coronary Arteries in Patients with Non-ST Segment Elevation Myocardial Infarction
In Preparation	786	Jennifer Rymer	A Retrospective Analysis of the National Cardiovascular Data Registry on Cangrelor Use Among Women and Minorities in the US (The COMMIT-US Study)
In Preparation	789	Sunil Rao	Characteristics of Early Use of Shockwave Intravascular Lithotripsy (IVL)
In Preparation	791	Dean J. Kereiakes	Real-world Outcomes of Coronary Intravascular Lithotripsy in In-stent Restenosis from the ACC NCDR® CathPCI Registry®
In Preparation	809	Renee Y Hsia	An Evaluation of the Growth of PCI in Outpatient and Inpatient Settings in Disadvantaged and Non-Disadvantaged Communities
Analysis	736	Benjamin Horne	Actual Practice Evaluation of Predictors for Major Adverse Cardiovascular Events and Bleeding Outcomes following Percutaneous Coronary Intervention among Patients in the Clipper Dataset
Analysis	741	Andrea Price	Impact of Credentialing, Certification and Licensure of Cath Lab Staff on Patient Outcomes
Analysis	750	Islam Y. Elgendy	Racial and sex differences in high-potency P2Y12 inhibitors prescription among patients with acute myocardial infarction undergoing percutaneous coronary intervention: An analysis from the CathPCI Registry
Analysis	751	Frederic Resnic	Validation of Novel Learning Curve Detection Tools within the NCDR StarClose Cath PCI Registry
Analysis	754	Ajar Kochar	Percutaneous Management of Severely Calcified Culprit Lesions in STEMIs
Analysis	765	Ayman Elbadawi	Contemporary trends, characteristics and outcomes of patients undergoing percutaneous coronary intervention for stent thrombosis: An analysis from the CathPCI Registry

**September 2024**

Analysis	798	Sunil Rao	Prevalence, temporal trends, and predictors of same day discharge after PCI for NSTEMI-ACS in clinical practice: A report from the NCDR-CathPCI Registry
Analysis	820	Ayman Fath	Trends, predictors, and institutional variation in the use of high-potency P2Y12 inhibitors among patients with chronic coronary syndrome undergoing percutaneous coronary intervention: An analysis from the CathPCI Registry
Analysis	800	Eli Reynolds	Temporal Trends and Predictors of Access Site Crossover during Percutaneous Coronary Intervention in Contemporary Practice
On Hold	611	Zachary Wegermann	Prevalence, temporal trends, and associated outcomes of intravascular ultrasound use in patients undergoing PCI
On Hold	667	Hannah Chaudry	Nationwide trends and predictors of anti-anginal use and de-escalation in patient's undergoing PCI for stable ischemic heart disease: Insights from the CathPCI Registry
External	790	Amit Amin	Outcomes and Costs Associated with Contemporary High-Quality PCI in the United States: Insights from the NCDR CathPCI Registry
External	792	Fred Resnic	Validation of Novel Learning Curve Detection Tools on the clinical outcomes associated with the use of the Mynx vascular closure device within the NCDR CathPCI Registry
External	796	Dean J. Kereiakes	In-hospital Outcomes of Real-world IVL-Procedures in Coronary Artery Disease Based on Patient and Lesion Complexity: Deep Dive into the ACC NCDR® CathPCI Registry®
External	801	Keyur Vora	Prevalence and clinical outcomes of Hemorrhagic Myocardial Infarction in the United States
External	803	Umair Syed Ahmad	Racial Disparities in Use of Atherectomy and Intra-Vascular Lithotripsy for Percutaneous Coronary Intervention
External	834	Ajar Kochar	Practice Patterns and Trends for Culprit Lesion versus Complete Revascularization in NSTEMI
External	836	Vinay Kini	Impact of Bundled Payment Models on Selection and Outcomes of Patients Undergoing Elective Percutaneous Coronary Intervention

September 2024

**CHEST PAIN – MI REGISTRY (FORMERLY ACTION)**

Manuscript Status	RPA ID #	Lead Author	Title
Submitted	334	Ajar Kochar	Temporal Trends of Higher Potency P2Y12 Inhibitor Use and Bleeding Outcomes in Patients with Myocardial Infarction Complicated by Out of Hospital Cardiac Arrest
In Preparation	251	Majithia	Public Reporting and Outcomes of Patients with Out-of-Hospital Cardiac Arrest
In Preparation	371	Kamil Faridi	Inpatient Outcomes for Patients with Peripheral Artery Disease Hospitalized for Acute Myocardial Infarction
In Preparation	395	Julie Mobayed	CPMI Patient Navigator program analysis (ad hoc patient navigator analysis)
In Preparation	414	Ashwin Nathan	Variation in Risk Avoidant Behavior for Coronary Angiography for Acute Myocardial Infarction Among United States Hospitals
In Preparation	422	Riyad Kherallah	Trends in noninvasive anatomic testing for the evaluation of patients with low and intermediate risk chest pain: Insights from the Chest Pain-MI registry
In Preparation	426	Hiroki Ueyama	Contemporary Trends and Outcomes of P2Y12 Inhibitors Pretreatment in Non-ST-Elevation Acute Coronary Syndrome
In Preparation	433	Darcy Banco	Variance in hospital level care quality among adults hospitalized with myocardial infarction by age and sex: an NCDR analysis
In Preparation	440	Rajesh Swaminathan	The Impact of Daylight-Saving Time on Acute Myocardial Infarction: Time to Shift Policy?
In Preparation	374	Zachary Wegermann	Simultaneous STEMI Presentation: Incidence and Outcomes
In Preparation	409	Michael Kontos	Outcomes in Patients with Inhospital STEMI
Analysis	389	Michael Kontos	Impact of the COVID-19 pandemic on care and outcomes of patients with STEMI and NSTEMI in the United States

**September 2024**

On Hold	335	Karthik Murugiah	Hospital Collaboration with Emergency Medical Services in the Care of Patients with Acute Myocardial Infarction: Results from the Translating Outstanding Performance in Percutaneous Coronary Intervention (TOP PCI) Study
On Hold	348	Nathaniel Smilowitz	Patterns of Discharge Medical Therapy and Outcomes in Patients with Myocardial Infarction and Non-obstructive Coronary Arteries (MINOCA): An Analysis of the NCDR Chest Pain-MI Registry



September 2024

## DIABETES COLLABORATIVE REGISTRY

Manuscript Status	RPA ID #	Lead Author	Title

September 2024

## EP DEVICE IMPLANT REGISTRY

Manuscript Status	RPA ID #	Lead Author	Title
Submitted	161	J Akar	Predictors of RV Pacing and Pacing-Induced Adverse Outcomes
Submitted	266	Pun	Long-Term Outcomes of Subcutaneous Implantable Cardioverter Defibrillators in Dialysis Patients
In Prep	265	Beixin He	Disproportionate race and gender disparities in implantation of defibrillators during COVID-19 era
In Prep	274	Carmel Ashur	Direct Oral Anticoagulant Management and Outcomes after Cardiovascular Implantable Electronic Device Placement
In Prep	275	Scott Weinreb	Characteristics and Outcomes of Pediatric Patients Undergoing Subcutaneous ICD Implantation – An Analysis of the NCDR EP Device Implant Registry
In Prep	178	Sharma	Outcomes in patients with diabetes receiving a subcutaneous implantable cardioverter defibrillator.
Analysis	286	Anneet Sandhu	Trends in Use and Outcomes of Same-Day Discharge After ICD and CRT Implantation

## IMPACT REGISTRY

Manuscript Status	RPA ID #	Lead Author	Title
Submitted	29	Natalie Jayaram	Association Between Trainee Involvement During Pediatric and Congenital Cardiac Catheterization and Procedural Outcomes
Submitted	90	Shriprasad Deshpande	Cardiac Catheterization and Interventions in Patients on ECMO: Analysis of the IMPACT Registry Data
In Preparation	27	Aimee Armstrong	The IMPACT of Reducing Radiation Risk: An NCDR QI Project
In Preparation	73	Dustin Nash	Evaluation of the Effect of Center Procedural Volume on Outcomes of Pediatric Catheter Ablation
In Preparation	80	Katia Bravo Jaimes	Racial disparities in clinical presentation and outcomes of transcatheter coarctation procedures in adults with coarctation of the aorta.
In Preparation	83	Natalie Jayaram	Examining the performance of the IMPACT risk model
In Preparation	84	Michael O'Byrne	Evaluating Racial Disparities in Access to Common Transcatheter Interventions
In Preparation	88	Chandra Srinivasan	Outcomes of Catheter Ablation for Atrial Tachyarrhythmias in Congenital Heart Disease
In Preparation	96	Khalifah Aldawsari	Procedural Related Major Adverse Events of Cardiac Catheterization In Pediatric Patients With Cardiomyopathy: Insights from IMPACT Registry
Analysis	100	Geetha Haligheri	Practice variation in catheter-based interventions for recurrent coarctation of the aorta in pediatric patients with single ventricle heart disease
Analysis	104	Christopher M. Janson	Impact of Patient Obesity on Outcomes of Pediatric Supraventricular Tachycardia Ablation
Analysis	105	Maully J. Shah	Effect of Ablation Energy Source on Outcomes of Pediatric Septal Accessory Pathway Ablation: Radiofrequency vs. Cryo

**LAAO REGISTRY**

Manuscript Status	RPA ID #	Lead Author	Title
In Press	120	Oluseun Alli	Racial Disparities in the Utilization and Outcomes with WATCHMAN FLX: A SURPASS analysis of the NCDR LAAO Registry
In Press	126	Kamil Faridi	A Simplified Risk Score to Predict Major Adverse Events During Hospitalization for Transcatheter Left Atrial Appendage Occlusion: From the NCDR LAAO Registry
In Press	167	Kamil Faridi	Use of Machine Learning Models to Predict In-Hospital Adverse Outcomes for Transcatheter Left Atrial Appendage Occlusion
Submitted	168	Bilal Munir	Association of Chronic Kidney Disease and End Stage Renal Disease with In-Hospital and Long-Term Outcomes Among Atrial Fibrillation Patients Undergoing Left Atrial Appendage Occlusion: Insights From the NCDR LAAO Registry®
Submitted	117	Jonathan Piccini	Combining left atrial appendage closure with WATCHMAN FLX and catheter ablation for atrial fibrillation: Results from the SURPASS analysis of the NCDR LAAO Registry
Submitted	87	Moussa Mansour	LAAO in Patients with ICH
In Preparation	94	Douglas Gibson	Clinical characteristics and outcomes in patients with same day discharge after left atrial appendage occlusion with WATCHMAN FLX
In Preparation	103	Devi G. Nair	Clinical characteristics and outcomes in men and women receiving left atrial appendage occlusion with WATCHMAN FLX
In Preparation	119	Lucy Pereira	Association of Physician Certification and Outcomes Among Patients Undergoing Left Atrial Appendage Occlusion
In Preparation	128	Angela Higgins	Long-term Outcomes Following Left Atrial Appendage Occlusion with a Watchman Device: Outcomes from the National Cardiovascular Data Registry
In Preparation	133	Matthew Price	Comparative Safety and Effectiveness of Left Atrial Appendage Occlusion with First-Generation Watchman and Next Generation Watchman FLX at One Year Follow-Up: An Analysis from the NCDR LAAO Registry
Analysis	121	Kamil Faridi	Comparative Effectiveness of Transcatheter Left Atrial Appendage Occlusion in Real-World Practice: Findings from the NCDR LAAO Registry
Analysis	129	Jonathan Hsu	Left Atrial Appendage Occlusion in Patients with Gastrointestinal Bleed: Insights from the NCDR LAAO Registry

**September 2024**

Analysis	147	Angela Higgs	In-Hospital and Long-Term Outcomes of Patients with Reduced Left Ventricular Function Undergoing Left Atrial Appendage Occlusion
Analysis	174	Joshua Rager	Shared decision making and use of patient decision aids for percutaneous LAAO
On Hold	114	Matthew Price	Peri-Device Leak after Left Atrial Appendage Closure with WATCHMAN FLX: Incidence and predictors
On Hold	132	Enrico Ferro	Impact of long-term antiplatelet discontinuation after left atrial appendage occlusion with WATCHMAN FLX
External	170	Darae Ko	National trends in the use of left atrial appendage occlusion in older adults with atrial fibrillation
External	171	Kamil Faridi	Comparing Administrative Claims Data to Site-Reported Events in the NCDR Left Atrial Appendage Occlusion Registry

September 2024

**PINNACLE REGISTRY**

Manuscript Status	RPA ID #	Lead Author	Title
Submitted	216	Firas Al Badarin	Prescription patterns and provider-level variability in the use of direct-acting oral anti-coagulants in non-valvular atrial fibrillation patients at extremes of body weight
In Preparation	215	Abdelghani El Rafei	Practice-Level Compliance with Cardiac Performance Measures and Outcomes in US Ambulatory Care: Findings from the NCDR PINNACLE Program
In Preparation	220	Eric Brandt	Blood Pressure and Treatment Patterns Among Older Adults After Recent Major Trial Results and Guideline Recommendations
In Preparation	225	Leila Haghghat	Implications of REDUCE-IT for the management of hypertriglyceridemia— an analysis from the NCDR PINNACLE registry
In Preparation	238	Evan Manning	Eligibility and Use of Sodium Glucose Cotransporter-2 Inhibitor (SGLT2i) Therapy in Diabetics and Non-Diabetics with Heart Failure with reduced ejection fraction (HFrEF): Findings from the NCDR PINNACLE Registry

**STS/ACC TVT REGISTRY**

Manuscript Status	RPA ID #	Lead Author	Title
Submitted	654	Kyeeun Park	Sex and race-based difference with TMVR mortality and complications
Submitted	667	Nimesh Desai	Development of an unsuccessful 30-day outcome following MitraClip transcatheter mitral valve repair to support patient counseling and decision making
Submitted	684	Ahmed Kolkailah	Hospital-Level Transcatheter Aortic Valve Replacement Performance With Simulated Risk Avoidance Strategies
Submitted	696	Lillian Kang	Outcomes of Commercial Transcatheter Aortic Valve Replacement in Low-Risk Patients: An Analysis of the STS/ACC TVT Registry
Submitted	738	Bansal	Out-of-Hospital 30-Day Mortality After Transcatheter Edge-to-Edge Repair of Mitral Valve: Insights from STS/ACC TVT Registry
Submitted	763	Zach Rozenbaum	Temporal improvement in procedural success and clinical outcome of TEER by etiology of mitral regurgitation
In Preparation	442	Vekstein	Resource Utilization and Costs Associated with Surgical Mitral Valve Repair After the Introduction of Transcatheter Repair-Aim2
In Preparation	466	Michael Young	The Impact of Frailty on Outcomes in Patients Undergoing Transcatheter Mitral Valve Repair
In Preparation	511	Herrmann	Prosthesis-Patient Mismatch After TAVR (TVT Registry Research Proposal)
In Preparation	547	Sammour	Impact of Coronary Artery Disease and Revascularization on Health Status After Transcatheter Aortic Valve Replacement: Insights from the Society of Thoracic Surgeons/American College of Cardiology Transcatheter Valve Therapies Registry
In Preparation	553	Ahmed Kolkailah	The contribution of site characteristics and patient selection to variation in site TAVR outcomes
In Preparation	577	John Suffredini	Racial and Ethnic Differences in the Utilization and Outcomes of Transcatheter Mitral Valve Repair

**September 2024**

In Preparation	595	Manasi Tannu	Impact of COVID-19 on Patients Needing Transcatheter Valve Therapy in USA
In Preparation	608	Julien	Development and validation of models for predicting risk of acute kidney injury in patients undergoing transcatheter aortic valve replacement: insights from the STS-ACC National Cardiovascular Data Registry TVT Registry
In Preparation	630	Marc Allard-Ratick	The effect of transcatheter mitral valve repair on chronic kidney disease
In Preparation	691	George Yankey	Early Outcomes of Commercial Transcatheter Tricuspid Valve Procedures in the Transcatheter Valve Therapies Registry
In Preparation	692	Andrew Vekstein	Outcomes of Sequential Transcatheter Aortic Valve Replacement and Edge-to-Edge Mitral Valve Repair
In Preparation	739	G. Michael Deeb	The relationship between site Joint Commission Stroke Certification Designation level and the incidence of stroke reporting in the ACC/STS National TVT Registry
In Preparation	741	Dhaval Kolte	Identifying Modifiable Practices Related to Outcome Variation and Enhancement in TAVR (IMPROVE TAVR)
In Preparation	754	Sreek Vemulapalli	Creation and Internal Validation of a Risk Model to Predict Heart Failure Hospitalization and Death after TAVR
In Preparation	759	Amit Vora	Institutional Volume and Failure to Rescue in Transcatheter Aortic Valve Replacement – Insights from the STS/ACC TVT Registry
Analysis	484	John Saxon	Clinical Outcomes After Repeat MitraClip
Analysis	517	Brennan	Outcomes of Transcatheter Aortic Valve Replacement for Primary Aortic Insufficiency
Analysis	673	Joe Aoun	Outcomes of Transcatheter Mitral Valve Repair in Patients with Recurrent Mitral Regurgitation After Surgical Mitral Valve Repair: A Report from the STS/TVT ACC Registry
Analysis	678	Megan Coylewright	Comparison of comorbidity burden among “young” (<65 years) and “older” (65 years-80) patients treated with transcatheter aortic valve replacement (TAVR): A Real World US Data Analysis
Analysis	688	Nickpreet Singh	Temporal trends, risk factors, and outcomes of patients with new left bundle branch block following transcatheter aortic valve replacement: Insights from the STS/ACC TVT Registry



**September 2024**

Analysis	703	Santiago Garcia	Frequency and Safety of Bioprosthetic Valve Fracture in Patients Undergoing Valve in Valve for Failed Surgical Valves using the SAPIEN 3/Ultra Valves
Analysis	722	Kashish Goel	Transseptal Mitral Valve in Valve – A comprehensive analysis of temporal trends, adoption and outcomes from 2014 to 2022
Analysis	725	Jingjing HE	Sex Specific TAVR Outcome in Bicuspid versus Tricuspid Aortic Stenosis: A Report from STS/TVT Registry
Analysis	773	Sundos Alabbadi	The Trend in Transcatheter Aortic Valve Replacement (TAVR) and Outcomes in Patients Younger than 65 Years Old
Analysis	781	Saket Girotra	Correlation between hospital and operator-level procedural volumes and outcomes for TAVR and MTEER
Analysis	791	Dennis Narcisse	Case volumes and Outcomes of Early Career Interventional Cardiologist performing TAVR in the United States
Analysis	805	Neel Butala	Applicability of TAVR Trials to Real-World Clinical Practice
External	765	Arjun Majithia	Validation of Novel Learning Curve Detection Tools within the NCDR TVT Registry