



# Annual Report 2023

*A collaborative consortium of health care providers dedicated to improving quality of care and outcomes for cardiovascular patients across the State of Michigan*



# A NOTE FROM HITINDER GURM

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Hitinder Gurm

BMC2's mission is collaboration and quality improvement. A spring analysis comparing our data to national registry data shows that BMC2 outpaces the national rates of referral to cardiac rehab. Michigan outperforms the nation on guideline-recommended medications prescribed at discharge after PCI and vascular procedures and our hospitals demonstrate consistent year-to-year improvement in decreasing the length of hospital stay for EVAR patients.

MISHC hospitals have a lower overall mortality rate when compared to the nation since 2017, including a 64% decrease over time. A decreasing rate of blood transfusion has resulted in more than 4000 transfusions avoided. Patients in Michigan clearly benefit from the strength of BMC2's collaborative work through improvements in care and outcomes.

In 2023, we upgraded our registry database, utilizing REDCap to improve the user experience. We also implemented online modules for PCI and Vascular Surgery coordinator training. We held 31 meetings where we welcomed national and international speakers and offered opportunities for our members to learn with and from each other.

Our PCI Patient Advisory Council helped inform patient-facing communications including discharge instructions and a machine-learning model for predicting PCI complications to use bedside to help physicians facilitate shared decision-making discussions and treatment selection.

We hope you utilize this report to learn about and celebrate the consortium's 2023 accomplishments. This work is attributed to the dedication of our partners across the State of Michigan and their passion for improving quality of care and outcomes for patients in Michigan, the nation, and worldwide.

Hitinder S. Gurm, MD  
Program Director - BMC2

## INSIDE THE REPORT

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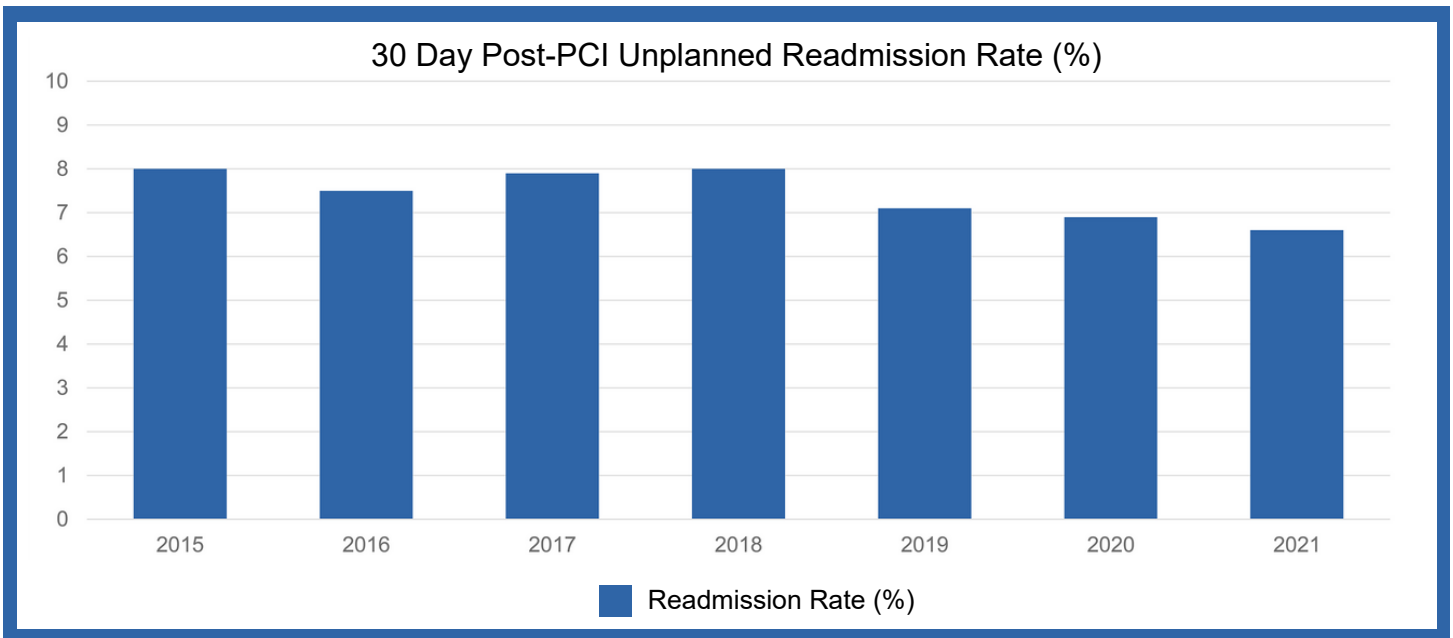
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## SUCCESS STORY

### Reducing Readmission After PCI

BMC2 PCI's multi-year quality improvement initiative resulted in fewer hospital readmissions after coronary revascularization procedures, improved long-term outcomes for patients, and reduced health care costs. Additionally, BMC2 championed companion initiatives that impact readmission prevention, including appropriate pre-PCI hydration, prescription of guideline-directed medical therapy for patients with heart failure, implementation of quality improvement measures, and in-centive goals to drive cardiac rehabilitation utilization.



BMC2's focus on readmissions since 2017 has impacted a steady decline in readmissions (>1%) resulting in an estimated 250 fewer readmissions and \$5.75 million in cost savings.

### Goal Spotlight

#### PCI - Use of IVUS/OCT for stent optimization (all cases)

Goal	Q1 2022	Q2 2023	% change
≥ 45%	30.5%	44.9%	47.2%

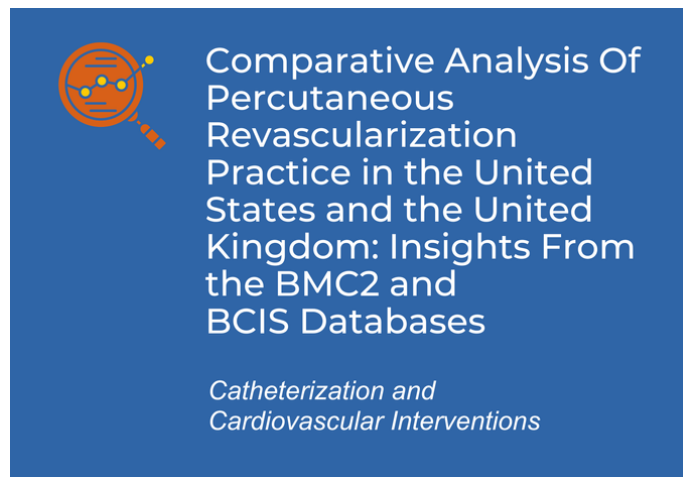
#### PCI - Use of IVUS/OCT for stent optimization (cases involving the left main coronary artery, in-stent restenosis, or stent thrombosis)

Goal	Q1 2022	Q2 2023	% change
≥ 45%	43.2%	61.6%	42.6%



# PUBLICATIONS

In 2023, the BMC2 PCI article, "[Comparative analysis of percutaneous revascularization practice in the United States and the United Kingdom: Insights from the BMC2 and BCIS databases](#)," was published in the February 9th issue of *Catheterization and Cardiovascular Interventions*. PCI consortium members have developed several manuscripts for future publication. Manuscript topics include death review, reducing patient radiation doses during PCI, and machine learning and patient preference.



# PRESENTATIONS

Consortium members presented outcomes of contemporary PCI in nonagenarians, contemporary PCI outcomes in older adults in Michigan, and the real-world safety and effectiveness of coronary intravascular lithotripsy during the American College of Cardiology (ACC) Scientific Sessions 2023. BMC2 participant, Dr. Brett Wanamaker, shared "Chronic Total Occlusion (CTO) Specialist Outcomes in Non-CTO Percutaneous Coronary Intervention," during Transcatheter Cardiovascular Therapeutics (TCT) 2023. At the American Heart Association (AHA) Scientific Sessions, Lexie Mansour presented the poster, "Dramatic Impact of a Liaison-Mediated Referral Strategy on Cardiac Rehabilitation Participation After Percutaneous Coronary Intervention." You will find a [complete list](#) of conference presentations and presenters at [bmc2.org](http://bmc2.org).

# PCI ADVISORY COUNCIL

BMC2 PCI convened a new Advisory Council in 2023. This council will strengthen the organization and benefit all consortium members.

<b>Chadi Alraies</b> Interventional Cardiologist DMC Heart Hospital	<b>Elizabeth Pielsticker</b> Interventional Cardiologist Henry Ford Jackson	<b>Linda Kline</b> Quality Manager Ascension Borgess
<b>Dilip Arora</b> Interventional Cardiologist Corewell Health South	<b>Anwar Zaitoun</b> Interventional Cardiologist Covenant Healthcare	<b>Hal Morgenstern</b> Patient Representative BMC2 PCI Patient Advisory Council
<b>Joseph Chattahi</b> Interventional Cardiologist Corewell Health Dearborn Hospital	<b>Carol Peters</b> Primary Site Coordinator McLaren Flint	<b>Ryan Madder</b> BMC2 PCI Strategic Advisor Corewell Health Grand Rapids Hospitals

Including a diverse group of partners representing the varied interests and priorities across Michigan will allow the consortium to better serve its members and ensure we focus on high-impact, high-value initiatives.



## PCI ADVISORY COUNCIL, CONT.

Members of the inaugural Advisory Council will meet tri-annually to discuss high-level strategic directions and priorities for BMC2, including but not limited to:

- Overall strategic direction of BMC2 PCI
- Quality improvement initiatives, including Pay for Performance and Value Based Reimbursement goals
- Consortium-wide meeting goals and topics
- Peer review goals and topics
- Opportunities and new initiatives

Members represent the varied population of the State of Michigan to ensure diversity of experience and opinion and will serve 2-year staggered terms. To learn more about the Advisory Council, contact the [Coordinating Center](#).

## PCI PATIENT ADVISORY COUNCIL

Our BMC2 PCI Patient Advisory Council (PAC) is now 2 years old. Throughout 2023, our patient advisors collaborated with us to create concise yet thorough discharge instructions for care after PCI including an infographic and video. We also created a document and video outlining ways patients can care for themselves at one week, one month, and one year after a PCI procedure. The documents are also available in Spanish and Arabic to help increase access to this information for our patients who do not speak English.

Patient advisors continuously emphasize the importance of caring for patient mental health and wellbeing after PCI. We look forward to adding resources for patient support groups to [bmc2.org](http://bmc2.org) in early 2024. We will also create a video which will share perspectives of seasoned patients with new patients in 2024.

A need for new PAC members, including members who better represent the diversity of Michigan, continues. We updated our patient-facing recruitment poster to include language which better shares the patient benefit in joining a PAC. We also created social media graphics to cast a wider net. We encourage you to utilize these materials as you share information about joining the PAC with your patients. Successfully referring a patient to the PAC is also a way you can earn our new extra credit points.

Our passionate and committed Patient Advisors are essential to improving quality of care and patient outcomes. We are thankful for them sharing their experiences and perspectives with us. We look forward to more opportunities to work with our advisors in 2024.



Our Patient Advisory Council helped inform the creation of new PCI discharge instructions, now available in Arabic, English, and Spanish.



# VASCULAR SURGERY

## NEW LEADERSHIP

Dr. Nicholas Osborne joined the Coordinating Center as director of vascular surgery in January, following 10 years of leadership by Dr. Peter Henke. Dr. Osborne set goals to foster increased engagement with stakeholders and prioritize excellent customer service. He also aims to create a Vascular Surgery Patient Advisory Council, focus on actionable opportunities to impact health equity and optimize use of long-term outcome data.



Nicholas Osborne

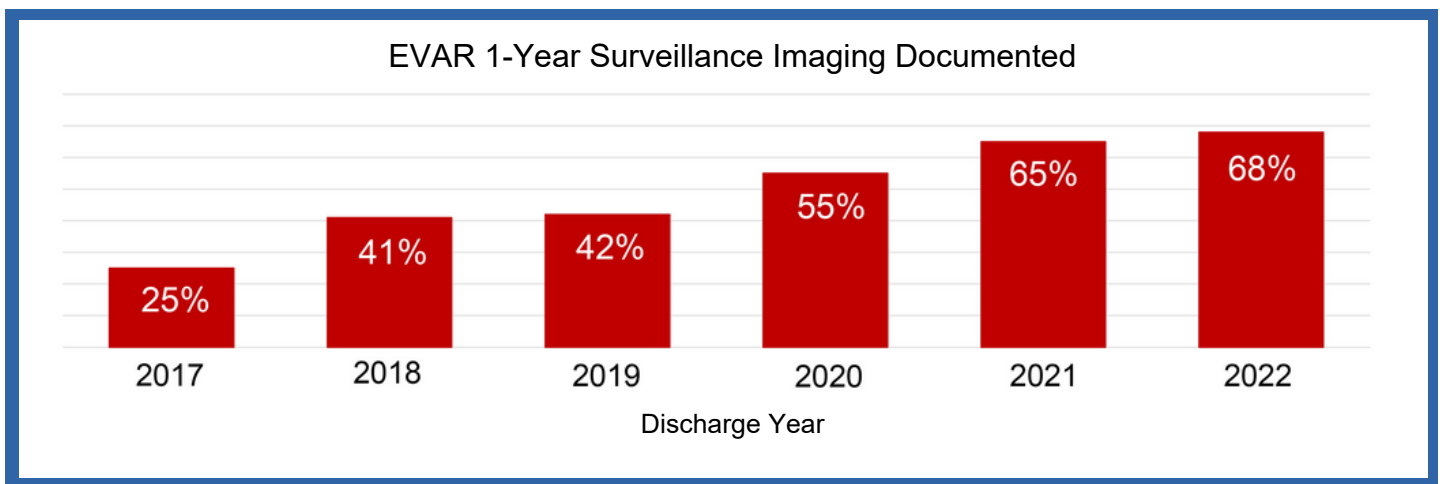
## SUCCESS STORY

### Endovascular Aneurysm Repair (EVAR) Surveillance

BMC2 VS established the quality improvement incentive goal “Documentation of 1-Year EVAR Surveillance Imaging.”

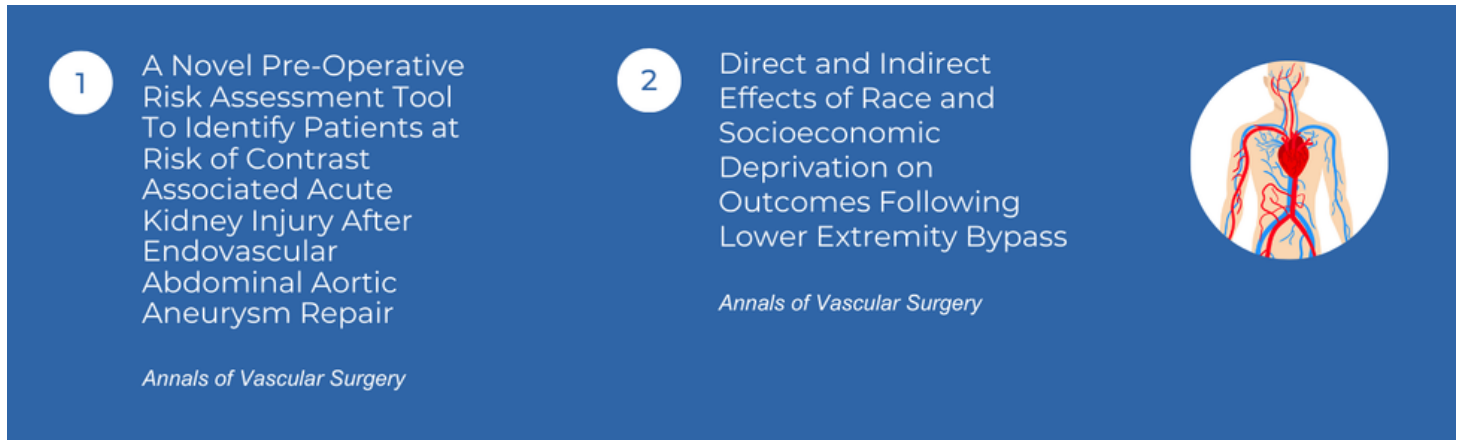
With this goal, providers performed and documented surveillance imaging more regularly, allowing them to catch and address problems before they resulted in life-threatening aneurysm ruptures. Between 2017 and 2021, six patients who did not have imaging performed and documented had a rupture occur, while a rupture occurred in only one patient who underwent imaging surveillance and documentation.

Sites in Michigan improved surveillance imaging documentation by over 175% - from 24.69% in 2017 to 68.2% in 2022.




# PUBLICATIONS

The Vascular Surgery registry had two publications in *Annals of Vascular Surgery* in 2023 – “[A Novel Pre-Operative Risk Assessment Tool To Identify Patients at Risk of Contrast Associated Acute Kidney Injury After Endovascular Abdominal Aortic Aneurysm Repair](#)” and “[Direct and Indirect Effects of Race and Socioeconomic Deprivation on Outcomes Following Lower Extremity Bypass](#)”. Both publications garnered media attention and were shared widely.



1 A Novel Pre-Operative Risk Assessment Tool To Identify Patients at Risk of Contrast Associated Acute Kidney Injury After Endovascular Abdominal Aortic Aneurysm Repair  
*Annals of Vascular Surgery*

2 Direct and Indirect Effects of Race and Socioeconomic Deprivation on Outcomes Following Lower Extremity Bypass  
*Annals of Vascular Surgery*



# PRESENTATIONS

During the Southern Association for Vascular Surgery (SAVS) 47th Annual Meeting in January, Margaret E. Smith presented "Real World Application of Wifl Scores in Chronic Limb Threatening Ischemia Patients." Co-authors included Jeremy Albright, Matthew Corriere, Nicholas Osborne, Drew Braet, and Peter Henke.



# GOAL SPOTLIGHT

## Opioid Reduction

To support appropriate prescribing for vascular surgery patients, the Opioid Prescribing Engagement Network (OPEN) offered BMC2 vascular surgeons the opportunity to participate in one-on-one counseling sessions aimed at helping providers decrease their opioid prescribing. These sessions were led by trained health care professionals and tailored to meet the individual needs of the provider with unbiased, evidence-based information about medications and prescribing. Follow-up support was available upon request.

Goal Spotlight				
Surgeons to prescribe a maximum of 4 opioid naïve patients at discharge				
Procedure	Goal	Q1 2022	Q2 2023	% change
CEA	≥ 70%	73.9%	87.9%	18.9%
Procedure	Goal	Q1 2022	Q2 2023	% change
EVAR	≥ 70%	77%	85.9%	11.6%

## ADVISORY COMMITTEE AND RESEARCH AND PUBLICATION STRATEGY COMMITTEE

BMC2 VS integrated two new groups of diverse partners representing varied interests and priorities across Michigan. These groups will strengthen the organization, better serve consortium members, and ensure we focus on high-impact, high-value initiatives.

Advisory Committee: Meets regularly to discuss high-level strategic directions and priorities for BMC2, including but not limited to:

- Overall strategic direction of BMC2 Vascular Surgery
- Quality improvement initiatives, including Pay for Performance and Value Based Reimbursement goals
- Consortium-wide meeting goals and topics
- Peer review goals and topics
- Opportunities and new initiatives

Research and Publication Strategy Committee: Develops and produces high-priority and impactful research using BMC2 data.





# ADVISORY COMMITTEE AND RESEARCH AND PUBLICATION STRATEGY COMMITTEE, CONT.

## 2023 Advisory Committee Members

<b>Constantinos Constantinou</b> Vascular Surgeon MyMichigan Health	<b>Ryan Kim</b> Vascular Surgeon Covenant HealthCare	<b>Eanas Yassa</b> Vascular Surgeon Corewell Spectrum
<b>Joshua Greenberg</b> Vascular Surgeon Trinity Health Grand Rapids	<b>Michelle Kosovec</b> Vascular Surgeon U-M Health West	<b>Nicholas Osborne</b> Director of BMC2 Vascular Surgery Michigan Medicine
<b>Peter Henke</b> Vascular Surgeon Michigan Medicine	<b>Judith Lin</b> Vascular Surgeon McLaren Greater Lansing	<b>Loay Kabbani</b> BMC2 VS Strategic Advisor Henry Ford Health

## 2023 Research and Publication Strategy Committee

<b>Constantinos Constantinou</b> Vascular Surgeon MyMichigan Health	<b>Ryan Kim</b> Vascular Surgeon Covenant HealthCare	<b>Nicholas Osborne</b> Director of BMC2 Vascular Surgery Michigan Medicine
<b>Peter Henke</b> Vascular Surgeon Michigan Medicine	<b>Nicolaus Mouawad</b> Vascular Surgeon McLaren Bay Region	<b>Loay Kabbani</b> BMC2 VS Strategic Advisor Henry Ford Health
<b>Andris Kazmers</b> Vascular Surgeon McLaren Northern Michigan	<b>Ash Mansour</b> Vascular Surgeon Corewell Health Grand Rapids Hospitals	



## NEW LEADERSHIP

As the Michigan Structural Heart Consortium ([MISHC](#)) has grown to include mitral valve procedures, early 2023 was an ideal time to expand leadership. [Dr. Raed M. Alnajjar](#) of Henry Ford Health, who focuses on surgical and percutaneous management of mitral valve disease, joined Drs. Stanley Chetcuti, P. Michael Grossman, and Himanshu Patel as a MISHC Co-Program Director. Dr. Alnajjar is especially committed to developing best practice guidelines for structural heart procedures and sharing MISHC's successes at the national level. His unique perspective as a busy surgeon in the Henry Ford System benefits the consortium and our mission to serve and support quality improvement in all hospitals across Michigan.



Raed M. Alnajjar

## SUCCESS STORY

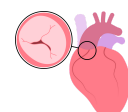
### Success Story: Improving Quality of Life through Increased KCCQ Documentation

Interventional cardiologists and cardiac surgeons who perform transcatheter aortic valve replacement (TAVR) strive to help patients live longer, fuller, higher-quality lives.

[MISHC](#) developed a quality improvement initiative to improve documentation and utilization of [Kansas City Cardiomyopathy Questionnaire](#) (KCCQ) data. The KCCQ is a validated 23-item patient-reported health status measure that quantifies physical limitations, symptoms, self-efficacy, social interference, and quality of life, and is administered before the procedure, 30 days post-procedure, and after one year.

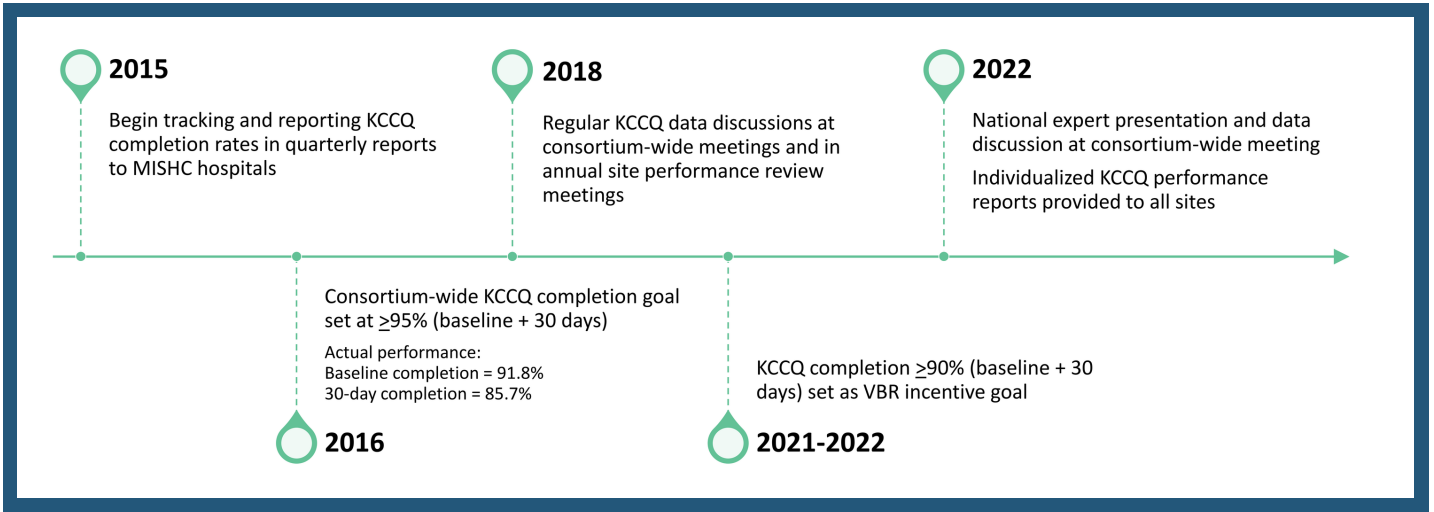
The pre-procedure questionnaire informs risk assessment and patient selection, and the post-TAVR KCCQ provides a patient-assessed response to treatment and a more complete picture of patient outcomes.

MISHC began the initiative by tracking and reporting KCCQ completion rates. From there, the consortium established goals and educational opportunities for hospitals.



# SUCCESS STORIES, CONT.

## Success Story: Improving Quality of Life through Increased KCCQ Documentation, Cont.



MISHC collaborates to improve collection and documentation of the KCCQ at baseline, 30 days, and 1 year follow up.

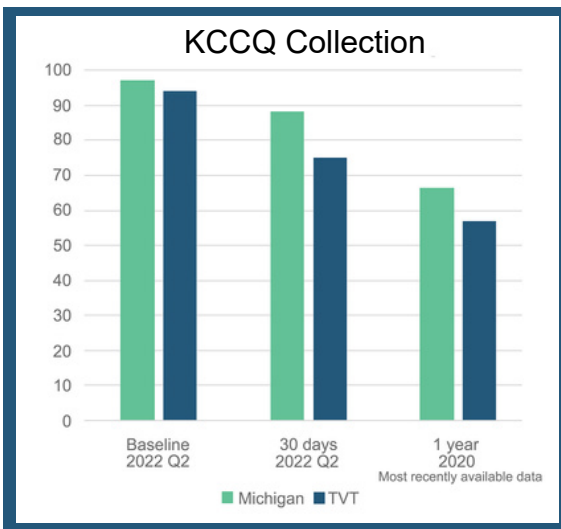


Figure 1

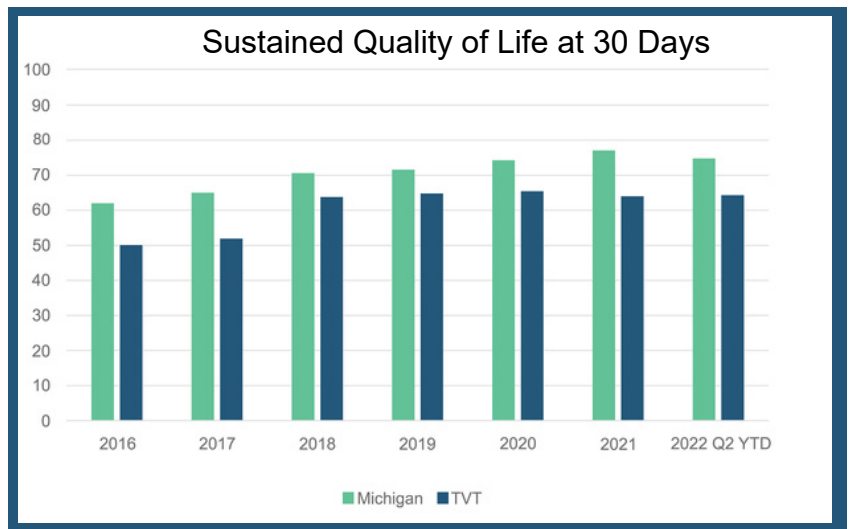
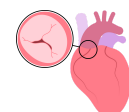


Figure 2

The result was increased documentation of the KCCQ, exceeding the national rates of data collection (Figure 1.) This documentation allowed MISHC to detect changes in the KCCQ summary score - a value that indicates survival and sustained quality of life – more accurately (Figure 2.) Michigan had a more than 10-point increase of the KCCQ summary score from baseline to 30-day follow-up. MISHC hospitals saw a 21% increase in the KCCQ summary score from 2016 through 2022. While national rates improved similarly from 2016 through 2022, Michigan remains higher than the national rates on the KCCQ summary score.



# GOAL SPOTLIGHT



Follow-up of post-TAVR patients 1-year post procedure is critical to achieving a successful outcome and to avoid early and late complications affecting patients’ survival and quality of life.

## BEST PRACTICES

MISHC released 4 new Best Practice Protocols in 2023. The protocols address TAVR readmission prevention, antithrombotic therapy post-TAVR, post-TAVR conduction system abnormalities, and shared decision-making. Best Practice Protocols are based on consortium-wide consensus at the time of publication, updated regularly, and do not replace the professional opinion of the treating physician. Visit [mishc.org](https://mishc.org) to find these documents:

- Antithrombotic Therapy Post-TAVR
- MISHC TAVR Readmission Prevention
- Post-TAVR Conduction System Abnormalities
- Shared Decision-Making



## PUBLICATIONS

MISHC data about the relationship between hospital stroke center designation and TVT stroke was published in *JACC: Cardiovascular Interventions* in January, revealing that Comprehensive Stroke Center designation is a possible factor in stroke rate detection differences between TAVR institutions. It may also factor into the observed differences in stroke rates between TAVR trials and those reported in TVT. These data also suggest that the comparison of hospitals based on post-TAVR stroke rates is potentially problematic.

[“The Relationship Between Hospital Stroke Center Designation and TVT Stroke: The Michigan TAVR Experience”](#) resulted in media coverage with articles by *Health Lab*, *TCTMD*, and many other outlets. Inspired by this publication, TVT colleagues are preparing to conduct the same analysis on a national sample.

In [“Predictors and Variation in Cardiac Rehabilitation Participation After Transcatheter Aortic Valve Replacement,”](#) published in *JACC: Advances*, data from [MISHC](#) and the [Michigan Value Collaborative](#) revealed that just 30.6% of patients who underwent TAVR participated in cardiac rehabilitation within 90 days after discharge. The publication is available for open access on ScienceDirect.

## PRESENTATIONS

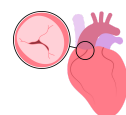
MISHC Clinical Quality Improvement Lead, Sheryl Fielding, BSN, RN, served on the 2023 ACC Quality Summit planning committee. She also presented with Holly A. Dalton, MSN, RN, of Baylor Scott and White Health. Their interactive session, “It Takes a Village to Care for TVT Nation!” discussed best practice ideas to improve quality in your structural heart program. You can find [Sheryl’s portion of the talk](#) on the presentations page of [mishc.org](#).

- 1 The Relationship Between Hospital Stroke Center Designation and TVT Reported Stroke: The Michigan TAVR Experience

*JACC: Cardiovascular Interventions*

- 2 Predictors and Variation in Cardiac Rehabilitation Participation After Transcatheter Aortic Valve Replacement

*JACC: Cardiovascular Interventions*



The Michigan Cardiac Rehab Network ([MiCR](#)) marked the completion of its first year in 2023. Born out of the combined efforts of BMC2 and the Michigan Value Collaborative ([MVC](#)), MiCR aims to increase participation in cardiac rehab for all eligible patients in Michigan. To do this, MiCR offers opportunities for stakeholder networking, clinical practice sharing, and dissemination of resources.

BMC2 surpasses the nation at referral to cardiac rehabilitation. The State of Michigan's 90% referral rate translates to over 23,000 patients referred to cardiac rehab each year. These interventions contribute to improved long-term health outcomes and reductions in hospital readmissions.



Additionally, MiCR is making an impact on national efforts. The network contributed content to the second edition of the Million Hearts Cardiac Rehabilitation Change Package ([CRCP](#)), released in August of 2023, by way of its "Sample Blinded Hospital Report for Cardiac Rehab Performance" and the [Cardiac Rehab Toolkit](#) section, "Eliminating Transportation as a Barrier to Participation."



Health care professionals from around the state gathered at Trinity Health Intensive Cardiac Rehab in Ann Arbor in November for the MiCR Stakeholder Meeting. Participants toured the facility, brainstormed during break sessions, and had opportunities to network. MiCR also launched the NewBeat Initiative, a partnership with Healthy Behavior Optimization for Michigan that provides cardiac rehab resources for providers and patients.



A partnership with the Healthy Behavior Optimization for Michigan (HBOM) design team, Larrea Young and Noa Kim, allowed MiCR members to inform and develop provider- and patient-facing resources that launched during the fall meeting - michiganocr.org and NewBeat materials. NewBeat includes [customizable handouts](#) on cardiac rehab for liaisons and patients and customizable Cardiac Care Cards for providers to send to patients post procedure. These materials are available for digital download at the MiCR website. Printed copies are available upon request. The network also announced an Uber Health pilot to assist patients with transportation to cardiac rehab.



1. A dedicated website for MiCR launched in 2023.
2. BMC2 collaborated with HBOM to create customizable materials including Cardiac Care Cards for providers to send to patients post procedure.
3. Patients will have increased access to cardiac rehab via an Uber Health pilot.

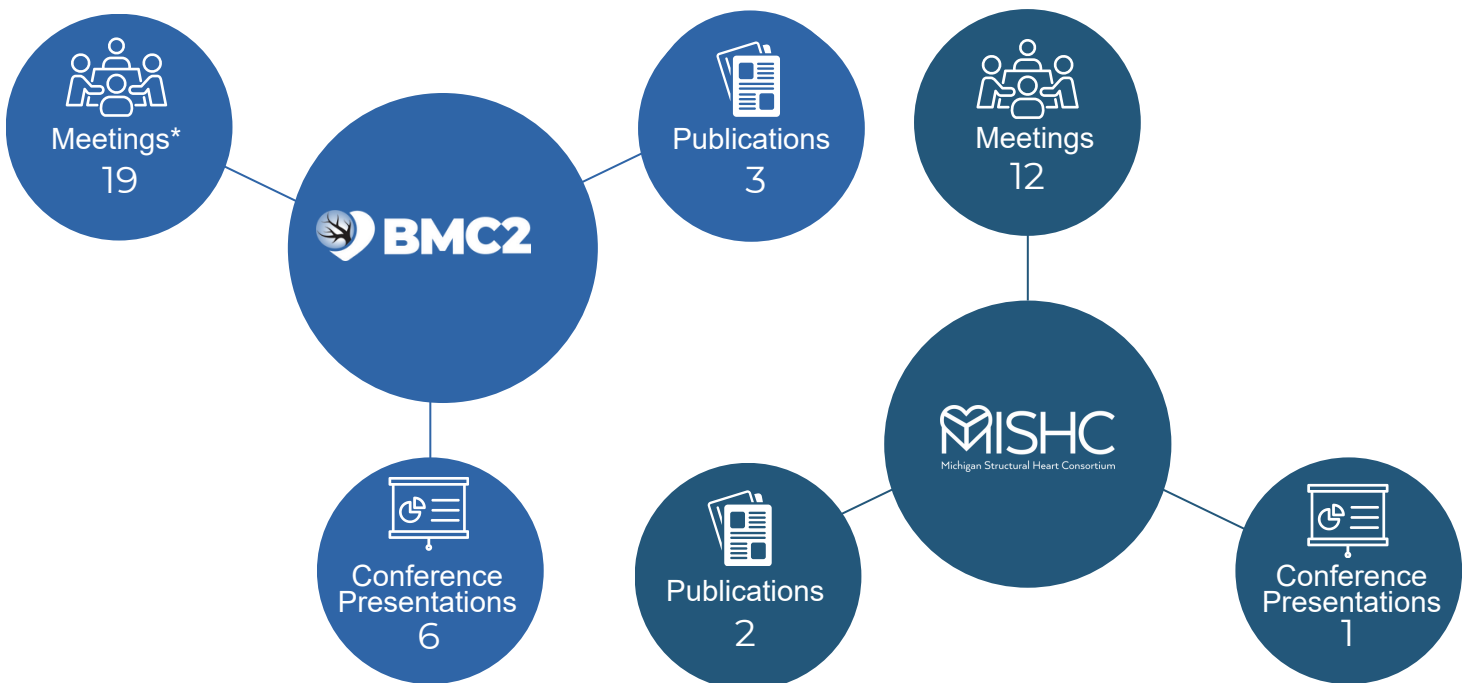
MiCR’s initial goal was to increase eligible patient enrollment in cardiac rehab from 30% to 40% by 2024. 2022 Q3 data, the most recent available at the time of publication, indicates the consortium average at 36%. We look forward to setting new goals and taking on new challenges to improve quality of care and patient outcomes in 2024.



# RESOURCES BY THE NUMBERS\*

## MEETINGS, PUBLICATIONS, AND CONFERENCE PRESENTATIONS

Over the last year BMC2 has created myriad resources to support cardiovascular quality improvement in Michigan and around the world, with high volume access across a broad range of our cardiovascular materials.



## WEBSITE



\*January 1st - December 12th, 2023

\*\*Includes 2 MiCR Meetings





# SOCIAL MEDIA\*

X, Formerly Known as Twitter



159  
followers

37  
posts



41  
followers

26  
posts

## Top Posts

1. BMC2 quote retweet of the Michigan Medicine *Health Lab* article about the publication “A novel pre-operative risk assessment tool to identify patients at risk of contrast associated acute kidney injury after endovascular abdominal aortic aneurysm repair” in *Annals of Vascular Surgery* (962)
2. “The Relationship Between Hospital Stroke Center Designation and TVT Reported Stroke: The Michigan TAVR Experience” in *JACC: Cardiovascular Interventions* (607)
3. BMC2 quote retweet on BCBSM’s article about the publication “Impact of Cannabis Use on Outcomes after Lower Extremity Bypass” in *Annals of Vascular Surgery* (444)
4. BMC2 article “Demonstrating the Power of CQIs” (423 views)
5. “Predictors and Variation in Cardiac Rehabilitation Participation After Transcatheter Aortic Valve Replacement” published in *JACC: Advances* (338)

## YouTube



2.7k  
views

25  
videos



38.8k  
views

9  
videos

## Top Videos

1. Mitral Valve Echocardiographic Assessment for TEER and TMVR Procedures (34,150 views)
2. Intraprocedural TEER Imaging: 3D TEE Considerations (278 views)
3. Hypoattenuated Leaflet Thickening (HALT) (209 views)
4. Arch Types (138 views)
5. Complete Revascularization in STEMI, NSTEMI, and Stable Disease (122 views)

\*January 1st - December 12th, 2023



# 2023 MEETINGS IN PHOTOS



1. Jenna Scott, BS, ACSM-CEP, EIM, of the Michigan Society for Cardiovascular and Pulmonary Rehabilitation (MSCVPR) and Ucardia presented CMS updates for cardiac rehab during the November 17th MiCR Stakeholder meeting at Trinity Health in Ann Arbor.
2. The May 17th Vascular Surgery Physician Meeting in Boyne City offered opportunities for learning about best practices for using social media professionally and reviewing guidelines and data.
3. The November 17th MiCR Stakeholder Meeting allowed attendees to tour Trinity Health Intensive Cardiac Rehab Center's facilities and brainstorm about improving patient access to cardiac rehab referrals.
4. Joan Michaels, MSN, Director of Cardiac Registries at the American College of Cardiology, shared a TVT update during the November 11th MISHC Coordinator and Abstractor Meeting.
5. Dr. Devraj Sukul thanks PCI Patient Advisory Committee member, Greg Merritt, for presenting new patient-informed discharge instruction resources during the May 6th PCI Collaborative Meeting at the Kensington Hotel in Ann Arbor.
6. Small-group breakout sessions offered time for topic-specific discussion during the May 5th PCI Coordinator Meeting at the Matthaei Botanical Gardens in Ann Arbor.
7. Participants from around the state enjoyed the opportunity to network during the MISHC Coordinator and Abstractor Meeting on November 11th.



# MEETING HIGHLIGHTS

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Consortium meetings brought opportunities for education and networking as we offered a mix of virtual events and in-person gatherings around Michigan. Presentations given by consortium members allowed sites to learn from each other, a valuable element of our mission. We also welcomed national and international speakers:

- Dr. Kevin J. Croce of Harvard Medical School presented "What is the Evidence for Routine Intravascular PCI Imaging?" during the BMC2 PCI Physician Webinar on February 9th, 2023.
- Dr. Jaffar M. Khan of St. Francis Hospital and Heart Center in Roslyn, NY presented "Hypoattenuated Leaflet Thickening (HALT)" during the MISHC Collaborative Webinar on April 18th, 2023.
- Dr. Sherry Grace of York University presented "Cardiologists' and CV Surgeons' Attitudes Toward Cardiac Rehabilitation" during the MiCR Spring Meeting on May 4th, 2023.

## LOOKING TO THE FUTURE

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With the infrastructure of the new REDCap database in place, BMC2 will turn to reimagining reports. We will draw from research, lessons from fellow CQIs, and feedback from consortium members to improve the content of reports and how users interact with them.

In 2024, we will prepare to advance our work understanding and correcting disparities in health care by creating health equity dashboards. Consortium members will help determine useful measures to identify where these disparities lie. We will collaborate to explore ways BMC2 can impact health care equity that are measurable at the individual level, proximate to health care outcomes, and actionable.

Physicians, nurses, administrators, and other professionals at BMC2 hospitals and facilities work together to collect data to inform protocols and projects then implement them. Their dedication to our mission advances quality of care and outcomes internationally and nationally and makes Michigan one of the safest places in the United States to receive cardiovascular care. We anticipate new goals and achievements in advancements in care in 2024 as we continue our collaboration.



# OUR TEAM



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Program Director



**Raed M. Alnajjar, MD**  
Co-Program Director of MISHC



**Stanley Chetcuti, MD**  
Co-Program Director of MISHC



**P. Michael Grossman, MD**  
Co-Program Director of MISHC



**Himanshu Patel, MD**  
Co-Program Director of MISHC



**Devraj Sukul, MD, MSc**  
Associate Director of BMC2 PCI



**Nicholas Osborne, MD, MPH**  
Director of BMC2 VS



**Annemarie Forrest, RN, MS, MPH**  
Managing Director



**Jeremy Albright, PhD**  
Statistician Lead



**Pam Benci**  
Administrative Specialist



**Mary Casey, MPA**  
Project Manager



**Sheryl Fielding, RN, BSN**  
Clinical Quality Improvement Lead, MISHC



**Rebecca Fleckenstein, RN, MSN**  
Clinical Quality Improvement Lead, VS



**Kathleen Frazier, RN, BSN**  
Clinical Quality Improvement Lead, PCI



**Jeff Hartnagle**  
Applications Programmer Senior



**Elizabeth Horn**  
Communications Specialist



**Milan Seth, MS**  
Statistician Expert



**Amy Shirato, RN, BSN**  
Clinical Quality Improvement Lead, PCI



**John Sly**  
Applications Programmer Lead



**Nathan Yost**  
Applications Programmer Senior

Thank you to our collaborators!



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**Melissa Clark, RN, MSN**



**Jana Stewart, MPH**





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