



Michigan Structural Heart Consortium (MISHC)

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Clinical Quality Improvement Lead

ACC Quality Summit 2023

Agenda

Who we are

What we do

What you can take home

How we can help

What is MISHC?

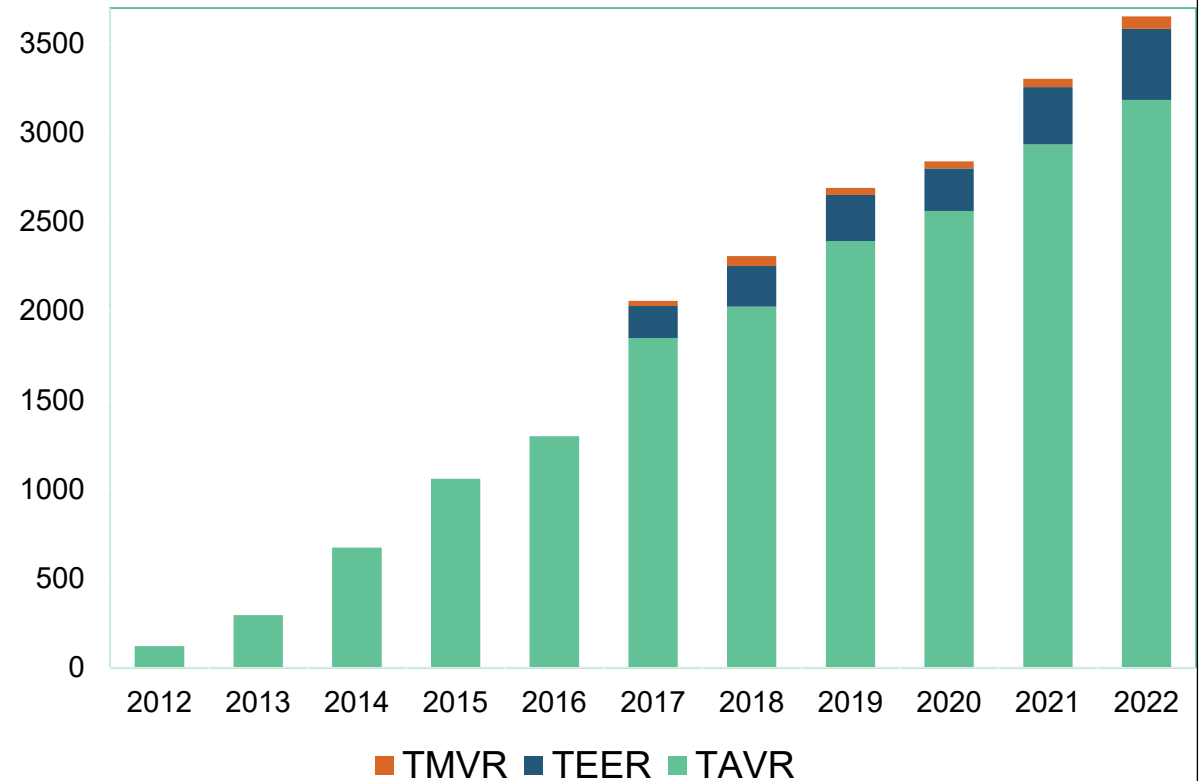
The Michigan Structural Heart Consortium is a quality improvement project designed to emphasize lifetime management and improve quality of care and outcomes in patients who undergo transcatheter valve procedures

Over 130 interventional cardiologists and cardiothoracic surgeons from 30 hospitals across Michigan that collaborate in MISHC, collecting data on >3500 procedures annually

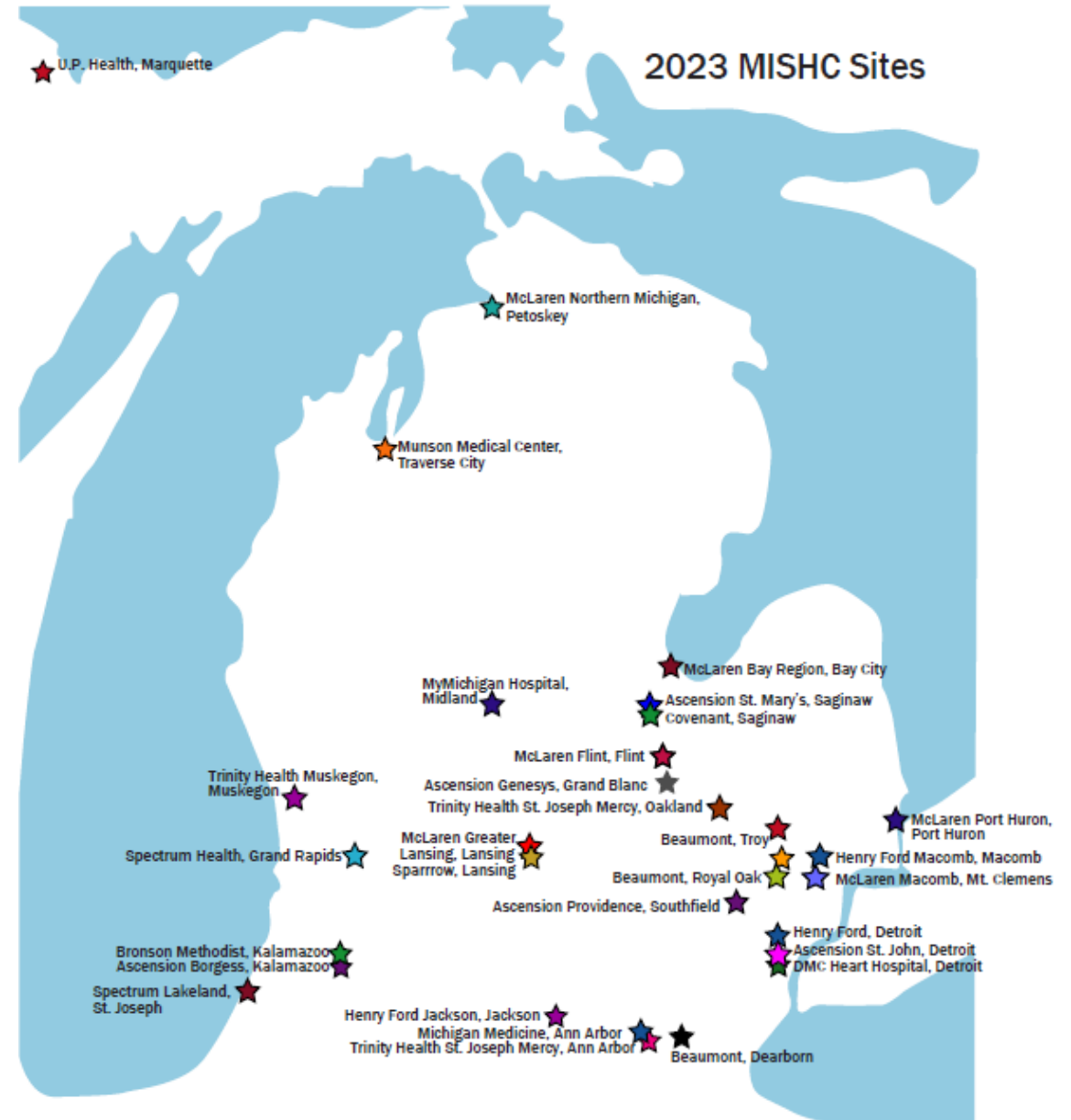
MISHC is a collaboration between the Michigan Society of Thoracic and Cardiovascular Surgeons Quality Collaborative (MSTCVS-QC) and the BMC2 PCI Cardiovascular Consortium



MISHC Procedures Volume 2012 – 2022



MISHC Transcatheter Structural Heart Sites



Meetings and Committees



MISHC participation is voluntary, the focus is on sharing, mentoring, educating and creating a culture of quality and collaboration at all levels to decrease practice variability across the state



TAVR and mitral focused physician meetings with national speakers provide education and mentoring with challenging case presentations geared toward meeting topic



Coordinator meetings focus on definition and goal understanding, procedural education and QI projects



Structural heart coordinator meetings bring mid-level providers together for educational speakers, mentoring and best practice creation



Annual Collaborative meetings where the entire structural heart team, quality, administrative and abstracting team members are invited



Publication committee and physician best practice special committees

Deliverables

TAVR, M-TEER and TMVR Reports – mirror TVT definitions for national comparison

- Discharge level, 30 day and 1 year follow up, and M&M reports with hospital and collaborative columns
- Highlight MISHC goals, CMS requirements, and outcomes which are also included as blinded site graphs

End of year TAVR

- 3-year reports for expanded data trending
- End of year 3-year risk adjusted reports for mortality, stroke, transfusion, contrast induced nephropathy, bleeding/vasc comps, and readmissions

Annual report findings spreadsheet

- Highlight QI opportunities and goal performance



Report Findings Spreadsheet

2022 Q2 - 2023 Q1 R4Q TAVR	Collaborative	Site #5	
Discharges:	3284	154	
Goals:			
Echo Post-Procedure $\geq 95\%$	99.0%	100.0%	
30 Day Follow Up $\geq 95\%$	90.2%	100.0%	
1 Year Follow Up $\geq 95\%$	89.1%	100.0%	
Bleeding/Vasc Comps $\leq 2\%$	3.2%	5.7%	
Transfusion $\leq 7\%$	5.3%	7.4%	
KCCQ:			
KCCQ @ Baseline	98.1%	100.0%	
KCCQ @ 30 D	84.9%	100.0%	
KCCQ @ 1 Y	71.6%	98.6%	
Survival with Sustained QOL	72.2%	80.3%	Pt is alive, and 30 day KCCQ Summary Score is at least 45 and did not decrease by more than 10 points from pre-procedure
Details:			
EPD Deployed	40.7%	0.0%	
Shared Decision Making	78.3%	100.0%	
Cardiac Rehab prior to DC	80.0%	100.0%	
Pacemaker	8.3%	7.4%	
Stroke - all types	1.6%	1.2%	
CIN	2.5%	2.6%	
Valve Related Readmission 30 D	0.5%	1.2%	
Non-Valve Readmission 30 D	8.8%	10.1%	

Site Visits

Annual chart review of all data fields from all time periods, base and 30 day and 1 year follow up

Exit interview with structural heart team

Discuss chart review findings, report findings, goal progress, QI projects, opportunities for improvement, report distribution for both TVT and MISHC reports, future expectations

Follow up with a site visit letter summarizing findings, QI opportunities and future plans

Challenging cases for the physician meetings and site highlight topics for the MISHC newsletter are frequently discovered in the exit interview

Successes

- Strong relationships have been built between the collaborative members and with the coordinating center
- New coordinator definition and expectations training
- Meet with new sites as they are planning to open their structural heart program
- Meet with coordinators to review QI presentations and projects prior to presenting to SH team
- Partnering sites that have accomplished similar challenges or are working on the same QI metric
- Sharing – challenging cases for education, documentation templates, order sets
- Best practice protocol workgroups encompass physicians or structural heart coordinators from across the state that volunteer to share their resources and develop guidelines for the state



MISHC.org

QUALITY IMPROVEMENT

BEST PRACTICES

PERFORMANCE INDEXES

CALCULATOR

EXTERNAL RESOURCES

MISHC best practice protocols are based on consortium-wide consensus at the time of publication. Protocols will be updated regularly, should not be considered formal guidance, and do not replace the professional opinion of the treating physician.

TAVR

[Groin Bleed zip file with Multiple Resources](#)

[Radial and Ulnar Bleed zip file with Multiple Resources](#)

[Management of Blood Loss and Transfusions Following TAVR](#)

[Timeout for TAVR](#)

[TAVR Nephropathy](#)

[Vascular Access Management in Percutaneous Transcatheter Aortic Valve Replacement](#)

[TAVR Peri-Procedural Care Pathway](#)

[Antithrombotic Therapy Post-TAVR](#)

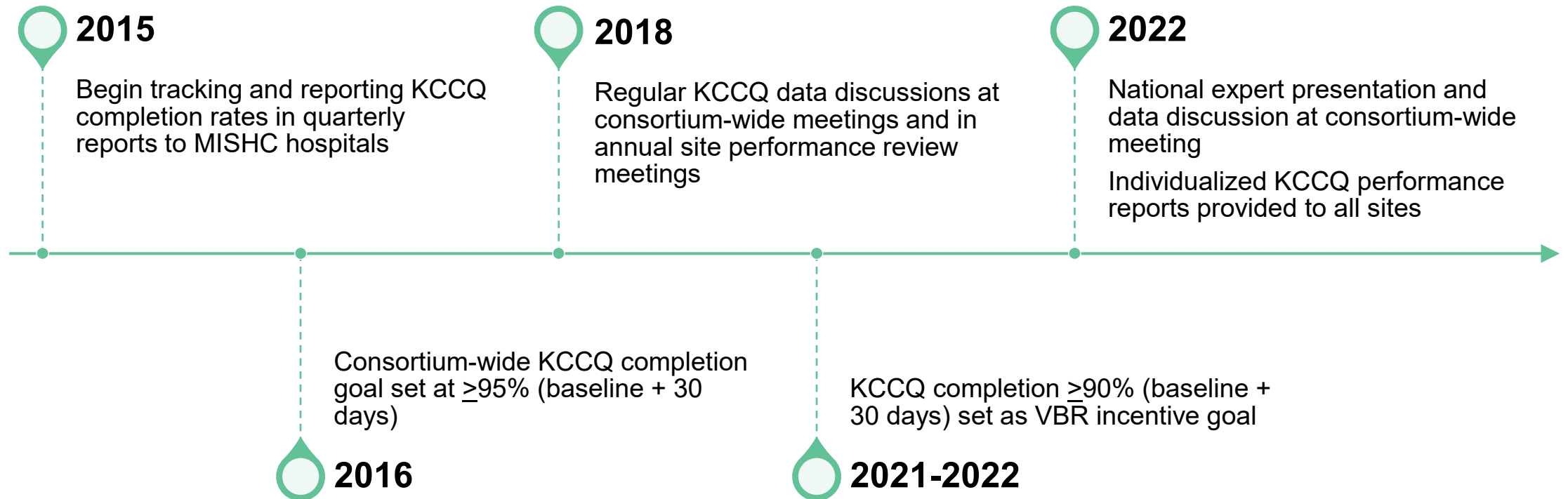
[MISHC TAVR Readmission Prevention](#)

[Post-TAVR Conduction System Abnormalities](#)

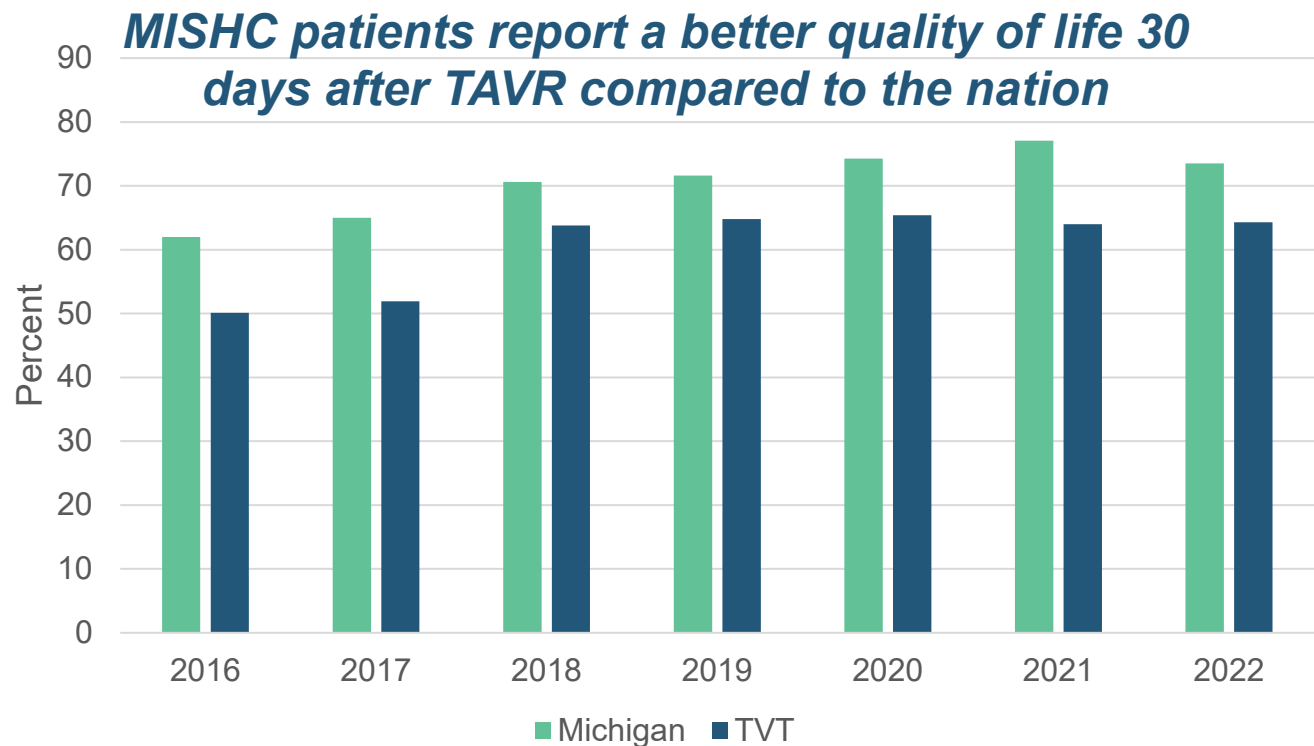
Mitral Valve Procedures

Coming soon

MISHC Collaborates to Improve Collection and Documentation of the KCCQ at baseline, 30 days, and 1 year follow up

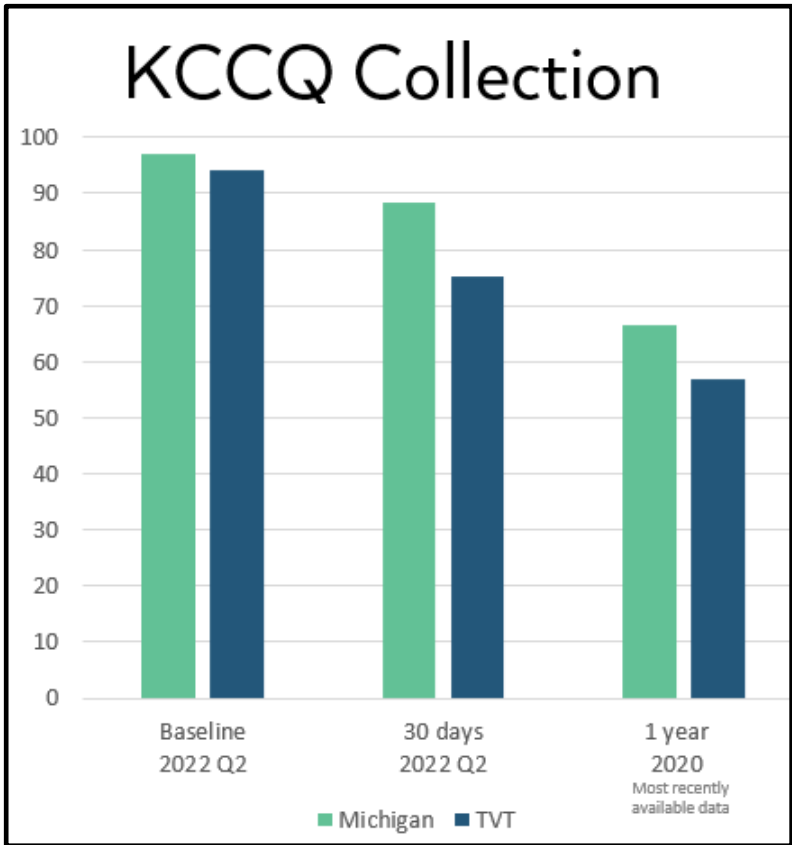


Acceptable QOL @ 30 Days



**21%
increase**

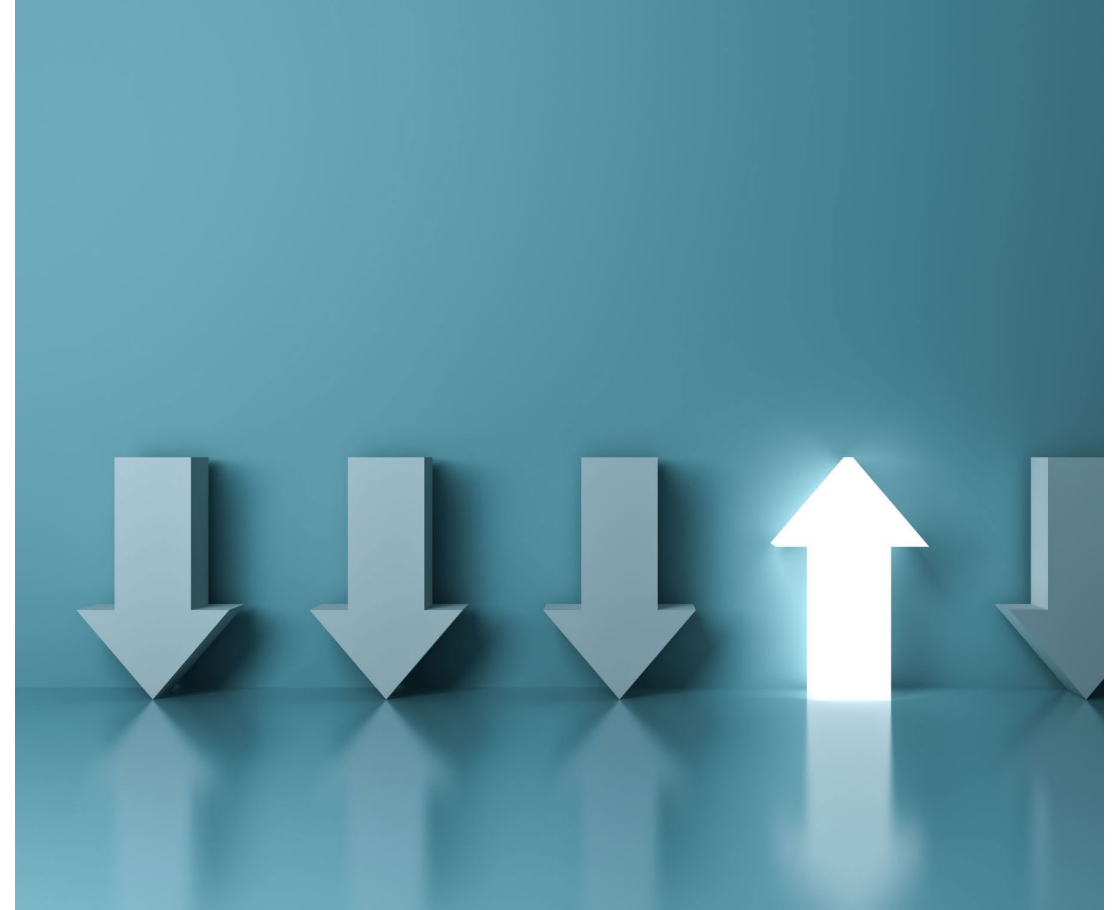
Patient is alive @ 30 days, summary score is ≥ 45 , and did not decrease by ≥ 10 point from baseline



Michigan data is more complete after a multi-year MISHC initiative to improve KCCQ follow up and documentation

Challenges

- Identifying meeting topics that attract both interventional cardiologists and cardiothoracic surgeons
- MISHC Collaborative meeting is partnering with MSTCVS, the STS Michigan collaborative, presenting TAVR/SAVR and STS PCI/CAB data
- Primary focus is lifetime management and highlighting heart team importance
- Location of meetings to ensure best attendance, 2 virtual meetings per year, 1 in person
- Unblinding data
- Added mitral procedures in 2022



Future Plans



ENGAGING ECHO
PHYSICIANS IN
MITRAL TEER
MEETINGS



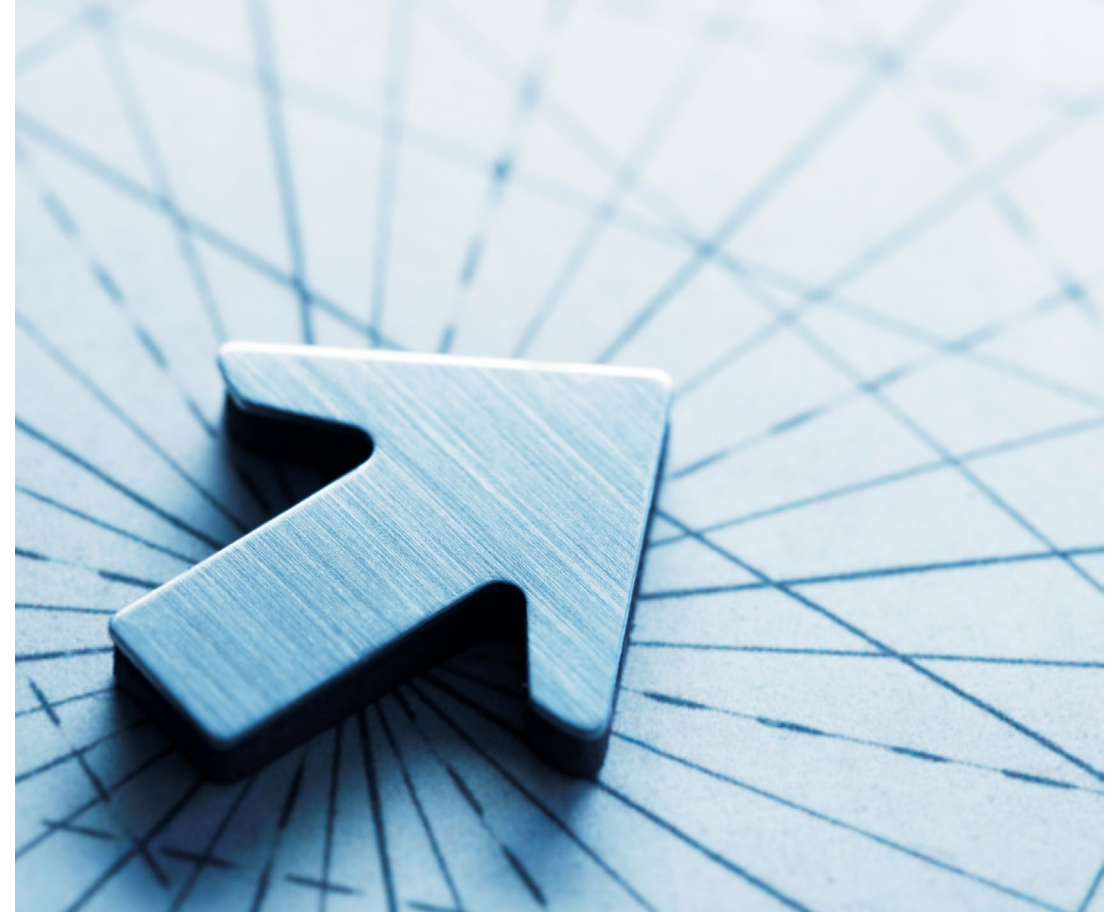
PHYSICIAN
LEVEL REPORTS



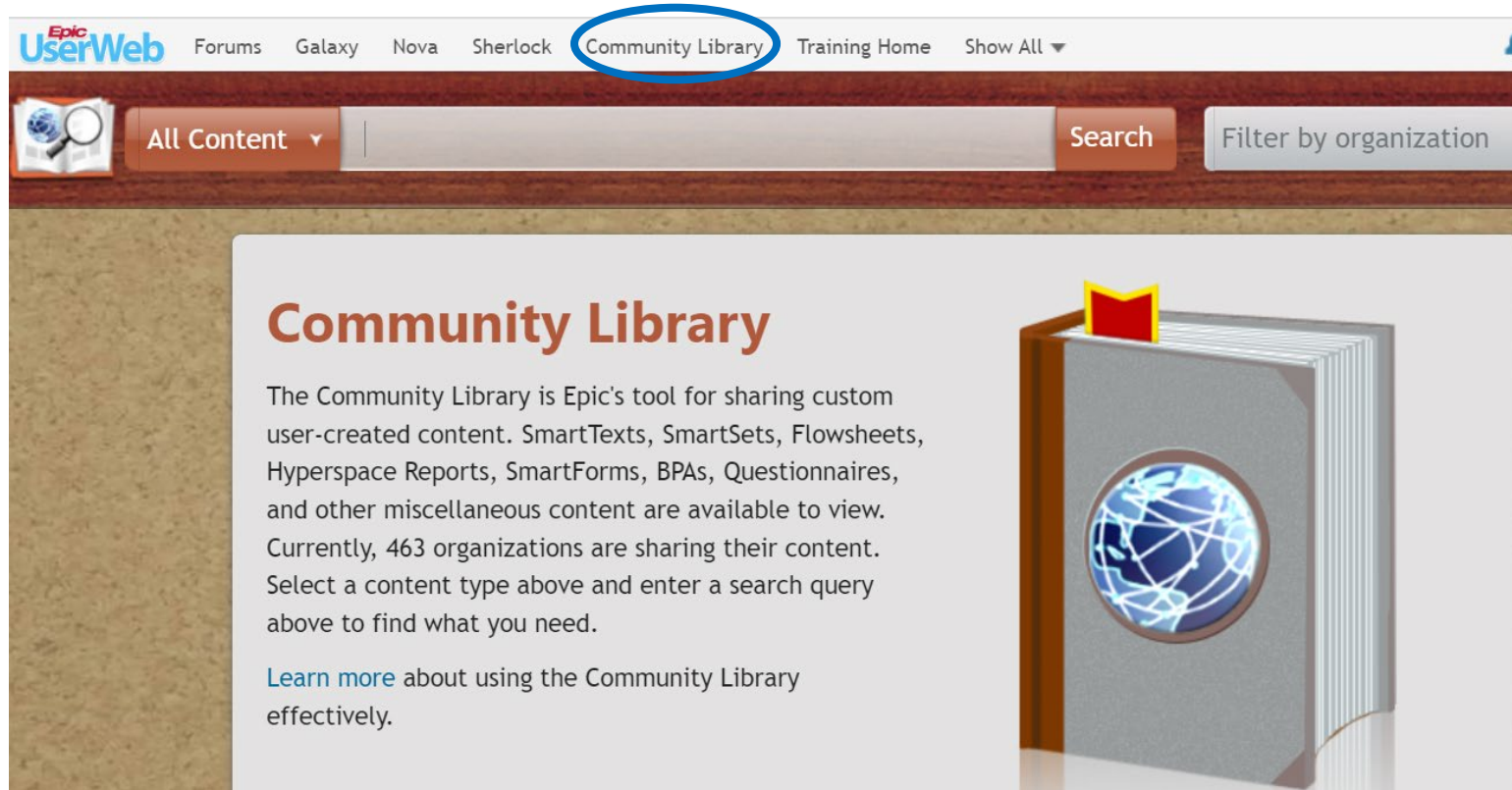
AUC PEER
REVIEW

Take home

- Systems can mentor new sites and work with them to ensure requirements are in place prior to performing procedures
- Virtual meetings can be scheduled to discuss quality, processes, challenges
- Physicians can meet virtually to create BPPs, educational meetings, publication review
- Report findings spreadsheets can be used to show goal performance
- Email lists for systems or state, add your email address to the Participant Directory through the Site Profile page on the TVT website, network with others in your state
- Summaries of TVT bimonthly data managers calls and FAQs can be sent to all participating sites, structural heart coordinators
- BPPs available on mishc.org
- Documentation templates



Epic Community Library



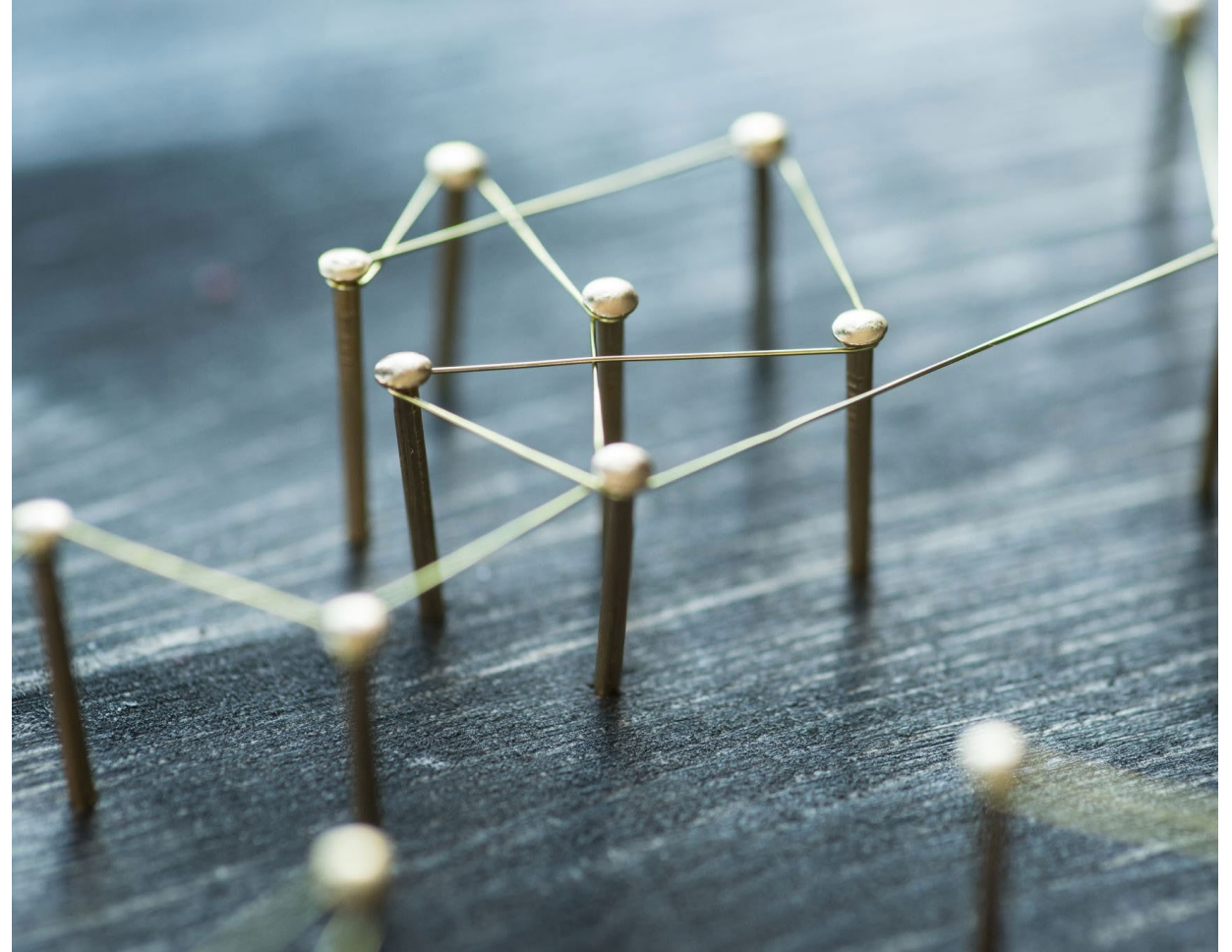
Epic community library link:

<https://signin.epic.com/adfs/ls/?wa=wsignin1.0&wtrealm=https%3a%2f%2fuserweb.epic.com%2f&wctx=rm%3d1%26id%3dpassive%26ru%3d%252F&wct=2015-06-25T16%3a40%3a55Z>

MISHC Coordinators are available to help!

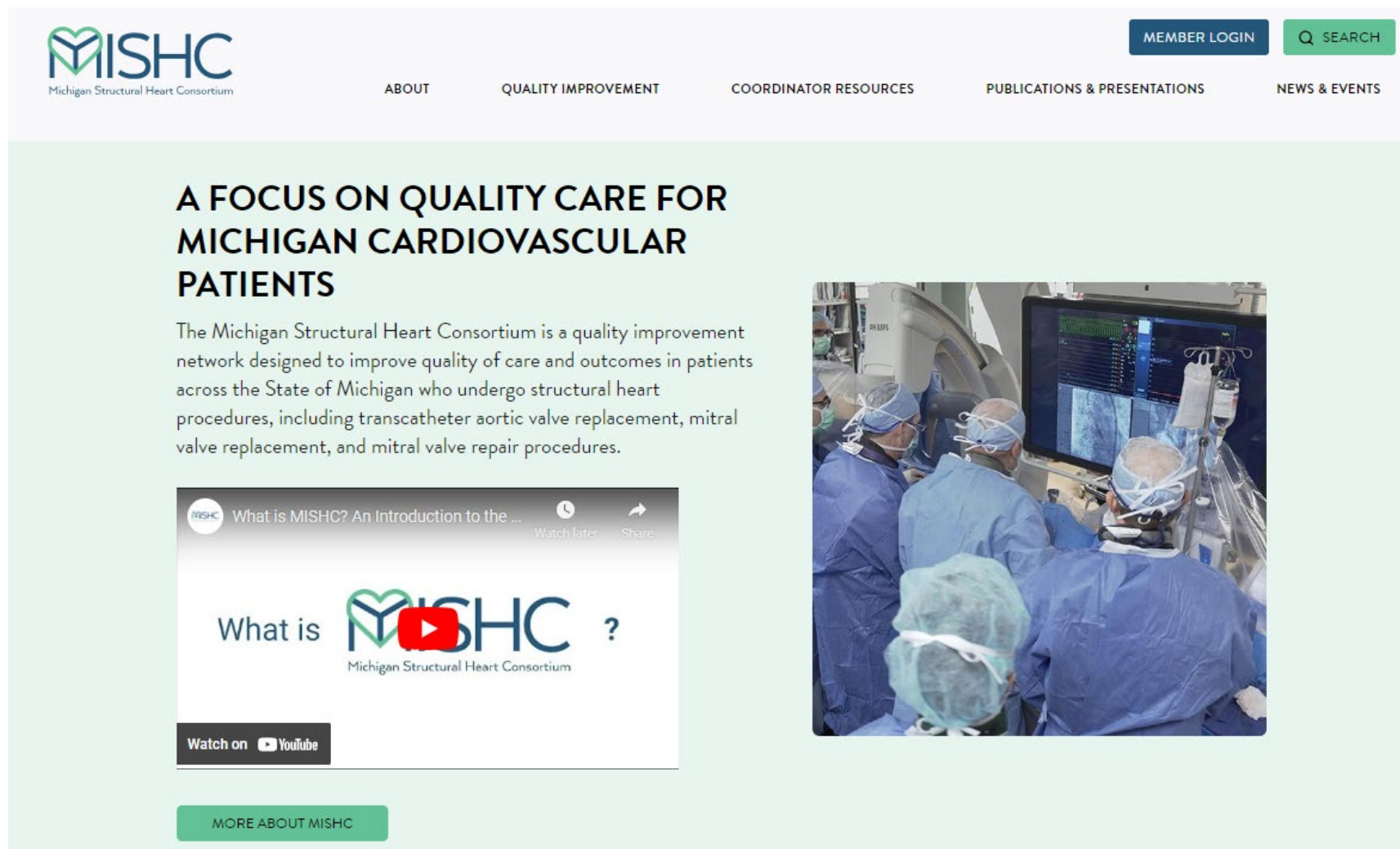
- Mentoring for both data abstractors and structural heart coordinators
- Participate in virtual state or local meetings
- Review QI opportunities, projects and presentations
- Help with website functionality, pull data, review reports

Contact Sheryl Fielding,
QR code, or at
sfields@med.umich.edu, to be
connected to a MISHC team
member



Find us at MISHC.org

Follow us on social media

A screenshot of the Michigan Structural Heart Consortium (MISHC) website. The header features the MISHC logo and navigation links: ABOUT, QUALITY IMPROVEMENT, COORDINATOR RESOURCES, PUBLICATIONS & PRESENTATIONS, and NEWS & EVENTS. There are also buttons for MEMBER LOGIN and a SEARCH bar. The main content area has a heading "A FOCUS ON QUALITY CARE FOR MICHIGAN CARDIOVASCULAR PATIENTS" followed by a paragraph describing the consortium's mission. Below this is a video player with the title "What is MISHC? An Introduction to the ..." and a "Watch on YouTube" button. A "MORE ABOUT MISHC" button is at the bottom. To the right of the text is a photograph of surgeons in an operating room.