BMC2 NEWS

May 2021

The Newsletter of the Blue Cross Blue Shield of Michigan Cardiovascular Consortium

A Note from Peter Henke

Welcome to the May edition of our BMC2 newsletter. You'll find new site spotlights, helpful tips about using our new website, information on new Best Practice Protocols, and more.
We hope you've had an opportunity to explore our new website and are finding it a useful resource. We're also excited to announce that BMC2 is now on LinkedIn. Follow us to keep up-to-date on BMC2 activities.

This month our vascular surgery registry has been hard at work on peer review. Covering appropriateness of elective infrainguinal open bypass cases that were performed for claudication only where a PTFE prosthetic graft is implanted, we look forward to a great discussion of the results at our November collaborative meeting, hopefully in person! This also is a friendly reminder that the deadline for the external peer review is June 7th. If you have questions, please don't hesitate to contact the coordinating center.

As always, THANKS for your collaboration to improve safety, quality, and patient outcomes each day!

Site Spotlight - Metro Health

Antibiotic redosing is a best practice that decreases the risk of surgical site infection (SSI). The team at Metro Health in Grand Rapids experienced an unfortunate event when a patient did not receive redosing during a procedure and was subsequently readmitted for an SSI. As a result, they took a close look at their protocol for antibiotic redosing and came up with a plan that raised their antibiotic redosing rate from 75% in 2019 to 100% in 2020.

The first step was to make sure that the redose timer was working properly in Epic. The timer is designed to begin at the start of a procedure and alert 4 hours later as a reminder to redose the patient if the procedure is still in process. While the timer was working adequately, there were some inconsistencies regarding at what point a procedure is considered complete. A decision was made to define "complete" as the point when the surgical incision is entirely closed.

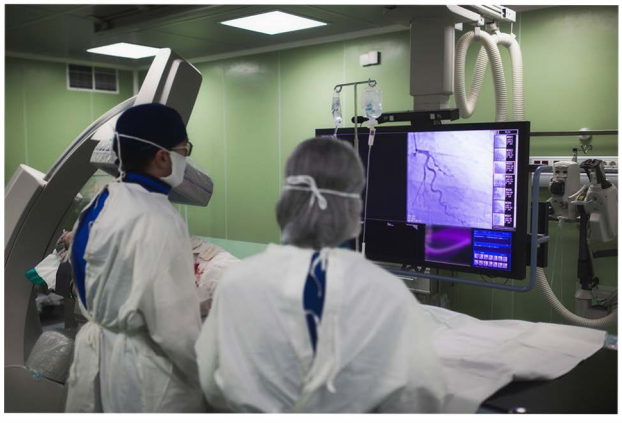
There were also some discrepancies in who the decision to redose falls to, with some confusion over whether the surgeon or anesthesiologist should make the call. A plan was put in place for the responsibility to go to the anesthesiologist so there would not be a debate or question about whether or not a patient would be redosed. The anesthesiologists were also given a refresher about redosing guidelines so that everyone was on the same page. Metro Health's antibiotic redosing rate continues to be 100%.

Site Spotlight - Mercy Health St. Mary's Grand Rapids

In 2019, Mercy Health St. Mary's Grand Rapids had a Contrast-Induced Nephropathy (CIN) rate of 9.4%. A move from Cerner to Epic allowed the team to have a streamlined order set that all of the physicians are expected to use. They also created custom phrases for hydration orders to streamline quality patient care. This included having a specific CIN policy for heart and vascular. The team created a type of grid to use for dosing hydration that is based on patient GFR lab results. (If patient GFR is X, then please hydrate at Y.) Then, the standard 50 mLs per hour per sedation policy is used with titration up and down based on the patient's GFR.

Additionally, the team added a dye max load into their timeout so that everyone in the room would know how much contrast the patient should get, with the monitor providing verbal updates throughout the procedure. As a result of these changes, the 2020 CIN rate was 1.75%.

Featured Publication - Physicians- patient gender concordance may not matter in interventional practice



While some studies suggest female patients treated by female physicians have better outcomes, there does not appear to be a relationship between operator and patient gender and outcome in patients undergoing coronary angioplasty or stenting. These are the results of a first-of-its-kind study by the Blue Cross Blue Shield of Michigan Cardiovascular Consortium (BMC2) and published in *Catheterizations and Cardiovascular Interventions*.

The study looked at procedures performed by 385 male interventional cardiologists, and 18 female interventional cardiologists at 48 non-federal hospitals across the state of Michigan. Female interventional cardiologists continue to be markedly under-represented and only perform a small percentage of cases, with women accounting for only 4.5% of interventional cardiologists and performing only 3% of procedures.

Despite interventional cardiology remaining an overwhelmingly male-dominated specialty, female physicians in this field stand out as excellent practitioners. Coronary angioplasties done by female physicians were more frequently rated as appropriate as compared to procedures performed by their male counterparts, among those studied. Female interventional cardiologists also more frequently prescribe recommended medical therapies than male interventional cardiologists. No differences in death, kidney injury, major bleeding or blood transfusions were found between patients treated by male or female interventional cardiologists.

"While the overall care processes and outcomes in Michigan were great, and similar for operators of either sex, the female physicians scored higher on appropriateness and post-procedural therapy. These findings would benefit female trainees who are considering interventional cardiology but are concerned about perceived barriers," says the lead author of the study, Prasanthi Yelavarthy, MD.

The study senior author, Hitinder Gurm, MD Director of BMC2, said, "It is embarrassing that the ratio of women to men in our field remains so low in 2021. I hope that these findings will push our professional societies and training programs to develop strategies to encourage future female trainees to pursue a career in interventional cardiology."

Staff Spotlight - Nate Yost

Nate Yost's greatest passion in life is expanding his horizons and comfort zones. He tries new things whenever possible and encourages others to do the same. Nate joined BMC2 in October of 2012 at the suggestion of fellow Applications Programmer Senior, Michelle Hughes. After doing freelance work for years, Nate was looking for a full time job, ideally working with content management software like Drupal, and found BMC2 to be a good fit. He enjoys that his work has rapid, real medical value and appreciates his co-workers who he describes as "enjoyable, smart folks." He also likes the easy-going work atmosphere that BMC2 offers.

Each day for Nate is a little different. He may be answering questions about the numbers in reports, delivering on data requests, or working on website and server improvements. Systems administration and architecture holds a special place in Nate's heart and he's found modernizing our server stack to accommodate web updates to be a fun project over the past year. As BMC2 grows and expands, Nate is excited about scaling our technology to support a bigger footprint.

Inspired by his love of video games, Nate learned to program computers and write software when he was in middle school. His hobbies are numerous and have taught him many skills, including designing electronics, hunting, running non-profits, building houses, and leading a disaster response team.

BMC2 Meetings

The PCI Coordinator Meeting was held the morning of May 13th. Annemarie Forrest went over the features of the new website. Coordinator resources have been moved to the new site and will also remain on the password protected version of the old site until mid-June. Kathleen Frazier has developed new training materials. Training is now split into 5 modules which are available on the website. Experienced coordinators are welcome to use these materials to review. Annemarie also reviewed new changes to the QI Project Summary. There is a new form on which both your plan for implementation and project outcomes will be documented. While this document is required, you may also upload supporting documents such as scorecards, PowerPoints, or A3s. A physician champion must be included on each project. The deadline for submitting this form is December 1st.

The VS Physician Meeting was held the afternoon of May 14th. Drs. Ash Mansour and Carrie Bosela presented VQI updates and data and Dr. Peter Henke presented BMC2 updates and data. Dr. Nick Osborne presented on imaging for complex EVAR. Attendees also heard a case presentation by Dr. Kevin Onofrey, information on aortic graft infections by Dr. Nicolas Mouawad, and EVAR explant tips, tricks, and pitfalls from Dr. Eanas Yassa. The presentations by Drs. Osborne, Mouawad, and Yassa are available on our YouTube channel.

Welcome New VS Coordinator

Alison Strong, BSN, RN
Performance Improvement Coordinator for General and Vascular Surgery Services
Ascension Borgess Hospital

New Website Tips

Our new website is designed to make it easier to find what you're looking for. Did you know you can search BMC2's database of publications by keyword, journal, year, and registry, all the way back to 2002? Try it out at https://bmc2.org/publications-presentations/publications.

Best Practice Protocols for Post-PCI Medical Management and Radiation Safety Now Available

New best practice protocols are now available on BMC2.org. **The Best Practice Protocol for Post-PCI Medical Management** covers antiplatelet and anticoagulant therapy, lipid management, hypertension management, heart failure management, and diabetes management in patients with atherosclerotic cardiovascular disease. It also covers smoking cessation and cardiac rehabilitation. The **BMC2 Best Practices to Enhance Cath Lab Radiation Safety Best Practice Protocol** covers best practices for reducing radiation exposure to patients, physicians, and staff. You can find both protocols on our website under Quality Improvement then Best Practices.

Reducing Post-CEA Hospital Stays Saves Big

The BMC2 VS goal, "Less than 8% of asymptomatic carotid endarterectomy patients NOT discharged by post-operative day 2", results in big costs savings for the healthcare system. In 2017, the collaborative average was 9.8%, and by 2020Q3 was 4.5%, a 54% improvement. Based on 1400 discharges, we estimate an annual reduction of 209 inpatient days per year. This translates to an annual cost savings of $480,000. Thanks for your hard work on this goal!

Upcoming Meetings

VS Coordinator Meeting - June 9th from 10 - 11:30 am. Dr. Ryan Howard of Michigan Medicine will present on smoking cessation, Cynthia Noack from MidMichigan Health, Midland will present a QI project on statin and aspirin at discharge, and Terri Militello of McLaren Bay Region will present a QI project on postoperative EVAR/CEA opioid prescribing. Presentations will be followed by break-out sessions, where we'll have in-depth discussions about each of these QI topics. Website updates will also be presented.

PCI Collaborative Meeting - June 10th from 6 - 8 pm. This meeting will focus on IVUS/OCT and feature national expert Ziad Ali, MD, of St. Francis Hospital and Heart Center. Also look for a review of the new BMC2 IVUS/OCT Best Practice Protocol by Dr. Michael Tucciarone of Beaumont Troy, and case reviews by Dr. Ryan Madder of Spectrum Health.

Cardiac Rehab Meeting – June 30th from 3:30 – 4:30 pm. We are excited to have Srinath Adusumalli, MD, MSc, FACC, speaking about behavioral nudges to affect cardiac rehab utilization. Please share this invitation with anyone who may be interested in attending.

PCI Coordinator Meeting – August 12th, 2021 from 10-11 am. Details coming soon.

Join Us on Social Media

In addition to Twitter and YouTube, you can now follow us on LinkedIn.

Do you have something to share via our newsletter? We want to hear from you! Email Elizabeth Walker at ehorn@umich.edu.

Call for Participation

Patient Engagement at BMC2

BMC2 is looking to incorporate the patient voice into BMC2-PCI activities and we need your help! In the coming months, we'll be creating a patient advisory committee to improve the effectiveness and relevance of PCI quality improvement interventions. Patient representatives will join BMC2 meetings as speakers and discussants, and also join regular advisory council meetings. What we learn may shape our work in the future.

We are seeking 10 patients that represent the diversity of our State. Can you recommend a patient to this group? There is no up-front commitment and patients will be compensated for their time.

We're looking for patients who:

- Have been an active participant in their care
- Ask thoughtful questions during appointments
- Are good listeners
- Would likely be confident to speak among a group of patients

When you approach potential patients, share that we want the Patient Advisory Council to help us improve the quality of care for PCI patients, and that activities may include the following:

- Quarterly teleconference or zoom meetings of the patient advisory council
- Attending BMC2 meetings as speakers/discussants
- Advising on tools to help improve care delivery

Send patient's name and contact info to Annemarie Forrest, avassalo@umich.edu; or Pam Benci, plf@umich.edu

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