Michigan Vascular Study Group Meeting  
Thursday November 10th 2016  
Hotel Baronette, Novi, MI 12:00 – 5:00 PM

Minutes

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nadine Caputo</td>
<td>Director of Quality</td>
<td>SVS/PSO</td>
</tr>
<tr>
<td>Dana Zurawski</td>
<td>RN</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Josie Klapec</td>
<td>Vascular Lab Supervisor</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Betti Kerrigan</td>
<td>VP, M2S</td>
<td>M2S</td>
</tr>
<tr>
<td>Georges Haddad</td>
<td>Physician</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Pritham Reddy</td>
<td>Physician</td>
<td>Providence Hospital</td>
</tr>
<tr>
<td>Kourtney Rudolph</td>
<td>Data Analyst</td>
<td>DMC-Harper Hospital</td>
</tr>
<tr>
<td>Praveen Balraj</td>
<td>Physician</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Christine Swanson</td>
<td>NP</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Loay Kabbani</td>
<td>Physician</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Mike Boros</td>
<td>Physician</td>
<td>Munson Medical Center</td>
</tr>
<tr>
<td>Tamer Boules</td>
<td>Guest Physician</td>
<td>Providence Hospital</td>
</tr>
<tr>
<td>Valerie Gunn</td>
<td>Practice Manager</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Fran Becker</td>
<td>Data Analyst</td>
<td>Beaumont Hospital RO</td>
</tr>
<tr>
<td>Kathy Miedema</td>
<td>Data Analyst</td>
<td>Borgess Medical Center</td>
</tr>
<tr>
<td>Ash Mansour</td>
<td>Physician</td>
<td>Spectrum Health</td>
</tr>
<tr>
<td>Yazen Abazid</td>
<td>Data Manager</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Cheryl Marentetic</td>
<td>Data Analyst</td>
<td>St. Joseph Mercy</td>
</tr>
<tr>
<td>Syed Ahsan</td>
<td>Physician</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Donna Bednarski</td>
<td>Data Analyst</td>
<td>DMC-Harper Hospital</td>
</tr>
<tr>
<td>Nicole Kennedy</td>
<td>Physician</td>
<td>Henry Ford Hospital WB</td>
</tr>
<tr>
<td>Mitchell Weaver</td>
<td>Physician</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Danielle Sutzko</td>
<td>Fellow</td>
<td>UM</td>
</tr>
<tr>
<td>Alex D. Shepard</td>
<td>Medical Director</td>
<td>Henry Ford Hospital</td>
</tr>
<tr>
<td>Peter Henke</td>
<td>Physician</td>
<td>UM</td>
</tr>
<tr>
<td>Cathy Stabler</td>
<td>Data Analyst</td>
<td>UM</td>
</tr>
<tr>
<td>Nick Osborne</td>
<td>Physician</td>
<td>UM</td>
</tr>
<tr>
<td>Erin Jeruzal</td>
<td>Data Manager</td>
<td>UM BMC2</td>
</tr>
<tr>
<td>Amanda Donnelly</td>
<td>Data Analyst</td>
<td>St. Joseph Mercy Ann Arbor</td>
</tr>
<tr>
<td>Paul Bove</td>
<td>Physician</td>
<td>Beaumont RO</td>
</tr>
<tr>
<td>David Adamolekun</td>
<td>Fellow</td>
<td>DMC-Harper Hospital</td>
</tr>
<tr>
<td>Eugene Laveroni</td>
<td>Guest Physician</td>
<td>Beaumont Botsford</td>
</tr>
<tr>
<td>Olan Jareunpoon</td>
<td>Guest Physician</td>
<td>Providence Park</td>
</tr>
<tr>
<td>William Oppat</td>
<td>Guest Physician</td>
<td>Providence Hospital</td>
</tr>
<tr>
<td>Simpledup Barripal</td>
<td>Fellow</td>
<td>DMC-Harper Hospital</td>
</tr>
<tr>
<td>George Akingba</td>
<td>Physician</td>
<td>DMC-Harper Hospital</td>
</tr>
</tbody>
</table>
Lunch & Welcome: Alex Shepard, MD & Peter Henke, MD

BMC2 PCI-VIC Date: Henke

A. General Data
   1. State map depicting all participating hospitals
   2. 39 centers – up from 37
   3. Procedures by year increased, CEA most common
   4. 10,997 vascular surgery discharges
   5. Overall death rate 0.4%, stroke 1.8%, and MI 0.1%
   6. Outcomes to 1 year: neuro deficit varied

B. Open Bypass
   1. AF2 most common inflow
   2. Fem-pop most common out flow
   3. CLI claudication most common indicators
   4. Outcomes:
      a. Death rate 4% higher
      b. MI rates higher than CEA 3.6%
      c. Amputations up 1.5%
      d. Outcomes to 1 year:
      e. Bypass revision 10%
      f. Death 8.5%
      g. Readmission rate 15%

C. AAA
   1. EVAR 76% asymptomatic, 23% symptomatic, 3% rupture
   2. Open AAA 59% asymptomatic 41% symptomatic, 23% ruptured
   3. Urgent, ruptured, leaks death rate 40%
   4. EVAR: death elective <1%
   5. 12% urgent/emergent EVAR
   6. 1 year f/u open subsequent operation 0%
   7. EVAR: conversion to open 0.3%

D. Post Op and Discharges: (all data Q1 and Q2 2016)
1. Any antiplatelet CEA, CAS, Open Bypass: over 95%
2. Statin CEA, CAS, Open Bypass 88% -- goal increased to 85%
3. PO MI: 1.6% -- varies per procedure
4. PO transfusion:
   a. All procedures 20%
   b. Non-emergent 14.5%
   c. Open bypass 27%
   d. Open AAA 33%
   e. EVAR 8%
   f. Overall 14%—symptoms prior to transfusion
5. SSI:
   a. Overall 10%
   b. Elective 9.7%
   c. Urgent/emergent 10.6%
   d. ABX pre op: 98.9%, redosed 88%
   e. 30 day readmission: 13%, Wound 45%
   f. 1 year readmission: 11.6%, Wound 25%

E. Future directions:
   1. BCBS not funding PVI portion, still supporting surgery arm
   2. BMC2 comprised of PCI, Vascular Surgery, TAVR
   3. Q3 PVI reports released 12/12/16
   4. PVI offered voluntarily, no funding for PVI data collection, PVI reports provided to participants, will be no fees
   5. December 2017—survey conducted to determine voluntary participation interest

F. 2017 Goals:
   1. Specific goals:
      a. Statin at d/c ≥ 85%
      b. Any antiplatelet at d/c ≥ 95%
      c. Reduce SSI
         i. Chlorhexidine & alcohol prep ≥ 90%
         ii. Antibiotic re-dosing ≥ 75%
      d. Increase 1 year f/u return to 80%
   2. Plan to initiate a focus on CEA appropriateness
   3. AAA appropriateness plan
   4. CEA plan
   5. CAS plan

G. 2017 Meetings dates:
   1. MVS Meeting, Boyne, MI, May 18, 2017
   2. Vascular Surgery Coordinator Meeting, Lyon Meadows, June 8, 2017
   3. Vascular Surgery Meeting for Coordinators and Physicians, Hotel Baronette, October 14, 2017
   4. MVS VQI meeting, November 9, 2017

National VQI Physician Update: Nadine Caputo

A. 392 centers, over 400 by year end
B. Procedure volume CEA, PVI top procedures
C. Annual meeting to be held May 31, 2017 in San Diego
D. Participation awards: remote attendance will no longer count toward award
E. PVI registry revised, drop down menus enhancements, FDA GUDID (specific device detail enhanced)
F. Vascular Medicine Registry: to be released Q2 2017—1st registry, non-procedure based, PAD, AAA, carotid stenosis
G. QI Project Guide available on M2S portal
H. EMR integration status: local IT staff need to configure VQI note templates, Medstreaming and Mtuitive 2 official certified vendors for Varicose Vein procedure form
I. COPI (Center Opportunity Profile for Improvement) and physician reports: reports releases in 2016 – CEA stroke/death, CAS stroke/death, PVI hematoma
J. Surveillance projects: TEVAR, Lombard, Crest2 Bard stent, TCAR (reimbursable)
K. Regulatory: VQI can provide necessary support, MIPS, APM, PQRS, QCDR

Regional Data Review: Shepard

A. 13 member centers
B. 69 physicians
C. Total procedure volume 9,955
D. % of 2015 procedures submitted with missing data: MVSG = 48%, VQI =49%
E. LTFU 2012: MVSG = 83%, VQI = 68%  2013: MVSG = 68%, VQI = 55%
F. Michigan leading VQI d/c in d/c on antiplatelets and statins
G. Chlorhexidine use and SSI: High and low
H. Infrainguinal bypass complications = 3%, VQI = 4%
I. EVAR: LTFU good, LOS an issue
J. Open AAA LOS ≥ 8 days = 32%, O:E higher than VQI
K. CEA stroke and death reasonable
L. CEA LOS > 1 day higher than VQI average but basically due to one outlier hospital with >55% of patients staying > 1 day
M. CAS stroke and death at VQI mean.
N. MVSG report card:
   1. A+ for prescribing antiplatelet/statin on D/C, CAS stroke/ death, Chlorhexidine for LEB, Major complications after LEB
   2. A for LTFU
   3. A- for reporting EVAR Sac diameter at LTFU
   4. B+ for CEA stroke/death
   5. B for in-hospital infection rate after LEB
   6. B- for Open AAA mortality, CEA LOS >1 day
   7. C for Open AAA LOS >8 days, EVAR LOS >2 days

MVSG Committee Report: Shepard

A. Arterial:
   1. 3 COPI reports: 30day stroke and 1 year mortality after CEA, 30day stroke and 1 year mortality after CAS, Hematoma after PVI
   2. 2 blind surgeon level reports
   3. CEA stroke/death: risk factors: age, HGB, general anesthesia, dysrhythmia, ASA alone (no Plavix)
   4. PVI hematoma: VQI rate: 3.1%, MVSG 3.7% pt factors, technical factors, greatest risk=age >79, no closure device
   5. Cardiac risk calculator [www.qxmd.com](http://www.qxmd.com) free app
6. Current ongoing work AQC: PVI overhaul, CAS updating registry, finalize new Medicine Registry, determining variables per registry that negate the need for LTFU, Data Audits

B. Venous:
   1. IVC Filter Registry—4,740 procedures
   2. Michigan leading Varicose Vein Registry

C. Governing Council Update:
   1. Enhanced analytics and data integration from EMRs
   2. New PSO communications committee
   3. New Medical Director of VQI-PSO

Hemodialysis Access: MVSG Experience: Praveen Balraj, MD, HFHS

   A. AV fistula and AV graft (all data from Henry Ford Health System)
   B. Jan 15-Jun 16: 321 access cases
   C. ASA IV 75% of population, ASA III 25%
   D. 62.5 yrs average age
   E. African American 80% (54% national level)
   F. 97% HTN, 39.8% on insulin, 7% non-insulin meds
   G. 64% already on dialysis on par with national average
   H. 43% have prior AVF or AVG, 33% of national average
   I. Pre op venogram—only on selective pts 6.2%
   J. 99.1% done under regional anesthesia, national 22.8% regional (39.7 local, 39.2 general)
   K. Prosthetic Straight graft 12.5% (11.7% national)
   L. Prosthetic Looped graft 15.6 (7.7% national)
   M. HFH doing more axillary artery access than national average
   N. Basilic vein, axillary vein higher than national average
   O. Anastomosis @ radial artery 15%
   P. Pre op arterial intervention 0% vs 1% national average

Presentations from the Group: Controversies in Dialysis Access

   1. Angioplasty vs stenting of the venous anastomosis of the failing dialysis graft – Yevgni Rits, MD, DMC
   2. The occluded access site: Percutaneous vs open interventions – Pritham Reddy, MD, Providence Hospital

Varicose Veins Procedures: MVSG Experience: Nicole Kennedy, MD, HFHS

   A. Fairly new registry, 2015 first data period, 4 centers involved
   B. Regional 1200+ procedures (44% of national numbers)
   C. National 2200+ procedures
   D. 6-8% average with prior h/o DVT
   E. 20-30% hx of prior Varicose Veins tx
   F. Tx method: RFA, laser, chemical (nearly none), surgery
   G. Post procedure complications <10% minor, low severe complication rate
Presentations from the Group: Varicose Veins

1. Complications of Endovenous ablation – Jennifer Watson, MD, Spectrum Health
2. Varicose Veins: National VQI Experience – Thomas Wakefield, MD U of M

Research Advisory Committee: Regional QI Project Discussion: All

A. Volunteers needed
B. National research projects—titles can be viewed at VQI site
C. National QI Projects
   a. Statin/AP theory
   b. FU imaging after EVAR
   c. Appropriateness of care
D. Regional QI Projection Discussion
   a. Reducing radiation exposure during EVAR
   b. Effect of socioeconomic status on outcome
   c. Reducing LOS after EVAR, CEA, and open AAA repair
   d. Hemodialysis access projects
   e. Varicose Veins projects

Discussion: Group

Starting your own QI project at your location, begin with regional data

Next Meeting: May 18, 2017, Boyne Highlands, Boyne, MI, MVS Meeting, Topic forthcoming

Meeting adjourned

Submitted by Alex Shepard