So Cal VOICe
10th Semi-Annual Meeting
29 April 2016
Torrey Pines Lodge, La Jolla, California

Minutes

Attendees:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Center</th>
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<tr>
<td>Johnny Thomas, MPA</td>
<td>Hospital Manager</td>
<td>Cedars-Sinai</td>
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<tr>
<td>Ahmed Abou-ZamZam, MD</td>
<td>Medical Director</td>
<td>Loma Linda</td>
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<td>Josh Gabel, MD</td>
<td>Physician</td>
<td>Loma Linda</td>
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<td>Wesley Fung, MD</td>
<td>Physician</td>
<td>San Fernando Valley Vascular</td>
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<td>Fuad Rafidi, MD</td>
<td>Physician</td>
<td>San Fernando Valley Vascular</td>
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<td>Katrina Ladd-Reeder, RVT</td>
<td>Hospital Manager</td>
<td>Providence St. Joseph</td>
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<td>Anna Petrovska</td>
<td>Other</td>
<td>Providence St. Joseph</td>
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<tr>
<td>Ankur Chandra, MD</td>
<td>Physician</td>
<td>Scripps Health</td>
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<td>Jodi Hirsch, PA</td>
<td>Hospital Manager</td>
<td>Scripps Health</td>
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<td>Shelley Berthiaume, RN</td>
<td>Hospital Manager</td>
<td>Sharp Grossmont, Chula Vista &amp; Memorial</td>
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<td>Wendy Chiodo, RN</td>
<td>Hospital Manager</td>
<td>Sharp Grossmont</td>
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<td>Karen Heaney, RN</td>
<td>Hospital Manager</td>
<td>Sharp Grossmont</td>
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<td>Vincent Guzzetta, MD</td>
<td>Physician</td>
<td>Sharp Grossmont</td>
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<td>Curtis Horton, MD</td>
<td>Physician</td>
<td>Sharp Memorial</td>
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<td>Carol Psahoulias, BSN</td>
<td>Hospital Manager</td>
<td>Sharp Memorial</td>
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<td>Jessica O’Connell, MD</td>
<td>Physician</td>
<td>UCLA</td>
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<td>Carlos Pineda</td>
<td>Physician</td>
<td>Harbor-UCLA</td>
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<td>Jesus Ulloa, MD</td>
<td>Physician</td>
<td>UCLA</td>
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<td>Karen Woo, MD</td>
<td>Physician</td>
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<td>Dennis Bandyk, MD</td>
<td>Physician</td>
<td>USC</td>
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<td>Stephen Lee, MD</td>
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<td>Fred Weaver, MD</td>
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<td>Monica Wong, MD</td>
<td>Physician</td>
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<td>Laura Sjoberg, NP</td>
<td>Other</td>
<td>USC</td>
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<tr>
<td>Carrie Bosela</td>
<td>Administrative Director</td>
<td>SVS PSO</td>
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Meeting called to order at 10:00 am

Dr. Abou-Zamzam Overview: Welcome and introduction of attendees.

**Welcome/overview** (Ahmed Abou-Zamzam)

Welcome and introduction of all attendees.

**Regional Update** (Ahmed Abou-Zamzam)

A list of participating centers was presented. The group at UC Irvine has now obtained approval and should be enrolled by the next meeting. Members were encouraged to approach small-group practices they may interact with to enroll.

The data on the numbers of cases within the VOICe registry were presented. The numbers have been steadily growing but we do not wish to see a plateau. Currently there are over 4750 cases with the majority being PVI (2067) and CEA (1110).

**Data Review** (Karen Woo)

Regional Quality Reports showing all study groups and VQI averages were presented: Skin Prep for IB; % perc PVI using u/s; CEA LOS>1 day; CAS comp; Open AAA, LOS, comp, LOS; EVAR LOS > 2 days; PVI: Percent of Patients with ABI or TBI Assessed Before Procedure; Comps following IB; EVAR: Rate of Sac Diameter Reporting at Long-Term Follow Up TEVAR: Rate of Sac Diameter Reporting at Long-Term Follow Up CEA LOS > 1 day; HD access AVF vs AVG; IVC filter retrieval; Vein procedures with complete data; CAS stroke/death.

DISCUSSION: What members liked and wished to see in the future. This will be added to the post-meeting survey. What members no longer felt useful - generally felt that prep is not helpful; What members wanted to see added – PVI access site complications; perhaps linking complications with access-guidance; complications following IB for claudication. These may be added to future COPI reports

**Missing Data** (Karen Woo)

A review of the data entered over a five month period was given. In CEA, 9-21% of the duplex entries were missing; in EVAR, 26-31% of the neck angle information was missing; in Supra, 33% were missing ipsi ABI; HBA1C was missing in 32% of DM in IB; 29% of PVI were missing ABI.

A discussion was held as far as opportunity for improvement. Some discussion on the issues with aortic neck and angles were discussed. Options for making mandatory fields in operative reports were discussed. The observation was that patient/OR-specific data should be placed somewhere in the records if the surgeon is not entering the data directly into the VQI.
Many of these fields are being actively reviewed and revised registry-by-registry by the ACQ and registry study groups.

**Medications: Antiplatelets and Statins** (Karen Woo)

Dr. Woo reviewed data on the use of antiplatelets and statins that has been gathered by Dr. DeMartino from the VQI registry. The data demonstrate an improvement in the use of statins over time. There is a clear survival benefit with the use of these medications. In a recent paper Dr. DeMartino and colleagues demonstrated that medical management was improved by VQI participation and thus involvement in an organized quality effort can affect patient outcomes.

Dr. Woo then presented our center-blinded data on antiplatelet and statin use in patients undergoing CEA, PVI, and LEB in the VOICe. Data were shown demonstrating the change in compliance over time. The trends are generally positive.

Dr. Woo reviewed the algorithm developed at USC for the initiation of statin therapy.

**Update on atherectomy**

1492 procedures; variations in use by center

LTFU 26%; reviewed patency – primary 56%; primary assisted 28%; outcomes data – ambulation and symptoms also presented

**Long Term follow Up VQI** Best Practice -Carrie Bosela

The data were presented for the LTFU. Overall the VOICe is below average within the VQI – about 42% with national average of 62%. The data were presented in graphic form.

There was a discussion over whether we wanted to de-identify the data on center LTFU at our meetings. This will be addressed in the post-meeting survey. There may be some recommendations forthcoming on the national level.

Discussed tools available on VQI website; participation awards. As an incentive can consider linking LTFU to credentialing and evaluations. On line you can run reports and give to VQI members;

**HIGH PERFORMERS: LTFU** Presentation by Sharp Grossmont (Karen Heeney)

Outlined the methods used to optimize long term follow up. Can search SSDI and Medicare data. Spend time searching within system for other follow ups.

Review records at 9 month time point to determine who is due; ensure appointments made at time of procedures; can use other follow ups within the system to collect data and phone follow-up.
Emphasized the need for a physician champion for success of LTFU. Overall, the keys are to make follow up a priority and to devote some resources to ensure good follow up.

**Data Analysis – Impact of Hospital encounter versus procedure level data** Sharp Grossmont (Shelley Berthiaume)

Presented an analysis looking at various outcomes, primarily mortality and compliance with medication usage. Analyzed the differences that may result when analysis is per-patient versus per-procedure data. In their own system, the group found that the procedure-based analysis overestimates mortality while it under-estimates the true compliance with medications when the per-patient data are considered the “gold standard.”

The discussion highlighted that this has significant implications for analysis of the data within the entire VQI.

**Performance improvement – discharge medications** Sharp Grossmont

Reviewed the methods used at Grossmont for medication compliance. Education and attention to details are key.

12:00 Lunch

**Pre-op cardiac testing** (Karen Woo)

Reviewed data available in the registries – all modules have stress test field; some modules also ask for EF. Data shown on EF and stress tests for elective procedures in VOICe regional data; marked majority of examinations are normal. Some data presented for post op MI; majority have normal stress tests.

Variation in stress test by center in CEA, IB, pvi, evar, tevar shown – wide variation noted

**Guidelines** (Jesus Ulloa)

A review of the current ACC/AHA guidelines for preoperative cardiac testing were presented. In summary, there is a limited but defined role for preoperative cardiac testing in the vascular patient.

**Survey Results** (Jesus Ulloa)

Reviewed results of survey circulated to members of the VOICe last month regarding preoperative cardiac testing. In summary: a fair proportion (55%) of participants feel that stress tests are over-utilized and do not provide important information; nearly 50% felt that cardiac evaluation delayed cases, and all felt that the evaluation rarely (84%) or never (16%) altered the operative plan. Most respondents (>60%) felt that the anesthesia service was the driver for testing; the reason for testing was primarily risk stratification (58%); results per procedure were reviewed.

**Smoking Habits** (Joshua Gabel and Ahmed Abou-Zamzam)
Smoking Patterns in patients undergoing treatment for claudication in the VQI (Joshua Gabel)

Data from an ongoing project evaluating smoking habits in patients being treated for intermittent claudication in the VQI was presented. There is wide variation in smoking behaviors by center in patients being treated for intermittent claudication. Overall, 44% of patient treated for IC are active smokers. Patients who were active smokers at the time of treatment tended to be younger, had fewer comorbidities, and had supra-inguinal disease. There was no difference in smoking rates in patients undergoing open versus endovascular interventions.

Preliminary data from the VOICe demonstrate that smoking rates vary widely by center – 22%-55% - in patients undergoing procedures for claudication are active smokers. Supra-inguinal disease has the highest proportion of active smokers.

For those patients with long-term follow up, 47% have quit smoking. The smoking cessation rates vary widely by center and range from 10-72%. In the VOICe nearly 36% of patients receiving treatment for claudication are smokers.

Smoking Cessation interventions (Ahmed Abou-Zamzam)

Dr. Abou-Zamzam presented some data from the VOICe showing the wide variation of active smoking rates in the registries – CEA 18%, PVI 26%, Supra-inguinal 52%), and variation by center – 11% to 35%.

Smoking cessation during follow up was seen in 55% of active smokers. More invasive procedures had a higher rate of smoking cessation – open AAA 64%, CAS 19%

Dr. Abou-Zamzam provided a background talk on the influence of smoking on vascular disease and some work that has been done through the VQI to identify smoking patterns and smoking cessation rates. The ongoing VAPOR trial was discussed which grew out of a QI project in a regional study group.

Discussion of strategies: interventions as simple as asking and advising the patient. Centers encouraged to seek out the best local programs to optimize resource utilization. (In the member survey 40% of sites have a smoking cessation program.) Flyers available online (nobutts.org) to help patients quit.

ACA Update

Dr. Karen Woo presented an in-depth account of various ongoing national quality and performance measures. These will all tie in to outcomes-based reimbursements proposed for the coming years. VQI participation can be of benefit in small practices as a qualifying entity for participation in programs which will become mandatory and linked to reimbursements in the future.
Dr. Woo gave an extensive outline of MACRA – the Medicare Access & CHIP Reauthorization Act of 2015. This makes three important changes to how Medicare pays providers: 1) This will end the sustainable growth rate formula (SGR); 2) Makes a new framework for rewarding health care providers for giving better care not just more care; and 3) Combines existing quality reporting programs into one new system. How this happens and is monitored is quite complex and will involve merit-based incentives (eventually penalties) and alternative payment models. Merit-based incentives will combine parts of PQRS, the Value-based Payment Modifier and the Medicare Electronic Health Record incentive programs. The Alternative Payment Models will involve aspects such as lump-sum incentives, increased transparencies, Accountable Care Organizations, Patient Centered Medical Homes and bundled payment models.

Discussion of the VQI as a Qualified Clinical Data Registry (QDCR). This may help centers meet measures of reporting.

This was meant as informational.

2:30 Coffee Break

**Data Managers Update**  Shelley Berthiaume

Ms. Berthiaume presented updates from the data managers’ bi-monthly webinars. There is also a quarterly National-Regional data manager’s call. Several topics have come up that have been relayed to the national VQI managers. The minutes of these meeting have been posted to the VOICe website.

There has been a request for reports on readmissions. There has been an ongoing discussion on the database providing patient-level data not simply procedure-level data. There has been an identified need to make the COPI reports automatic and available to all participants at a site. There is also a concern of repetitive efforts for the data managers to run reports separately for each participating center and not being able to do a batch report for all their centers. Also a discussion of the need to adapt the CEA and CAS modules to accommodate the Stroke Center requirements.

**National VQI update**  (Carrie Bosela)

Reviewed the information from the SVS VQI. There are 17 regional study groups. Overall 379 centers in 46 states + Ontario, Canada. Overall there are now over 285,000 procedures captured. The VQI 1st annual meeting will be at the VAM on June 8, 2016.

**Medicine registry update:** To include PAD, carotid stenosis and AAA. Releases in 3rd or 4th quarter 2016.
**Planned Center Opportunity Profile for Improvement (COPI) Reports:** 2016 planned reports: CEA Stroke/Death; CAS Stroke/Death; Long term imaging after EVAR; Major complications after oAAA; PVI Hematoma; Amputation free survival after Infra/Supra.

**Cost Pilot: MedAssets** – 17 site participating in pilot to understand the economics of vascular procedures; combining hospital cost data (MedAssets) with clinical data (VQI).

**EPIC update:** There is an ongoing effort to integrate the VQI and EPIC. Dr Stoner at Rochester is building a CEA form that should be ready this year.

**Regulatory Issues:** Meaningful use – the VQI can meet use of specialized registry only if members subscribe and use “data import.”

**Pathways development Update:** There is a new functionality coming to the analytics allowing easier center reports.

**2016 Projects:** New PVI procedure and follow up forms; concomitant procedure features with infra and supra; device data integration; QCDR and PQRS measure updates for outcomes; Add IDE devices on EVAR and TEVAR registries.

**Cost Pilot Project for EVAR** – This is being developed to allow for cost comparisons and analyses and potentially aid in value-based decisions. More information will be coming in the new year.

**Post-approval studies:** Sites can still sign up for three studies involving TEVAR (dissection: Medtronic and Gore; 1 year still enrolling, five year closed), EVAR (Aorfix), and CREST 2 registry for CAS.

**Arterial Quality Council Update:** (Karen Woo)

Role: participation in AQC calls; yearly report with identification of OFIs. Evaluation of PQRS/QCDR measures; generation of risk calculators and yearly updates of models

Statistical audits – piloted with oAAA. Looked at post-op MI rate in high risk patients and audited low reporters.

National QI projects: Statin/AP therapy; Follow up imaging after EVAR; Appropriateness of Care

A brief presentation of the venous registry was given. The IVC registry now has over 4700 procedures with 56 participating centers.

Current workgroup developing an IVC retrieval reminder report/email notification

CMS quality measure: appropriate management of retrievable IVC filters.
Varicose vein registry – 3456 procedures; includes QOL. Recent presentation at AVF – “The VQI VVR provides complete assessment of varicose vein interventions, and is useful for monitoring changes after treatment. Modern day varicose vein surgery is characterized by predominately endovenous treatment of axial vein reflux, phlebectomy of clusters, and dramatic improvements in both VCSS and patient reported outcomes.

**Governing Council Update** (Ahmed Abou-Zamzam)

Dr. Goodney provided an overview of the Audit Subcommittee’s efforts to link patients in the VQI to their respective Medicare claims for long-terms outcomes such as stroke, amputation, need for further procedures, and overall survival. In the near future, VQI participants will be able to link to clinical claims datasets as an ongoing mechanism for long-term effectiveness evaluation.

Dr. Kraiss provided an overview of the strategic goals that Executive Committee has set for the next year, which include: Stimulating quality improvement projects; Maximizing the value of the VQI for key groups (including COPI reports and other registry reports); Strengthening collaborations with external stakeholders and disseminating findings to a wider audience; Enhancing registry effectiveness; Increasing VQI membership and engagement through the regional quality groups; Fostering industry relationships; Increasing operational efficiencies

**Research Advisory Council (RAC) Update** (Ankur Chandra)

National and Regional news: The approved project list is now online at [http://www.vascularqualityinitiative.org/wp-content/uploads/VQI_Approved_Projects_List-12.18.15.pdf](http://www.vascularqualityinitiative.org/wp-content/uploads/VQI_Approved_Projects_List-12.18.15.pdf)

There is a new portal for submission of projects to the RAC: [http://abstracts123.com/svs1/](http://abstracts123.com/svs1/). This will simplify the process and allow easy tracking of the applications.

**Wrap-up** (Ahmed Abou-Zamzam)

A round table discussion was held for the last part of the meeting.

Several topics were again raised – soliciting more member involvement is the key to continued success of the study group.

The members present were asked about their goals and ideas for future meetings; specifically what format they wished to have at the meetings. Initial feedback was positive for beginning with the regional data and finishing with national information.

The presentations by high performers was well-received.

There was a proposal to have invited speakers. For the spring meeting inviting the speakers from the SCVSS meeting.
Have more presentations from our group looking at the regional data.

Inviting presentations from members participating in national projects.

An extensive post-meeting survey will be sent out.

A solicitation for hosting the fall meeting was made. The group from USC has offered to host the meeting at USC on November 4, 2016.

4:00 Adjourn