

Vascular Quality Initiative®

Year in Review

Since June 2016, VQI has added 57 centers and now comprises 416 centers and over 3,000 physicians. More than 373,000 procedures are recorded in its 12 clinical registries, and development continues on the new Vascular Medicine Registry. In addition to its continued growth, VQI increased both the breadth and depth of quality improvement activities.

FOCUS ON MEMBER EDUCATION AND

OUTREACH. The SVS PSO in conjunction with M2S has introduced new quality improvement publications and expanded member outreach through monthly webinars, the new VQI Annual Meeting, the QI Project Guide and the development of a Members' Only section of the VQI website. (See page 2). A Communications Committee has been formed to keep the membership informed of VQI activities and possibilities for engagement.

VQI PARTICIPATION AWARD. This award recognizes the importance of active participation through long term follow up, attendance at meetings and QI activities as a critical component of the SVS PSO quality improvement mission. Participation Awards are based on degree of involvement and patient follow up and are meant to encourage improved engagement. The median long-term follow-up rate for centers qualifying for a 2016 VQI Participation Award increased from 58% the previous year to 64%, a 10% improvement in this key metric. The 202 sites that received one or more stars are listed on the VQI website alphabetically by center name. ([Click here](#) to view listing).

QUALITY IMPROVEMENT REPORTS. This year, the SVS PSO developed three new Center Opportunity Profile for Improvement (COPI) reports and three physician-level reports focusing on aspects of CEA, CAS and PVI procedures. In addition, five new parameters were added to the semi-annual regional reports. Ongoing tracking is in place for surgical site infection rates. A comprehensive data audit is in progress and has so far shown that only 5.9% of VQI variables were subject to data inaccuracies and this resulted in discrepancies in only 0.4% of individual data points in the registries. It is important to note that none of these errors impacted any key outcome variables or clinical findings.

NATIONAL RESEARCH PROJECTS. During the current period, 47 new research projects were presented by 72 unique investigators, and 40 VQI publications and presentations were completed in the year. Since 2011, 128 VQI national research projects have been initiated by the VQI in total, plus 145 regional projects.

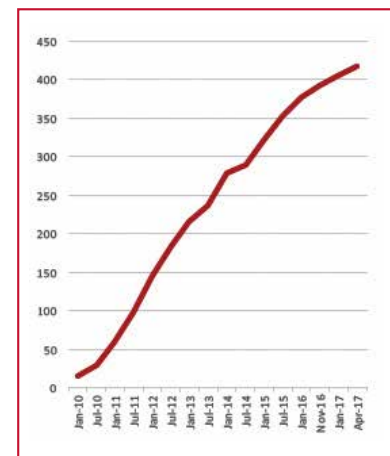
ONGOING REGISTRY DEVELOPMENT. The SVS PSO, the Society for Vascular Medicine and M2S are working together on the Vascular Medicine Registry to help evaluate the treatment and outcomes of patients with carotid, AAA and lower extremity arterial disease who are managed medically. The registry is planned to launch in Q4 2017, and will enable outcomes comparisons with surgical registries. A Vascular Stenting Registry is also under consideration to be operational in 2018.

SVS PSO COMMITTEE CHAIRS AND REGIONAL LEADERS: Changes in committee and regional quality leadership have taken place. The Regional Quality Groups meet semi-annually and have robust

programs for quality improvement projects. The registry chairs continue to address the needs of the membership and continue consideration of upgrades to the registry data collection forms. The quality committees support ongoing quality improvement initiatives at the local, regional and national level. The Communications Committee will be responsible for keeping the membership updated with recent developments.

STRATEGIC FOCUS. The SVS PSO has identified four areas of strategic import: national QI initiatives, VQI data integrity, the significance of MIPS/MACRA, and collaboration with the SVS and the Clinical Practice Committee on clinical indications.

GROWTH IN PARTICIPATING CENTERS



Current Quality Initiatives

Quality improvement projects are initiated by committees or the membership and promoted at Regional Quality Groups and nationally. Examples include:

NEW NATIONAL QI INITIATIVE FOR DISCHARGE MEDICATIONS. VQI data showed that patients who had undergone vascular operations and are discharged on an aspirin and statin have improved survival at 5 years compared to not being discharged on these medications. This initiative reminds vascular surgeons to prescribe anti-platelet agents and statins to appropriate patients to improve their long-term outcomes, and is led by Randall R. DeMartino, MD, a Mayo Clinic vascular surgeon and co-chair of the Vascular Medicine Registry. VQI adopted this as a national QI project, and provides physicians and centers with regular feedback as well as tools such as guidelines for patient communication to primary care physicians

to increase the number of patients on these medications. For more, [click here](#) to see the current QI initiatives.

NEW NATIONAL QI INITIATIVE FOR LONG TERM FOLLOW UP FOR EVAR. It is critical that patients who undergo endovascular aneurysm repair (EVAR) have follow up including imaging annually. This initiative promotes follow up imaging at one year for EVAR patients, and is led by Salvatore Scali, MD, a University of Florida vascular surgeon and Chair of the EVAR Registry. The imaging (MRI, CT or duplex scan) at one year helps surgeons assess aneurysm status and potential for rupture. Follow up can often be improved by simple process measures including physician, staff and patient education. For more, [click here](#) to see the EVAR LTFU webinar.

ONGOING TRACKING FOR REDUCTION IN LOS. VQI regional benchmark reports showed wide variation in LOS for major vascular procedures. Hospitals in several regional groups identified potential causes, many of which can be controlled by the provider. Regional Quality Groups brainstormed solutions including developing

clinical pathways and standardized order sets. Patient and staff education are important as well as setting discharge expectations during pre-surgical visits. Several VQI centers have adopted the use of Enhance Recovery protocols to improve care and reduce LOS, and the VQI is working with these centers to share best practices.

IMPROVING APPROPRIATENESS OF CARE. Treatment of vascular disease, including both arterial and venous pathology, is subject to wide variation which may result in widely disparate outcomes. In an effort to address population health, a Clinical Indications Committee has been formed to evaluate clinical indications and promote a more standardized approach to care of the vascular patient. Using VQI data and expertise, the Clinical Indications Committee will work closely with the SVS Clinical Practice Council to incorporate evidence based practices. The membership of the Clinical Indications Committee includes experts on both arterial and venous disease with representatives from both academic and community practice.

QI Events and Educational Outreach

In the past year, the expansion of quality improvement events and materials for the VQI was designed to bring together a greater understanding of registry data and data-driven vascular best practices for all members. The sharing of VQI best practices helps to complete the QI cycle of data collection, analysis of results, improvements in process and outcomes, and sharing of both methodology and results with peers.

VQI ANNUAL MEETING. The inaugural VQI@VAM event brought together nearly 200 health professionals for a day of registry-based presentations, key note sessions from external QI experts, and case studies from VQI centers and regional quality groups. The meeting also provided a forum for discussion of quality research and brought regions together. The 2017 meeting has been expanded to include an additional half day on complex registry issues and a poster reception. Attendees will have an opportunity for discussion of complex registry data issues and case studies, and the event is intended to demonstrate the value of VQI data to key decision-makers. ([Click here](#) to view details online.)

QI PROJECT GUIDE. This guide defines the key steps needed to complete a data-driven QI project, describes some of the QI tools available and provides guidance on how VQI reports and VQI center case studies can be used. The guide was distributed at the VQI@VAM 2016 event and is available online. It will be updated with case studies, tools and best practice on an ongoing basis and made available to all VQI members.

WEBINAR SERIES. The SVS VQI held six webinars on topics that alternated between specific registry data collection and QI best practices. Each was attended by up to 150 health professionals. Topics included the impact of MIPS and MACRA, long term follow-up for EVAR, and updates to the PVI and CAS Registries.

MEMBERS ONLY WEB RESOURCES. The SVS PSO has created a new Members Only area within the VQI website for quality improvement project content, videos, and case studies. This area includes a National Shared Area for PSO presentations and videos, a Regional Shared Area for regional quality research and presentations, and Members' Forums for discussion of quality improvement topics. The development of this area was designed to support data managers and physicians and encourage sharing of best practice content among all members. User information, credentials and instructions were sent to members in April 2017.

Technology Improvements through M2S

CAS REVISIONS. The CAS Registry was updated in November 2016 to streamline data entry, include all device types, and align with the Carotid Endarterectomy (CEA) Registry. This registry allows users to meet CMS carotid stent center certification requirements.

NEW PROCEDURE CLONE FEATURE. A feature to pre-populate (clone) data from a similar prior procedure was released for the PVI Registry in early 2017. This new functionality populates a new PVI procedure with relevant data from an existing PVI procedure to reduce the time and effort required for data entry. This time saving and user friendly feature will be applied to other registries in the future.

EMR DATA INTEGRATION. M2S continues to work with EMR vendors to automatically populate VQI registries when VQI data elements are available in the EMR, in order to streamline data collection. Data integration for the Varicose Vein Registry has been accomplished for

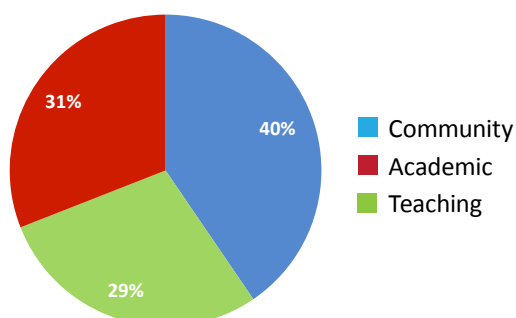
the Medstreaming Vascular Information System, and is underway for the PVI Registry.

VQI 2017 QCDR and MIPS. CMS has approved M2S to be a Qualified Clinical Data Registry (QCDR) for 2017. M2S submitted nine potential new measures for 2017 to augment existing measures in order to allow VQI members more flexibility in MIPS reporting. Enrollment for 2017 is pending awaiting approval from CMS for the 2017 Quality Measures.

BLINDED DATA SET REVIEW AND UPDATE. During the past year, M2S and the SVS PSO have conducted an extensive audit to assure accuracy of de-identified datasets for research. This has resulted in automation and standardization of the methods used to create the datasets as well as additional quality assurance processes in an effort to insure uniformity and accuracy. In addition, help text specific for investigators has been added. This large project involving each registry sequentially is scheduled for completion in June, 2017.

VQI Member Characteristics

TYPES OF PARTICIPATING HOSPITALS



18 REGIONAL QUALITY GROUPS NOW INCLUDING THE CANADIAN VASCULAR QUALITY INITIATIVE



VQI Activity with External Stakeholders

MEDICAL DEVICE MANUFACTURER POST-APPROVAL SURVEILLANCE PROJECTS

BARD LIFESTENT® POPLITEAL ARTERY STENT PROJECT. New clinical project designed to further evaluate the Bard LifeStent® for treatment of popliteal artery atherosclerosis. The surveillance project will enroll 74 patients and include one-year and two-year follow up.

MEDTRONIC IN.PACT ADMIRAL DCB ISR PROJECT. New clinical project designed to confirm that IN.PACT Admiral DCBs are safe and effective for treatment of ISR lesions in the superficial femoral and popliteal arteries. This project will enroll 300 patients across 50 sites for one-, two- and three-year follow-up.

TEVAR. This project, initiated in October 2014, has demonstrated the value of expanding surveillance to real world device performance while meeting FDA requirements, and with faster patient enrollment compared to traditional study methodology. In partnership with Gore and Medtronic, the SVS PSO and M2S completed enrollment of the five-year cohort with annual follow ups continuing for five years, and the one-year cohort has enrolled 176 of the 200 required patients.

TRANSCAROTID REVASCLARIZATION SURVEILLANCE PROJECT. This project will enroll >5,000 subjects with one-year follow up to obtain more data about real-world outcomes of trans-carotid artery revascularization (TCAR) in comparison with CEA as performed by VQI centers. In September, 2016, CMS approved reimbursement for physicians and centers that perform TCAR procedures on both symptomatic and asymptomatic medical high-risk patients, provided that those procedures and follow-up are entered into the VQI CAS Registry. The SVS PSO Steering Committee will complete periodic data analyses. Publication of data collected in this project will help inform future CMS CAS coverage decisions.

CREST-2 REGISTRY. This randomized controlled clinical trial compares CEA and CAS to the best medical therapy. Investigators must report their carotid artery stent procedures to be qualified for this trial and then report non-randomized procedures during the trial. This year, more than 90 interventionists used VQI to report more than 800 CAS procedures for the CREST-2 Registry project.

QUALITY CHAMPIONS



QUALITY PARTNERS



FDA—MEDICAL DEVICE EPIDEMIOLOGY NETWORK (MDEPINET) PROJECTS

REGISTRY ASSESSMENT OF PERIPHERAL INTERVENTIONAL DEVICES (RAPID).

VQI is an active participant in RAPID, which has developed a minimum core dataset for total product life cycle device evaluation across multiple data sources. In Phase 2, VQI will contribute prospective data about SFA-popliteal artery treatment to create objective performance criteria, allow for potential indication expansion, and evaluation of specific devices.

INTERNATIONAL CONSORTIUM OF VASCULAR REGISTRIES (ICVR). VQI and 11 other national vascular registries from Europe and Australasia combined data to analyze variation in treatment of carotid and aortic aneurysm disease across countries, with an emphasis on open vs. endovascular treatment. Variations in patient selection and treatment were reported across countries and across centers within countries in two publications from ICVR this year. Future projects will analyze PVI outcomes, and prospectively evaluate EVAR treatment and devices used for elective and ruptured AAA.

MACRA and MIPS for VQI Providers

The MIPS program under MACRA can be used by VQI physicians to enhance reimbursement and improve vascular patient care with robust measures based on quality performance. Although reimbursement will not be affected until 2019, it will be based on 2017 activities. It will be important for affected physicians to select and submit data in 2017 for up to six out of 300 quality measures to qualify for payments in 2019.

MIPS is designed to support a combination of quality improvement Activities and Advancing Care elements available to any vascular care provider. Incentives are available for submission of specific information, and the impact will be up to 4% of member's applicable Medicare billing in 2019, based on 2017 submissions, with increasing impact going forward. An increasing rate of negative reimbursements will be imposed beginning in 2019 for non-submission of required data.

MACRA replaced three Medicare reporting programs (Medicare Meaningful Use, the Physician Quality Reporting System, and the Value-Based Payment Modifier) with MIPS. MACRA defined four performance categories for MIPS—all relating to quality and value of patient care.

MAXIMIZE MIPS COMPOSITE SCORE USING THE VQI

Many data and quality improvement activities that are the foundation of the SVS PSO and VQI will fulfill several elements of MIPS. Participation in the VQI can help individual providers to improve scoring under MIPS through:

- Utilization of VQI data to understand provider and practice variation for quality improvement
- Evaluation of performance against regional and national benchmarks
- Identification of quality improvement projects for VQI centers
- Access to national blinded datasets to investigate specific questions

Please note that the SVS PSO cannot publicly report data; however, M2S can submit data as a QCDR on the behalf of VQI physicians on request.

415+ PARTICIPATING VQI CENTERS AND HEALTH SYSTEMS BY STATE

Providence Alaska Medical Center (AK)	Redmond Regional Medical Center (GA)	University of Michigan (MI)	Strong Mem. Hospital, University of	Memorial Hermann Heart & Vascular
University of Alabama (AL)	Tift Regional Medical Center (GA)	Vascular Institute of Michigan (MI)	Rochester Medical Center (NY)	Institute-Texas Medical Center (TX)
Carondelet Specialists Group (AZ)	Iowa Heart Center at Mercy Medical	Allina-Abbott Northwestern Hospital (MN)	SUNY Upstate-University Hospital	Memorial Hermann Katy Hospital (TX)
Mayo Clinic Arizona (AZ)	Center (IA)	Allina-Mercy Hospital (MN)	Medical Center (NY)	Memorial Hermann Memorial City
University of Arizona Medical Center—	UnityPoint Health-Des Moines (IA)	Allina-United Hospital (MN)	Westchester Medical Center (NY)	Med Center (TX)
University Campus (AZ)	St. Luke's Healthcare-St. Luke's	Allina-Unity Hospital (MN)	Aultman Hospital (OH)	Memorial Hermann Northeast Hospital (TX)
Tucson Medical Center (AZ)	Regional Med Ctr (ID)	Fairview-Southdale Hospital (MN)	Cleveland Clinic, Heart and Vascular	Memorial Hermann Southeast Hospital (TX)
Western Vascular Institute (AZ)	Carle Foundation Hospital (IL)	Fairview-University of Minnesota	Institute (OH)	Memorial Hermann Southwest Hospital (TX)
Cedars-Sinai Medical Center (CA)	Gilvdis Vein Clinic (IL)	Medical Center (MN)	Lake Health-West Medical Center (OH)	Memorial Hermann The Woodlands
Dignity Health (Sequoia Hospital) (CA)	NorthShore Univ. Health-NorthShore	Mayo Clinic (MN)	Mercy Medical Center (OH)	Hospital (TX)
El Camino Hospital (CA)	Skokie Hospital (IL)	St. Luke's Hospital (MN)	Mount Carmel St. Ann's Hosp (OH)	Peripheral Vascular Associates (TX)
Hoag Memorial Hospital Presbyterian (CA)	Northwestern Medicine Central	Barnes Jewish Hospital (MO)	Mount Carmel East Hospital (OH)	Russell C. Lam MD PA (TX)
Loma Linda University Medical Center (CA)	DuPage Hospital (IL)	Columbia Surgical Services, Inc. (MO)	Mount Carmel West Hospital (OH)	Scott & White Memorial Hospital (TX)
Marin General Hospital (CA)	Northwestern Memorial Hospital (IL)	Mercy Hospital Springfield (MO)	OhioHealth Doctors Hospital (OH)	South Texas Vascular Center (TX)
Palo Alto Medical Foundation (CA)	OSF-Saint Anthony Medical Center (IL)	Mercy Hospital St. Louis (MO)	OhioHealth Dublin Methodist Hospital (OH)	Texas Health Presbyterian Hospital Dallas (TX)
Providence Holy Cross Medical Center (CA)	OSF-Saint Francis Medical Center (IL)	Saint Luke's Hospital of Kansas City (MO)	OhioHealth Grady Memorial Hospital (OH)	The University of Texas Southwestern
Providence Little Company of Mary,	OSF-St. Joseph Medical Center (IL)	SSM DePaul Health Center (MO)	OhioHealth Grant Medical Center (OH)	Medical Center (TX)
Torrance (CA)	SIU School of Medicine, Memorial	SSM Health St. Louis University Hospital (MO)	OhioHealth Mansfield Hospital (OH)	University of Texas Health Science Center,
Providence Saint Joseph Medical Center (CA)	Medical Center (IL)	SSM St. Clare Health Center (MO)	OhioHealth Marion General Hospital (OH)	San Antonio (TX)
Providence Tarzana Medical Center (CA)	St. Mary's Hospital-Decatur (IL)	SSM St. Joseph Health Center (MO)	OhioHealth Riverside Methodist Hospital (OH)	University of Texas MD Anderson Center (TX)
San Fernando Valley Vascular Group (CA)	University of Chicago Medical Center (IL)	SSM St. Mary's Health Center (MO)	ProMedica Toledo Hospital,	Vanguard Vascular & Vein (TX)
Scripps Green Hospital (Scripps Health) (CA)	Weiss Memorial Hospital (IL)	St. Anthony's Medical Center (MO)	Jobst Vascular (OH)	University of Utah Hospital and Clinics (UT)
Sharp Grossmont Hospital (CA)	Beacon Health Clinic (IN)	St. Luke's Hospital (MO)	Summa Health System (OH)	Augusta Health (VA)
Sharp Memorial Hospital (CA)	Community Hospital East (IN)	University of Missouri Medical Center (MO)	The MetroHealth System (OH)	Carilion Roanoke Memorial Hospital (VA)
St. John's Health Center (Providence) (CA)	Community Hospital Heart & Vascular (IN)	Anderson Regional Medical Center (MS)	The Ohio State University,	Centra Health (Lynchburg General
Stanford Hospital & Clinics (CA)	Community Hospital South (IN)	Rush Foundation Hospital (MS)	Wexner Medical Center (OH)	Hospital) (VA)
UC Davis Health System (CA)	Elkhart General Hospital (IN)	The Practice of John F. Lucas III, M.D. (MS)	University Hospitals Health System (OH)	Charlottesville Radiology LTD & CRL
UCLA-Harbor Medical Center,	IU Health-Arnett Hospital (IN)	University of Mississippi Medical Center (MS)	Wright State Physician Group (OH)	Surgical (VA)
Los Angeles County (CA)	IU Health-Ball Memorial Hospital (IN)	St. Patrick Hospital (Providence) (MT)	Inovia Vein Specialty Center (OR)	CJW Medical-Chippenham Hospital (VA)
UCLA-Ronald Reagan Medical Center (CA)	IU Health-Bloomington Hospital (IN)	St. Vincent Healthcare (MT)	Oregon Health & Sciences University (OR)	CJW Medical-Johnston-Willis Hospital (VA)
UCSD Medical Center (CA)	IU Health-Goshen Hospital (IN)	Alamance Regional Medical Center (NC)	Providence Medford Medical Center (OR)	Inova Alexandria Hospital (VA)
UCSF Medical Center (CA)	IU Health-Methodist Hospital (IN)	Carolinas Healthcare-Pineville (NC)	Providence Portland Medical Center (OR)	Inova Fair Oaks Hospital (VA)
USC University Hospital-Keck Hospital (CA)	IU Health-Saxony Hospital (IN)	Carolinas H/care Sys-Sanger Heart &	Providence St. Vincent Medical Center (OR)	Inova Fairfax Hospital (VA)
Washington Hospital Health System (CA)	Lutheran Hospital of Indiana	Vascular Institute (NC)	Abington Memorial Hospital (PA)	Inova Gainesville Hospital (VA)
CISSSO (Canada)	(IOM Health System) (IN)	Cone Health Heart & Vascular Center (NC)	Allegheny Clinic Vascular Surgery (PA)	Inova Loudoun Hospital (VA)
Covenant Health-Grey Nuns Hospital	Memorial Hospital of South Bend (IN)	Duke University Medical Center (NC)	DLP Conemaugh Memorial Hospital (PA)	Inova Mount Vernon Hospital (VA)
(Canada)	Saint Joseph Regional Medical Center (IN)	Mission Hospital (NC)	Center (PA)	Mary Washington Hospital (VA)
St. Michael's Hospital (Canada)	St. Francis Heart Center (IN)	Novant Health Forsyth Medical Center (NC)	Excelsa Health (PA)	Sentara Careplex Hospital (VA)
Thunder Bay Regional Health Sciences	St. Vincent Heart Center of Indiana, LLC (IN)	Novant Health Matthews Medical Center (NC)	Geisinger Community Medical Center (PA)	Sentara Leigh Hospital (VA)
Centre (Canada)	St. Vincent Hospital & Healthcare Center (IN)	Novant Health Presbyterian Medical	Geisinger Medical Center (PA)	Sentara Norfolk General Hospital (VA)
Toronto General Hospital (Canada)	University of Kansas Medical Center (KA)	Center (NC)	Geisinger Wyoming Valley Medical Center (PA)	Sentara Northern Virginia (VA)
Centura-Penrose St. Francis Health	Flint Hills Heart, Vascular, and Vein Clinic,	Rex Healthcare (UNC Health System) (NC)	Guthrie Clinic (PA)	Sentara Obici Hospital (VA)
Services (CO)	LLC (KS)	University of North Carolina Hospitals (NC)	Holy Spirit-Geisinger Affiliate (PA)	Sentara Princess Anne Hospital (VA)
Centura-Porter Adventist Hospital (CO)	Baptist Health Louisville (KY)	Vidant Medical Center (NC)	Penn State Milton S. Hershey Medical	Sentara RMH Medical Center (VA)
Centura-St. Mary Corwin Medical Center (CO)	Baptist Health Madisonville-Jack L. Hamman	Wake Forest Baptist Health (NC)	Center (PA)	Sentara Virginia Beach General Hospital (VA)
Exempla-Saint Joseph Medical Center (CO)	Heart & Vascular Center (KY)	CHI Health Nebraska Heart (NE)	St. Luke's Hosp & Health Network—	Sentara Williamsburg Regional Medical
Presbyterian St. Luke's Medical Center (CO)	KentuckyOne Health-Jewish East (KY)	Nebraska Medical Center (NE)	Allentown (PA)	Center (VA)
Rose Medical Center (CO)	KentuckyOne Health-Jewish Hospital (KY)	Catholic Medical Center d/b/a CTSA (NH)	St. Luke's Hospital & Health Network—	UVA Medical Center (UVA Health System) (VA)
UCHA-Memorial Hospital Central (CO)	King's Daughters Medical Center (KY)	Concord Hospital (NH)	Anderson (PA)	Virginia Commonwealth University
University of Colorado, Denver (CO)	University of Kentucky (KY)	Dartmouth-Hitchcock Medical Center (NH)	St. Luke's Hospital & Health Network—	Hospital Authority (VA)
Danbury Hospital (CT)	Baton Rouge General Medical Center (LA)	Elliot Hospital (NH)	Bethlehem (PA)	Winchester Medical Center (VA)
Hartford Hospital (CT)	LSU Health Science Center-Shreveport (LA)	Lakes Region General Hospital (NH)	St. Mary Medical Center (PA)	University of Vermont Medical Center (VT)
Saint Francis Hospital and Medical Center (CT)	Cooper University Medical Center (NJ)	Cooper University Medical Center (NJ)	The Reading Hospital and Medical Center (PA)	Confluence Health (WA)
Yale-New Haven Hospital (CT)	Kennedy University Hospital (NJ)	Kennedy University Hospital (NJ)	UPENN-University of Pennsylvania (PA)	Harborview Medical Center (WA)
MedStar-Washington Hospital Center (DC)	Meridian-Bayshore Community Hospital (NJ)	Meridian-Bayshore Community Hospital (NJ)	UPMC/UPP Vascular Surgery (PA)	Kadlec (Providence) (WA)
MFA-Medical Faculty Associates	Meridian-Jersey Shore University	Meridian-Jersey Shore University	UPMC/Harmot Hospital (PA)	Northwest Hospital & Medical Center (WA)
Physician Group (DC)	Medical Center (NJ)	Medical Center (NJ)	Lifespan-Rhode Island Hospital (RI)	Providence Holy Family Hospital (WA)
Beebe Healthcare (DE)	Meridian-Ocean Medical Center (NJ)	Meridian-Ocean Medical Center (NJ)	Lifespan-The Miriam Hospital (RI)	Providence Regional Medical Center (WA)
Christiana Care Health System (DE)	Meridian-Riverview Medical Center (NJ)	Meridian-Riverview Medical Center (NJ)	AnMed Health (SC)	Providence Sacred Heart Medical Center (WA)
Baptist Hospital of Miami (FL)	Meridian-Southern Ocean Medical	Meridian-Southern Ocean Medical	Beaufort Memorial Hospital (SC)	Providence St. Mary Medical Center (WA)
BayCare-St. Anthony's Hospital (FL)	Center (NJ)	Center (NJ)	McLeod Regional Medical Center (SC)	Providence St. Peter Hospital (WA)
Coastal Vascular & Interventional, PLLC (FL)	Monmouth Medical Center	Monmouth Medical Center	Medical University of South Carolina	Seattle Vascular Surgery (WA)
Florida Hospital-Orlando (FL)	(Barnabas Health) (NJ)	(Barnabas Health) (NJ)	Hospital (SC)	Swedish Cherry Hill (Providence) (WA)
Mayo Clinic Florida (FL)	Newark Beth Israel Medical Center	Newark Beth Israel Medical Center	Palmetto Health Richland (SC)	Swedish Edmonds (Providence) (WA)
Memorial Hospital Pembroke (FL)	(Barnabas Health) (NJ)	(Barnabas Health) (NJ)	Regional Medical Center of Orangeburg &	Swedish First Hill (Providence) (WA)
Memorial Hospital West (FL)	Overlook Hospital	Overlook Hospital	Calhoun Co (SC)	University of Washington Medical Center (WA)
Memorial Regional Hospital (FL)	(Atlantic Health System) (NJ)	(Atlantic Health System) (NJ)	Roper St. Francis Hospital (SC)	Virginia Mason (WA)
Miami Vein Center (FL)	Rutgers Robert Wood Johnson	Rutgers Robert Wood Johnson	Self Regional Healthcare (SC)	Aurora Baycare Medical Center (WI)
Orlando Health-Dr. P. Phillips Hospital (FL)	Medical School (NJ)	Medical School (NJ)	Spartanburg Regional Health Services	Aurora Lakeland Medical Center (WI)
Orlando Health-Orlando Regional	Saint Barnabas Medical Center	Saint Barnabas Medical Center	District, Inc. (SC)	Aurora Medical Center in Kenosha (WI)
Medical Center (FL)	(Barnabas Health) (NJ)	(Barnabas Health) (NJ)	Trident Medical Center (SC)	Aurora Medical Center in Manitowoc
Orlando Health-South Seminole Hospital (FL)	Heart Hosp. of New Mexico at Lovelace	Heart Hosp. of New Mexico at Lovelace	Rapid City Regional Hospital (SD)	County (WI)
Palm Beach Gardens Medical Center (FL)	Medical Center (NM)	Medical Center (NM)	Sanford Clinic Vascular Associates (SD)	Aurora Medical Center in Oshkosh (WI)
Sarasota Memorial Hospital (FL)	Presbyterian Hospital (NM)	Presbyterian Hospital (NM)	Baptist Memorial Hospital-Memphis (TN)	Aurora Medical Center in Summit (WI)
South Miami Hospital (FL)	Regents of the University of New Mexico (NM)	Regents of the University of New Mexico (NM)	Jackson Madison County General	Aurora Medical Center in Washington
Surgical Specialists of Central Florida (FL)	Carson Tahoe Regional Hospital (NV)	Carson Tahoe Regional Hospital (NV)	Hospital (TN)	County (WI)
Tampa Cardiovascular Associates (FL)	Catholic Health Mercy Hospital of Buffalo (NY)	Catholic Health Mercy Hospital of Buffalo (NY)	Nashville Vascular & Vein Institute (TN)	Aurora Medical Center of Wrafton (WI)
Tampa General Hospital (FL)	Catholic Health Sister of Charity Hospital (NY)	Catholic Health Sister of Charity Hospital (NY)	Saint Thomas Middtown Hospital (TN)	Aurora Memorial Hospital of Burlington (WI)
The Vein and Vascular Institute of	Columbia University Medical Center (NY)	Columbia University Medical Center (NY)	Saint Thomas Rutherford Hospital (TN)	Aurora Sheboygan Memorial Medical
Tampa Bay (FL)	John T. Mather Hospital (NY)	John T. Mather Hospital (NY)	Saint Thomas West Hospital (TN)	Center (WI)
UF Health-Shands Hospital (FL)	Kaleidoscope General Hospital (NY)	Kaleidoscope General Hospital (NY)	University of Tennessee Medical Center (TN)	Aurora Sinai Medical Center (WI)
Vascular Surgery Associates (FL)	Maimonides Medical Center (NY)	Maimonides Medical Center (NY)	University Surgical Associates (TN)	Aurora St. Luke's Medical Center (WI)
Albany Vascular Specialist Center (GA)	Montefiore Medical Center (NY)	Montefiore Medical Center (NY)	Baylor All Saints Medical Center (TX)	Aurora St. Luke's South Shore (WI)
Athens Regional Medical Center (GA)	Mount Sinai-Beth Israel Hospital (NY)	Mount Sinai-Beth Israel Hospital (NY)	Baylor-Jack and Jane Hospital	Aurora West Allis Medical Center (WI)
Cobb Hospital, Inc. (WellStar Health	Mount Sinai Hospital (NY)	Mount Sinai Hospital (NY)	Hamilton Heart and Vascular (TX)	Columbia St. Mary-Milwaukee (WI)
System, Inc.) (GA)	Mount Sinai-St. Luke's Roosevelt	Mount Sinai-St. Luke's Roosevelt	Baylor-The Heart Hospital Denton (TX)	Columbia St. Mary-Ozaukee (WI)
Emory Healthcare (GA)	Hospital Center (NY)	Hospital Center (NY)	Baylor-The Heart Hospital Plano (TX)	Froedtert Memorial Lutheran Hospital (WI)
Floyd Medical Center (GA)	NSLJ-Lenox Hill Hospital (NY)	NSLJ-Lenox Hill Hospital (NY)	Baylor University Medical Center (TX)	Mayo Clinic Health System—
Grady Memorial Hospital (GA)	DMC DMC Long Island Jewish Medical	DMC DMC Long Island Jewish Medical	CTVS-CardioThoracic Vascular	Northwest Wisconsin Region Inc. (WI)
Kennestone Hospital Inc.	Center (NY)	Center (NY)	Surgeons (NY)	ProHealth Care (Waukesha Memorial
(WellStar Health System) (GA)	NSLJ-North Shore University Hospital (NY)	NSLJ-North Shore University Hospital (NY)	Houston Methodist St. John Hospital—	Hospital) (WI)
Memorial University Health Medical	NSLJ-Staten Island Hospital- North Site (NY)	NSLJ-Staten Island Hospital- North Site (NY)	Clear Lake (TX)	Radiology Associates-Fox Valley (WI)
Center-SHVI (GA)	NYP/Weill Cornell Medical College (NY)	NYP/Weill Cornell Medical College (NY)	John Sealy Hospital, UTMB (TX)	St. Mary's Hospital (WI)
Northside Hospital Atlanta (GA)	NYU Langone Medical Center (NY)	NYU Langone Medical Center (NY)	Medical Center Hospital (TX)	Camden Clark Medical Center (WV)
Northside Hospital Cherokee (GA)	St. Charles Hospital (NY)	St. Charles Hospital (NY)	Memorial Hermann Greater Heights	Charleston Area Medical Center (WV)
Northside Hospital Forsyth (GA)	Stony Brook University Medical Center (NY)	Stony Brook University Medical Center (NY)	Hospital (TX)	St. Mary's Medical Center (WV)
Piedmont Hospital Atlanta (GA)				West Virginia University Hospitals, Inc. (WV)