

# Vascular Verification Program

A quality program of the American College of Surgeons with the Society for Vascular Surgery

# VASCULAR VERIFICATION PROGRAM (VASCULAR-VP)

## **PRE-REVIEW QUESTIONNAIRE**

## v.2023

View Standards Manual



## Institutional Administrative Commitment (IAC)

#### **Standard IAC.1: Hospital Commitment**

- Upload a letter from hospital leadership (e.g., CEO or equivalent) demonstrating the commitment to the Vascular Program which includes:
  - A high-level description of the Vascular Program including program leadership, annual volume, procedure mix, and commitment and organization of multidisciplinary care services for vascular patients
  - Any initiatives involving the Vascular Program in the past 12 months that were initiated for the purposes of ensuring quality and safety
  - Hospital leadership's involvement with the Vascular Program
  - The current and future commitment to and financial investment in the Vascular Program
  - The organization's commitment to maintaining compliance with verification program standards
- Upload an organizational diagram (e.g., wiring diagram) showing the Vascular Program's relationships to other departments and internal governing bodies, specifically those that oversee patient safety, quality, and fiscal administration of the Vascular Program.

 Is there an a priori mechanism or forum for requesting quality and safety resources (e.g., registry participation, external quality program participation, FTE support, etc.) from hospital administration?

*If yes, provide an example of a resource recently requested (approved or denied).* 

4. Do the strategic priorities of the Vascular Program align with your hospital's strategic priorities?

Describe Vascular Program priorities and challenges with alignment, if any.



### Standard IAC.2: Culture of Patient Safety and High Reliability

**PASSIVE**: Adverse events are expected or unavoidable.

**REACTIVE**: Able to fix problems whenever they occur, but not looking for problems. **CALCULATIVE**: Have systems in place to prevent problems and actively surveil for potential problems.

**PROACTIVE**: Proactively look for potential problems and develop quality improvement projects to fix any identified problems.

**GENERATIVE**: Quality and safety at the core of business; constantly looking for potential problems and ways to prevent them.

- Using one of the 5 descriptors provided above, which best describes your HOSPITAL'S safety culture?
  - Passive
  - □ Reactive
  - Calculative
  - □ Proactive
  - □ Generative
- Using one of the 5 descriptors provided above, which best describes the VASCULAR PROGRAM'S safety culture?
  - Passive
  - □ Reactive
  - □ Calculative
  - Proactive
  - □ Generative

- For the VASCULAR PROGRAM, rank the following on a scale from 1-6 for areas that are strengths to needs improvement (1=strongest → 6=weakest).
  - \_ Teamwork Climate
  - \_\_\_ Safety Climate
  - \_\_\_ Job Satisfaction
  - \_\_\_ Stress Recognition
  - \_\_ Perception of Management
  - \_\_ Working Conditions
- 4. Has the vascular service participated in any safety culture assessments (for example, SAQ, HSOPS, and so on) over the past three years? If yes, upload any safety culture assessments reports. If no, describe plan to establish culture of safety assessments within the Vascular Program.
- Is there formal safety culture education (e.g., TeamSTEPPS) provided to vascular staff at the time of initial onboarding?
- 6. How often is ongoing formal safety culture education provided to vascular staff?
  - □ At least quarterly
  - □ At least semi-annually
  - □ At least annually
  - On an ad hoc basis

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#### Ongoing safety culture training is not provided

- Upload listing of safety culture/safety attitudes training events the vascular staff participated in over the last year, including dates of training (for example, TeamSTEPPS).
- Are there any examples in the last 3 years of how safety culture results were used to drive tailored improvement initiatives and ongoing safety culture education within Vascular Program?
   If yes, upload an example of an improvement initiative that resulted from safety culture survey results.
- Does the Vascular Program use a quality dashboard?
   If yes, upload.
- 10. Are vascular staff encouraged to report "near miss" events?
- Are "near miss" events shared for educational purposes?
   If yes, describe.

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### **Program Scope and Governance (PSG)**

#### Standard PSG.1: Definition and Scope of a Vascular Program

- Upload PHYSICIAN ROSTER table inclusive of all vascular cases performed at the hospital in the previous 12 months using the provided template.
- 2. Upload VASCULAR CASE VOLUME table inclusive of all cases performed at the hospital in the previous 12 months using the provided template.
- 3. Upload hospital's written scope of practice for the Vascular Program.
- 4. Are any procedures or patient populations referred to an outside facility for vascular care?

*If yes, describe the referral process or upload process flow.* 

5. Have any vascular patients in the past 3 years been urgently transferred to a higher level of care?

*If yes, upload a list and explanation regarding reason for transfer.* 

 Has your hospital performed any vascular procedures or cared for any patients outside the hospital's written scope of practice for the Vascular Program within the last 3 years?

*If yes, upload a list and describe the reason.* 

- Is there a standardized review process for ensuring all vascular providers are practicing within hospital scope?
   If yes, describe.
- 8. Does the Vascular Program conduct reviews for the following:

Appropriate procedures for setting
 Appropriate patients for setting

 If any items in #8 are selected, upload all related policies or protocols detailing criteria for selecting appropriate patients and/or procedures for the hospital setting.



### Standard PSG.2: Vascular Program Medical Director

- Upload the official job description for the Vascular Program Medical Director position, including percent FTE specific to this role.
- Upload the curriculum vitae for the individual serving as the Medical Director.
- Upload an organizational diagram inclusive of the Medical Director position, as well as all other Vascular Program staff (Standard PSG.3) that illustrates the reporting structure and relationships to institutional leadership.
- 4. What are the internal and external resources, including but not limited to personnel and budget support, available to the Vascular Program Medical Director that support their job functions (i.e., budget support for attending national quality meetings, etc.)?

 Indicate which of the following responsibilities fall under the Medical Director (select all that apply):

 Mortality and adverse event review
 Address clinical practice variation
 Establish quality and safety standards/ guidelines
 Develop/implement Vascular-specific QI initiatives
 Leadership and prioritization of Vascular initiatives/goals
 Monitor outcomes to identify surgical issues
 Oversight/leadership of Vascular
 Program Committee
 Participate in governance, including approving vascular privileges

- Describe how job performance is measured and success is defined for the individual(s) in the role.
- Describe any barriers that may hinder the Vascular Program Medical Director from being effective in this role.



#### Standard PSG.3: Vascular Program Management Resources

- Upload official job descriptions for the Vascular Program Manager, Quality Improvement Support, and Clinical Data Abstraction/Analysis roles.
- List the names and titles of the individuals serving in each of the following roles. If responsibility falls to a team, indicate as such:
  - a. Program Manager:
  - b. QI Support:
  - c. Clinical Data Abstraction:
  - d. Data Analysis (if different from c. above):
- 3. List the FTE allocation specific to each role with the Vascular Program:
  - a. Program Manager:
  - b. QI Support:
  - c. Clinical Data Abstraction:
  - d. Data Analysis (if different from c. above):

#### Vascular Program Manager:

- Does the individual(s) in the Program Manager role have a collaborative working relationship with the Vascular Program Medical Director? If yes, describe how they work together to assess program needs and goals.
- Is the individual(s) in the Program Manager role responsible for overseeing program support, including

programmatic data and QI needs, and administrative functions of the Vascular Program (i.e., committee meetings)?

6. What are the internal and external resources, including but not limited to budget support, available to the Vascular Program Manager that support their job functions?

#### **Quality Improvement Support:**

 Does the individual/team providing QI Support to the Vascular Program have any specialized training or experience specific to leading quality initiatives? *If yes, describe.*

#### **Clinical Data Abstraction:**

- Is data abstraction and analysis performed by the same person/service within the Vascular Program?
   If no, describe how the abstraction and analysis functions are coordinated within the program.
- Does the individual/service providing clinical data abstraction have any type of registry/ data-specific training? *If yes, list completed training.*
- 10. Does the individual/service providing data analysis have any type of training in data analysis and reporting? *If yes, list completed training.*

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11. Is data-specific training required on a regular and ongoing basis?If yes, describe.



### **Standard PSG.4: Vascular Program Committee**

 Is there an established committee focused on quality within the Vascular Program (do not include system-wide service-line committees)?

If YES, answer the questions below.

- 2. Upload organizational chart showing the Vascular Program Committee's position within the overall hospital framework.
- 3. How frequently does this committee meet?
  - U Weekly
  - □ Monthly
  - **Quarterly**
  - **Other,** describe:
- 4. Upload meeting minutes from the most recent committee meeting.
- Upload COMMITTEE MEMBERSHIP table with roster, dates of meetings and attendance within the last year using the provided template.
- List any representatives from other disciplines on the committee, such as nursing, anesthesia, critical care, or other non-surgeon specialists:

- 7. Describe the frequency of meeting attendance for multi-disciplinary representatives described in #6 above:
  \$50%
  \$50-75%
  >75%
  - **Other,** describe:
- Select the following functions that are routinely performed by the committee (select all that apply):
  - Outcomes Data Review
     Standardized Clinical Pathway
     Development
     Individual Physician Review (peer review)
     Retrospective Case Review (including M&M)
     Process/Quality Improvement
     Projects Specific to the Vascular
     Program

If any of the above functions are performed outside of the committee or by separate committees, explain.

 Upload the Vascular Program Committee charter inclusive of written goals and statement of purpose.



## **Facilities and Equipment Resources (FER)**

#### **Standard FER.1: Hospital Accreditation**

- Upload copies of state licensure and hospital accreditation/certification from the various regulatory programs that designate your hospital, including, but not limited to, The Joint Commission, DNV, et al. demonstrating current licensure/accreditation/certification.
- Is your hospital currently under any improvement plans from state licensure or hospital accreditation/certification review?
   If yes, upload any current improvement plans.
- 3. Has your hospital received feedback from state or national accrediting bodies that has led to changes impacting the Vascular Program? *If yes, describe.*



### Standard FER.2: Dedicated Operating Room or Procedure Suite

- Upload a map of the hospital with specific notation of operating room(s) and/or procedure suite(s) available for vascular use.
- 2. Upload the call schedule for operating room staff (e.g., nursing staff, radiology technicians) for the previous month.
- Upload any written policies and procedures for operating room/ procedure suite availability, use and staffing/personnel requirements.
- Does the hospital maintain designated ORs and/or procedure suites for vascular patients during traditional business hours (M-F, daytime)? If yes, describe hours of availability for designated OR/procedure suite use. If no, describe how vascular cases needing an OR/procedure suite are managed.
- 5. Does the hospital maintain designated ORs and/or procedure suites for vascular patients outside traditional business hours (weekends, overnight, evenings, etc.)?

If yes, describe hours of availability for designated OR/procedure suite use. If no, describe how vascular cases needing an OR/procedure suite are managed.

- Do you have standardized imaging equipment available in your ORs and/or procedure suites?
   If yes, describe.
- 7. Do you have ultrasonographic imaging available to assist in vascular access? *If yes, describe.*
- Do you have hemodynamic and physiologic monitoring available in your ORs and/or procedure suites?
   If yes, describe.
- Does your hospital have specified routine hours and on-call availability of procedure/interventional suite staff? *If yes, describe hours of routine availability and on-call response times.*
- Does your hospital have surgeon and support staff availability for cardiopulmonary bypass?
   If yes, describe hours of routine availability and on-call response times.
   If no, describe how patients needing cardiopulmonary bypass are managed, if applicable.
- 11. Does your hospital have staff available for performing and interpreting echocardiographic imaging?
  If yes, describe hours of routine availability and on-call response times.
  If no, describe how patients needing TEE imaging are managed, if applicable.

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12. Does your hospital have staff and equipment available for performing and interpreting electroencephalography or cerebral monitoring during aortic arch cases?

If yes, describe hours of routine availability and on-call response times. If no, describe how patients needing described imaging are managed, if applicable.



#### **Standard FER.3: Appropriate Inventory**

- Upload a summary (inventory list) of all inventory related to standard vascular surgical and procedural needs, including but not limited to selection of sheaths, guidewires, angioplasty balloons, occlusion balloons, stents, stent grafts, thrombectomy catheters and/or devices, embolic protection devices, and Vascular closure devices as appropriate to the setting.
- Upload a summary of appropriate inventory maintained on-site for managing emergency vascular patient care needs.
- 3. Have any situations been encountered in the previous three years where required equipment was unavailable?

*If yes, describe the circumstances of the case and the subsequent decision-making processes.* 



#### Standard FER.4: Post Anesthesia Care Unit

- Describe the location and capacity of your post-anesthesia care/observation unit.
- Upload the hospital's written policies and procedures for post-anesthesia care/observation unit availability, use and staffing/personnel requirements.
- Indicate which of the following are available in your post-anesthesia/ observation care unit (select all that apply):

Pulse oximetry monitoringDifficult airway cart

□ ACLS trained staff

□ Fully stocked crash cart

If any are not available, describe any measures in place to address these areas.



### Standard FER.5: Intensive Care Unit

- Upload a map of the hospital with notation of the location of the Intensive Care Unit (ICU) relative to operating room(s) and/or procedure suite.
- Upload hospital policy for ICU staffing (e.g., nursing ratios and overnight backup call schedules).
- Upload ICU physician, resident and/or advanced practice provider call schedule for the previous month.
- 4. List the name and credentials of the current ICU medical director:
- Does your hospital have a standardized escalation of care plan?
   If yes, upload.
- Do you have monitoring equipment available 24/7/365 in your ICU? *If yes, describe.*
- Does your hospital have a formal policy detailing the composition, availability and leadership of the critical care team? *If yes, upload.*
- 8. What type of model does your ICU follow?
  - 🗌 Open
  - Closed
  - **Other,** describe:

- Does your hospital have a policy or protocol that establishes expectations for communication and collaboration between attendings and intensivists? *If yes, describe or upload.*
- Is there a formal policy for care coordination between the primary surgical service and intensivists?
   If yes, describe.
- 11. Are there any barriers to collaboration between the surgical team and the ICU team?If yes, describe.
- 12. Does your hospital use residents or physician extenders as primary in-house coverage?
  If yes, describe how you ensure timely availability of supervising physician intensivists.
- 13. Is there a pathway for patients outside of the ICU to be evaluated for escalation to the ICU?If yes, describe.
- 14. Are there barriers for patients being transferred into the ICU in a timely fashion (include transfers from both the OR and general care floors)? *If yes, describe.*



#### Standard FER.6: Vascular Inpatient Treatment Area

- Does your hospital have a dedicated floor/unit/area for vascular inpatients? If no, describe how vascular patients are managed on the general floor units.
- Is this area always available when a vascular patient is transferred out of the ICU?

If no, describe examples, including the circumstances of the case, in which there was no available bed for a vascular patient in the dedicated unit and solutions currently in place for this circumstance.

- Are there standardized staffing plans and coverage for the vascular inpatient treatment areas?
   If yes, upload hospital policy for staffing plan and coverage for any designated vascular inpatient treatment areas.
- Are there formal mechanisms through which the staff's qualifications and competencies are assessed? *If yes, describe.*

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#### Standard FER.7: Accredited Non-Invasive Vascular Lab

- Upload all current certificates for the non-invasive vascular lab from all regulatory bodies.
- 2. List the anatomic modules in which your lab currently holds accreditation.
- Does your lab have standardized routine and on-call availability for vascular studies?
   If yes, describe hours and availability.
- Does your lab have the capability to perform the following studies (select all that apply):
  - □ Carotid
  - Renal
  - □ Mesenteric
  - □ Arterial
  - □ Venous
  - Duplex Ultrasound
  - □ Other, describe:

If your lab does not undertake studies in any of the listed areas, describe your process for managing cases presenting with these needs. 5. Does your hospital conduct quality reviews specifically for vascular lab studies performed in the hospital?

If yes, what are the triggers for the quality review process.



### **Standard FER.8: Imaging Facilities and Capabilities**

- Does your hospital have the following imaging modalities available 24/7/365?
   CT Imaging
   3-D CT reconstructions
   Echocardiogram
   If any of the above are not available
   24/7/365, describe hours of availability.
- 2. Is your hospital able to obtain vascular studies (duplex, physiologic), TEE, TTE and diagnostic coronary angiography? *If yes, describe.*
- Upload all policies regarding 24/7/365 availability of emergency diagnostic imaging.
- Do providers have off-site access for viewing imaging performed in your institution?
   If yes, describe access mechanism.
- Is the hospital able to receive, upload and view imaging performed at outside facilities?
   If yes, upload policies for capabilities regarding imaging obtained at outside facilities.
- Are there any barriers to viewing images from outside facilities?
   If yes, describe.



### **Standard FER.9: Blood Bank and Laboratory Services**

- Is the blood bank available 24/7/365?
   If no, describe protocols to manage need for blood products outside traditional business hours.
- Is rapid transfusion available 24/7/365, either through routine or on-call staffing? Describe hours of routine and on-call availability and expected response times.
- 3. Is intra-operative cell-saver autotransfusion available 24/7/365, either through routine or on-call staffing? Describe hours of routine and on-call availability and expected response times.
- Are standard diagnostic laboratory tests available 24/7/365?
   If no, describe hours of availability, including whether the service is available on or off-site.
- Upload hospital's written policies for the availability of laboratory and blood bank services.



## Personnel and Services Resources (PSR)

### Standard PSR.1: Qualified Surgeon/Interventionalist

- Are privileging requirements for your hospital based on published specialty guidelines?
   If yes, describe.
- 2. Upload hospital privileging criteria for physicians performing vascular cases.
- 3. Does the Vascular Medical Director have input and sign-off on specific privileging requirements?

If yes, explain how this is done.

4. Do you have a vascular-specific onboarding process for all surgeons and interventionalists new to the hospital?

*If yes, does the onboarding process include:* 

□ **Review of initial cases?** If yes, how many?

□ Backup call available during initial cases? If yes, how many?

□ Proctoring or double scrubbing of initial cases? If yes, how many?

Review of volume in historical case logs before privileging?

□ Is there a case volume requirement? If yes, what is the required case volume?

- 5. Does the hospital have a surgical team available 24/7/365 that includes at least one board-certified, board-eligible or equivalent Vascular Surgeon?
- 6. If NO to question #5 above: If Vascular Surgeon is not available 24/7/365, does the hospital have a surgical team available 24/7/365 that includes at least one board-certified, board-eligible or equivalent Cardiothoracic Surgeon or General Surgeon privileged to perform all vascular surgical procedures relevant to the portfolio of services offered?
- 7. Are all surgeons or interventionalists performing vascular procedures, regardless of specialty, required to adhere to identical privileging criteria to meet vascular requirements? If no, describe how your hospital ensures competence with vascular procedures.
- Does the hospital have a process for ensuring compliance with 45-minute availability requirement?
   If yes, describe and upload arrival log or other tracking mechanism for team availability compliance.



9. Does your hospital have any standardized processes for the safe introduction of new surgical procedures or technology?

If yes, provide details regarding requirements for training, proctoring, and ongoing monitoring of outcomes and upload the written process for safe introduction of new surgical procedures or technology, including most recent example of an FPPE process.



#### Standard PSR.2: Qualified Operative Team

 Does the hospital have the following personnel available onsite as part of the vascular operative call team?

Dedicated Vascular Nurses

Dedicated Scrub Techs

□ First Assistant (during complex procedures)

- □ Radiology Tech in OR/Lab
- Is there a formal process to ensure qualified assistants are available to staff the operating room (e.g., if resident coverage for a case is not available due to educational commitments)?

If yes, describe.

 Is there a formal process for ensuring an appropriately trained team is available to staff the operating room for vascular cases?

If yes, describe or upload policies.



#### Standard PSR.3: Operative Team Availability and Call Coverage

- Upload a copy of the vascular call coverage schedule for the previous month.
- Does the hospital have any standardized procedures or training regarding handoffs between attending and on-call surgeons?
   If yes, describe.
- Does the hospital require 30-minute response time for areas of identified need (i.e., life- or limb-threatening conditions)?
   If yes, describe or upload protocol.
- Does the hospital have a process for ensuring compliance with 30-minute availability requirement? If yes, describe or upload protocol/ process flow for tracking compliance with response time requirements.
- Is timeliness of availability documented and monitored? If yes, describe and upload tracking documentation (arrival logs, time to consult logs, etc).

- Does your hospital have an aortic alert call-in protocol?
   If yes, upload protocol.
- 7. Describe any barriers to the use of the aortic alert call-in protocol.



#### Standard PSR.4: Vascular Team Education

- Do vascular team members working within the <u>operating room and/or</u> <u>procedural suites</u> undertake specific training regarding vascular patient care protocols/pathways, order sets, and identification of post-procedure complications? *If yes, describe or upload documentation of requirements and process.*
- Do vascular team members working within the <u>vascular inpatient unit</u> undertake specific training regarding vascular patient care protocols/ pathways, order sets, and identification of post-procedure complications? *If yes, describe or upload documentation of requirements and process.*
- Are there continuing education requirements in place for the vascular team?
   If yes, describe requirements including

participation, frequency, and assurance of skills integration.



#### **Standard PSR.5: Anesthesiology and Pain Management Services**

- Upload call schedule for anesthesia demonstrating 24/7/365 coverage for the previous month.
- 2. Does your hospital have designated anesthesia providers for vascular cases? If yes, describe processes for ensuring availability of designated providers.
- 3. Does your hospital utilize certified nonphysician anesthesia providers within an anesthesia care team model? *If yes, describe and upload policy documentation regarding supervision of certified non-physician anesthesia providers and care team model supervision.*
- Are there any barriers to obtaining anesthesia coverage for vascular cases at your hospital? *If yes, describe.*
- Are there policies and/or protocols in place establishing how anesthesia coverage and staffing for vascular cases is determined?
   If yes, describe.

- Does your hospital have a pain management program?
   If yes, describe.
- Does your hospital have designated cardiovascular anesthesiology providers on the anesthesia staff?
   If yes, upload documentation regarding the qualifications of cardiovascular anesthesiologists.
- Does your hospital have 24/7/365 coverage by cardiovascular anesthesiology as part of the anesthesia staff? If yes, upload call schedule for cardiovascular anesthesiologists demonstrating 24/7/365 coverage for the previous month.



#### Standard PSR.6: Endoscopic and Interventional Services

- Does your hospital have diagnostic and therapeutic endoscopic services available 24/7/365?
   If no, describe hours of availability including on-site and via referral.
- 2. Upload hospital policies regarding the availability of diagnostic and therapeutic endoscopic services including a list of the services available.
- Does your hospital have diagnostic and therapeutic interventional radiology services available 24/7/365?
   If no, describe hours of availability including on-site and via referral.
- Upload hospital policies regarding the availability of diagnostic and therapeutic interventional radiology services including a list of the services available.
- Are there any barriers to urgent and emergent activation of diagnostic and therapeutic endoscopic and radiology services?
   If yes, describe.
- If endoscopic and interventional radiology services are not available onsite 24/7/365, upload an agreement for 24/7/365 call coverage by qualified external providers.



#### **Standard PSR.7: Radiologic Imaging Services**

- Upload a list of diagnostic radiology services available at the hospital, including the hours of availability.
- Is there a process for activation of radiologic imaging studies outside traditional business hours?
   If yes, describe.
- Are there any barriers to urgent and emergent activation of diagnostic radiologic services?
   If yes, describe.
- Is a credentialed radiologist available 24/7/365 within 60 minutes for image interpretation either in person or by phone?
   If no, describe hours of coverage.
- Is there a process for review of external imaging studies?
   If yes, describe.
- For life-threatening diagnoses identified on imaging, is there a standard process for alerting the physician(s) of record? *If yes, describe, including the process if the physician(s) of record cannot be reached.*



### **Standard PSR.8: Surgical and Medical Specialty Services**

- Indicate whether the specialties listed below are available to vascular patients on-site, via transfer or are not available:
  - Cardiology
  - Cardiothoracic Surgery\*
  - Critical Care
  - Endocrinology
  - Gastroenterology
  - General Surgery\*
  - o Geriatric Medicine
  - Hematology
  - Hospitalists/Internal Medicine
  - o Infectious Disease
  - Interventional Cardiology
  - 24/7/365 Cath Lab Availability
  - Nephrology
  - Neurology
  - $\circ$  Orthopedics
  - o Orthotics and Prosthetics
  - Plastic Surgery
  - o Pulmonology
  - o Urology
  - $\circ \quad \text{Wound Care} \quad$

*\*indicates 45 minute response time required* 

- Upload transfer agreement documents for those specialties that are not available on-site at your hospital, if any.
- If any specialties are not available either on-site or via transfer, describe protocols to address any patients with specialty needs.



#### **Standard PSR.9: Allied Health Services**

- Upload call schedules for physical therapy, occupational therapy, respiratory therapy and pharmacy showing hours of coverage and consultation availability for the previous month.
- Are there limitations on the availability of physical and occupational therapy services when requested? *If yes, describe.*
- Are physical and occupational therapy services available on weekends?
   If yes, describe.
- Does your hospital have a documented plan for early ambulation?
   If yes, upload the current plan/protocol.
- Are respiratory therapy services and consults available to vascular patients and providers when requested? Describe any barriers to activating this service.
- Are respiratory therapy services and consults available to vascular patients and providers when requested? Describe any barriers to activating nutritional services and consults.

- 7. Are qualified pharmacists available for perioperative consultation 24/7/365?
- Describe any cases within the last year where a pharmacist was unavailable to consult when needed, and the subsequent decision-making process.



#### Standard PSR.10: Patient Support Services

- Indicate whether the support services listed below are available to vascular patients on-site, via transfer or are not available:
  - o Behavioral Health Services
  - Case Management
  - o Ethical Consultation
  - Palliative Care Services
  - Pastoral Care Services
  - Patient Navigation
  - Social Services
  - Translation/Interpreter Services
- If any of the above are not available, describe measures in place to secure patients access to needed services.
- Are there any barriers to obtaining any of the support services listed above when needed for vascular patients? *If yes, describe.*



## Patient Care: Expectations and Protocols (PC)

#### Standard PC.1: Standardized Care Pathways and Procedure Selection

- Upload table indicating all standard processes/protocols currently in use with vascular patients using the provided template.
- 2. Upload all in-use Phase I-V pathways and protocols for vascular patients.
- 3. How are perioperative pathways developed and amended?
- 4. How are national guidelines assessed and integrated into local perioperative pathways?
- 5. Upload documents of order sets and clinical pathways for vascular patients with source documentation.
- 6. Does your hospital have standardized procedure selection protocols for vascular patients?

If yes, describe or upload any procedure selection protocols currently in use for vascular patients with source documentation. 7. Does your hospital have any processes currently in place to ensure compliance with order sets and clinical pathways?

If yes, describe or upload any process flows and documents demonstrating compliance rates for order sets and pathways.

- Are there any mechanisms in place to educate staff on local perioperative pathways?
   If yes, describe.
- 9. What barriers exist to development of clinical pathways for vascular cases?



#### Standard PC.2: Patient Education

 Are any standardized post-operative educational materials currently in use for vascular patients?

If yes, upload materials.

2. Are any standardized post-operative educational materials currently in use for vascular patients?

If yes, upload materials.

 Are different educational materials available based on patient preoperative risk profile (e.g., different expected courses for healthy patient vs patient with significant comorbidities)?

If yes, describe.

- 4. Are educational materials updated with changes to perioperative care pathways?
- Is there a formal system in place for how often these materials are reviewed and updated?
   If yes, describe this process.
- 6. When was the last time these materials were reviewed and updated?



#### Standard PC.3: Informed Consent Process

- Upload examples of each of the following forms currently in use for vascular patients:
  - Goals of Care Form
  - Power of Attorney
  - Advance Directives
  - Patient Consent
- Are there any differences in the consent processes between urgent/emergent and planned procedures?
   If yes, describe.
- Are goals of care discussions and consenting process discussions documented in the medical record? *If yes, describe.*
- Are resources available within the hospital to assist with each of the above-listed items?
   If yes, describe.
- Are there standard processes by which your hospital identifies an appropriate proxy who receives and coordinates communication for the patient, if needed? *If yes, describe.*



### Standard PC.4: Risk Assessment and Preoperative Optimization Protocol

- Are there any standardized processes for evaluation of vascular patients through a preoperative clinic?
- If **YES**, answer questions #2-4:
- 2. Approximately what percent of vascular patients are seen in an organized preoperative clinic?
- 3. How are vascular patients selected for preoperative clinic?
- 4. Which specialty is responsible for the preoperative clinic (e.g., anesthesiology, internal medicine, primary care, surgery, etc.)?
- If vascular patients are not seen in a preoperative clinic, is there another mechanism that exists for preoperative evaluation?

If yes, describe.

6. How is the information from the preoperative clinic or other preoperative evaluation process communicated to the operating physician and team?

- Indicate which, if any, of the following assessments are conducted with vascular patients:
  - □ Risk Assessment/Management
  - Nutritional Assessment/ Management
  - Medication Risk Assessment/ Management
  - □ High Risk Population Assessment/Management
- For any items in #7 above with "Yes" selected, upload documentation including criteria for selecting patients for additional assessment or optimization programs.
- 9. How are preoperative optimization protocols developed, reviewed, and updated?
- 10. Are discussions of appropriateness (e.g., whether the planned operation is indicated for the patient given his/her baseline risks, whether there are non-operative alternatives, etc.), riskstratification/discussion of risk, and/or evidence-based practice guidelines presented to the patient by the physician?

If yes, describe.



11. What barriers exist for routine preoperative assessment and optimization of vascular patients?



### **Standard PC.5: Thoracic Aortic Protocol**

#### COMPREHENSIVE INPATIENT LEVEL ONLY

- Does your hospital have a written protocol for thoracic aortic disease management, including acute emergencies?
   If yes, upload the protocol.
- Is the protocol informed by published guidelines for clinical practice in this area?
   If yes, describe.
- Indicate which of the following are available at your hospital for management of complex thoracic aortic disease:

□ Intraoperative neuromonitoring capabilities

 Intraoperative cardiopulmonary bypass capabilities

Cardiothoracic surgeon availability
 24/7/365

Vascular surgeon availability24/7/365

- If any of the above are not included, describe how this is managed outside of the standardized protocol.
- Is there a formal system in place for how often this protocol is reviewed and updated?
   If yes, describe this process.

- 6. When was the last time this protocol was reviewed and updated?
- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process.
- Is compliance with the protocol monitored?
   If yes, describe this process or upload any documentation of protocolcompliance tracking.



### **Standard PC.6: Abdominal Aortic Protocol**

- Does your hospital have a written protocol for abdominal aortic disease management, including acute emergencies?
   If yes, upload the protocol.
- Is the protocol informed by published guidelines for clinical practice in this area?
   If yes, describe.
- Indicate which of the following are available at your hospital for management of abdominal aortic disease:

□ Intraoperative neuromonitoring capabilities

Vascular surgeon availability24/7/365

- If any of the above are not included, describe how this is managed outside of the standardized protocol.
- Is there a formal system in place for how often this protocol is reviewed and updated?
   If yes, describe this process.
- 6. When was the last time this protocol was reviewed and updated?

- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process.
- Is compliance with the protocol monitored?
   If yes, describe this process or upload any documentation of protocolcompliance tracking.
- Does your hospital follow specific guidelines on abdominal aortic aneurysm size?
   If yes, describe or upload any protocols/documentation.
- 10. Have any cases been performed outside of protocol scope (i.e., with an aneurysm outside of guidelines, etc.) within the previous 12 months? *If yes, describe the circumstances of the case(s) and decision-making process.*



### **Standard PC.7: Carotid Artery Disease Protocol**

- Does your hospital have a written protocol for carotid artery disease management? *If yes, upload the protocol.*
- Is the protocol informed by published guidelines for clinical practice in this area?
   If yes, describe.
- Is a vascular surgeon available 24/7/365 for operative and perioperative assistance?
   If no, describe how patients needing this level of care are managed.
- Is there a formal system in place for how often this protocol is reviewed and updated?
   If yes, describe this process.
- 5. When was the last time this protocol was reviewed and updated?
- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process

- Is compliance with the protocol monitored?
   If yes, describe this process or upload any documentation of protocolcompliance tracking.
- Does your hospital follow specific guidelines on carotid stenosis percentages (symptomatic and asymptomatic)?
   If yes, describe or upload any protocols/documentation.
- Have any cases been performed outside of protocol scope (i.e., with stenosis outside of guidelines, etc.) within the previous 12 months?
   If yes, describe the circumstances of the case(s) and decision-making process.



### **Standard PC.8: Peripheral Artery Disease Protocol**

- Does your hospital have a written protocol for peripheral artery disease management? *If yes, upload the protocol.*
- Is the protocol informed by published guidelines for clinical practice in this area?
   If yes, describe.
- Is a vascular surgeon available 24/7/365 for operative and perioperative assistance?
   If no, describe how patients needing this level of care are managed.
- Is there a formal system in place for how often this protocol is reviewed and updated?
   If yes, describe this process.
- 5. When was the last time this protocol was reviewed and updated?
- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process.
- Is compliance with the protocol monitored?
   If yes, describe this process or upload any documentation of protocolcompliance tracking.

- Does your hospital follow specific guidelines on lifestyle management and claudication in patients with peripheral artery disease?
   If yes, describe or upload any protocols/documentation.
- Have any cases been performed outside of protocol scope (i.e., procedures undertaken without claudication management, etc.) within the previous 12 months?
   If yes, describe the circumstances of the case(s) and decision-making process.



### **Standard PC.9: Arteriovenous Hemodialysis Access Protocol**

- Does your hospital have a written protocol for arteriovenous hemodialysis (AV) access?
   If yes, upload the protocol.
- Is the protocol informed by published guidelines for clinical practice in this area?
   If yes, describe.
- Indicate which of the following are included within your hospital's AV Access protocol for patients requiring this level of care:
  - □ Pre-operative evaluation
  - □ Treatment of complications
  - □ Patient selection
  - Medical management
  - □ Loop closure post-intervention with dialysis center
  - Outpatient dialysis evaluation for metabolic stability
- If any of the above are not included, describe how this is managed outside of the standardized protocol.
- Is there a formal system in place for how often this protocol is reviewed and updated?
   If yes, describe this process.

- 6. When was the last time this protocol was reviewed and updated?
- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process.
- Is compliance with the protocol monitored?
   If yes, describe this process or upload any documentation of protocolcompliance tracking.



### Standard PC.10: Superficial and Deep Venous Disease Protocol

- Does your hospital have a written protocol for superficial and deep venous disease management?
   If yes, upload the protocol.
- Is the protocol informed by published guidelines for clinical practice in this area?
   If yes, describe.
- Indicate which of the following are included within your hospital's superficial and deep venous disease protocol(s) for patients requiring this level of care:

 Pre-operative evaluation protocol for conservative treatment
 Post-procedure thrombotic event diagnosis and treatment

- If any of the above are not included, describe how this is managed outside of the standardized protocol.
- Is there a formal system in place for how often this protocol is reviewed and updated?
   If yes, describe this process.
- 6. When was the last time this protocol was reviewed and updated?

- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process.
- Is compliance with the protocol monitored?
   If yes, describe this process or upload any documentation of protocolcompliance tracking.



### **Standard PC.11: Geriatric Patient Care Protocols**

- Does your hospital have any of the following protocols specific to the care of older adults currently in use with VASCULAR patients (select all that apply)?
  - □ Goals of care discussions
  - □ Medical proxy
  - □ Patient/proxy affirmation of
  - decision making
  - □ Code status/advance directives
  - □ Life sustaining treatment discussion
  - □ Impaired mobility
  - □ Impaired cognition
  - □ Impaired functional status
  - □ Malnutrition
  - □ Difficulty swallowing
  - □ Need for palliative care assessment
  - □ Medication reconciliation and

management

- □ Frailty assessment
- □ Referral to geriatric
- specialist/geriatrician
- **Other**, describe:
- 2. Upload any protocols indicated as currently in use in #1 above.
- Is there a formal system in place for how often these protocols are reviewed and updated?
   If yes, describe this process.

- 4. When was the last time these protocols were reviewed and updated?
- Are multidisciplinary providers educated on and included in protocol maintenance?
   If yes, describe this process.



#### Standard PC.12: Rapid Response Protocol

- Does your hospital have a rapid response protocol in place?
   If yes, upload the protocol.
- 2. Are rapid response personnel available 24/7/365?
  Yes No If no, describe hours of availability:
- 3. Are resources and supplies necessary for code response available regularly and consistently throughout the hospital?

Yes No I If yes, describe:

 Have there been any situations within the previous 12 months where the rapid response protocol was unable to be activated or was not activated according to protocol? If yes, describe the circumstances of the

case(s) and decision-making process, as well as any subsequent changes in protocol usage.



### Standard PC.13: Rescue Protocol

- Does your hospital have rescue protocols in place for the following emergency circumstances (multiple areas may be covered under a single protocol)?
  - □ Cardiac emergencies
  - Pulmonary emergencies
  - □ Bleeding emergencies
  - □ Neurological emergencies If "No" was selected for any of the above, describe how cases are managed.
- For any items with "Yes" selected in #1 above, upload all corresponding rescue protocols.
- 3. Are these protocols different from the program's Rapid Response Protocol, specifically as an early intervention to prevent a patient's condition from escalating to a code? *If yes, describe.*



### **Standard PC.14: Massive Transfusion Protocol**

- Does your hospital have a written massive transfusion protocol? If yes, upload the protocol.
- Have there been any circumstances in the prior 12 months where there were constraints on the ability to follow the protocol?
   If yes, describe.
- 3. How many times was the massive transfusion protocol used in the management of vascular patients in the last 12 months?



### Standard PC.15: Discharge Planning and Disposition Pathways

- Does your hospital have any standard discharge and disposition protocols currently in use with vascular patients? *If yes, upload the protocol(s).*
- Does your hospital have any existing transfer agreements with postdischarge disposition facilities (i.e., SNF, acute care rehab, long term care, etc)? *If yes, upload agreements.*
- Are there any barriers to safe and timely discharge of patients from the vascular service?
   If yes, describe.



### Standard PC.16: Ability to Readmit and Receive Transfer Patients 24/7

- Does your hospital have any standardized processes for patient readmission?
   If yes, upload any documentation on processes for patient readmission.
- Does your hospital have the ability to receive patients for readmission 24/7/365?
   If no, describe how patient readmission is managed outside of available hours.
- 3. How are requests for transfer from other facilities routed and triaged?
- Do you have mechanisms in place to integrate information and studies from outside hospitals into the patient's medical record after transfer? *If yes, describe.*
- Do frontline hospital providers (e.g., urgent care, emergency department) know who to contact with concerns about vascular patients? If yes, describe this process.
- Does your hospital have any protocols for expediting evaluation and treatment of vascular patients who arrive in unstable condition?
   If yes, upload protocols.

7. What barriers exist to medically necessary and appropriate acceptance of transfers from other facilities?



### **Standard PC.17: Transfer Agreement and Protocols**

- Does your hospital have any services that are routinely managed via transfer agreements?
   If yes, upload all transfer agreements currently in place.
- Does your hospital have transfer protocols in place for instances when patients require a higher level of care, if applicable? If yes, upload protocol(s).
- 3. Have there been any circumstances in the previous 12 months where patients were unable to be transferred as needed according to protocol? If yes, describe the circumstances of the case(s) and the subsequent decisionmaking process.



### Data Surveillance and Systems (DSS)

### Standard DSS.1: Data Collection and Registry Participation

- Upload table indicating all sources of data used within the Vascular Program using provided template.
- Upload the most recent (patient deidentified) data reports from each registry or data source used to monitor for quality improvement purposes including patient experience data, hospital-wide event reporting and surgical outcomes data, and vascularspecific data.
- 3. If no registry data is used, do you have a formal process for collecting administrative data? If yes, complete and upload the DATA COLLECTION table for all measures not captured in data reports submitted above.
- 4. Does the hospital have any written policies on reporting quality and safety events? If yes, upload all policies.
- Does the Vascular Program conduct or participate in any training on reporting quality and safety events?
   If yes, describe or upload documentation of trainings.

- 6. How often are data on vascular quality and safety data reported out?
  - □ Monthly
  - □ Quarterly
  - □ Semi-annually
  - □ Annually
  - **Other,** describe:
- How are the data reported out? (select all that apply)
  - □ Dashboards
  - Daily huddles
  - $\Box$  Reported to department and
  - disease-specific leadership
  - □ Reported to nursing leadership
  - □ Other, describe:
- 8. Who reviews the collected data? (select all that apply)
  - □ Vascular Program leaders
  - Vascular Program Committee
  - Other multi-disciplinary
  - committee(s)
  - □ Frontline staff (vascular surgeons,
  - interventionalists and nurses)
  - Quality Department
  - □ C-Suite/Hospital Leadership
  - □ **Other,** describe:



- Indicate which, if any, of the following time frames patients are followed to track complications (select all that apply):
  - 🗆 30 day
  - $\Box$  6 month
  - $\Box$  12 month
  - □ Other, describe:
- If any items in #9 are selected, describe or upload policy/process flow(s) for patient follow up, including lost-tofollow up protocol.
- 11. If any items in #9 are selected, indicate percentage of patients followed up at each time point:
  - a. 30 day:
  - b. 6 month:
  - c. 12 month:
  - d. Other, describe:

- Indicate if any of the following measures are captured within the Vascular Program (select all that apply):
  - □ Process Measures
  - □ Appropriateness Measures
  - □ Patient-Reported Outcomes
- If any items in #12 are selected, upload all related policies and protocols for developing, tracking and evaluating selected measures.



# Quality Improvement (QI)

#### Standard QI.1: Quality Assessment and Improvement

 Has at least one QI project been completed within the Vascular Program within the past 12 months?

If yes, complete and upload the template to provide examples of all Vascular-specific QI initiatives from the previous 12 months.

- Does the hospital have dedicated QI staff trained in quality improvement methodologies (e.g., LEAN, Six Sigma) either within the Vascular Program or from the hospital's quality department to support vascular quality improvement initiatives? If yes, describe.
- 3. What are the data sources most often used to identify quality improvement initiatives?
- 4. How, and by what mechanism, are quality improvement initiatives identified, prioritized, and chosen?
- 5. How are vascular quality improvement efforts integrated into the overarching hospital quality framework (i.e., relationship to SQO, quality department, etc.)?
- 6. Do you have adequate FTE support to conduct all of the QI initiatives you

believe are central to ensuring safe and high-quality vascular care? *Provide explanation.* 

 Rate the following potential barriers to conducting quality improvement initiatives as high, medium, or low.

HIGH: We don't have this resource or this is a significant barrier
MEDIUM: We have limited resources or this is sometimes a barrier
LOW: We have sufficient resources or this is not a barrier

Access to data: HIGH/MEDIUM/LOW Data quality: HIGH/MEDIUM/LOW QI/PI expertise: HIGH/MEDIUM/LOW FTE support for QI/PI: HIGH/MEDIUM/LOW Competing priorities: HIGH/MEDIUM/LOW

List any additional barriers:

- 8. What are the top quality goals for the Vascular Program in the coming year (e.g., reduce readmissions, implement ERAS protocol, etc.)?
- 9. What were the goals for the two years prior?



### Standard QI.2: Case Review Process

- Are vascular cases presented at a Morbidity & Mortality (M&M) Conference?
   If yes, describe.
- Is there a process for retrospective case review, separate from M&M, within the Vascular Program?
   If yes, how many cases were reviewed over the previous 12 months (include cases currently still in review).
- Is there a regular and specific schedule for vascular case review meeting occurrences?
   If yes, upload documentation of meeting occurrences within the previous 12 months, including vascular provider attendance.
- 4. What are the criteria used for case selection for the case review process (select all that apply)?
  - $\Box$  100% of cases are reviewed

Randomized review (select all that apply):

 Cases are selected at random for educational review purposes
 Cases are selected at random for adherence to protocols or resource utilization For cause review (select all that apply):

□ All mortalities (in-hospital or within 30 days of discharge) are reviewed □ All sentinel/serious safety events are reviewed (i.e., retained foreign bodies, wrong site surgery, etc.) □ All unplanned returns to OR are reviewed □ All unplanned readmissions with 30 days are reviewed □ All ED visits within 30 days of discharge are reviewed □ There are set criteria for specific complications (i.e., intra-op complications or procedure time, postop complications, etc.) that are reviewed *If selected, list the types of* complications reviewed.

5. Who selects cases for review (select all that apply)?

□ Vascular Program Medical Director

- Residents
- □ Surgeons and interventionalists select their own cases
- □ Selection determined by algorithm or set criteria
- □ Vascular Program Committee
- **Other**, describe:



6. What are the data sources used for case identification (select all that apply)?

□ Serious safety event reporting system

 Referral from peer review, risk management, or other committee
 EMR or Administrative Data Report (e.g., Vizient)
 Clinical registry reports (e.g., ACS NSQIP, VQI)

□ Other, describe:

- 7. Is there an event classification system (i.e., non-preventable, preventable, etc.)?
  If yes, describe.
- Is there a standardized way for documenting review findings?
   If yes, describe or upload form/template.
- Is there a routine, formal process for loop closure?
   If yes, describe or upload process flow.
- 10. Is there a routine, formal process for maintaining surveillance of issues identified through case review?
  - If yes, describe or upload process flow.

- 11. Does the case review process include integrating resolutions/findings with quality improvement activities in clinical care? If yes, describe or upload process flow.
- 12. Is there a formal review of case appropriateness done on a regular basis?If yes, describe or upload process flow.



### Standard QI.3: Peer Review Process for the Individual Physician

 Does the Vascular Committee have any processes or policies for referring cases to hospital peer review?

*If yes, upload any policies or process documentation.* 

 Is there a process/pathway for feeding back information from peer review to the Vascular Program Committee, i.e. loop closure?

If yes, describe.

- 3. Does the Vascular Program have representation on the hospital peer review committee?
- 4. How does your hospital capture and track physician/peer review documentation?
- 5. How are surgeons requiring peer review identified (select all that apply)?
  - □ Case Review
  - □ Tracking Outliers

□ Referral from Vascular Program Medical Director

- □ Word of Mouth
- □ Vascular Program Committee
- □ Other, describe:
- 6. How many vascular surgeons/ interventionalists have been evaluated

as part of a formal physician/peer review process over the past 3 years?

- 7. Of the vascular surgeons/ interventionalists evaluated over the past 3 years, how many revealed there was a physician-level performance issue?
- 8. Of the those evaluated over the past 3 years, how many are no longer practicing at the hospital?
- 9. Of those evaluated over the past 3 years, how many issues were successfully addressed through proctoring or remediation processes (i.e., issues have not recurred)?
- 10. Of those evaluated over the past 3 years, how many continue to be monitored for performance issues, or it is unclear if performance issues were resolved?
- 11. Indicate if you have any of the following programs/policies (select all that apply):

Disruptive Behavior Policy
 Aging Surgeon Policy
 Physician Wellness Program (i.e., second victim, burnout prevention program)

12. If any items in #11 have are selected, upload all related policies.



### Standard QI.4: Quality Improvement Collaborative Participation

- Does the Vascular Program participate in any state, regional and/or national collaboratives?
   If yes, upload list of current collaboratives the program participates in.
- 2. Is collaborative data used to support QI initiatives in the Vascular Program? If yes, upload any recent (past 12 months) collaborative data reports used within the Vascular Program to inform QI projects.



### **Education: Professional and Community Outreach (EDU)**

### Standard EDU.1: Patient Outreach and Community Education

 Has the Vascular Program participated in any patient outreach or community education campaigns in the past 3 years?
 If yes, describe or upload documentation, including location of activity and primary audience.



## **Research: Basic and Clinical Trials (RES)**

### Standard RES.1: Research and Scholarly Activities

- Are there any formal mechanism(s) in place to provide information to patients about available clinical trials and other clinical research opportunities? *If yes, describe.*
- Does the Vascular Program have any currently active IRB protocols?
   If yes, upload listing of active protocols including dates and funding sources.
- 3. Are there any currently active clinical trials within the Vascular Program? *If yes, upload listing of current trials and number of enrolled patients within the previous 12 months.*
- Has the Vascular Program participated in research leading to publication within the last 3 years?
   If yes, upload a list of references for all publications in the last 3 years.