

Benefits of Multispecialty Vascular Care Teams

Combining resources across service lines to bring patients more comprehensive treatment options for complex aortic disease and critical limb ischemia.

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Multispecialty team approaches enable physicians to draw from specific and often unique areas of expertise while coordinating with other specialists to find the best treatment plans possible for their patients and optimizing health care delivery. At MedStar Health, the vascular surgery department works with multiple services to deliver coordinated care for a variety of pathophysiologic processes. For example, our department offers combined care in conjunction with the cardiac surgery service for the management of complex aortic pathologies as well as with the podiatric surgery service in limb salvage cases.

Each relationship between the different hospital services offers unique benefits in patient care. First and foremost, dedicated teams can deliver optimal health care in a timely and efficient manner. For example, when treating complex aortic disease processes, a surgeon with experience in treating the aorta in the chest and a surgeon with similar experience treating the abdominal aorta can combine their experience and skills to achieve the best possible outcome in a case that might be more challenging to either surgeon individually. This form of collaboration can be implemented across all aspects of patient care and interaction, from evaluation and preoperative planning to care delivery and long-term follow-up. In our experience, these collaborative team approaches offer patients the benefits of varied perspectives throughout their treatment course and result in customized management plans for each individual, rather than one-size-fits-all approaches naturally limited by a single operator's skill set and previous procedural experience.

TEAM APPROACHES IN COMPLEX AORTIC CARE

As cardiac and vascular surgeons work together on advanced open surgical and endovascular techniques, new opportunities emerge to collaborate and improve the therapeutic offering. One of the presentations in which we see the greatest utility and benefit for aortic teams is in open and endovascular treatment of complex thoracoabdominal aortic aneurysms. To treat this difficult disease presentation, two surgeons work in parallel to expedite what can often be lengthy procedures. Shortening the duration of the procedure is beneficial for numerous reasons, including keeping each operator at peak performance capability. As previously mentioned, each surgeon also brings unique experience and expertise, which can facilitate difficult decision making if both surgeons are able to listen and appreciate the nuances of the other's suggested approach. Because of the complexity of this high-level endovascular treatment, having two skilled operators can greatly facilitate a smooth case.

A merging of technical skills can also be appreciated in these situations. A practical example can be seen during parallel grafting of thoracoabdominal aortic aneurysms. Complex endovascular skills, which are not common to all practitioners, are often needed to maximize cannulation of the branch vessels. At the same time, access from the axillary artery is simplified by creating separate accesses and securing each with a purse-string suture with a Roummel tourniquet for hemostatic control, similar to cannulation during coronary artery bypass grafting. This foregoes the need for a surgical conduit. Bringing experience and technical skill from each specialty allows for a synergistic result.

TEAM APPROACHES IN CRITICAL LIMB ISCHEMIA

At our institutions, vascular surgeons also partner with podiatric surgical services to combine the skill sets of revascularization with those of comprehensive wound care, reconstructive surgery, and limb-sparing amputation procedures. Whereas many of the skills shared by the aortic team members overlap, the limb salvage collaboration is highly complementary in that regard. The vascular team brings a diverse array of revascularization options, crossing total occlusions and delivering a variety of therapies, including surgical bypass when needed. However, in this challenging lower extremity disease state, revascularization alone is not enough, as it does not comprehensively address the associated tissue loss and damage. The podiatry team brings expertise in wound care, minimal/partial amputation when needed, and musculotendinous procedures that can facilitate limb salvage.

With these teams working together, expedited and focused care is offered, resulting in decreased proximal amputation, decreased length of hospital stay, and improved patient satisfaction scores. Our site-specific results were presented in an abstract titled, “Minimizing Interval Between Revascularization and Completion Amputation Optimizes Surgical Site Healing” at the 44th Annual Meeting of the Society for Clinical Vascular Surgeons this past spring.¹

ADDITIONAL BENEFITS OF MULTISPECIALTY PATIENT CARE

Referral

Additional benefits also arise from these collaborative efforts. First, each service has an individual referral base that can be combined with other services’ referrals to increase the number of patients coming in from local and regional providers. Referring physicians can be assured that the patients they refer with complex conditions will be treated by a multidisciplinary team that is dedicated to the best possible outcomes.

Identity and Branding

This focus on a team approach also provides an opportunity for branding. For instance, we have established the Complex Aortic Center within the MedStar Heart and Vascular Institute, and we integrated with the MedStar Georgetown Center for Wound Healing and Hyperbaric Medicine. As a result, patients whom we treat may recognize that they are receiving joint, multispecialty care and be more inclined to seek treatment because they feel confident that they will receive the best possible care. In our experience, the patients are very happy to have multiple surgeons involved with

their treatment and often express even greater patient satisfaction and family comfort level.

Cross-Training

Aside from the direct patient impact, a multispecialty approach also significantly benefits training programs. Trainees benefit from increased case volume, case complexity, and exposure to techniques not necessarily unique to their specialty. Ultimately, trainees, and even faculty, can then potentially provide combined care if practicing in an environment where collaborative care is not offered. Our vascular surgeons and trainees have experienced multiple techniques used by the podiatric service for limb salvage that would traditionally be beyond the scope of training for a vascular surgeon. Having these surgical specialties train as part of a multispecialty team has improved communication and cross-specialty awareness, which in turn has been a direct asset to patient care.

Clinical Study and Publication

Opportunities also exist for academic pursuits. Combinations of data can lead to presentations at a wider array of meetings and varied publications in peer-reviewed journals. Increasing volume also provides greater opportunity to attract clinical trials. Resources, such as coordinators, data abstractors, and statisticians, among others, can be shared, streamlining the ability to conduct research.

IDENTIFYING KEYS TO TEAM SUCCESS

Multispecialty teams can be established at all levels of clinical care. For instance, an operating room may have specific aortic teams that can be interchanged between cardiac and vascular services, or patients with critical limb ischemia may be seen simultaneously by the podiatric and vascular teams, with a nursing staff specially trained to care for these wounds.

To create a successful multispecialty team approach, physicians need to identify disease processes in which there would be a benefit. Those teams then need to meet and identify how they will work together. Sometimes, patient care may happen in parallel, whereas in other instances, it may occur in a series. Regardless, there are important questions teams need to answer ahead of time, such as: Will procedures be performed in conjunction? Will the patients be seen in the outpatient office by several physicians representing each team? Which physicians will be involved? Will nurse practitioners and physician assistants play a role in these teams to aid in communication and coordination of care? Co-leadership usually facilitates buy-in from both specialties.

Finally, the financial impact of a team approach is an important element to address early. Some complex cases

can be billed with a -62 modifier, which increases the total physician reimbursement to 125%. The manner in which finances are resolved for a team approach to care would be specific to each practice/institution, as physician reimbursement varies. Ultimately, the benefit of a multispecialty approach is clear. Patients and practitioners alike stand to gain, so we recommend forming these teams whenever possible. ■

1. Chatman BC, Sorensen CM, Snow ME, et al. Minimizing interval between revascularization and completion amputation optimizes surgical site healing. Presented at the 44th Annual Meeting of the Society for Clinical Vascular Surgery; March 13, 2016; Las Vegas, Nevada.

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