Dr. Balamuthusamy: How would you summarize the viability of the freestanding point of care for dialysis access intervention/surgery?

Dr. Rasmussen: Freestanding points of care for dialysis access are definitely viable, but this population is complex and needs focused expertise. To have a successful business model for our center, we first developed a mission statement and built the center to meet our goals, which were to increase prevalence of arteriovenous fistulas (AVFs) and shorten catheter times while providing a positive patient experience. We wanted to demonstrate that we could meet these goals and lower costs compared to the hospital outpatient department (HOPD).

To meet these goals, the ambulatory surgery center (ASC) was built as a designated care center using the center of excellence model. We perform a small number of procedures, but they are done regularly. Several studies published in the past decade have established that this model results in improved patient care at lowered costs. We subsequently added surgical access creation to the procedure list.

Viability is also dependent on changing the existing paradigm. How can that be done? The ASC has to be able to provide data documenting improved outcomes to the nephrologist, dialysis providers, and health plans. Ongoing data entry is a must, and the appropriate software is required to create reports. In so doing, we are earning our stripes and building a brand in our market.

Dr. Balamuthusamy: What are the key opportunities and obstacles to building an ASC in 2018?

Dr. Rasmussen: By far, the key opportunity is to provide improved patient care. Having a center that takes ownership of the dialysis access allows one facility to manage the access from chronic kidney disease (CKD) stage 4/5 through initiation of dialysis using a vascular access to providing maintenance for endovascular and surgical therapies. Medicare has developed the Dialysis Facility Compare Star Program, a rating system that is used to compare the health of the patients in dialysis facilities. Two metrics they use are AVF prevalence and percentage of central venous catheters (CVCs) in use after 90 days of initiating outpatient dialysis. A stark reality remains that < 20% of patients initiate dialysis using an AVF and > 80% of patients initiate dialysis using a CVC. CVCs alone cost the Centers for Medicare & Medicaid Services (CMS) over $1 billion per year. We target an AVF prevalence of > 70% and a catheter prevalence < 10% at 90 days in the dialysis facilities we serve. In 2017, our doctors created 89% AVFs, placed 11% arteriovenous grafts, and removed over twice as many CVCs than we placed. The ability to demonstrate those metrics to care providers in our community promotes a partnership with them.

The ASC must be authorized to see patients and perform procedures. Medicare certification is mandatory. The importance of establishing contracts with health plans in the community cannot be overstated. In addition, there are states that require a certificate of need, which presents additional challenges in those locations.

What was our biggest hurdle to overcome? The Kidney Disease Outcomes Quality Initiative told us that we needed to increase AVF prevalence and decrease CVC use after 90 days on dialysis, but did not tell us how to do it. So, we developed care maps and designated a care map coordinator. Care maps take a patient from one “destination” to the next and avoids unnecessary delays. The goal of our care map is to move the patient with CKD stage 4/5 or end-stage renal disease (ESRD) on dialysis with a CVC through access creation and catheter removal. We have a preoperative care map that takes the patient from the original referral for arteriovenous access creation through surgery consultation. Our postoperative care map takes the patient from surgery through CVC removal.
We discovered interesting destinations that resulted in longer catheter time, the most important of which was 4 to 6 weeks postoperatively. At that destination, an evaluation must determine whether the access meets "the rules of 6" (ie, 6 weeks after the AVF has been placed, the fistula should be able to support a blood flow of 600 mL/min, be a maximum of 6 mm from the surface, have a diameter > 6 mm, and have a least 6 cm of straight vein for the dialysis nurse to cannulate) and will be able to support dialysis at 8 to 10 weeks postoperatively or if the AVF is immature and will not be able to support dialysis. The findings from this evaluation may necessitate referral for angiography (eg, for percutaneous transluminal angioplasty of a downstream stenosis or coil embolization of a significant tributary vein).

**Dr. Balamuthusamy: How would you describe the predictability or unpredictability of future reimbursement, and can this risk be mitigated?**

**Dr. Rasmussen:** Medicare provides coverage for roughly 70% of our patients, and Medicare rates are the benchmark that the ASC uses to negotiate contracts with the health plans. Physicians need to support organizations such as the American Society of Diagnostic and Interventional Nephrology and the Society of Cardiovascular and Interventional Radiology that lobby Medicare for fair rates for endovascular and surgical procedures. The bottom line is that Medicare will predictably remain unpredictable, and rates will fluctuate for different procedures. When building a financial model, one must understand that future reimbursement will fluctuate, and Medicare-approved ASC rates vary based on location.

Medicare has and will continue to implement payment reform to promote more cost-effective care. The shift from the HOPD to outpatient treatment in designated care centers was a direct result of the increased Medicare reimbursement for dialysis access procedures using an extension of practice (EOP) model. Vascular access–related hospital days and missed dialysis treatments significantly decreased, which proved to be cost-effective for Medicare. Perhaps predictably, Medicare significantly decreased EOP payment in 2017. At the same time, Medicare provided financial incentives to form an ASC, which resulted in conversions from the EOP model and a proliferation of ASCs being built to provide this care. In 2018, reimbursement again changed, and EOP rates went slightly up while ASC rates fell significantly. In our service area for endovascular and surgery combined, rates were reduced by 17%, even though rates for surgery CPT codes were adjusted slightly upward.

Thirty percent of insurance coverage is provided by health plans and Medicaid. Health plans may see the advantages of improved patient care and cost savings and contract with the ASC, or it can prove very challenging to form a relationship. The difficulty of contracting with all the health plans that provide coverage to a large dialysis population cannot be overstated (we have over 20). Writing a contract with any given health plan may require a lot of time and effort to provide education about the advantages of the ASC or credentialing your physicians. You cannot assume that the health plan will embrace your mission statement. Some of our contracts took over 18 months to negotiate. For some plans, such as Medicaid and Medi-Cal in California, rates are so low that the ASC may opt not to see those patients.

**Dr. Balamuthusamy: How will new payment models affect the viability of dedicated centers? To what degree will reimbursement dictate or influence device selection in these models?**

**Dr. Rasmussen:** Vascular access management through the ASC is a critical force in managing health care expenditures in the ESRD population. Payment models, especially those that focus on pay for performance, will continue to evolve and may or may not gain traction in any given location. The comprehensive ESRD Care Model allows CMS to partner with health care providers to enhance the delivery of patient care. In this model, coordination of care, including vascular access care for Medicare beneficiaries that reduces costs, is shared by the providers. The ASC will also require other models of contracting with health plans to establish a relationship in any given service area. We are experimenting with a health plan for payment that puts the ASC at risk for both facility and professional services, a “global contract.” Our ASC will pay the doctor for “professional services,” and whatever remaining dollars are left represent the “facility component.”

Technology is rapidly advancing, and costs for devices will increase (eg, drug-eluting technologies). Device selection should always be governed by best patient care, but reimbursement will influence device selection, and unlike the HOPD, the most expensive device cannot automatically be selected. If there is a proven but marginal benefit of a new expensive device, there will be little utilization in the freestanding ASC. If the patient is going to transition from hemodialysis to peritoneal dialysis or will undergo renal transplant in the next 6 months, then significant increases in device costs may not add to better care.

**Dr. Balamuthusamy: What local partnerships and referral networks are needed, and what are the challenges of developing referrals to a new access intervention center?**

**Dr. Rasmussen:** Although we all know what it means, the word “referral” has to leave our vernacular. The word itself may connote possible compliance issues.
that must be avoided, but partnerships and networks are good places to start, always promoting best patient care and cost savings. We have identified four areas:

- Physician investors: I have been involved in many of these centers and have seen a wide variation of support from physician investors at almost all locations. I would not start a center again unless an investor agreed to spend a day at the center within 6 months of its opening to see what is required with intake, in the nursing area, the procedure rooms, chart documentation and distribution, and how appropriate follow-up is done. The mistake is to assume an investor physician would understand or appreciate what the ASC does and automatically become a strategic partner to change the paradigm.

- Community nephrologists: Some centers form without any local nephrologists having ownership and are very successful, but this model mandates relationship building. There are many physicians in the community who want their patients cared for in a center of excellence, but the ASC would have to demonstrate that it delivers best patient care.

- The dialysis provider: The dialysis companies are under financial pressure from CMS to shorten catheter time to < 90 days. There are other metrics (eg, AVF prevalence) that the dialysis company may use to gauge how the ASC performs, but we have determined that shortened catheter time is the most important metric. Medical directors of the dialysis facilities appreciate your effort to promote patient care by shortening catheter time and increasing AVF prevalence, and doing so helps to form a strategic partnership.

- The dialysis nurse: The dialysis patient often looks for guidance from the dialysis nurse to determine a place of service. Therefore, the outreach and education you provide to the dialysis facilities are very important. Addressing concerns that the facility administrator or center manager have regarding the appointment process, hours of operation, and real-time access to procedure reports promotes a partnership with these critical members of the care team.

**Dr. Balamuthusamy:** How will centers face challenges in the future with all the unknown variables such as reimbursement, referral, and possible “evolution” of payment strategies?

**Dr. Rasmussen:** Adding additional service lines may prove beneficial for the business model (eg, peripheral artery disease diagnostic and therapeutic interventions), but core procedures for dialysis access therapies and AVF creation will drive the business model. Medicare is forced to deal with an unsustainable increase in costs for ESRD, now 10% of the Medicare dollars spent on < 1% of Medicare recipients and costing $80,000 to $85,000 per patient annually. Vascular access management remains an expensive component of the patient’s care. A fully mature ASC that demonstrates improved outcomes at lower costs to CMS and provides a favorable patient experience will be in the best position as we go forward.

**Dr. Balamuthusamy:** Thank you, Dr. Rasmussen, for sharing your expertise on the state of dialysis vascular access care and sites of service. The payment reductions for EOPs have led to the closure of several outpatient low-cost centers in the past year. With the 2019 ASC payments yet to be released by CMS and the substantial reduction in payments for EOPs, it’s a major disservice to our patients on dialysis who are indirectly denied access to prompt and reliable vascular access care in low-cost centers. Strong advocacy from providers, payors, and patient care groups is needed to address this major crisis to sustain patient-centered, high-quality care to our patients.


Randall Rasmussen, MD
Medical Director
Tri-County Vascular Care ASC
San Jose, California
elektrocmn@comcast.net
Disclosures: None.

Saravanan Balamuthusamy, MD, FASN, FASDIN
Associate Professor of Medicine and Nephrology
University of North Texas and Texas Christian University
Director of Research and Interventional Nephrology Training Program
PPG Healthcare
Fort Worth, Texas
sbala@ppghealthcare.com
Disclosures: Consultant to Bard/Becton-Dickinson and speaker for Lutonix Inc.