Transcatheter Aortic Valve Replacement at the Winthrop University Hospital

Interview by Amanda Wright

This article features an interview with Richard Schwartz, DO, Gina Kanetis and Valerie Kuczwaj, from the Winthrop University Hospital in Mineola, New York. It is the sixth in a series of six articles sponsored by Edwards Lifesciences.

Dr. Schwartz, can you tell us about how your program began and how you built your team?

Dr. Schwartz: The TAVR program at Winthrop University Hospital was born approximately four years ago at a national conference where we witnessed a transcatheter valve replacement performed during a live case broadcast. A procedure once thought to be impossible became possible. The exciting new technology was a natural fit for our hospital, as the interventional cardiologists and the cardiac surgeons work closely with one another. It was a partnership from the beginning. Forming a team approach was just an extension of how we treated coronary disease and valvular heart disease. We began meeting to discuss roles on the team and how patients would be evaluated and treated. Visiting institutions that performed TAVR, as well as attending many conferences on the procedure allowed us to gain valuable experience. Once we had the infrastructure in place, we began patient evaluations and when appropriate, we would refer the patients to institutions participating in the PARTNER Trial (Placement of AoRTic TraNsclatheter Valve Trial), a pivotal U.S. trial for TAVR. Once the results were published and the FDA approved the Edwards SAPIEN transcatheter heart valve, our team was well experienced in the workup and referral of patients with aortic stenosis who were not surgical candidates. We were pleased to become one of the initial commercial sites.

We employed a team approach with cardiac surgeons, interventional cardiologists, noninvasive cardiologists, imaging specialists (echo as well as CT), heart failure specialists, and, of course, nursing and technologic specialists. Patients are seen in a valve center by the surgeons and cardiologists. After the patient consultation and noninvasive workup, the cases are presented at a valve conference attended by all of the above personnel (done on a weekly basis). The treatment options are finalized and then the patient is scheduled for their procedure. Our coordinators provide the diagnostic testing as well as patient and family education and counseling. Without this support staff, the TAVR program could not succeed. We also maintain an extensive database on every patient we evaluate, whether they receive transcatheter therapy or not. Once the decision is made to proceed, the cath lab team and the OR staff work together seamlessly. During the procedure, we have OR nurses, a perfusionist, cardiac anesthesiologists, cardiac...
cath lab nurses, cardiac cath lab technologists, and physician assistants all working together. To the outsider, it looks like chaos, but to anyone in the room, it is harmony, with everyone knowing their role.

How do you differentiate your program?
Dr. Schwartz: The program at Winthrop is different from others in that we are truly a team. Our hospital’s philosophy, “Your Health Means Everything,” is carried out to its fullest in these very sick patients. We have complete support from the administration at the hospital. They place patient care and innovation first. Administration allowed us the resources to form this team. What also sets us apart is our excellent nursing care. From patient evaluation to the procedure and postoperative inpatient care to outpatient follow-up, there is complete attention to detail and the patient’s needs.

Gina and Valerie, can you please describe the structure of your valve clinic?
Ms. Kanetis and Ms. Kuczwaj: The Winthrop TAVR clinic consists of a multidisciplinary team encompassing noninvasive cardiologists, interventional cardiologists, cardiac surgeons, echocardiographers, nurses, technicians, IT specialists and other ancillary personnel.

What are your respective roles and responsibilities?
Ms. Kanetis and Ms. Kuczwaj: As the TAVR coordinators, our job is to act as liaisons between the doctors, patients and patients’ families. We coordinate the pre- and post-procedure patient care. We facilitate patient testing and procedure scheduling, as well as provide educational and emotional support to our patients. We also contribute to the case review process at our weekly multidisciplinary meetings.

Who else makes up the valve clinic team?
Ms. Kanetis and Ms. Kuczwaj: The members of our team include Dr. Richard Schwartz and Dr. Kevin Marzo, who bring vast experience in the diagnosis and treatment of structural heart disease. Dr. Scott Schubach and Dr. John Goncalves bring extensive experience in complex cardiac surgical procedures. Dr. Juan Gaztanaga and Dr. Bevash Ray have expertise in advanced cardiac imaging. Dr. George Gubernikoff is our chief echocardiographer. Gina Berrent is the operations manager for invasive cardiology. She manages and maintains the hybrid cath lab. John Gaetani is our IT expert. He ensures the accuracy and integrity of our database and is instrumental in the preparation of our patient presentations.

How are potential TAVR patients identified?
Ms. Kanetis and Ms. Kuczwaj: Most often, patients are identified through referral by one of their treating physicians. This can occur in either the outpatient or inpatient setting. Once identified and after the patient expresses an interest in proceeding with the evaluation, we then initiate the TAVR screening process.

What is your process for patient screening and evaluation?
Ms. Kanetis and Ms. Kuczwaj: First, eligibility for the procedure needs to be determined by the cardiothoracic surgeons. Once the patient is deemed eligible, they are then scheduled for appropriate testing, which includes a transesophageal echocardiogram, pulmonary function tests, computed tomography angiography of the chest/abdomen/pelvis, carotid Doppler, and cardiac catheterization. Once testing is complete, the multidisciplinary team reviews results and determines procedural appropriateness. Dr. Schwartz and Dr. Goncalves discuss the results with the patient and their treatment options are reviewed.
How are patients tracked through the system during this process and through follow-up?

Ms. Kanetis and Ms. Kuczwaj: We follow our patients very closely. Since the majority of the evaluation and treatment is performed at Winthrop University Hospital or one of its associated facilities, this not only ensures accurate and consistent data accumulation, it also allows us to track our patients through every step of the evaluation, treatment and follow-up process. We also keep an extensive database for all of our TAVR patients.

Dr. Schwartz, how have you been educating your referral network about TAVR?

Dr. Schwartz: Education is crucial. In order to change doctor bias, we have provided many lectures to cardiologists and internists on the indications of the procedure, as well as going to cardiologists’ offices to give them literature. We have offered to see patients at a wide variety of office sites for the convenience of the patients and to initiate the workup, as these patients may be too sick to travel.

In addition to healthcare practitioner education, Winthrop University Hospital has invested in raising general awareness about this technology. What kinds of marketing/communication activities most effectively increased awareness around the availability of this therapy at your hospital?

Dr. Schwartz: Administration at Winthrop has given us the utmost support. Whether it is advertising on the radio or in print, creating a website for the procedure or sending our hospital’s journal (dedicated to TAVR) to the community and physicians in the region, they have shown a strong commitment to get the message out that we have an outstanding valve program. With their continued support, not only do the physicians in the area consider us as a premier valve center, but patients also seek us out for expert care. This is quite an honor.

What have each of you found to be the most rewarding aspect of your TAVR program?

Dr. Schwartz: There are many rewarding aspects of our TAVR program; in particular, our heart team enjoys working with these very special patients and developing relationships with them and their families throughout the process. I am so proud of our team, because they have formed a professional unit in treating the patient and supporting their families. It truly has been an honor to be part of this program, seeing it from its origin to where it is now, and looking forward to the very bright future.

Ms. Kanetis and Ms. Kuczwaj: Being part of an amazing team of dedicated individuals has been both personally and professionally rewarding for us. Hearing a patient simply say “thank you” during a follow-up and knowing that we were able to help patients once deemed to be out of treatment options is a very special feeling.