minority of programs offer thoracic track pathways, a proposal such as this may engender pushback from those without sufficient access to catheter-based procedures.

3. Ultimately, questions arise related to divergence of the specialty, equivalence of pathways, and subspecialty certification.

Kilcoyne and colleagues¹ are right to challenge the specialty to evolve, and we must do so. It remains unclear how much of the curriculum is the responsibility of the

“undergraduate” program and how much to leave to post-graduate subspecialty fellowships. The latter exist but are not as highly subscribed as one might hope if surgeons are going to continue to play a role in this space.

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See Article page 2166.

Commentary: There's no I in TAVR: How do we train the team?

Gurion Lantz, MD, and Frederick A. Tibayan, MD

The advent and adoption of percutaneous valve interventions have transformed the field of cardiac surgery. The modern cardiac surgeon who specializes in adults must also be a competent structuralist, which requires an in-depth understanding of imaging, wire skills, fluoroscopy, and an ever-changing stable of valves and clips. As transcatheter aortic valve replacement (TAVR) has surpassed surgical aortic valve replacement in annual volume, clearly our surgical trainees must be facile in TAVR planning and performance before graduation.¹ In their thought-provoking Young Surgeon's Note, Kilcoyne and colleagues² outline new pathways and core principles to train the next generation of cardiothoracic surgeons in the treatment of structural heart disease. As the field changes, we must either change with it or be left behind. In light of this evolution, we agree that it is time to reassess the

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CENTRAL MESSAGE

As the armamentarium of transcatheter tools available to structural heart teams expands, trainees must add value in the selection, planning, procedure-related, and long-term phases of patient care.

training requirements (and sometimes, attitudes) during cardiothoracic surgery training. The authors warn that the field must skillfully navigate and embrace this sea change in the treatment of cardiovascular diseases or risk watching our roles diminish.

With this in mind, now is the time to think broadly and over a long time horizon as we define the place of the cardiothoracic surgeons on a structural valve teams. We must prepare our trainees for much more than TAVR. A perusal of the case requirements in the authors' proposed curriculum, which includes imaging analysis; structural heart team conferences; aortic, mitral, and tricuspid valve procedures; thoracic endovascular aortic repair;

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ventricular assist devices; and more, underscores the expanding armamentarium available to modern heart teams. Further, surgeons must remain integral not only in the case selection and planning for the short term, but also for a path of interventions that encompasses the rest of a patient's lifetime. For patients with aortic stenosis, this may include TAVR, valve-in-valve TAVR, surgical aortic valve replacement with bioprosthetic or mechanical prostheses, or some combination. The value of a cardiac surgeon on a multidisciplinary valve team is not limited to the ability to cut, sew, and tie, but rather in his or her in-depth knowledge of cardiac anatomy and tissues, the feasibility of surgery in complex cases, and an understanding of how what been done in prior operations (root replacements) influences anatomy and function. Although surgical bailout is rare, this rarity is in part due to surgeons' expertise not only in the conduct of the procedure, but also in patient selection for open versus transcatheter intervention.

We certainly agree that as cardiothoracic surgery practice changes, cardiothoracic training must keep pace. The Accreditation Council for Graduate Medical Education case requirement of 5 TAVR cases as primary operator can likely be accomplished in 2 days in most programs, out of a several-year training pathway. It is time to increase this case requirement, and also to implement a benchmark for structural case planning and/or attendance in a multidisciplinary valve conference. As the field evolves, it is incumbent on us to train our future colleagues to be integral members of heart teams, not just along for the ride in the hybrid room.

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See Article page 2166.

Commentary: Twenty-first century adult cardiac surgery training: Modernization

Chawannuch Ruaengsri, MD, and
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The growing indication for transcatheter heart valve therapies (THV) has driven patients to less-invasive procedures and fueled the need for additional training for cardiac surgeons. The Centers for Medicare and Medicaid

Chawannuch Ruaengsri, MD, and Kendra J. Grubb, MD, MHA, FACC

CENTRAL MESSAGE

Current training in adult cardiac surgery fails to prepare trainees in structural heart and valve disease. Structured curricula for transcatheter interventions must be developed and maintained.

Services 2012 decision memo formalized use of a heart team for transcatheter aortic valve replacement and called for patient assessment by 2 cardiac surgeons.¹ During 2019, the requirement was updated to 1 cardiac surgeon

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