While a scoping review was appropriate in this initial phase, systematic analyses may be warranted for future exploration. Importantly, Moran and colleagues provide an introduction to possible transcatheter cardiovascular competencies, meaning competencies for consideration. Given the exhaustive nature of the competencies identified, questions remain regarding the necessity, practicality, and function of each. A methodology for evaluation must be developed to assess each competency individually to devise a more focused list of fundamentals before moving on to any subsequent steps in curriculum development and addressing this unmet need.

References

Commentary: The train has left the station: Run fast or look for the next train
Barbara C. S. Hamilton, MD, MAS, and Tom C. Nguyen, MD, FACS, FACC

A seismic shift is occurring in the management of structural heart disease. In North America, the rate of transcatheter aortic valve replacement (TAVR) exceeds that of conventional surgical replacement.¹ Our colleagues in interventional cardiology have nimbly adopted the skills needed to perform percutaneous valvular procedures. Because TAVRs are increasingly accomplished via percutaneous femoral access, the need for surgical presence has been called into question from outcome and economic standpoints.²,³ Furthermore, future “single operator” devices may eliminate the need to have 2 physicians available. The success of TAVR has blown open the evolution of percutaneous valvular interventions. Despite this fundamental change, no method of training cardiac surgery residents to independently perform these procedures has been established. Expectations are ambiguous and varied, and determination of competency is at the whim of the educator. Current guidelines require that residents perform only 5 TAVRs as the primary surgeon and 10 TAVRs as an assistant.⁴ In this fashion, we are not sufficiently preparing our current trainees to be cardiac surgeons of the future.

CENTRAL MESSAGE
Management of structural heart patients is rapidly evolving as percutaneous treatments gain traction. Structured transcatheter aortic valve replacement training is crucial to prepare for the future of cardiac surgery.
Yet hope remains. In their article in this issue of the *Journal*, Moran and colleagues have sought to spark a much-needed discourse regarding the implementation of formalized TAVR training in cardiac surgery. By identifying a comprehensive list of possible competencies, they provide a framework for establishing an evidence-based curriculum. They purposefully keep their competency list broad to clarify what could be included in an ideal program with unlimited time and resources. Although they use frequency as a stand-in for importance, they astutely identify that frequency may instead represent competencies that are simply easily described. Further discussion with experts in the field is necessary to tease out those competencies that should be included as key tenets in building a curriculum. This is a start, but not by any means a completed objective.

Like many aspects of surgical education, defining goals is central to attaining proficiency. But proficiency is only the beginning. As rates of transcatheter interventions rise, we have an opportunity to act as leaders in this progression to minimally invasive treatments. To provide our field with the best opportunity to thrive, it is imperative that we efficiently train the future leaders of cardiac surgery to be expert in these techniques, with the skills to act as independent autonomous providers. Identifying markers of competency is the first step. Indeed, we are in the indelibly unique position to provide true equipoise in management decisions with our patients, to offer the entire range of options from percutaneous approaches to conventional surgery. A modification of our mindset and training paradigm could allow us to become indispensable leaders at the vanguard of structural heart disease. The train may have left the station, but we don’t have to be left behind. The time is now for us to lace up our shoes and sprint hard. We may still catch that train, or at the very least be well positioned to jump on board those trains that are lining up to follow.

References