team expertise built and maintained through a high and steady stream of robotic mitral surgery cases after overcoming a challenging initial learning curve. Centers must be committed to meet the cost, technical demands, and specialized resources for robotic mitral surgery including dedicated operating rooms, nursing, anesthesia, and perfusion teams. The lead robotic mitral surgeons must assemble such a dedicated team and engage in multidisciplinary collaborations with interventional cardiologists, echocardiographers, and intensive care staff experienced in robotic surgery.³ In terms of patient selection, a flexible algorithm that maximizes application of robotic mitral surgery without sacrificing patient outcomes is recommended. The choice of robot versus sternotomy must be patient-tailored following careful subjective and objective assessment of patient variables in the context of the team's capabilities.

To conclude, the robot is simply a surgical instrument. Like any other surgical equipment, the limits of its

applicability are operator dependent. Experienced surgeons running successful robotic mitral surgery programs regularly draw from their own experience to gauge patient variables when making complex judgement on surgical approach. The establishment and sustenance of a successful robotic mitral surgery program, ultimately, is a complex, multifaceted endeavor that requires fine synergy between institutional and surgeon-related variables as well as careful patient selection.

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Commentary: Reap what you sew: Excellent advice for a conservative algorithm for robotic mitral surgery

Heidi B. Nafday, MD, and Eugene A. Grossi, MD

The past 3 decades have seen great exploration of less-invasive approaches for mitral valve repair. Likewise, the use of robotic assistive technology for mitral repair has

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CENTRAL MESSAGE

New robotic mitral programs can benefit from a conservative patient selection algorithm as experience builds and surgeons gain confidence.

expanded during the past 2 decades. Nevertheless, robotic mitral surgery constitutes a small percentage of mitral surgery performed nationally.¹ Interest in less-invasive approaches will continue to expand, offering patients

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Disclosures: The authors reported no conflicts of interest.

The *Journal* policy requires editors and reviewers to disclose conflicts of interest and to decline handling or reviewing manuscripts for which they may have a conflict of interest. The editors and reviewers of this article have no conflicts of interest.

Received for publication Dec 17, 2020; accepted for publication Dec 18, 2020; available ahead of print Dec 26, 2020.

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J Thorac Cardiovasc Surg 2022;164:1090-1
0022-5223/\$36.00

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<https://doi.org/10.1016/j.jtcvs.2020.12.081>

expedited recovery from major operations by removing some issues (eg, pain and limitations to mobility) related to sternotomy that cannot be avoided. This is of particular importance when guidelines advise this operation for asymptomatic patients.

Chemtob and colleagues² present an excellent approach using both patient and imaging criteria to guide initial patient selection. This algorithm is useful for programs just starting out and early in their experience with developing a robotic mitral valve program. As the authors note, the criteria at a given center may be liberated to allow patients requiring additional procedures (eg, atrial septal defect closure and cryoablation) to benefit from this approach. With increased confidence and experience, even patients considered among the most challenging—such as redo

operations and complex mitral annular calcification cases—may see the greatest benefit from the lesser chest wall disruption provided by the robotic approach.

As farmers have learned, using a coultter alone avoids the disruption associated with tilling a field, thus creating a better environment for crops to flourish. Likewise, minimizing chest wall disruption via the robotic approach can have significant benefits.

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