## **Better and Better: Adopting Advances** in Shoulder Surgery

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e are all susceptible to the seduction of new technologies. Technological advances occur in our daily lives with increasing frequency. The examples are endless: 4G phones, tablet computers, and even 3D HD TV to name a few. For many of us, there is significant satisfaction that comes with being early adopters of the most up-to-date technology.

technology in their practice.



Shoulder surgery is no different. It continues to change at a rapid pace as research produces seductive new procedures. When promising treatments are introduced, it can be difficult for surgeons to know when it is appropriate to offer them to patients. Surgeons need to ask specific questions before they include any new procedure, treatment, or

Will this new procedure or treatment significantly help my patients by solving a difficult problem? Is the science behind it sound? Reverse shoulder arthroplasty has been a tremendous advancement in the treatment of shoulder arthritis with rotator cuff insufficiency. Data from Europe prove it is effective and increasing experience in the United States is confirming its value in treating many complex shoulder problems.

Is this new procedure or technology within my surgical skill set? Is it within the capabilities of my institution? The subtleties of a new plate or anchor usually can be learned quickly, but this may not be the case for more complex or less common procedures. Surgeons must evaluate their own skills to determine if specialized training is needed. Multiple studies in various disciplines have demonstrated that surgical success rates are linked to surgeon and institutional volume. The practicing surgeon needs to be certain that their institution will have enough ongoing experience to ensure good outcomes for their patients.

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Does this new technology significantly increase costs? Arthroscopy has become the most common approach for many shoulder problems, but it also has increased costs for many shoulder surgeries. Although the success rates of arthroscopic and open procedures are similar, those increased costs are counterbalanced by improved patient satisfaction.

Once a new procedure or technology is adopted, surgeons must seek out the best training available. The American Academy of Orthopaedic Surgeons runs numerous courses at the Orthopedic Learning Center in Rosemont, Illinois, taught by knowledgeable surgeons. If possible, go and observe the procedure at an institution where it is commonly performed. Do not overlook the importance of supporting staff in the operating room. A smoothly functioning team is needed for the success of more complex procedures. Video learning can be helpful for some procedures, but skillful editing can make an elaborate surgery look deceptively easy.

Carefully select the patients on whom you perform any procedure that is new to you. Good patient selection always has been a crucial factor in successful results. Be forthright with your patients about your experience and training.

Finally, be as objective as you can in assessing your own results. Has your new procedure lived up to your expectations? Are the results in your patients improved, compared with what you might have done previously? We owe it to our patients to be informed and well trained in the latest and most effective procedures. We need to be honest with ourselves about our limitations and be prepared to adopt new surgical skills and technologies when the science behind them proves their effectiveness.

## **AUTHOR'S DISCLOSURE** STATEMENT

The author reports no actual or potential conflict of interest in relation to this article.