the standard levels I and II axillary node dissection should be done.

Sentinel lymph-node biopsy has now reached the point at which it should be compared to a conventional levels I and II axillary dissection in randomized clinical trials of clinically node-negative breast cancer patients. Both the National Surgical Adjuvant Breast Project and the American College of Surgeons have initiated studies that will determine whether sentinel-node resection can provide equivalent or better regional control, disease-free survival and overall survival, and if these results can be achieved with less morbidity. All centres are encouraged to participate in these trials. However, until these studies have been completed and the use of SLN biopsy is validated, the Canadian Society of Surgical Oncology stands by the current practice guidelines that incorporate levels I and II axillary dissection as part of standard breast cancer treatment. Our recommendation is that Canadian general surgeons plan to acquire the necessary equipment, collaborate with their nuclear medicine and pathology colleagues to build an expert team, complete a recognized training program designed to teach the technique and perform a minimum of 30 SLN biopsies with concurrent levels I and II axillary lymph-node dissections in order to document proficiency and accuracy. Thirty SLN biopsies and axillary dissections should provide about 10 positive axillary node biopsies and thus provide some basis for calculating an individual surgeon's false-negative rate. If the standard axillary dissection is not part of the treatment plan, the patient should be fully informed, not only of the possible benefits of reduced axillary morbidity but also the current state of knowledge, the individual surgeon's false-negative rate and possible consequences of a false-negative result. The sentinel-node biopsy has the potential to reduce morbidity from breast cancer surgery, but it must be incorporated into practice with due diligence.

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REDUCING ARTHROPLASTY COSTS

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The paper by Johnston and his colleagues in this issue (page 445) on reducing arthroplasty costs through vendor contracts deserves a wide audience. This Edmonton group has initiated and sustained a viable methodology, which creates a win-win scenario for patients, surgeons, health care providers and prostheses manufacturers. It could act as a blueprint for other centres that are also facing cost constraints.

There are some important points to consider.

The process was open, the specific variables were identified for all potential bidders and the evaluation committee comprised a majority of peer-chosen orthopedic suregeons. As benefits were identified and made available to all potential partners in the equation, the pro-

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ject continued to be a success. Important allowances were made for new advances and revision procedures not included in this process.

As the practice of joint arthroplasty continues to improve, the numbers necessary to demonstrate clinically and statistically significant differences between arthroplasty components are becoming larger. This means that an individual surgeon's results are unlikely ever to show a significant difference among components and that groups of surgeons, by pooling their results, will be able to demonstrate a significant difference and have considerable impact on prosthesis selection.

Outcomes collected on behalf of a group allow for individual comparisons or surgical outcomes to be analysed and improved upon. Ten-year results are more likely to be collected when independent study research personnel, reporting to the group rather than to individual surgeons, can follow up patients for that length of time.

The process was also acceptable because with the use of an audited wait list demonstrating significant wait time for joint arthroplasty, the administration was able to free more resources to add to the savings achieved and allow more patients to undergo the operation.

This process is also something that industry should support. Manufacturers no longer have to answer to individual surgeons but to groups of surgeons, and this undoubtedly is a source of some cost savings. They will also be able to get significant results with respect to their arthroplasty products quicker with a group of surgeons than with individuals.

There is one caveat for the future. If a new implant is designed and implanted under trial conditions and demonstrates significantly superior results, then the administration must be prepared to pay more for such an implant, because the costs of proving its efficacy are naturally going to increase if the new product is subjected to a 10-year randomized, controlled study.

We should now ask that such an accounting of costs and outcomes be applied to other areas to enhance efficiency and improve outcomes in other surgical and nonsurgical specialties.