AAOS Strives to Reduce Surgical Risk with New Online Toolkit

Preparing a healthier body and mind leads to better surgical outcomes

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Orthopaedic surgeons are involved in routine aspects of surgical planning, such as selecting implants and instructing operating room (OR) support staff on surgical needs. Payers now place more emphasis on the entire episode of care, not just the isolated surgical procedure. The entire episode of care can directly affect how we are judged as surgeons. Most of a patient's surgical risks are present before we make the decision to operate. Understanding and mitigating such risks have become vital aspects of surgical planning.

As we challenge ourselves to produce better outcomes on a broader scale, we should ask the following questions about each surgical patient:

- What are the unique risks for this patient?
- Can simple medical measures and management techniques before surgery reduce those risks?

The new online AAOS Surgical Risk Reduction Toolkit (SRR Toolkit) was developed with these questions in mind. The primary goal is to deliver the best tools and resources to help AAOS members ask and answer these questions efficiently, with the intention of improving quality and patient outcomes.

The SRR Toolkit is designed to help identify patient-specific risk factors that can be medically optimized throughout the care episode and to provide resources to help doctors and patients manage and optimize specific risks. The easiest pathway to improved patient outcomes following complex orthopaedic surgery is avoiding medical complications that lead to increased length of stay, hospital readmission, and return to the OR. The methodology takes advantage of easily accessible resources to create a team approach to address known avoidable complications and improve clinical outcomes.

Patients with multiple medical comorbidities can pose many challenges to treating surgeons and care teams, and they are at higher risk for perioperative complications following orthopaedic surgical procedures. There is mounting evidence that making "sick" patients less sick has the potential to decrease risk for postoperative complications. Tools applied in an algorithmic manner to address risks enable surgeons to develop reproducible medical optimization strategies that will decrease risk for postoperative complications and improve overall clinical outcomes. We can create a team approach that allows the evolution of the doctor-patient partnership to help optimize specific risk factors. The development of a clinical pathway in our immediate and local health systems encourages and assists us in reducing identified risk factors before surgery. Medical optimization prior to elective orthopaedic surgery makes our patients more aware of the health risks associated with upcoming surgery and promotes patient engagement in developing a sustainable healthy lifestyle.

AAOS continually works to develop ways to help fellows and active members improve the quality of their practice, decrease complications, and increase the value of their work to society. Specifically, the SRR Toolkit contains a preliminary review of the major patient surgical risk factors, including obesity, poor nutrition, smoking, sleep apnea, anemia, clotting risks, and infection. It includes a temporal approach so that the data and interventions provided mirror the way we engage with patients each day. It is now well accepted that complications are most likely to occur during critical "hand-offs," including transitions in care as patients move

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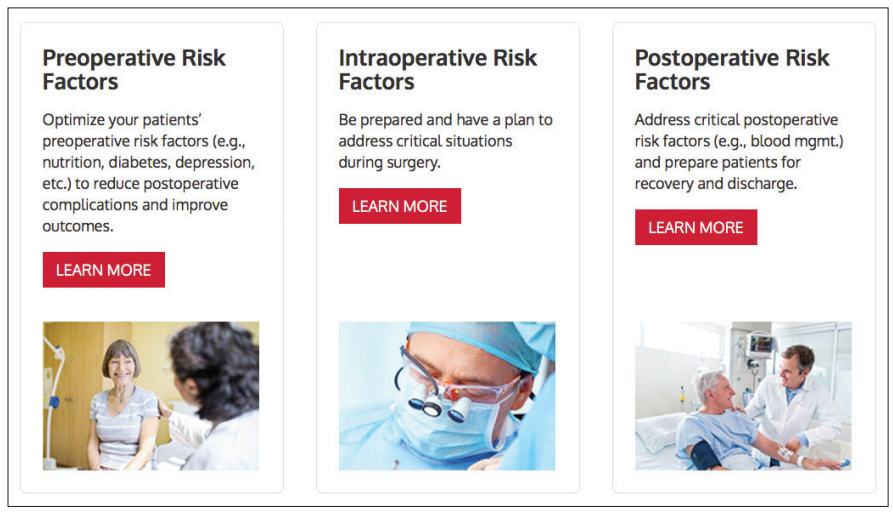

Fig. 1 Surgical Risk Reduction Toolkit homepage

Fig. 2 Intraoperative risk factors

SRR TOOLKIT FROM PAGE 28

from home to the preoperative area, from the preoperative area to the OR, from surgery to recovery, from recovery to the floor or home, and from the floor to discharge to home or a rehabilitation facility. The SRR Toolkit, therefore, begins with preoperative, patient-specific risk factors; moves to surgeon-centered intraoperative checklists and complication-prevention techniques; and finishes with post-operative care and considerations, enabling surgeons to develop a seamless patient care pathway using available resources (Fig. 1).

The content presented in the SRR Toolkit is multilayered. It starts with a general listing of areas of interest divided into sections (Fig. 2) and then drills down into deeper detail (Fig. 3). It contains both surgeon- and patient-centered information, with resources that can aid in decreasing risk and potential complications. The toolkit is under continuous development and will grow to include more perioperative considerations, such as diabetes, osteoporosis, metabolic syndrome, depression and mental health, frailty, and multimodal pain reduction.

The goal is to expand upon this web-based platform and transform the SRR Toolkit into a user-friendly application for surgeons. Surgeons and support personnel may use the application in office settings to quickly and efficiently evaluate each patient's specific risks related to a proposed surgical procedure by asking simple questions in a checklist format.

We hope the SRR Toolkit will have a positive effect on your practice and your patients' preoperative and overall health, reduce your complication rates, and help you be the best surgeon with the best possible outcomes.

Visit www.aaos.org/SurgicalRiskReductionToolkit for more information.

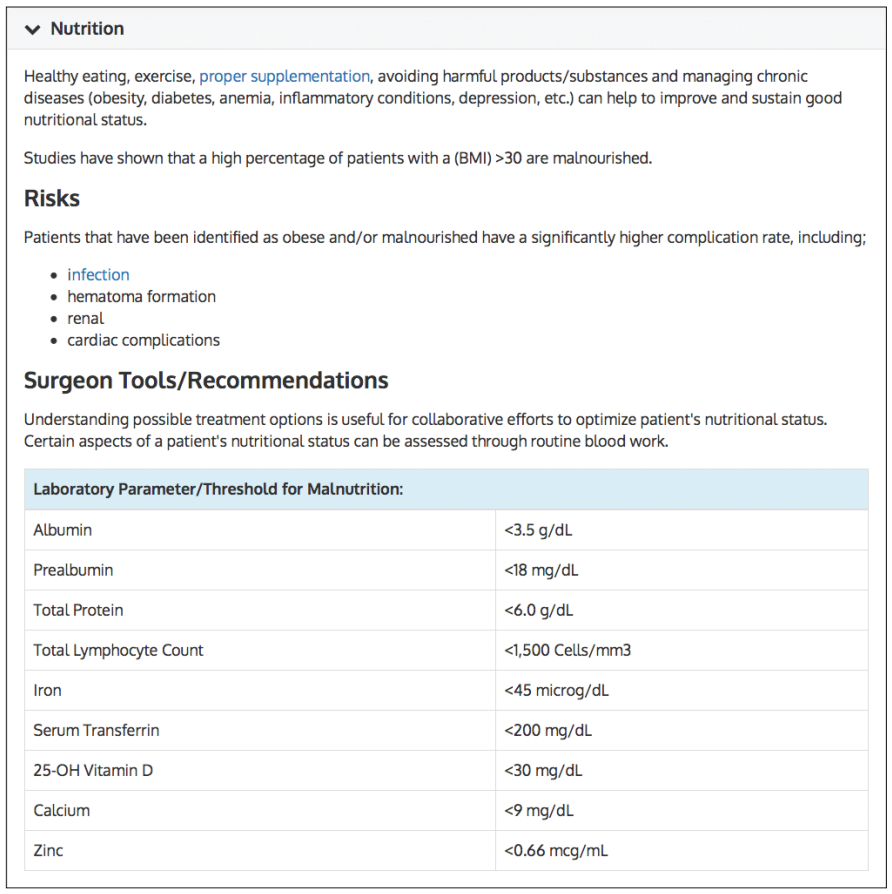

Fig. 3 Content from the preoperative risk factors

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Failed or Recalled Implants: Is There Surgeon Liability?

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In recent years, catastrophic failures have been associated with several orthopaedic implants. Issues with biologics, such as bone morphogenic protein, also have been reported. This article explores several of the potential liability aspects of failed implants. For example, what is an orthopaedic surgeon's legal exposure and medical liability with a failing or failed implant in patients in his or her practice? We have extensive experience treating patients with failed implants, representing plaintiffs in court, and providing expert witness testimony regarding failed implants. Having an implant fail in a patient is not malpractice per se, but a good starting point would be to define a malpractice claim before delving into the individual issues.

Components of a malpractice suit

Briefly, for medical malpractice to be considered, an injured patient must show that the physician acted negligently in rendering care and that such negligence resulted in injury. To do so, four legal elements must be proven:

1. a professional duty owed to the patient
2. breach of such duty
3. injury caused by the breach
4. resulting damages

Implanting a device that is widely known in the orthopaedic community to have had issues would breach one's professional duty. Conversely, a breach would not occur if a surgeon had used an implant with a heretofore unremarkable adverse outcome history. Thus, use of a Food and Drug Administration (FDA)-approved implant as intended is not negligence. Furthermore, if an implant fails, that does

Editor's note: This article is the first in a two-part series on liability for failed implants. The next article will appear in the March issue of *AAOS Now*.

Elements needed to bring a malpractice suit

In a malpractice suit, four legal elements must be proven:

1. A professional duty owed to the patient: Professional duty begins when the professional provides a medical or surgical service or procedure.
2. Breach of such duty: Failure to ensure patient safety and confidentiality would be a duty breach.
3. Injury caused by the breach: Administration of a medication despite a known allergy by the patient with an ensuing death would be an extreme form of injury.
4. Resulting damage: As noted above, one example would be a fatal reaction to a medication in a patient with a known allergy.

To prove **negligence**, the patient must prove duty, breach, causation, and injury. Other elements also play a role in such cases, including:

- **Standard of care** is defined as the degree of care expected of a minimally competent physician in the same specialty and under the same circumstances. Standard of care changes—the standard today will be different tomorrow. The standard used must be at the time of the event, not today.
- **Thoughtful documentation** of good clinical care and the informed consent process will discourage many plaintiffs' lawyers from accepting cases.