Improving Patient-centered Care Delivery in 2017:
INTRODUCING PRE-ANESTHESIA DECISION AIDS

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"I recently had surgery on my ankle. Because my church choir activities are extremely important to me, I was concerned when the surgeon mentioned that the procedure would be done under general anesthesia, as my friend recently had a sore throat and hoarseness for a couple of weeks after her surgery. You can't imagine how relieved I was when my anesthesiologist presented the option of spinal anesthesia. The brochure that explained the block, along with its risks and benefits, clarified the upsides and downsides of my anesthesia choices. I was thrilled with the outcome of the spinal. Please thank my anesthesiologist for offering me this choice."

Patients often have preferences for their medical care, including anesthesia options. Yet patients may feel vulnerable when discussing their care plans with physicians, not speaking up out of fear of being labeled "difficult" or "demanding." This situation may be exacerbated when discussing anesthesia plans on a first meeting with a physician with whom the patient has no prior relationship. Without engaging patients, we will never know their concerns and preferences.

The Institute of Medicine (IOM) named patient-centered care as one of the six aims for health care system improvement in its seminal 2001 report *Crossing the Quality Chasm*. Patient-centered care delivery was defined as "providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions."[1] The Picker Institute undertook a multiyear survey of patients' perceptions regarding the most important health care delivery characteristics with respect to quality and safety. Patients identified respect for an individual's values, preferences, and expressed needs and provision of high-quality information and education for the patient and family as two of the eight most important principles.[2] In order to practice patient-centered care, health care providers need to engage in shared decision-making with patients.

Shared decision-making is a mode of communication with patients to encourage engagement about treatments that have options – options for which patient preferences, as well as physician preferences and professional opinion warrant consideration before a final treatment decision is made. Shared decision-making is appropriate when there is no medically "best" choice; in these instances, the best choice among medically appropriate options for each patient depends on individual patient preferences, including the patient's unique weighing of various risks, benefits and treatment goals. These medical decisions are termed "preference sensitive." The option of regional anesthesia for surgery is often a preference-sensitive choice, as general anesthesia or sedation with local anesthesia may also be a clinically appropriate option.

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Decision aids are patient education tools to assist patients in making a preference-sensitive choice among their medical care options. Decision aids have particular content: explanation of the choices, evidence-based presentation of risks and benefits along with probabilities and uncertainties about outcomes, and information to assist patients in evaluating the things that are most important to them in making their decisions (Table 1).[3] Decision aids can take various forms: computerized programs, videos, pamphlets or checklists, and there are specific criteria for the development process.[4] The latest Cochrane review of 115 trials through June 2012 found that the use of decision aids led to enhanced patient knowledge about treatment options, more accurate perceptions of the risks involved with different therapeutic approaches, more decisions that were in keeping with patients' values with a corresponding reduction in feelings of internal decisional conflict for patients, and more patient engagement in decision-making with fewer individuals remaining passive or undecided.[5]

In Washington State, the legislature incorporated medical legal protections for physicians if shared decision-making with use of patient decision aids is used:

> *"The legislature finds that there is growing evidence that, for preference-sensitive care involving elective surgery, patient practitioner communication is improved through the use of high-quality decision aids that detail the benefits, harms, and uncertainty of available treatment options. Improved communication leads to more fully informed patient decisions. The legislature intends to increase the extent to which patients make genuinely informed, preference-based treatment decisions … by recognition of shared decision making and patient decision aids in the state's laws on informed consent.[6]"*

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Table 1: Patient Decision Aid Content and Evaluation Criteria
1. Provide unbiased information about the options
Describe the options
Describe the risks and benefits
Describe the side effects
Include chances of positive and negative outcomes
2. Provide probabilities of the outcomes – unbiased
Compare probabilities using the same denominators
Describe uncertainty around the probabilities
Use multiple methods – words, numbers, diagrams
3. Include ways to clarify the patient's values – what is important in making the decision
Prompt patients to consider which benefits and risks are most important to them
Encourage patients to discuss their options with others and seek additional opinions
4. Use plain language
Grade 6-8 reading level
5. Use current scientific evidence
Include a reference section or appendix
Update the evidence on a regular schedule
6. Disclose funding source and potential conflicts of interest
Funding for development
Funding for distribution

Note: This list is an abbreviated version including only selected items from the full criteria developed by IPDAS. The full checklist is available at ***ipdas.ohri.ca/resources.html****.*

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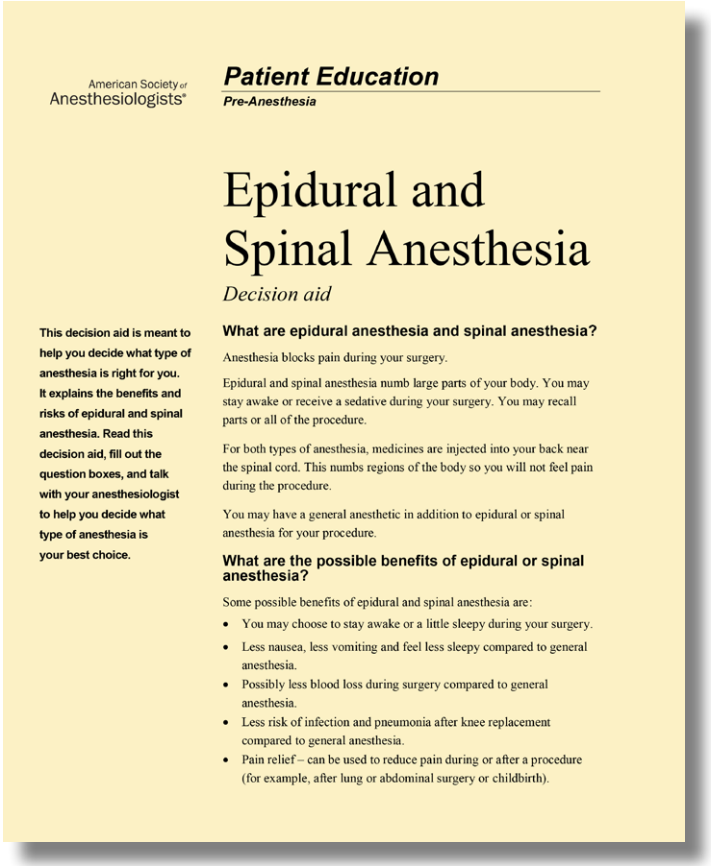
In 2010, the ASA Committee on Professional Liability partnered with the shared decision-making team at the University of Washington under a grant from the Agency for Healthcare Research and Quality (AHRQ R21 HS19532) to develop regional anesthesia decision aids. Two patient decision aids were developed, one for epidural and spinal anesthesia (Figure 1) and another for peripheral nerve blocks (Figure 2). These decision aids were tested with patients in a pre-anesthesia evaluation clinic. They were shown to increase knowledge about regional anesthesia, did not affect patient anxiety and were well-received by patients.[4] They also increased patient engagement during the clinic visit, with patients more often discussing their anesthesia options during the clinic visit if they had been given a decision-aid before their visit, compared to patients who did not receive decision aids.[7]

Figure 1: Epidural and Spinal Anesthesia Decision Aid



American Society of Anesthesiologists®

Patient Education
Pre-Anesthesia

Epidural and Spinal Anesthesia

Decision aid

This decision aid is meant to help you decide what type of anesthesia is right for you. It explains the benefits and risks of epidural and spinal anesthesia. Read this decision aid, fill out the question boxes, and talk with your anesthesiologist to help you decide what type of anesthesia is your best choice.

What are epidural anesthesia and spinal anesthesia?

Anesthesia blocks pain during your surgery.

Epidural and spinal anesthesia numb large parts of your body. You may stay awake or receive a sedative during your surgery. You may recall parts or all of the procedure.

For both types of anesthesia, medicines are injected into your back near the spinal cord. This numbs regions of the body so you will not feel pain during the procedure.

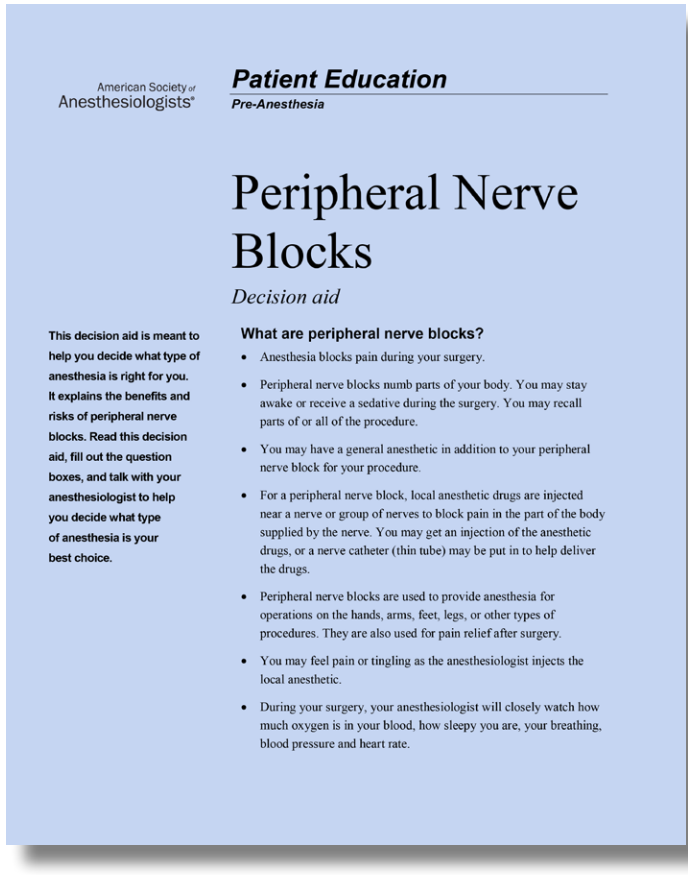
You may have a general anesthetic in addition to epidural or spinal anesthesia for your procedure.

What are the possible benefits of epidural or spinal anesthesia?

Some possible benefits of epidural and spinal anesthesia are:

- You may choose to stay awake or a little sleepy during your surgery.
- Less nausea, less vomiting and feel less sleepy compared to general anesthesia.
- Possibly less blood loss during surgery compared to general anesthesia.
- Less risk of infection and pneumonia after knee replacement compared to general anesthesia.
- Pain relief – can be used to reduce pain during or after a procedure (for example, after lung or abdominal surgery or childbirth).

Figure 2: Peripheral Nerve Block Decision Aid



American Society of Anesthesiologists®

Patient Education
Pre-Anesthesia

Peripheral Nerve Blocks

Decision aid

This decision aid is meant to help you decide what type of anesthesia is right for you. It explains the benefits and risks of peripheral nerve blocks. Read this decision aid, fill out the question boxes, and talk with your anesthesiologist to help you decide what type of anesthesia is your best choice.

What are peripheral nerve blocks?

- Anesthesia blocks pain during your surgery.
- Peripheral nerve blocks numb parts of your body. You may stay awake or receive a sedative during the surgery. You may recall parts of or all of the procedure.
- You may have a general anesthetic in addition to your peripheral nerve block for your procedure.
- For a peripheral nerve block, local anesthetic drugs are injected near a nerve or group of nerves to block pain in the part of the body supplied by the nerve. You may get an injection of the anesthetic drugs, or a nerve catheter (thin tube) may be put in to help deliver the drugs.
- Peripheral nerve blocks are used to provide anesthesia for operations on the hands, arms, feet, legs, or other types of procedures. They are also used for pain relief after surgery.
- You may feel pain or tingling as the anesthesiologist injects the local anesthetic.
- During your surgery, your anesthesiologist will closely watch how much oxygen is in your blood, how sleepy you are, your breathing, blood pressure and heart rate.

Figures 1 and 2: Snapshots of the first page of the Epidural and Spinal Anesthesia (left) and Peripheral Nerve Blocks (above) patient decision aids. Each decision aid opens with the nature of the procedure, followed by a listing of benefits, risks (minor and major), side effects, choices and a reference list. Each decision aid includes spaces for patients to list the benefits that matter most to them, concerns about possible risks, questions and information needs. The decision aid includes a brief multiple-choice test for understanding and includes the clinic telephone number.

With successful field testing of these regional anesthesia decision aids, they were transitioned from the Committee on Professional Liability to the Committee on Patient Safety and Education for ASA branding.

According to ASA Administrative Procedures Related to Approval of Committee Work Documents (Ref. 11.7.1.2.1), following approval by Drs. Stead, Clark and Broussard (appropriate Vice President, Section Chair and Board committee chair), the decision aids were submitted and approved by the Administrative Council. As of March 21, 2017, the materials were posted on **www.asahq.org** and readily available for ASA members to adopt into anesthesia practice. They can be accessed using the following link, under the heading "Patient Safety" **www.asahq.org/resources/resources-from-asa-committees#Patient_Safety**.

Pursuant to the intent of using these patient decision aids in the pre-anesthesia clinic visit, the Committee on Patient Safety and Education proposes the development of additional patient education tools in collaboration with the Committee on Professional Liability. Posner et al. (2014) demonstrated that patients generally have a low level of knowledge regarding regional anesthesia, and we suspect that information deficit extends to most other anesthetic techniques as well, with the possible exception of general anesthesia.[8]

"Shared decision-making is appropriate when there is no medically 'best' choice; in these instances, the best choice among medically appropriate options for each patient depends on individual patient preferences, including the patient's unique weighing of various risks, benefits and treatment goals."

For the next decision aid, we might consider the term "Twilight Sleep," clarifying what this means to the patient and how this may differ from the term "sedation." Our goal will be to help patients understand the types of procedures in which these anesthetic techniques might be used, their level of consciousness during the procedure and what they can expect to feel using such a technique.

Possible future patient decision aids in this "Twilight Series" include DNR/DNI orders during the perioperative period, monitored anesthesia care (MAC) and herbal medications, including medical marijuana.

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