An expert comments on the preop process

OR Manager interviewed L. Reuven Pasternak, MD, MPH, MBA, vice dean, Bayview Campus, Johns Hopkins Medicine, Baltimore. Dr Pasternak chaired the American Society of Anesthesiologists Task Force on Preanesthesia Evaluation and is author of review articles on preoperative screening.

Q How have you improved the process for preoperative evaluation at Bayview?

Dr Pasternak: Bayview uses a preoperative evaluation center (PEC) that is under the management of senior clinical nurses. Bayview has 10 ORs and a surgical volume of 8,000 patients a year. Administratively and clinically, the nurses run the clinic under the direction of an anesthesiologist who is a medical director but who is not on site.

We used to have a physician on site who was assigned as medical director. But we found that as the nursing staff became familiar with anesthesia protocols and issues, we really didn’t need a physician on site. The nurses were able to address those issues with physician backup.

Over the 10 years Bayview has used this process, case cancellations for elective patients caused by incomplete paperwork have improved dramatically from 17% to essentially zero.

The only cancellations we have now are situations where a patient violates basic issues like NPO, or a surgeon may decide surgery is no longer necessary for clinical reasons. The process also has helped reduce unnecessary preoperative testing.

Q Please describe the process for preanesthesia evaluation at Bayview.

Dr Pasternak: The PEC is the focus for gathering all of the clinical information about the patient before surgery.

When a surgeon schedules a case for the OR, we have a posting sheet, which is the way the PEC is made aware of a patient being scheduled. We did this so the surgeons do not have to make 2 phone calls to start the process.

The nursing staff contacts the primary care provider to advise them that the patient is scheduled for surgery and asks that information be provided to us.

We have a form physicians can use to provide that information. But we also accept information on their forms, provided they answer all of the questions of concern to us. Many offices deal with multiple hospitals. Allowing the offices to use their own forms is friendlier to them and makes it easier to get the information. We would rather do it that way and transpose the information on to our forms if necessary.

Our form includes check-offs related to the patient’s medical status, allergies, medications, past surgery, and special issues. The nursing staff reviews the forms for tests and consultations needed. This information is kept in a folder for each patient. Each day, the information is reviewed by an attending anesthesiologist who determines whether additional information is necessary. If it is, the PEC staff call to get the information.

Q Preop clinics are not revenue generating. How did you justify your clinic?

Dr Pasternak: We were lucky because our hospital was willing to support this enterprise. We were able to demonstrate that the clinic does generate revenue indirectly because it helps eliminate cancellations. It also makes for a more efficient process in the OR because the anesthesia staff doesn’t have to spend as much time chasing down information on the day of surgery.
**How many patients do you see in the clinic before the day of surgery?**

*Dr Pasternak:* About one-fourth come in prior to the day of surgery. We make this service available to anyone who requests it. We don’t bill for it.

The criteria for who comes in are based more on medical acuity than the invasiveness of the surgery. Usually, it is patients who have had major ongoing medical problems or who have known airway difficulties. Coming to the clinic also ensures that all of our forms are filled in to minimize the chance of anything going wrong on the day of surgery.

We have done informal surveys of other academic and private practice institutions and found that 20% to 33% of patients come in for an evaluation before the day of surgery.

**How do you decide which patients need to come in before the day of surgery?**

*Dr Pasternak:* That question caused the most controversy when we developed the ASA Practice Advisory. [The advisory, published in 2002, represents expert opinion on preanesthesia evaluation.]

Different anesthesiologists from different parts of the country had very different perspectives on what needed to be done. Some worked in environments where the continuity of care or the primary care system was very poor. They felt the advisory needed to give them the leverage to require patients to come in, which was the only way they felt comfortable they would get the necessary data. Then you had the other extreme where surgeons and anesthesiologists work closely together, and there was no reason to require anyone to come in.

That is why the Practice Advisory does not state specific conditions for which patients have to come in before the day of surgery.

The one thing we state emphatically is that regardless of whether patients come in or not, we need certain information prior to the day of surgery to provide anesthesia safely. Then you need to develop a system that works for your area.

**How do you handle specialty consultations?**

*Dr Pasternak:* The first thing we did was to reduce the scope of the problem. We have found the number of specialty consultations has decreased significantly. The first researchers to look at this were Stephen Fischer and his group at Stanford.

They found that by having the information reviewed by staff, they were able to reduce referrals to cardiologists and pulmonologists. That is because the nursing staff understood the anesthesia staff’s criteria and were able to determine that they had the information needed and didn’t need additional testing.

The second thing we did was to have the PEC staff request the consultation when necessary. If a patient is referred from a private physician, we ask if the physician has a cardiologist he or she prefers us to use. If not, we refer the patient to our cardiologist for an assessment.

**Do you have a standard form you ask consulting physicians to complete?**

*Dr Pasternak:* We have a standard form that we supply on request, but we don’t require that it be used. We phrase the question in such a way that we will get the information needed rather than just a small slip saying, “cleared for anesthesia.” We identify the medical problem and ask: “Is this problem as stable as reasonably possible in preparation for surgery?”

**Do you have sanctions to encourage physicians to get paperwork in on time?**

*Dr Pasternak:* We have considered the possibility of automatic cancellations if patients don’t have absolutely everything needed on the chart. But we haven’t gone to that. In cases when a lab value may be missing, the anesthesiologist and nurse will review it. We have found overwhelmingly that there really wasn’t a reason to think the patient was going to have an abnormality that was going to cause
a cancellation or change in management during the perioperative period. So we thought, “Why punish the patient?”

We do allow for patients to get blood work done on the day of surgery. We require them to come in a bit earlier, and we have not had problems. It is pretty infrequent, so we haven’t taken as rigid an approach as we might have.

Q Would you please summarize the current thinking on preoperative testing?

Dr Pasternak: The recommendation is that preoperative testing should be done only on the reasonable expectation that:

- the patient has a specific medical condition that is of concern for safety during the perioperative period and
- testing would yield information that might affect management of the patient by the anesthesiologist or the surgeon.

The ASA Practice Advisory does not recommend the broad-based screening that has been done in the past. Testing is done for clinical conditions and that reason alone.

The 2 areas in which there still is work to be done are:

- whether there is a routine cutoff age for an electrocardiogram (ECG) on an adult patient without a history of cardiocirculatory or other disease
- pregnancy testing.

In the ASA Practice Advisory, we state there is no evidence to support a minimum age for a baseline ECG. An ECG may be indicated for patients with known cardiovascular risk factors or for patients with risk factors identified in the preanesthesia evaluation. If someone felt they needed a cutoff age, we say age 50, but that is very soft. There is no evidence to support that.

The most controversial issue of all was pregnancy testing. There is no evidence to suggest that anesthesia in and of itself would cause a woman to have problems in early pregnancy. The literature shows that routine pregnancy tests are positive in 0.3% to 2.2% of cases and lead to delays or cancellations of surgery in 100% of cases where pregnancy is found.

The Practice Advisory recommends that “pregnancy testing may be offered to female patients of childbearing age and for whom the result would alter the patient’s management.” That may sound like mumbo-jumbo, but there are a lot of social issues that come into play as well as medical issues. [For a discussion of pregnancy testing, see August 2003 OR Manager, p 28.]

Q How do you see the role of nurses in preanesthesia evaluation?

Dr Pasternak: I think they have a huge role to serve, both in the clinical and administrative realm. From the administrative side, they do a superb job. From the clinical standpoint, they have the knowledge base and skills to do the assessment and ask for support from the anesthesia staff. I think that is the universal view of the physician staff with whom we deal.

Q What were the major challenges in implementing your system?

Dr Pasternak: I think the hardest part was educating physicians outside of our immediate environment. Some have a high turnover of personnel in their offices, so it is a constant exercise.

It took 2 to 3 years to get to the point where we had a critical mass of people in other locations who were familiar with our system and our criteria. It takes a while for them to understand that anesthesia issues are distinct from surgeons’ issues. It is a different set of information that is required.

References


