Time is valuable in ambulatory surgical centers (ASCs). Patients need to be moved through the facility as quickly—and safely—as possible. How can you balance time with safety to achieve success in your ASC? Simply be sure your policies and procedures reflect evidence-based practice guidelines for addressing common factors that contribute to delayed discharge: pain, postoperative nausea and vomiting (PONV), lack of hydration, and lack of a patient escort. Add in a patient discharge criteria system and professional collaboration, and you’ll set yourself up for safety and efficiency.

**Ease the pain**

Preventing pain begins with assessing the patient for risk factors. One risk factor is the type of surgery, as shown in a study by Frances Chung, FRCPC, department of anesthesia, Toronto Western Hospital, University Health Network, University of Toronto in Toronto, Ontario. Dr Chung and her colleagues found patients undergoing orthopedic procedures have a high incidence of postoperative pain. Two other factors that increased pain: longer surgical time and a high body-mass index (BMI).

One way to ease postoperative pain is to, “give acetaminophen and an NSAID [nonsteroidal antiinflammatory drug] 30 to 60 minutes before surgery,” Dr Chung notes. Walter Maurer, MD, president of the Society for Ambulatory Anesthesia (SAMBA), also supports the use of NSAIDs. He advises moving away from narcotics toward nonnarcotic modes for pain management. He uses intravenous ketorolac tromethamine (Toradol) during surgery to prevent postoperative pain. Dr Maurer, who is head of the ambulatory anesthesia department at the Cleveland Clinic, predicts a resurgence of cox-2 inhibitors, which are effective in managing pain but are now off the market. “The problem was with long-term dosing,” he notes, “I don’t think you have to be concerned about 1 or 2 doses.”

Dr Chung advises using regional anesthesia whenever possible because it’s associated with better pain control and less PONV. An option for patients in whom regional anesthesia can’t be used is continuous local delivery of analgesia to the operative site through a pump such as the Pain Buster Pain Management System or On-Q Post Op Pain Relief System. Patients go home with the pumps, which deliver drugs at a fixed rate.

**Prevent nausea and vomiting**

Control of pain is just one strategy for reducing PONV. An excellent resource for other methods is the 2006 evidence-based guideline for preventing and managing PONV/PDNV (postdischarge nausea and vomiting) from the American Society of PeriAnesthesia Nurses (ASPAN). The American Society of Anesthesiologists (ASA) and the American Association of Nurse Anesthetists have endorsed the guideline. (See December 2006 OR Manager, p 18.)

Like pain, preventing PONV begins with assessing a patient’s risk. Patient risk factors include being female, a history of PONV or motion sickness, not smoking, and use of opioids to manage pain postoperatively. Surgical risk factors typically reported include surgery time longer than 1 hour and the type of surgery, although research in this area is conflicting. The most common types of surgery associated with PONV are plastic surgery, otolaryngologic procedures, laparoscopic cholecys-
tectomy, and major and laparoscopic gynecological surgery—all common procedures in the ASC setting.

The ASPAN guideline recommends using an established PONV risk assessment tool such as the ones developed by Apfel and Koivuranta, which are available in the ASPAN guidelines. Have your staff complete the tool and communicate the numeric results (0 to 4 or 0 to 5 depending on the scale used) to the anesthesia provider. You may want to have staff put the results next to the ASA score for ready access.

Four preventive strategies

Most patients will have at least a moderate risk for PONV, so routine prophylaxis before and during surgery is helpful for preventing nausea and vomiting. Dr Maurer credits successful prevention of PONV to 4 key strategies based on ASA and ASPAN guidelines.

- **Be sure the patient is well hydrated.** “Think about the time,” he says. “An afternoon case with a patient who’s been NPO all day is very different in terms of possible nausea and vomiting compared to a 7:30 am case. If patients aren’t well hydrated, their blood pressure will drop postoperatively; then they’ll sit up, triggering the emetic center and causing vomiting.” Allow healthy patients having elective procedures to drink clear fluids up to 2 hours before surgery. Although no set standard for hydration during surgery exists, both Drs Maurer and Chung recommend 20 mL/kg.

- **Administer a small dose of dexamethasone.** “It’s cheap, has virtually no side effects, and potentiates other antiemetics used,” says Dr Maurer. He has also seen a trend back to using the tranquilizer droperidol (Inapsine), despite its “black box” warning for use in anesthesia. The warning was added because of the drug’s ability to prolong the QT interval, possibly leading to cardiac arrhythmias. However, some anesthesiologists are using a small dose of droperidol as an antiemetic in patients without a history of cardiac conditions.

- **Administer a 5-HT3 (serotonin) receptor antagonist** such as ondansetron (Zofran), which has a low-risk profile for side effects.

- **Use propofol-based anesthesia,** if possible, rather than inhaled gases. Propofol has the additional advantage of antiemetic properties.

  Dr Maurer recommends using drugs that affect different pathways. For example, propofol may depress receptors causing PONV, while dexamethasone may antagonize prostaglandins or release endorphins. It’s also best to use an antiemetic from a different class than the one given when treating the patient who vomits.

  Another strategy important to nurses is to not force patients to eat. Forcing food may contribute to PONV. Dr Maurer uses metoclopramide (Reglan) to keep the stomach empty.

  Other prevention and treatment options include scopolamine patch, promethazine (for treatment), and acupoint stimulation. The most common acupoint used is P6, located on the plantar side of the wrist. A fine needle (acupuncture), electrical stimulation (acustimulation), or pressure from fingers or a wristband is applied to the point. The ASPAN guideline categorizes this as a level IIB recommendation, meaning that the benefit equals the risk and that it is not unreasonable to implement the recommendation.

  Watch for new PONV guidelines from SAMBA, scheduled for release in the first quarter of 2007.

Choosing fluids

You already know hydration can reduce PONV, but it can also prevent nausea, dizziness, and drowsiness, which can persist for as long as 24 hours after the patient goes home. But hydration doesn’t include fluids immediately postoperatively.

Dr Chung says, “Oral intake before discharge isn’t a requirement anymore. Studies show it’s not necessary.” In fact, forcing a patient to drink can increase the incidence of PONV, particularly in pediatric patients.

Because patients don’t have to drink fluids, it makes sense that voiding before discharge is no longer a standard for patients at low risk for urinary retention.
Instead, tell patients to seek medical help if they haven’t voided by 8 hours after discharge.

If patients are at high risk for urinary retention, Dr Chung says it’s better to “use ultrasound monitoring of bladder volume instead of simply relying on clinical judgment.”

### Don’t forget the escort

Only 0.5% to 2% of patients in the most progressive ASCs have no escort to accompany them home after discharge, but that’s still too many. In addition to causing schedule delays, research suggests, patients without an escort experience more complications and readmissions, so securing an escort is essential.

That begins in the surgeon’s office. “You have to have the surgeon’s office tell patients they will need an escort,” Dr Chung says. That doesn’t mean a taxi driver. “If you let the patient take a taxi home and something happens, you’re liable.” In some cases patients may not want their family to know they are having surgery, so office staff must work to find an alternative.

Despite preoperative instructions, some patients may arrive at the ASC with no escort plans. In this situation, Dr Maurer says nurses first work with the patient to identify someone. If that’s not successful, the surgery is rescheduled. In some cases, the surgeon may do the procedure under local anesthesia.

Nurses keep an eye out for potential problems from the time they first see the patient. “They ask right away about pickups,” he says. “They get a phone number, and if they are concerned, they call to verify the arrangements.” That decreases the likelihood of an escort not showing up after the surgery. The escort should remain with the patient until the next day.

What happens if despite every effort, the patient’s escort doesn’t arrive after surgery? One option is to admit the patient to a short-stay unit, but insurance is unlikely to cover the cost. If a patient wants to sign out against medical advice (AMA), be sure to document the incident in the medical record.

Sometimes a simple conversation can prevent patients from leaving, Dr Maurer offers this idea: “I say, ‘Do you really want to be driving home, have a child run out in front of your car and hit them because you couldn’t stop in time?’ It’s not just the patient, it’s society that’s at risk.” (For more on escort policies, see the July 2006 OR Manager.)

### Deciding on discharge

Your facility’s policy should include a discharge scoring system to determine readiness to leave the ASC. Such a system helps ensure patient safety and reduce your liability. Dr Chung developed the system most commonly used: the revised postanesthesia discharge scoring system (PADSS) (sidebar).

“You need to make the scoring system part of the evaluation process,” she says. “It can’t be hiding somewhere in the computer or cabinet.” Keep a copy on the nurse’s clipboard for easy access and have staff document the results.

### Collaboration is key

Collaboration is essential to ensure patients go home quickly and safely.

“Synergy develops among the OR manager, surgeons, and anesthesiologists,” says Dr Maurer. Surgeons provide an accurate assessment of needs and expectations for patients preoperatively; nurses verify escorts and manage patients postoperatively according to standards and policies; and anesthesia providers take steps to reduce PONV, pain, and other factors that contribute to prolonged stay.

Follow-up calls to patients are essential to determine patient satisfaction and fine-tune processes. “You don’t want patients to feel shoved along like cattle,” says Dr Maurer. Yet perceptions can vary: the staff may feel it took a long time to discharge the patient, but the patient feels rushed. Or the staff may feel the patient was moved through quickly, but the patient feels the process took too long.

Patient expectations can depend on the type of procedure, he notes. Patients who are paying out of pocket for plastic surgery may expect to spend the day and be treated as if they were in a spa setting. On the other hand, patients who are having
a cyst removed may want to go home quickly. An important factor is where patients have access to those who can provide emotional support.

Although standards exist, there is no “one size fits all” policy to improve the patient discharge process. Consider the needs of your facility, surgeons, anesthesia providers, staff, and, and above all, patients to tailor a system that’s effective and promotes good patient outcomes. ♦

References


Revised postanesthetic discharge scoring system (PADSS)

Maximum score = 10. Patients scoring greater than or equal to 9 meet criteria for discharge.

**Vital signs**
- Within 20% of preop baseline 2
- 20% to 40% of preop baseline 1
- 40% of preop baseline 0

**Activity level**
- Steady gait, no dizziness, consistent with preop level 2
- Requires assistance 1
- Unable to ambulate/assess 0

**Nausea and vomiting**
- Minimal: mild, no treatment needed 2
- Moderate: treatment effective 1
- Severe: treatment not effective 0

**Pain**
- VAS = 0 to 3, patient has minimal or no pain prior to discharge 2
- VAS = 4 to 6, patient has moderate pain 1
- VAS = 7 to 10, patient has severe pain 0
**Surgical bleeding**

- Minimal: does not require dressing change
  - 2
- Moderate: required up to 2 dressing changes with no further bleeding
  - 1
- Severe: required 3 or more dressing changes and continuous bleeding
  - 0

VAS = visual analog scale.

*Source: Chung F. Department of Anesthesia, University Health Network, University of Toronto. Used with permission.*

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**Patient discharge: Minimizing risk**

Having a sound discharge process is as important to patient safety as selecting the appropriate patients for your ASC.

“I always ask facilities whether there is an anesthesia assessment and clearance for discharge,” says Michael Midgley, RN, MPH, CPHRM, a risk management consultant for AIG Consultants, Inc, Health Care Management Division, New York City.

In some ASCs, an anesthesia provider stays in the building until the last patient has left. “That’s definitely best practice,” he says. In other situations, the anesthesia provider discharges patients after they meet discharge criteria, and a nurse stays until the patient’s escort arrives.

Many ASCs have adopted criteria to guide discharge.

The need for an escort should be made clear to patients before surgery.

“The need for an escort should be made clear to patients before surgery.”

“Any patient undergoing anesthesia has to understand preoperatively that they won’t be allowed to leave alone or drive themselves home,” Midgley says. Patients should identify the escort in writing and sign a form prior to the procedure acknowledging that an escort is required.

**When escorts don’t show**

Even so, in some cases, escorts don’t show up. ASCs need a policy to cover these situations. One option is to use a car service that serves patients with special needs. A taxi is not a good alternative. A taxi driver is not prepared to help patients get to their doors or to take action in an emergency.

Arranging transportation obviously is more difficult in remote locations. ASCs in this situation need to develop a contingency plan and policy.

A policy provides support for a nurse who must stay with a patient after everyone else has left. For example, the ASC could have a transfer agreement with a hospital, clinic, or some other facility.

Of course, there are patients who have a friend accompany them around the corner where they get in their car and drive home.

“You can’t hold patients against their will,” he says. “You can tell them, ‘It is our policy that patients not leave without an escort.’ But if a patient insists on leaving, you can’t put them in restraints. And you don’t need to call the police.

“But if a patient seems incoherent, or you are concerned about the person’s capacity, you should have the patient stay and arrange safe transport home or to another facility.”

This is similar to discharges Against Medical Advice (AMA) in the hospital.

“You would request the patient to sign an AMA form, stating the reasons for leaving,” he says. “You would then document in the patient record the methods used to assess mental capacity and to discharge the patient safely.
“The most important thing is proper documentation of the staff’s actions and the patient’s refusal to adhere to the ASC’s policy,” he says.

For more, see “What’s ASC’s obligation for escorts?” March 2004 OR Manager, and “Tips for enforcing patient escort policies,” July 2006 OR Manager.