1. Select all options that constitute information from chart review that might require extra attention or planning during your session to maximize safety.

-Nursing note indicates that pt received pain medication 1 hr ago and is resting comfortably. This is good to know but doesn't really present a safety concern. If anything, the session may go better because the pt is less likely to be in pain. It is possible that they may be sleepy or nauseous due to the medications.

-Op note indicates that pt received general anesthesia, a femoral nerve block, and an adductor canal block. You are heading to evaluate the pt; they have been out of surgery for one hour.

Given that this patient is only 1 hr post-op, it is likely that anesthesia is still active. You can see this pt, but you should anticipate and plan for side effects such as hypotension, dizziness, nausea, and impaired sensation and motor control that increase their risk of falling during ambulation.

-For a joint replacement - Op note indicates estimated blood loss of 300 mL during the procedure.

This is a pretty typical amount of blood to be lost during this sort of procedure. Concerns usually arise when estimated blood loss is at least 500 mL - this is when providers begin to consider things like cell salvage or whether a transfusion will be necessary post-op.

-Vitals indicate HR over the last hour in the 50 bpm range and BP 98/60 for a 270 lb woman in her 40s.

These values are on the low side. You are likely to still be able to see this patient, but you should check in with the nurse first to find out how these vitals are being managed, confirm that you can see the patient, and to let them know whether you plan on ambulating the patient and that you anticipate vitals to change further with activity. During your session, you should be watching for signs of orthostasis, which can be a side effect of general or spinal anesthesia, or that the patient is going to lose consciousness.

2. Select all parts of your evaluation that may tell you whether the patient is still experiencing the effects of anesthesia prior to assessment of functional mobility.

-alert and oriented

Potentially, yes. If the patient seems confused or disoriented, it is possible that this is a side effect of general anesthesia that may impact your ability to give instructions and provide education during your session. However, this could also be the result of a number of other things such as post-op delirium, the nature of their injury, or even their normal cognitive status (if they have dementia, for example).

-personal history

No. You can glean valuable information from taking their history and learning personal information about their family support or home set-up, but this isn't likely to tell you anything about their status post-anesthesia.

-subjective pain rating

Potentially, yes. If the patient reports minimal to no pain related to their surgery, it is possible that there is regional anesthesia / a peripheral nerve block that is still active, and you may see other impairments of sensation or strength that persist as well. However, this could also be the result of recently-administered pain medication.

-sensation

Yes! A sensation check should always be part of your initial evaluation. If your patient presents with impaired sensation in the dermatomal distributions related to the nerve blocks they have received, the block is still active, and the patient may also present with residual motor deficits. Assessing sensation can also help you identify issues such as peripheral neuropathy that can increase fall risk.

-ROM

Not really. Passive ROM shouldn't really be affected by anesthesia, nor should active ROM of non-surgical limbs. If you're thinking that the active ROM of the surgical limb will be impacted, this is an accurate line of thought - but this is also akin to a grade 3 muscle test. :)

-muscle testing

Yes! If a peripheral nerve block is still active, the patient will likely present with difficulty contracting or weakness of the target muscles. Specific muscle testing of these areas can give you a strong idea of whether the patient is still experiencing effects that will interfere with functional mobility or increase fall risk during the session.

3. Which of the following personal factors increase risk for complications and poorer outcomes in the ambulatory setting?

-ASA Class 3

Incorrect. While ASA Class 3 patients do have a severe disease process, it is only once this disease poses a constant threat to life (Class 4 or above) that risk of complications is significantly increased.

-Sleep apnea

Correct. If you see in the chart that this patient has obstructive sleep apnea, this puts them at much higher risk of experiencing respiratory complications while under anesthesia and during their procedure. These patient are also more likely to have longer PACU stays and have increased need for narcotics, which can result in side effects that impact your physical therapy session.

-BMI of 35

Incorrect. While this BMI classifies a patient as severely obese, it is a BMI of 40 or higher, classified as morbid obesity, that increases likelihood of having poor outcomes. Indeed, for patients with BMIs in the 40-50 range, the surgeon should consider performing the procedure inpatient rather than in the ambulatory setting, so that they are better prepared to manage any complications that arise.

-Reduced sensitivity to anesthesia

Incorrect. While a patient with reduced sensitivity to anesthesia may need their dosing modified to ensure effectiveness, this will be managed prior to the start of surgery. On the other hand, patients with increased sensitivity to anesthesia are at much greater risk for complications because they may have received a higher dose than necessary. This can result in an increase in the severity of side effects that are experienced and a more extended recovery period post-op.

-Older age

Correct. While it is important to realize that physiologic age is a more important predictor of complications and poor outcomes than chronological age, older adults are at increased risk of issues overall. This is because they are more likely to have frailty, polypharmacy, issues with malnutrition, and increased sensitivity to anesthesia. They have also experienced changes in the way that their bodies process and are affected by medications, which can lead to slower onset of anesthesia, as well as slower elimination that results in extended recovery time and increases risk of residual block.

4. Which of the following factors in a patient's history increase risk for falls in the obstetric setting?

-Receiving an epidural

-Increased blood loss during labor

-Opioid administration

-Ambulation within 2 hours after labor

All of the above are correct! Epidurals increase risk due to the persistence of lower extremity numbness and the increased likelihood of hypotension as a side effect. Increased blood loss during labor will further increase the risk of hypotension. Notably, normal amounts are about 500 mL during vaginal delivery, and 1000 mL during cesarean. Opioid administration can also have hypotensive side effects, and several studies have suggested a correlation with increased risk of falls. Finally, with earlier ambulation, the patient hasn't yet had enough time for the anesthesia to wear off and may still be blocking nerve impulses from the lower part of the spine. With a typical epidural, drug duration can range from 2 to 6 hours.

5. What information from your evaluation do you want to communicate directly to nursing staff in addition to documenting it in your note from the session?

-Voiding

There is no safety reason to tell the nursing staff every time a patient voids during their \ session with you. It is probably only necessary to inform them if it is the first time that the patient has voided (and nurses often want to know the exact amount), or if there is a patient for whom I&Os are specifically being tracked.

-Knee buckling or foot drop

Yes! You definitely want to communicate this to the nurses if you observe either of these during ambulation. This patient will be at higher risk for falls and it will help ensure patient safety if all staff are on higher alert for a fall when helping the patient to ambulate in the room (for example, on the way to the bathroom).

-Level of physical assistance needed for mobility

Yes! It is important for the nurses to know this, especially if the patient in question required Max Assist or an additional person for support. This will not only help keep the patient safe by reducing fall risk, but can also help protect the nursing staff from injury during transfers.

-Vital signs in normal ranges

While this is good to see, and you will document these vitals in your note, it is not necessary to additionally communicate this directly to nursing staff. An exception may be if the nurses have specifically been worried about or monitoring abnormal vitals, and you want to let them know that everything remained stable during exertion. Nurses are typically monitoring their patients' vitals themselves at least on an hourly basis, if not more frequently.