

Top 10 Preoperative Questions for Adult Ambulatory Anesthesia: A National Survey of Practicing Clinicians

Presenter: Natalie Simon, MD

Background

- Low complications in ambulatory anesthesia rely on appropriate patient selection
- Key predictors of increased risk include frailty, impaired functional status, comorbidities, procedural complexity, and suboptimal patient selection or discharge planning¹⁻³
- Limited data exist about the information clinicians prioritize when evaluating patients for ambulatory anesthesia

Methods

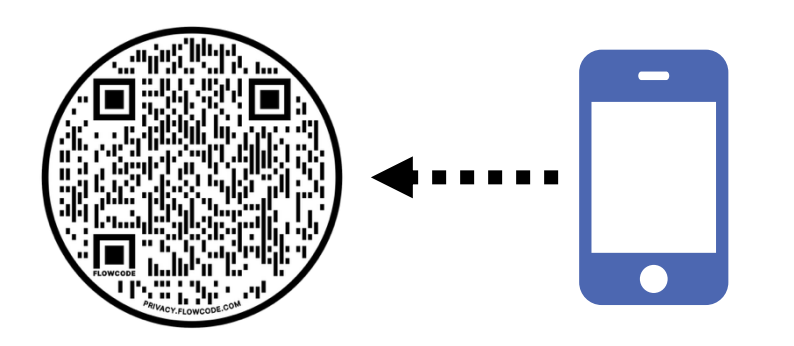
- An anonymous electronic survey was distributed to SAMBA members, the Society for Perioperative Assessment and Quality Improvement (SPAQI) member forum, and direct colleague referral from July to August 2025
- Respondents were asked to select the top 10 preoperative questions that should be asked of all patients before ambulatory surgery from a list of 32 questions developed by experienced anesthesiologists



Outpatient • Office Based • Non-Operating Room



Acknowledgements
This research was funded in part through the NIH/NCI Cancer Center Support Grant P30 CA008748. The NIH grant (Core grant) supports all research activities and infrastructure at MSK.



- **Clinicians demonstrate broad consensus on a core set of preoperative questions for ambulatory anesthesia**
- **Variability in prioritizing disease-specific information highlights gaps between guidelines and clinical practice**

Table 1. Respondent Demographics

Demographics	n (total 413)	%
Provider type		
Anesthesiologist (MD, DO, MBBS)	306	74.1%
CRNA	104	25.2%
Other (DDS)	3	0.7%
Years in Practice		
0–10	106	25.7%
11–20	141	34.1%
21+	166	40.2%
Practice Location		
Hospital	196	47.5%
Ambulatory surgery center	117	28.3%
Hybrid practice model	48	11.6%
Hospital outpatient department	36	8.7%
Office-based	16	3.9%
Practice Type		
Academic	244	59.4%
Private	119	29%
Hybrid	48	11.7%
Primary Focus		
Ambulatory anesthesia	149	36.1%
General operating rooms	142	34.4%
Other	55	13.3%
Pediatric anesthesia	25	6.1%
Preoperative clinic	15	3.6%
Non-operating room anesthesia	14	3.4%
Office-based anesthesia	13	3.1%

Abbreviations: CRNA, certified registered nurse anesthetist; DDS, doctor of dental surgery; DO, doctor of osteopathy; MBBS, bachelor of medicine, bachelor of surgery; MD, doctor of medicine.

Early-career clinicians	Later-career clinicians	Private practice clinicians	Academic clinicians	Nurse anesthetists
More frequently prioritized questions regarding functional capacity, reflux symptoms, heart failure, and prior stroke	Emphasized implanted devices, recent coronary stents, medications, and pregnancy status	More prioritized frequently transportation home after surgery	Emphasized cardiopulmonary risk factors	Prioritized reflux symptoms, OSA, and questions regarding past head and neck radiation

Table 2. Ranked List of Survey Responses

Associated Question	n (Total = 413)	%
Have you or a family member had significant problems with anesthesia?	335	81.1%
What are you allergic to?	330	79.9%
Do you have trouble breathing when lying flat, walking briskly up two flights of stairs, or 4 blocks?	290	70.2%
Do you have obstructive sleep apnea?	267	64.6%
What prescription or over the counter medications do you take?	259	62.7%
What other medical problems do you have?	246	60%
Do you have diabetes?	210	50.8%
Do you have symptoms of gastric reflux that wake you up while sleeping?	208	50.4%
Do you have coronary artery disease (CAD)?	182	44.1%
Have you ever had a stroke?	168	40.7%
Do you have a pacemaker, implanted defibrillator, or other cardiac device?	119	28.8%
Do you have heart failure?	103	24.9%
Have you had head and neck surgeries or radiation, or trouble opening your mouth more than two fingerbreadths?	89	21.5%
Have you had heart stents in the last 12 months?	86	20.8%
Do you have a bleeding disorder or ever needed medical treatment to stop bleeding?	86	20.8%
After surgery, do you have someone to drive you or accompany you if using a taxi or car service?	84	20.3%
Have you had a heart attack in the last 60 days?	82	19.9%
Are you currently or are you possibly pregnant?	80	19.4%
Do you have a history of liver disease or cirrhosis?	76	18.4%
Do you use home oxygen?	73	17.7%
Do you have any type of implanted medical device?	71	17.2%
Have you had a stroke in the last 3 months?	57	13.8%
Are you taking opioid medications, methadone, suboxone or naloxone for chronic pain?	55	13.3%
Do you weigh more than 250 pounds for a female or 300 pounds for a male?	55	13.3%
Have you been told you have a murmur or a problem with your heart valves?	46	11.1%
Are you on dialysis?	42	10.2%
Can you get to the ambulatory surgery center and lie flat for 30-45 minutes?	36	8.7%
Have you ever had a blood clot?	27	6.5%
Are you dependent on others to eat, dress or bathe?	26	6.3%
Have you fainted within the last 6 months?	14	3.4%
Have you had a blood clot in the last 3 months?	11	2.7%
Do you have an insulin pump?	9	2.2%

Conclusions

- General agreement on screening questions
- **Variability** in disease-specific assessment
- Heart failure and recent coronary stents **less** frequently prioritized despite established guideline recommendations
- **Gaps** between guidelines and clinical practice suggest an opportunity to educate clinicians and standardize ambulatory surgery processes to optimize outcomes and resource utilization

- 44% prioritized CAD
- Only 21% asked about cardiac stents within 12 months
- Heart failure was a priority in only 25% despite 3X greater risk of perioperative death compared to CAD⁴

References

1. Seib CD, et al. Association of Patient Frailty With Increased Morbidity After Common Ambulatory General Surgery Operations. JAMA Surg. Feb 1 2018;153(2):160-168.
2. Mathis MR, et al. Patient selection for day case-eligible surgery: identifying those at high risk for major complications. Anesthesiology. Dec 2013;119(6):1310-21.
3. Teja B, et al. Incidence, Prediction, and Causes of Unplanned 30-Day Hospital Admission After Ambulatory Procedures. Anesth Analg. Aug 2020;131(2):497-507.
4. Thompson A, et al. 2024 AHA/ACC/ACS/ASNC/HRS/SCA/SCCT/SCMR/SVM Guideline for Perioperative Cardiovascular Management for Noncardiac Surgery: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. Circulation. 2024;150(19):e351-e442.

Natalie B. Simon, MD, Icahn School of Medicine at Mount Sinai, New York, NY; Rebecca M. Gerlach, MD, FRCP, University of New Mexico, Albuquerque, NM; Jordan G. Lee, BS, University of New Mexico, Albuquerque, NM; BobbieJean Sweitzer, MD, FACP, SAMBA-F, FASA, Vanderbilt University, Nashville, TN; Kara M. Barnett, MD, FASA, SAMBA-F, Memorial Sloan Kettering Cancer Center, Middletown, NJ

