

## **Outlining-Attacking the Stem Question:**

### **The Knockout Blow**

Niels F. Jensen, MD

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Phone: 319-337-3700

### **Choose Your Weapons and Defend Yourself**

Never underestimate the inherently adversarial nature of the Oral exam. At its best (or worst depending upon your point of view), it is challenging--far from a warm and fuzzy session.

"Soldiers, sailors, and airmen of the Allied Expeditionary Force! You are about to embark upon the Great Crusade, toward which we have striven these many months. The eyes of the world are upon you. The hopes and prayers of liberty loving people everywhere march with you. . Your task will not be an easy one. Your enemy is well trained, well equipped and battle hardened. He will fight savagely. . ." Order of the Day, D-Day, June 6, 1944 Supreme Allied Commander, Dwight D. Eisenhower

#### I. A Three Pronged Attack

1. As we launch our ground war against the Oral Boards, let's be clear on strategy. Specifically, it entails a three pronged attack: scripting, presentation-poise, and outlining. This attack will destroy our enemy and a few of our troops will even reach the pinnacle of success as the very top anesthesiologists in the United States tested--that week or any week. I am very proud to have mentored several of these elite, special Ranger forces but am equally proud of the triumph of one eight timer, one seven timer, and many others who were not previously successful after several attempts. Coming from three generations of teachers, I regard this as my highest calling and therefore such success is my greatest reward. There is no better feeling than helping a hardworking and deserving human being achieve a worthy goal.
2. The crucial centerpiece of our strategy will be the scripting of the Big Red book. We intend to memorize it. We will command it and the Spiel cards so well as to bring verbal polish into the exam room--always altering our lines and lists and thereby disguising them so that we appear spontaneous yet knowledgeable. This defines verbal organization and polish in the Oral Board exam room and it takes a tremendous amount of time and work to develop. It amounts to putting a voluminous amount of information on the tip of the tongue so that it can be presented to two potential adversaries in a poised manner.
3. With our center of knowledge and scripting strong, we will attack on the right flank with poised and polished presentation. Developing this prior to D-Day will be an ongoing effort--an effort greatly advanced by our weekend tutorial together. I strongly recommend an early tutorial. Many have told me after taking the tutorial that they wish that they had taken it six months earlier. Certainly, this greatly enhances growth and maturity in presentation.
  - a. At the tutorial, I will take a hard look at all aspects of your presentation, drawing upon my five year experience as a coach in this area, a lifetime of public speaking and presentation, and careful study of verbal presentation outside the realm of anesthesia.
  - b. I have a number of failings and many of you are superior in many ways, but I have given more Oral Board exams than anyone in the United States--on or off the Board. Someone may someday catch me but to do so they will have to work and travel hard, spending many bleary-eyed Sunday nights at O'Hare catching flights. I very much hope to see you at least one tutorial. The numbers show that two tutorials are almost always decisive, with the pass rate among this group in the mid-90% range.
  - c. Please don't be misled by lecture courses. You don't need them. The format is wrong. Sitting in a lecture hall reviewing information you either know (you passed the written) or don't need to know is a colossal waste of time and money. People who sponsor these usually fundamentally don't understand successful verbal presentation. If they did, they would rely more upon techniques that help a student achieve it.

Listening to lectures just doesn't cut it. Presenting cases yourself and listening and watching others do so is the key to success.

4. A tremendously unappreciated, but vital skill will assist us as the pincers close on our enemy from the left: outlining. It is so overlooked that some may consider it a feint. In fact, it can help us deliver a knockout blow. Essentially, it provides us with something very precious--an opportunity to excel. Since mediocrity puts one at risk and since our goal is decisive victory, this is of obvious importance.

## II. Outlining the stem question

1. Both exams begin with the examinee being given three to five minutes to outline the stem question. This is a crucial period. It enables one to anticipate many aspects of the test and to determine where the test may be going before it gets there.

a. Some have commented that their exam did not exactly follow their outline or deviated from it in key ways (we will simulate this at the tutorial) but there is no test given that a good outline will not benefit to some extent. Here is why: Since the evaluation you receive is substantially subjective, some areas, such as the induction of anesthesia count more than other areas. As outlining, at the very minimum, allows one to decide upon this important aspect of management and provides a precise and concise method to describe it, is very important.

b. In addition, outlining allows for the identification of "Red line" issues (see below) which help one stand out as being excellent. Every second of the allotted outlining time must be used effectively.

2. The main case has six parts:

- a. Preoperative assessment, tests, and therapy
- b. Premedication
- c. Monitors
- d. Choice of anesthesia
- e. Techniques
- f. Post-operative care

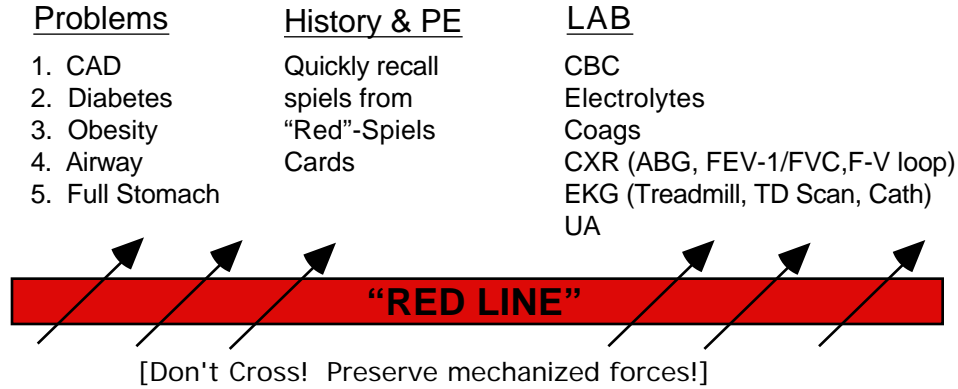
3. Following exploration of these six topic areas is a series of "suggested topic" questions. It is impossible to outline the suggested topics as one cannot anticipate them but discussion of them in the context of outlining is still critical (see below).

4. Here is my full grid for outlining. The "two minute drill" will be presented below. Unlike many other approaches, it is possible with the help of this grid and the techniques described to outline any stem question in less than five minutes.

## Full Outlining "Ranger" Drill

Is this an emergency?  
 Why is the surgery being done?

### A. Preop assessment/Tests/Therapy



### B. Premedication

### C. Monitors

D. Choice of Anesthesia: If regional, always plan GETA

### E. Techniques

- a. Airway/Full stomach/Volume Status/Medical Probs  
 = A/FS/Vs/MP
- b. Induction: The "Money Shot"

Three Parts	How	Drugs
Concerns	IV-IM	1) Proper order
From	Inhalation	2) Include relaxant
Above	Awake	3) No drug doses
	Trach	

### F. Postop Plans

5. Effective outlining begins with a quick but careful reading of the stem question, including the vital signs. Visualize the patient in your hospital and your operating room. Following this, two quick questions are appropriate:

- a. Is this an emergency? The timing of the surgery must be considered. You and the examiner must be together on this point, in other words sharing the same view of the elective, urgent, or emergent nature of the case. Obviously, this impacts the extent of preoperative workup.
- b. Why is the surgery being done? In most cases it is clear why the patient is going to the operating room but, odd as it may seem, I have certainly seen several stem questions in which this is not clear. Formally asking this question is therefore necessary.

6. Preoperative assessment, tests, therapy

- a. Quickly form a problem list. For example, obesity, diabetes, coronary artery disease, and asthma are frequent problems in the Oral Board exam room.
- b. Quickly dust-off your spiels from your cards and Big Red. We have memorized these lists over the course of a year and now we want to use them. Don't leave your best pitches in the bull pen. Use them. "The fastball that got you here, will get you out of here!" You should not take the time to write spiels, just mentally review them.
- c. Quickly consider the laboratory data you really need to do the case. C-E-C-C-E-U This is not a fancy mnemonic but does enable one to critically plan essential laboratory data.

- 1) CBC: Be specific. If all you require is an H/H, state it.
- 2) Electrolytes: Again, be specific. If all you require is a potassium, state it.
- 3) Coagulation: Be careful. Make sure coag studies are clearly indicated.
- 4) CXR (ABGs, Spirometry, Flow-volume loops): The term pulmonary function tests is a non-specific one. Carefully consider these pulmonary function tests, with costs and benefits clearly in mind. Again, is the test really necessary? Several anesthesiologists each cycle order flow volume loops in situations in which they never have or never would in their own clinical practice. This, obviously, is a mistake.
- 5) EKG (Treadmill, Thallium, Angiography): The ordering of an EKG in the Oral Boards (given age and associated medical problems) is rarely controversial or contentious but other cardiac tests clearly can be. If they are necessary, get a cardiologist involved. Anesthesiologists rarely, if ever, order these tests themselves. Make sure this is clear: "In conjunction with a cardiologist, I believe a thallium dipyridamole scan is in order."
- 6) UA: A UA is rarely necessary. Do not order it or any other test by rote.

7. What is the "Red line"? The "Red line" is crucial. Recognition and respect for it is fundamental to preserving your mechanized forces for the attack ahead. (One could argue that the induction of anesthesia is in fact the most important single aspect of the exam in that it allows one to avoid "killing errors" and demonstrate excellence. In fact, both are critical.)

- a. Observance of the "Red line" is probably not a requirement for passing. If one happens to get examiners who are trying to pass you, very few things matter. You will pass. But when faced with a skilled examiner, "Red line" issues and your handling of them can make the difference.
- b. In the stem question there are often several issues that are identified or implied that are threatening to the patient--just as in actual practice where one often discovers aspects of the workup that are incomplete or inadequate and must be corrected. Obvious examples, among many, are ongoing unstable myocardial ischemia or congestive heart failure, since both are clearly associated with a poor prognosis postoperatively.
- c. The first part of the exam, that involving the preoperative period, should be recognized for what it is-- a period during which the anesthesiologist is a consultant to the surgeon. Following this, the anesthesiologist becomes a primary provider of care and is no longer simply consulting the surgeon. Medico-legal and ethical concerns differ when this "Red line" is crossed.
- d. "Red line" issues are issues discussed or implied in the stem question that must be addressed before one moves the patient across the "Red line" into the operating room. When the "Red line" is crossed, we are no longer merely consultants but have final authority and responsibility for patient care within our arena. The surgeon no longer dictates or makes final decisions regarding anesthetic concerns. We now act independently and as a primary physician for the patient. (The surgeon can obviously still offer suggestions, and vice-versa, but he can no longer dictate terms.)
- e. Most Board candidates are knowledgeable about various problems such as coronary artery disease or congestive heart failure and know the appropriate sequence of proper

workup but they often fail to recognize that this discussion with an examiner is not an idle one and ultimately involves the patient at hand. So often an examinee will order an expensive test, such as a thallium-dipyridamole scan and actually get the result of reperfusion of thallium on same, and will then do nothing to pursue the problem further, for example with other tests or requesting the intervention of a cardiologist before surgery proceeds. This only rarely occurs in the actual operating room but occurs frequently in the examination room. This disparity makes "Red line" problems threatening. That is, unlike the actual situation in the real world, examinees blithely cross the "Red line" into the operating room without proper and safe follow-up of crucial problems and in so doing enter the "killing fields" of the exam. Heavy artillery is ready to mercilessly pound away until your well equipped and great armies are destroyed.

f. I first became aware of "Red line" issues when I was practicing for the exam. It became clear to me after being examined by many board examiners that they were unconsciously looking not so much for knowledge but for safety in patient management. Indeed, after further study of the process, one learns that this is their most important single charge. It is, in fact, the most important intangible they use to justify this entire Oral exam process--testing for safety issues which are difficult to evaluate with K type questions. (Incidentally, and this was not apparent to me at the time but is resoundingly clear after more than five years, they are also testing presentation. They will not admit to this and the reason, I believe, is that they themselves don't fully appreciate it. Remember, they don't do this as much as I do. I can assure you that there are most definitely styles of presentation which put one at more risk than other styles.)

g. I'll never forget speaking with an anesthesiologist from Texas who had been very frustrated by this system and had been unfortunately impacted by it in many personal ways involving his self-esteem, job, marriage, and family. He said, "Niels, my stem question involved a burned patient who had many significant problems. I simply answered their questions and soon we were in the operating room doing the case--elbow deep in several complications involving fluid status, respiratory status, etc. It was a mess! Suddenly, the senior examiner, who had never even looked at me up until then, took off his bifocals and dropped them on his clipboard. He looked at me and said, "Doctor, why are we even in the operating room at this time?" Niels, I was just answering their questions. I didn't feel I had brought the patient into the operating room. They had! I knew then though that it would be another long year and, sure enough, it was."

h. I hope you are convinced of the importance of "Red line" issues--issues which need to be addressed before proceeding into the operating room. It would be a mistake, however, for you to adopt a strategy in the exam room which engendered unnecessary, expensive, and seemingly endless delay in getting patients induced. This is very annoying. Delay is only justified if the situation truly warrants it. Don't obfuscate.

i. There are two strategies to handle "Red line" issues. The first is to deal aggressively with them when they first arise--attempting to take the initiative away from the examiner and actually drive the exam yourself. For example, when the examiner attempts to move away from an unresolved "Red line" issue interject yourself, politely but decisively state your concerns and make clear that the workup would be conducted fully and any further consideration about intraoperative care would depend upon it. The second is to wait until the case begins to move past the preoperative workup and into the arena where you are no longer a consultant to the surgeon but a provider of care. At this point, you want to iterate your concerns about identified "Red line" problems and take the initiative in the same way described above. The problem with this strategy is that the point at which exam does move through the "Red line" and into the operating room can be subtle and unannounced. When the "Red line is crossed and safety has been compromised, survival is in jeopardy and any thoughts about glorious victory, no hostages, and mechanized forces smashing through enemy lines must be put

on hold. One must hang on and hope that somehow Devine forces will intervene. Don't cross the "Red line" and then you won't have to worry about benevolence—Devine or otherwise.

1) Emergency cases are obviously governed by different considerations, namely the case must go forward. This does not mean that you must go helter-skelter in the operating room but concerns naturally must center upon how best to optimize a suboptimal situation. Again, do not adopt a strategy of delay, delay, delay. This is terribly frustrating to a skilled examiner.

j. The most important tools to handle "Red line" issues are careful and correct thinking and the word assuming:

"Sir, again, as I have noted, the patient has apparent myocardial ischemia and is not a candidate for surgery at this time. I will not place monitors for the spinal anesthetic because I would never take the patient into the operating room with redistribution on his thallium-dipyridamole study. A cardiologist needs to be consulted and a catheterization probably done. Based upon those results and the recommendations of the cardiologist, I will proceed in the manner best for the patient. Assuming then that these concerns have been met and that the patient has been optimized for this surgery and does not need either further therapy or CABG itself, I will proceed with spinal anesthesia."

When I hear this kind of clear and incisive thought and verbal organization, I rejoice. It is so rare! I hope you realize it is also powerful. In this subjective situation where different answers absolutely count differently and questions certainly have different weight, the power of a response such as this can certainly change the tenor of the entire exam (especially with the added weight of proper eye contact, hand movement, and voice pacing and modulation). A skilled examiner is constantly evaluating you, always probing for a weak spot. When they see demonstration of true excellence whether it be in the area of "Red line" issues or the induction of anesthesia--they simply mentally back-off somewhat, begin to give you the benefit of doubt, and think about how to attack the next candidate.

## 8. Premedication

- a. There are only a few ways to get bollixed-up in the area of premedication. Always assure them you will go to the bedside, examine the patient, and perform a careful preoperative visit. Don't commit to drugs or drug doses lightly. Assure them that your preoperative visit is a powerful anxiolytic and may be adequate. If it is not a small amount of a benzodiazepine may be useful.
- b. Don't forget antisialogues if you are planning an awake intubation.
- c. Don't forget antibiotic prophylaxis in the setting of valvular heart disease.

## 9. Monitors

- a. Memorize the ASA standard monitors from the Monitors chapter and be prepared to recite them. (Don't insist upon such recitation in the exam room.) How would you like to hear this list dozens of times in the course of a few days?
- b. A winning approach: "I will monitor the patient with ASA standard monitors as well as invasive monitors--X-Y-Z."

## 10. Choice of Anesthesia

- a. Decide upon how you would do the case, in your hospital and your operating room if called upon to do so at this very time. In addition, decide upon whether and which alternatives you would agree to, for example if the patient refused your approach.
- b. Most cases can be done in different ways and the best way to defend a choice is often upon practical criteria. For example, anesthesia for total hip arthroplasty can obviously be done with either regional or general techniques. Therefore, one could argue for a regional on the basis of the following: "I recommend a regional anesthetic.

Total blood loss may be less, my surgeon operates quickly, and patients can eat sooner, are often less nauseated, and are generally very satisfied." The defense for a general anesthetic is equally sound: "I recommend a general anesthetic. My surgeon is slower than many, patients are in an uncomfortable position and manipulation of the prosthesis can be significant and sometimes frightening. All of these can lead to excessive sedation, which is obviously undesirable, especially in a lateral position."

## 11. Techniques

a. All effective outlining ultimately leads to the conduct or induction of anesthesia. Since the Oral examination is largely subjective, verbal polish in describing these is desirable. The formulation and articulation of an anesthetic plan is another important opportunity to demonstrate excellence.

b. This aspect of the exam does have added importance.

c. I have listened to hours of tape and hours of exams and believe the techniques outlined below offer the best way to verbally describe an induction of anesthesia. I believe it offers the clearest and cleanest way to excel in this crucial aspect of the exam.

d. Four questions greatly facilitate and prompt our thinking when it comes to the induction of anesthesia: Airway?/Full stomach?/Volume status?/Medical problems? These questions, if asked carefully and in a discriminating way, enable one to quickly frame specific anesthetic concerns and avoid "killing errors".

e. With the above four questions addressed, we arrive at the induction of anesthesia. It must not only be correct but must be verbally polished. Verbal description of the induction of anesthesia has three parts: Concerns implied in the stem question, how it will be done, and the drugs by which it will be done in the order give and without revealing drug doses. The beauty of this approach is apparent where it counts--in the listening.

1) What are your concerns? So often when anesthesiologists are asked how they will induce anesthesia they begin with statements such as, "After placement of monitors...I will induce with Pentothal." This not only obscures the question but also fails the test of excellence. Remember, they asked how you will induce anesthesia not for how you will monitor, check for complete social, sexual, or psychological problems in the history, or anything else. One might argue that they did not ask for concerns either and this is true but it so important that we will quickly get them in. State your concerns quickly, in words not sentences or long diatribes. A quick statement of concerns, however, is necessary because they are often conflicting. It is important to let the examiner know that we are aware of conflicting concerns as we choose techniques and administer drugs.

2) How will you do it? One cannot forget and should formally address the options for anesthetic induction: Intravenous, intramuscular, inhalation, awake, tracheostomy. Once again, visualize the patient as if the patient was presenting in your operating room and in your hospital. How would you do the case? This is how you want to present it.

a) One of the most threatening questions in the Oral examination room begins with the following: "Could you. . .". "Could you use rectal thiopental?" "Could you do this case with an intraosseous catheter?" "Could you do this case without a pulse oximeter?" When these types of questions are asked, quickly put on your Board translation headphones and ask yourself this simple question: "Would I actually do this case, at this time, in this way? Do I really want to defend this approach?" Often the answer is negative, so simply state: "I would not do this case, at this time, in that way. I am concerned about the fact that I have never done an intraosseous. This would not be an

appropriate patient to start with." "Could you. . ." questions are so dangerous because they take you out of your own operating room into less familiar territory, territory ripe for assassination.

3) What are the drugs you will use to do it, in the order given, and without stating drug doses?

7. The two minute drill

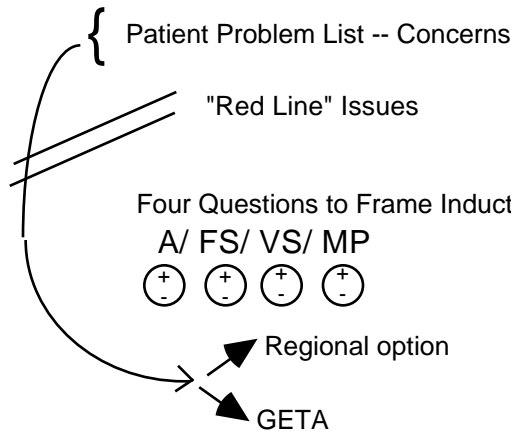
- a. Outlining techniques are truly exposed as being excellent or poor when it comes to their ability to get you in a position to take the "money shot" of the exam, the induction of anesthesia.
- b. I recommend the two minute drill because it allows one to get to the "money shot," the induction of anesthesia, before we are fired at. It is critical to get to the induction of anesthesia then backtrack as time permits. If one proceeds in this way, it guarantees that we will have planned the most important issue of the exam when we face our adversaries.
- c. Here is a grid for the two minute drill:

### Two Minute Outlining Drill

Read Question x 2

Emergency?

Why?



1. Concerns	2. How	3. Drugs
From Above	IV-IM Inhalation Awake Trach	In order given, including relaxant Avoid giving drug doses

d. Tips:

- (1) Read the question twice and visualize the patient in your operating room.
- (2) Ask yourself, "Is this an emergency case and why is the surgery being done?"
- (3) Quickly list your concerns, examining the vital signs carefully.
- (4) Decide upon the presence of any "Red line" issues.
- (5) Ask yourself the four key questions A/FS/VS/MP.
  - (a) The first three are simply check or no check. Formally write your concerns in the area of medical problems.



(6) Formally entertain the notion of regional anesthesia but always plan for general endotracheal anesthesia. Plan exactly how you will say it, in the three part manner described above.

(7) Once these points have been covered in the two minute drill, go back to issues related to laboratory data needed, history and physical examination (spiels review).

12. Post-operative

a. Think in general about post-operative issues related to a specific patient, usually including but not limited to pain management and ventilatory support. Again, think about your patient and how you would manage the patient in your hospital and your operating room.

13. Suggested topic questions

a. Be careful. Don't hurdle the history and physical examination to jump into patient care problems. This can be very tempting given the time demands and the pressures of the Oral examination. These suggested topics can be tricky.

14. You must practise! We hit outlining hard at the tutorial. Come! It will only help and I suspect it will help a great deal.

**Dr. Jensen's Presentation Points**

"A rock pile ceases to become a rock pile when a man looks at it and envisions within himself a cathedral."

Antoine St. Exupery

Most soldiers look at a stem question and see rubble, a destroyed village, a rock pile. You and I will learn to look at a stem question and through the discipline of outlining will see a beautiful cathedral.