

# To Those Who Initiate Critical Care

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**Thank you for the opportunity to serve as Secretary/Finance Chair for the Critical Care Medicine Section of AAEM.** Since a good leader would never ask of others something they wouldn't do themselves, the first article of my term is written by yours truly.

The doctor: "This is not that hard. I mean, it's not rocket science."

The rocket scientist: "This is not that hard. I mean, it's not life and death."

CMS is quick to point out "critical care" is location independent.<sup>1</sup> Similarly, anyone could be in the position of providing critical care and so any physician could, theoretically, bill one or both of our two favorite EM codes, 99291 and 99292. Although critical care billing does not carry location information, it is not a far stretch to assert that the majority of critical care provided outside of an intensive care unit is in the emergency department. The challenge of simultaneously resuscitating and stabilizing one or more critically ill patients, teeing them up for the ICU (OR, cath lab, or endoscopy suite), while still maintaining the flow of the rest of the department, is unlike any other specialty. So one might think it presumptuous to ask more of these trench warriors. However, care continues for patients once they leave the ED. As an emergency physician and critical care physician, I would like to give "top 5" requests, items that may not seem like much at the time but, downstream in the ICU, matter. They also may save the patient an intervention and you, time.

## 1) Bigger is better, at least for endotracheal tubes.

When told the event of childbirth is a beautiful miracle, comedian Jeff Foxworthy declared that a child being born is a beautiful miracle, but the actual event is like a wet St. Bernard trying to come in through the cat door.

The same is true about bronchoscopy through a small endotracheal tube. It is possible to pass a bronchoscope through a size 7-0 ETT. But it requires special (silicone) lubricant, the scope pulls against the ETT and so requires more force to move, it moves the ETT, and overall is unpleasant for everyone involved. So by all means, for the edentulous, C-spine immobilized, micrognathia, smoke-inhaled, morbidly obese, pregnant patient, get something in: ETT 6-0, 5-0, whatever, something. But for most airways, think big: at least 7-5, 8-0 ETT is better, 8-5 is heaven, and a 9-0 should earn you champagne from your admitting intensivist. Also, for patients with secretions (which, let's face it, is all of them), suctioning and ventilator management are much easier with larger tubes. So don't commit bigamy, but for ETTs, let's all be big.

## 2) Stay out of the danger zone. "Two centimeters" is your friend.

We all know practitioners who consider an ETT not in the pharynx or (why bother?) or right mainstem (what exuberance!) to be a win. After all, the ICU can fix it later. But do those people consider an oil change for their car anywhere between 500 miles (exuberance) or 20,000 miles (why bother)? After all, when the engine melts or explodes, the mechanic can fix it.

So, on the post-intubation chest X-ray check the distance from the tip of the ETT to the carina. Then adjust, or order to have adjusted, that distance to be 2 cm. This is high enough to prevent distal movement causing a mainstem intubation, and low enough to prevent accidental extubation. Accidental extubations carry higher morbidity (increased ventilator days, LOS, and therefore risk of VAP), and even mortality.<sup>2-3</sup> Plus, accidental extubations are reportable events to CMS. Don't obscure your skill at obtaining an airway by losing the airway or one of the lungs. You've done the work, get all the credit. Otherwise, your EMR will be telling CMS on you.

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# Twice the work, twice the liability, and no extra payment.

### 3) “A tube for every orifice, and an orifice for every tube.”

With multiple trainees, someone can place the ETT, someone the NG tube, and someone the OG tube. Oh, wait, that’s too many. Just because a patient has a nose, does not mean a tube has to be placed in it. Once a patient is intubated, orogastric tubes are preferred over nasogastric tubes. Weak-to-moderate evidence shows that compared to orogastric tubes, nasogastric tubes carry an increased risk of sinusitis.<sup>4</sup> So unless a patient is expected to require an NG tube once extubated (for example, a patient going to the OR for bowel surgery), oral is better than nasal. Plus it hurts less.

### 4) Government spending: doing twice as much for twice the price. Or, if one X-ray is good, two are better. Or, prove your skill by taking a picture at each step.

One you intubate, check a chest X-ray. Then place the OG tube and check a chest X-ray. Or don’t place an OG tube at all, the ICU can do it and get their own X-ray. Nooooo! Once you intubate, and before the chest X-ray, place a gastric tube (preferably an OG tube, see “Orifices,” above). One X-ray can confirm it all. Besides, if you end up ordering two X-rays, you are obligated to check both. Twice the work, twice the liability, and no extra payment. Oh yeah, you don’t need a dedicated abdominal film. As long as the chest X-ray shows the gastric tube going below the diaphragm (and the proximal hole below the diaphragm), the tube is good.

### 5) Infectious risk, ischemia risk, risk to staff, one more test to review, costs money, and it hurts, too.

ABGs are wonderful. They can highlight hidden disorders, suggest extent of disease process, and help with ventilator management. However, there are many cases where they are not necessary. Do you really need an ABG (or, worse, a VBG) to diagnose DKA? So when you need an ABG, don’t be afraid to order it. But if it’s not necessary, consider holding off. And specifically for DKA, for the CMS billing requirement for a “blood gas,”<sup>5-6</sup> add a line in your note “Blood gas not required.” The text doesn’t risk infection, there’s no risk to staff, you won’t have to review an ABG, it doesn’t cost anything, and the only people it hurts are the CMS reviewers who would otherwise use the absence of an ABG/VBG to not pay you.

“If my shadow has offended,  
Think but these, and all is mended  
Heed the above, and be we friends.  
Your critical care will return more than dividends.”<sup>7</sup>

So go forth, provide critical care. Provide care for the moment, but also with an eye to the patient’s journey, of which the ED is just the first stop. ●

#### References:

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8. Adapted from A Midsummer Night’s Dream, William Shakespeare, Prologue.

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