As a medical student, do you ever wonder what it's like to specialize in critical care? Meet Devang Sanghavi, MD (@Dev_Sanghavi), a critical care medicine specialist and a featured physician in the AMA's “Shadow Me” Specialty Series, which offers advice directly from physicians about life in their specialties. Check out his insights to help determine whether a career in critical care medicine might be a good fit for you.

The AMA's Specialty Guide simplifies medical students' specialty selection process by highlighting major specialties, detailing training information and providing access to related association information. It is produced by FREIDA™, the AMA Residency & Fellowship Database®.

Learn more with the AMA about the medical specialty of critical care medicine.
"Shadowing" Dr. Sanghavi

Specialty: Critical care medicine.

Practice setting: Academic medical center.

Employment type: Employed by a hospital in Jacksonville, Florida.

Years in practice: Five.

A typical day and week in my practice: Our practice follows the three-shield approach to medicine, thus my time and efforts are divided between clinical, education and research responsibilities, as well as administration.

Regarding my clinical responsibilities, a typical day starts at around 5 a.m., when I have a quick workout, which is a good warm up for an exciting day ahead. Sign-out from the night team at the hospital happens between 6:30 and 7 a.m., and then comes the rounding part of the day. I round from the sickest patient first, and I may have to do procedures in between patients to stabilize them. The pace varies from day to day, but there is always the excitement of “what next?”—which keeps me on my toes.

I work in three different ICUs—medical, transplant and cardiac—and each is unique. The teaching aspect of my practice is involved in the workflow as well. Be it a procedure or didactics, a lot of learning happens during patient care. The aspect of my practice that is most exciting is the procedure, which could be advanced cardiac life support or right heart catheterization or central line or bronchoscopy. We do several of them on a day-to-day basis.

For any young learner who likes internal medicine but at a very fast pace with lots of procedures, this is the field for you. This is internal medicine on steroids.

My typical day ends at around 6 p.m., when sign-out happens to the night team. The rest of the day is for family, unwinding and relaxation. The cool part of being an intensivist is the shift-based nature of work—you don’t take the pager home. On my nonclinical days, as part of my administrative and research work, there are meetings, research data analysis, networking, mentoring, idea generation and innovation.

The most challenging and rewarding aspects of critical care medicine: The most challenging part of the practice is when you are participating in the care of a patient towards the end of his or her life. As the saying goes, all patients will likely pass through the ICU before their death. Doing this work day in and day out can be taxing. It requires not only good clinical skills, but also your compassion, your communication skills and your patience to deal with a dying patient and their family—but it is a
privilege that only a few of us get.

The most rewarding part is the hope you bring to patients every day. In the midst of despair and gloom, you provide that glimmer of hope. Helping patients beat the odds and walk out of the hospital with full vigor is the most rewarding thing for any physician. We see that—we help our patients beat death—on a daily basis.

**How life in critical care medicine has been affected by the global pandemic:** You might be surprised to learn that the word intensivist was only added to the Merriam-Webster dictionary last year. The field of critical care was started during the polio pandemic in 1950s, but the pandemic has brought new attention to the ICU, to the intensivist. But more importantly, there have been a lot of advances in critical care because of COVID-19—in research, in therapeutics, in collaboration.

**The long-term impact the pandemic will have on critical care medicine:** Telemedicine has become more mainstream and ECMO machines are the new ventilator, and this is all because of the pandemic. Doing research in critical care is very difficult, but what we’ve proved now with multisite collaboration and the adaptive nature of clinical trials is that we have been able to recruit a lot of patients and collaborate. So that will be the lasting effect on the research side of things.

But the pandemic also spurred the development of new devices to manage acute respiratory distress syndrome (ARDS). Even before the pandemic, a lot of patients in ICUs had ARDS, and that improved technology will be put to use even after the pandemic subsides.

We’ve also learned a lot about ARDS and respiratory failure because of COVID-19—for example, long COVID patients‘ longitudinal follow-up goes hand in hand with post-ICU syndrome—and we will be able to bring that knowledge to bear to improve care. So, a lot of good has arisen from the challenges of the pandemic. It has permanently changed the face of critical care practice.

**Three adjectives to describe the typical critical care medicine specialist:** High-octane, passionate and compassionate.

**How my lifestyle matches, or differs from, what I had envisioned:** Honestly, I didn’t think about lifestyle per se during my medical school days. My ideal field in medicine was a branch where I would wake up every morning and be excited about my work and the day ahead. When work is joyful, lifestyle automatically is taken care of. I consider it a privilege to be able to help my patients the way critical care medicine can.
Skills every physician in training should have for critical care medicine but won’t be tested for on the board exam: This field is very fast paced, so you need common sense, as well as the ability to think and act quickly. But you also need a lot of compassion, hope and resilience because you will see death frequently. And you need to know a little bit of everything—endocrinology, rheumatology, surgery, cardiology—because when you need to act quickly, that knowledge really helps.

Questions physicians in training should ask themselves before pursuing critical care medicine: Are you a leader? People will look to you for answers and direction. Are you comfortable with death and dying patients? You'll be responsible for making difficult decisions.

Would you be OK to spend your whole day working to save a patient and then have that patient not even know you were the physician who saved him or her? Most critical care patients are not “with it” enough to know this—they are often on a machine, such as a ventilator. Also, are you comfortable having little time to think and plan? Your actions may often be reflexive. You first must save the patient; only later can you think about diagnosis and differentials.

Books every medical student interested in critical care medicine should be reading:

- *In Shock: My Journey from Death to Recovery and the Redemptive Power of Hope*, by Rana Awdish, MD. It’s the story of an intensivist who had a catastrophic medical event during pregnancy and survived countless complications. It showcases the tremendous power of hope and is a must-read for all medical students.
- *Being Mortal: Medicine and What Matters in the End*, by Atul Gawande, MD, MPH. It’s about care of the patient at the end of life. These two books give a good glimpse of not only critical care but also the overall practice of medicine and how we as a society deal with mortality.
- *The Rise and Fall of Modern Medicine*, by James Le Fanu, MD. This is a great summary of modern medicine from the discovery of penicillin to CRISPR gene editing and where we fall short. For an aspiring physician who may not even be in medical school yet, this can give a lot of good insights into the profession.
- *The Innovator’s Prescription: A Disruptive Solution for Health Care*, by Clayton Christensen, DBA, Jerome H. Grossman, MD, and Jason Hwang, MD. There are a lot of problems in health care, and this gives you a template for dealing with them.

The online resource students interested in critical care medicine should follow: I strongly encourage all medical students to use #MedTwitter. In this age of rapid dissemination of information, rapid knowledge is key. Following some of the leaders, the journals and the preprints in your field of interest will keep you abreast of developments. Also, medicine tends to be very hierarchical, but social media has flattened the playing field. For example, a medical student can ask a question of the principal investigator (PI) of a study on #MedTwitter, and he or she might answer.
Quick insights I would give students who are considering critical care medicine: To me, critical care is the most gratifying field in medicine. I cannot imagine practicing medicine any other way. If reading this sparks your interest, I would ask you to talk to other intensivists, actually shadow them. Work in a few ICUs in different academic and nonacademic settings. If what you see aligns with your view of the practice of medicine, then critical care may be for you.

Mantra or song to describe life in critical care medicine: “We Will Rock You,” by Queen. I truly believe you need to find that kind of energy every day in critical care.