A Multidisciplinary Approach to Medical Education

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The practice of medicine across all disciplines is becoming more complex. While advances in technology allow us to provide better care, patients can get lost in the hustle between physicians and other health care workers. One of the best approaches we as future physicians can take to help mitigate patient confusion and utilize the full capacity of all health care workers is to work as a cohesive team. Working as a member of a team is engrained early in medical school but the health care team extends beyond that of medical students, residents and attending physicians. Medical education can, and we believe should, include training with other allied medical professions. Studying medicine at the Chicago College of Osteopathic Medicine at Midwestern University and other medical colleges at multidisciplinary campuses provides students with the opportunity to learn alongside other medical professionals. This type of study provides a better understanding of the other professions and fosters respect for our nonphysician colleagues.

Midwestern University incorporates two interdisciplinary courses into its medical curriculum: Interprofessional Education and Healthcare Communications. Interprofessional Education brings together pharmacy, medical, dental, physician assistant, physical therapy and occupational therapy students where each student describes their future roles and responsibilities in their respective professions. At the end of the course, students representing each profession work in teams to complete simulated patient encounters. Each simulated patient portrays someone who has been lost in the complexities of our health care system, which unfortunately is not an uncommon occurrence. During these simulated patient encounters, students discuss barriers that prevent the patient’s health care needs from being met. Students then assemble into interprofessional care teams, define their roles to the patient and make recommendations based on a collaborative approach.
The Interprofessional Education course is followed by a course entitled Healthcare Communications, which is taken by medical, dental and pharmacy students. This course was created after numerous studies showed that health care is less effective without a conscious effort at communication. Students learn the principles and elements of interpersonal and nonverbal communication as well as barriers to communication. Strategies for cultural sensitivity and awareness in our interactions with other health care workers is also discussed. The course requires students to examine their individual style of communication and learn how to develop interpersonal skills to foster a more efficient and respectful atmosphere.

Medical education should provide an atmosphere for collaboration with allied health care professionals by providing exposure and interaction with all members of the health care team. Midwestern University has adopted this approach and we believe other medical colleges can do the same. By incorporating a team approach early on in medical education, future physicians are better equipped to work cohesively as a team, and ultimately enhance patient outcomes.

NEW in ASA Education!

NEW Opioid Analgesics Course

The course can be found at: https://www.asahq.org/education-and-career/educational-and-cme-offerings/complimentary-education/opioid-analgesics
Guide to Away Rotations and Sub-Internships in Anesthesiology
Elena Madan, MS4, Tufts University School of Medicine

Away Rotations

An away rotation is one that is not done at your home institution. It is often used as an audition for a program that you are interested in attending for residency. It is usually more for you than the program. It is an opportunity for you to see if you fit in with the residents, the culture and location, and whether you can see yourself long-term at the host institution. If you do one, realize that you are signing up for a month long ‘interview.’ General tips to succeed are to be adaptable, hard-working and knowledgeable. Although anesthesia is a procedural field, don’t forget that as physicians we add the most value with our overall knowledge base. You will need to strike a balance between being present, demonstrating procedural acumen, using the breadth and depth of your knowledge and reading up on your cases.

Preparation before the rotation

Depending on how the clerkship is arranged, you will either be assigned to a room or have the opportunity to choose your cases. It can be helpful to familiarize yourself with what the residents and attendings look like, so that you can introduce yourself when you see them. A quick Google search of their name and institution is usually sufficient. You will want to balance your clerkship with a variety of cases and people you work with. At the same time, try to work with the same attending for at least a few days. This continuity will enable you to build rapport and advance your skills. The more comfortable an attending or resident becomes with you, the more likely they are to trust you to perform procedural skills (e.g., drawing up medications, intubating, helping manage the anesthetic plan). Adapt your techniques as you work with different people, as everyone will have different preferences for how they like things done.

As for knowledge base, there are several items that an MS4 should be familiar with: how to perform a preoperative history and physical exam, how to place I.V.s, how to intubate, rapid sequence induction, difficult airway management, all the medications used perioperatively (indications, pros/cons, doses, side effects, etc.), and PACU concerns. If you’ve never placed an I.V. or intubated before, there are numerous YouTube videos to familiarize yourself with the process prior to actually doing it. That being said, nothing compares to actually performing the skill, so always be on the lookout for any opportunity to try. The first few times will undoubtedly be nerve wracking, but the more times you practice the more confident you will be.

Once the rotation starts

Every day before you head home, check the schedule for the following day. Try to find the attending and/or resident you will be working with to introduce yourself and find out their preferences for when to meet in the morning. Look up the patient cases if you can and develop an anesthetic plan using the Anesthesiologist’s Manual of Surgical Procedures. Try to identify what challenges you may encounter given any patient’s particular history, comorbidities, past difficulties with anesthesia, etc.

Arrive early, preferably before your resident. Offer to help set up the room, but don’t be offended if they decline. They may find it more efficient to do this themselves. That said, watch and pay attention to how the room is setup. This shows enthusiasm and can go a long way. There are various mnemonics such as MSMAIDS (machine, suction, monitors, airway, I.V., drugs, and special equipment) to help you remember the steps.

During cases

The best ways to stay engaged during the cases are:

1. Ask how you can help: Some examples of ways to help include preparing equipment, drawing up drugs, pushing drugs, charting, etc. Each person will have a different level of comfort over what you will be allowed to do, so please ask.

2. Ask questions when things are slow. Be careful about asking questions during induction and extubation as these are critical times. But, over the duration of the case, there will be downtime, and this is when you can ask pointed questions (ideally not ones that you can easily read up on yourself at home).

It can be helpful to carry a pocket book as a reference guide. I personally liked Pocket Anesthesia as a book you could easily fit in your white coat. Duke’s Anesthesia Secrets is written in an excellent question/answer format similar to pimp questions.
When to leave

You will want to strike a balance between staying late and not getting in the way.

When told to go home, you should go home - it’s not a test! Usually the resident/attending is also tired and will want some time alone.

Additionally, it will be a better use of your time to prepare for the next day and come ready to work rather than wear yourself out such that you cannot arrive on time or perform the next day. As a student, you are there to learn and the more you read in your spare time, the more knowledgeable you will be, and the more you will get out of each case.

After the rotation

After your rotation, follow up with attendings you have worked with, particularly if you would like a letter of recommendation. Remind them of any salient patient cases that you worked on together that were particularly meaningful to you.

Other questions colleagues have asked are answered below:

Should I be writing progress notes or O.R. notes?

No progress notes need to be written. Charting is done intraoperatively, and you will need to ask if this is something that you should help with. Do not be offended if the resident says no. It is not personal; physicians may be particular about how they like things documented. If not learned on an away rotation, you will have more than ample time to learn once residency begins.

Should I go to lectures?

YES! Even if not mandatory, go to grand rounds and resident lectures if you have time. Some topics may be over your head, but the exposure will be helpful. Try to read about the topics on your own time as well. You never know when you’ll be asked about a particular lecture topic and have a chance to shine.

Acknowledgements:
I would like to acknowledge Justin Yuan for his editorial contributions.
I am the type of student who, going into medical school, had no idea what type of doctor I would become. I have always been open minded to most specialties. Given such, I knew that going into my clinical rotations during third year, I would have the propensity to fall in love with many fields. So far, I have rotated through family medicine, outpatient pediatrics and inpatient pediatrics. I liked my time on family medicine because I enjoyed the variety of cases and the diversity of the patient population. I enjoyed outpatient pediatrics because I found that both the children and their parents were emotionally invested in achieving better health. I liked inpatient pediatrics because each day was a cognitive exercise, in which clinical reasoning and problem solving had to be applied to difficult and often enigmatic cases.

One field of medicine that I have not yet rotated on, however, is the field of anesthesia. I recently completed the American Association of Medical Colleges “Careers in Medicine” Survey and this was one of the specialties that I was matched with. As part of the process of career exploration, UConn encourages medical students to participate in this survey. The survey involves completing a series of 100+ questions designed to evaluate personal approaches to tackling complex clinical problems, comfort with diagnostic precision, desire for emergency and critical care, and preference for patient continuity, among other areas. We are encouraged to complete the survey during both our first year and second years of medical school. Both times, I was matched to anesthesia.

When going through the questions on the survey, I did not expect that the results would point in this direction. However, the more I read up about the specialty and the work that anesthesiologists do, the more I realized that this in fact is a field that is very intriguing and aligned to my persona. In my opinion, anesthesia is a field at the nexus of medicine and surgery. It allows for one to complete hands-on procedures and work quickly on your feet to solve problems. It enables physician teams to not only support the work of surgeons, but also support other areas of hospital medicine, whether that be at the bedside of the patient (e.g., performing intubation) or managing their pain in an outpatient setting.

My first exposure to the field really started this year, as part of my inpatient pediatrics rotation. I had the opportunity to see a pediatric anesthesiologist support their emergency department and surgical colleagues with a facial laceration repair. The laceration was too large to be repaired in a child without sedation, so in this case having an anesthesiologist available was a crucial part of providing care. It was an experience that incorporated aspects of my prior rotations in a way that I had not anticipated: it provided the variety of family medicine; the zeal of pediatrics and the problem solving associated with inpatient medicine.

As I continue through my rotations, I am interested to see where I finally land. I am hopeful that I will land in a specialty that marries the aforementioned qualities. For now, anesthesia is in the running.
Becoming Anesthesiologists and the Opioid Crisis through the Eyes of Osteopathic Medical Students in New Mexico

Brent Hunsaker, OMS 4 & Alex Nelsen, OMS4, Burrell College of Osteopathic Medicine

The opioid crisis is undeniably relevant to us as health care workers in New Mexico. In 2017, New Mexico exceeded the national rate of opioid-involved overdose deaths at 16.7 deaths per 100,000 persons... “[and] deaths have not significantly changed over the last several years.” With today’s medical model of increased productivity requirements, documentation, and new quality metrics, physicians may feel increased pressure to spend less and less time with their patients leading to lower thresholds of prescribing “quick-fix” solutions, like opioids. This, in turn, can contribute to devastating addiction. In an article by Fishbaine et al., it states, “…abuse develops in nearly 5% of patients with chronic pain who are treated with prescription opioids, though this rate varies across studies.” Using the principles of patience and advocacy, we can continue to use a fully holistic approach to improve patients’ lives and avoid potentially life threatening addiction. While our focus as osteopathic medical students has engendered positive outcomes here in New Mexico, we feel as if our anecdotal story can serve to help lower over-prescribing and perhaps remind all of us as to why we dedicated so much time to becoming physicians.

Recently, there was one specific incident during a surgery rotation where a patient presented with chronic pain. After several encounters and hospitalizations with negative objective findings, it would have been easy and timesaving to prescribe pain medications and monitor. Nonetheless, after collaborating with the surgeon, and beseeching a gastroenterologist to perform an endoscopic retrograde cholangiopancreatography (ERCP) despite no clear indication, an answer surfaced. Shortly after initiating the ERCP, it became unmistakable that this patient had a mass at the Ampulla of Vater causing his symptoms. Without advocating for the patient, and more importantly taking the time and having the necessary patience, this diagnosis may have been even further delayed and detrimental to the patient; who is currently undergoing chemotherapy and is doing well despite the circumstances.

One of the main reasons we have chosen to pursue careers as anesthesiologists lies in the opportunity to advocate for patients in their most vulnerable moments. Furthermore, we are eager for a career where we can implement our two additional suggestions to help attenuate the opioid crisis and earn patient trust in these vulnerable moments. The first way is through communicating with patients. According to the New Mexico Department of Health, risk factors for overdose include previous overdose, obtaining overlapping prescriptions, history of mental illness, and living in rural areas and having low income.1 Good communication with patients at each visit should uncover these types of risk factors and help mitigate over-prescribing or prescribing to vulnerable patient populations. The second suggestion is to establish realistic expectations with patients. Opioids are used to minimize the body’s perception of pain, not cure pain. Patients’ expectations of having their pain disappear need to be addressed and normalized. Ultimately, we should advise patients that opioid prescriptions might not reduce their pain to the level they expect. Moreover, patients should be led toward strategies that manage their pain through a biopsychosocial model as opposed to relying on health care visits and medication to completely manage their symptoms.

We are thankful for an education that focuses on patients as humans; not only having bodies, but also minds and spirits. This knowledge instills in us a desire to take our time with everyone and find the causes of pain rather than simply mask the origin with symptomatic relief alone. We do recognize instances in which opioids may be appropriate, like palliative care or decreasing acute pain in rib fractures to avoid hypercarbia and we will continue to strive to do our part as medical students in this incredible profession of anesthesia.

References
Prepare for your future in the field of anesthesiology

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**Upcoming!**

**Schedule of Events for Medical Students**

*The ASA MSCGC has been hard at work planning exciting events for medical students attending ANESTHESIOLOGY® 2019 in Orlando, FL. Check out the list of events, detailed below. We hope to see you there! – Alice*

**Friday, October 18**

1. 7 p.m.: WELCOME!
   - Start off your experience with a kickoff panel, and a welcome session by ASA’s President Dr. Mason, followed by a reception for medical students and residents to network with each other from 8:30 to 10:30 p.m.

**Saturday, October 19**

1. 8 – 8:50 a.m.: *The ABC’s of Anesthesia – An Interactive Tutorial*
   - Join Dr. Tran of Johns Hopkins Hospital, Dr. Yeldo of Henry Ford Hospital, and Dr. Peterson of Children’s National Medical Center for an engaging session on the fundamentals of anesthesia; it might be early, but it will get your mind working and ready for the day ahead!
*The ASA MSCGC encourages medical students to attend the session with Keynote Speaker Dr. Abraham Verghese, M.D., M.A.C.P., from 9 – 10:15 a.m. (And I encourage students to read his best-selling novel, Cutting for Stone, which is one of my personal favorites!)*

2. 11 – 11:50 a.m.: Applying to Residency and Finding the Best Fit  
   - **Dr. Banks** of The University of Miami School of Medicine Department of Anesthesiology is back by popular demand with advice on how best to approach residency applications.

3. Noon – 12:50 p.m.: How to Shine in Interviews  
   - **Dr. Schlecht** of South Oakland Anesthesia Associates reveals how to best impress residency program directors, and how to develop a competitive application throughout medical school so that you’re best prepared for interview day.

4. 1 – 1:50 p.m.: Money Management for the Young Physician  
   - Loans got you down? Join **Dr. Minhaj** of the University of Chicago to learn the best approach at money management as we transition from school to salaries!

5. 2 – 2:50 p.m.: How to Network at the Meet and Greet  
   - The Meet & Greet, while exciting, can certainly be nerve-wracking. Join **Dr. Xi** of Massachusetts General Hospital to learn tips and tricks of networking to enhance your experience at the meet and greet.

6. 3 – 5:30 p.m.: Meet & Greet with Residency Program Directors  
   - The pinnacle of the meeting for us medical students! Get your name and face out there, network with residents and program directors, and find programs that intrigue you!

**Sunday, October 20**

1. 9 a.m. – Noon: Medical Student Component House of Delegates Meeting and Educational Session  
   - Session for appointed delegates to participate in legislative activities and education.  
   - Not a delegate? Become a more active member of the ASA by applying for next year’s term! It is truly a great experience.
Dear ASA MSC Component,

I am very excited to have been elected as the secretary to the ASA MSC Governing Council and editor of the ASA MSC Newsletter. I look forward to providing readers with exciting and relevant topics and encourage anyone interested in writing a piece to send me something!

We as a governing council are committed to enhancing medical student exposure to the field of anesthesiology. We are here to answer any questions, as well as address any concerns or comments.

Feel free to contact me directly at asa.mscsecretary@gmail.com

Sincerely,
Alice DiFrancesco
MSIV, UConn School of Medicine

Would you like to get involved with the ASA MSC Newsletter?

You can contribute an article!

If you are interested in writing something for the upcoming newsletter, please contact:

asa.mscsecretary@gmail.com