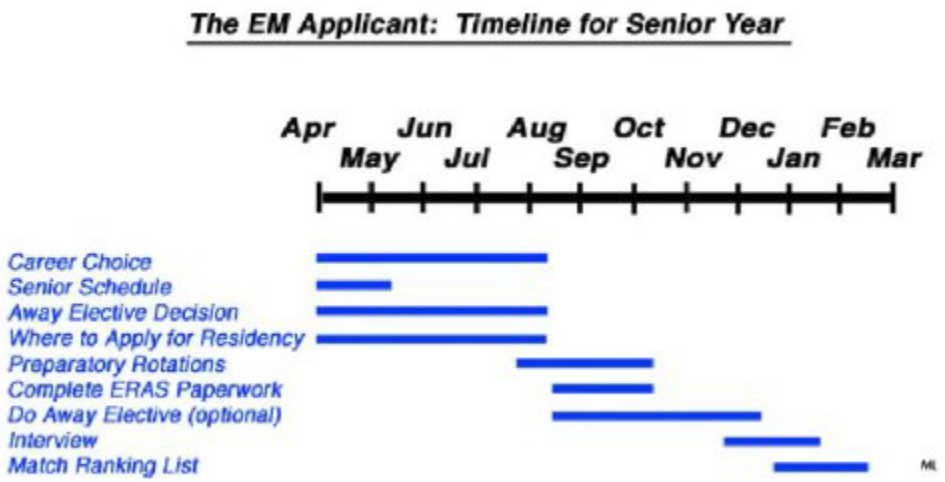
What timing and process are appropriate for finalizing career choice? (Louis Binder, MD)

Some students will be fortunate enough to identify their career choice over the course of the junior year (whether in Emergency Medicine or another field). If so, congratulations!! This affords ample time over the spring and summer to contemplate subsequent questions regarding senior year organization, whether to take a rotation away, and which residencies to apply to.

Probably the majority of students are not able to make a final choice of specialty by the end of their junior year. In most cases, this may be due to needing to take a senior year experience to confirm an intended choice, or to take two or three early experiences in the senior year to finalize a choice among several possibilities. In general, a good objective for students to strive for is to narrow down your possibilities for career choice to two or three related possibilities by the end of the junior year. The early part of the senior year can then be used to take confirming clinical experiences to finalize specialty choice.

What is an appropriate career development time line for the senior year? (Louis Binder, MD)



Career choice: Spring or July/August
Senior schedule and sequencing: Spring
Decisions on electives away: Spring/Summer
Where to apply for residency: Spring/Summer
Completing paperwork (CV, personal statement, ERAS, application letters): August/September
Interview preparation: December/January
Sequencing and inputting match rank order lists: January/February

When are the best times to place unscheduled time during the senior year? (Louis Binder, MD)

This is an individualized consideration for each student, and there is no right or wrong answer. Students may wish to or need to utilize unscheduled time to complete make-up requirements for clerkships, research, organizational involvements, additional training, personal commitments, etc. that could occur at virtually any point in the senior year.

However, having stated the above, a few logical points for placement of unscheduled time for the majority of students exist:

* July of senior year - relax and undertake "a breather" after a rigorous junior year.
* A month in late summer or early fall for "paperwork" related to residency applications - compiling a curriculum vitae, personal statement, recruiting letters of recommendation, completing residency applications, finishing ERAS diskette, setting up away rotations, etc. May be especially effective if coupled with USMLE II preparation, complete two priorities with one unscheduled month.
* December or January to allow dedicated time for interviews.
* And of course, at the end of the senior year as terminal leave.

When should I take USMLE Step II: Early, Mid-Year, or Late? (Louis Binder, MD)

Again, this is an individualized consideration for each student, and there are no right or wrong answers. Below are some of the salient considerations:

Will you have completed all of your core junior year clerkships (Medicine, Surgery, Pediatrics, Psychiatry, Ob/Gyn, Family Practice) by August? If not, plan on deferring Step II until prerequisite clinical experiences are completed.

Is passing USMLE II a requirement for graduation at your school? If so, this mitigates toward taking USMLE II earlier, in order to preserve time for a second attempt at the exam if unsuccessful.

What is your level of standardized test taking skill? If you are not a proficient standardized test taker, consider taking the exam in August to preserve time for an additional attempt prior to graduation.

Preparing for the Step II exam will cause a certain amount of extra distraction in conjunction with other priorities. What is your preference - to have this distraction occur in early fall amidst specialty choice decision making and residency applications, in late fall during important rotations, or in the winter with interviews and rank order lists? There is no "right" answer; each student is able to pick the point in the senior year when the least parallel distraction is anticipated, allowing the best focus on the examination. Whether you choose (or not) to plan unscheduled time for these periods, or for USMLE II preparation, may influence this consideration.

The final consideration on when to schedule USMLE Step II is whether you would desire for USMLE II to be a consideration in the residency application process (take early) or not (take late). To explain the thinking here, use the analogy of the "NFL Draft". At the scouting events, top draft prospects will often skip these sessions, while weaker prospects want to attend to show scouts what they can do, and enhance their chances of getting drafted. Why? The top prospects have nothing to gain by a good workout, but have a lot to lose with a sub-par workout performance, including draft position and money. The weaker prospects have little to lose from a poor workout, but have much to gain from a strong one. The analogy carries over with Step II timing from a residency application viewpoint. If you achieved a Step I score of 240, you have little competitiveness to gain in taking Step II early, but much to lose with a sub-par performance. From a competitiveness standpoint alone, you might consider deferring the exam (although if it is better to take it early for other timing reasons, then do so). Conversely, if you achieved a Step I score that is marginally competitive in your intended specialty, then take Step II early. You have little to lose from a poor score (correlates with the lower score for Step I anyway, doesn't change programs thinking about your candidacy), but everything to gain in raising your competitiveness with a good score. This is a golden opportunity to improve your application if you can prepare well and perform superbly.

Fourth-Year Curriculum

What is an appropriate philosophical approach to the senior year? (Louis Binder, MD)

In contrast to the junior year, the senior year is predominantly an elective year (students can select the majority of their rotations, usually the only year in their pipeline of medical education when they will have this opportunity) and is less rigorous than the junior year. The other major difference which makes the senior year more difficult is that the focus on medical education and professional development must be balanced with a priority of "seeking a job" for the next year. The distraction of this priority varies with each student's situation - some will be minimally impacted, while others will find the residency application process a major distraction in the senior year.

How do I prepare for a residency in Emergency Medicine? (Wendy C. Coates, MD)

You should spend a month in a busy ED, preferably one with an emergency medicine residency, where you can experience first-hand the exciting opportunities available within the specialty. There, you will work with board-certified emergency physicians, EM residents or both. Visit the student rotation list on the website. The remainder of your senior year should be spent exploring various medical, surgical, and pediatric electives to strengthen your background. Some students participate in an EM research project, while others become involved in local or national EM organizations.

What breadth of electives should I take? (Louis Binder, MD)

In general, a broad based senior year, in preparation for the broad based specialty of Emergency Medicine, is a good idea. Virtually anything taken will have applicabity to Emergency Medicine. In general, the four best experiences as preparatory rotations for an Emergency Medicine rotation or career include Cardiology (particularly CCU critical care experience), Radiology (reading plain films, CT, ultrasound), Orthopedics (fracture management and musculoskeletal exam), and Intensive Care experiences. Other useful rotations include

Internal Medicine, Pediatric Emergency Medicine, Neurology/Neurosurgery, Anesthesiology, Surgery and/or Trauma Service experiences, Toxicology, and Ophthalmology/Otolaryngology.

What extracurricular content would be appropriate to consider in the senior year? (Louis Binder, MD)

Research, community service, international experiences, organizational involvements, or pursuit of additional degree training (public health, business, administration, education, etc.) could all be considered, depending on specific interests. None of the above are required as an applicant to Emergency Medicine programs, so do not feel obligated to undertake such activities if you are not truly interested in them for their own sake. Additionally, heavy emphasis in one or more of these areas will generally not compensate for academic deficiencies in the medical curriculum. However, if you are so inclined, such experiences can be invaluable developmentally. As with rotation choices, selection of such extracurricular experiences should be carefully considered and sequenced appropriately in the senior year amidst other priorities.

Away-Rotation Elective

Should I select a rotation away from my institution? (Louis Binder, MD)
The worst reason to do a rotation away is "Because I was told by the residency director/faculty at another program that I would not have a realistic chance to be selected unless I spent a month on site at their institution". Selection to a specific residency rarely correlates to completion of a "command performance" requirement, and if duplicative, affords no educational value to the student.

What are good rationales to do a rotation away? (Louis Binder, MD)
If one particular residency stands out as an especially exciting possibility as a residency choice (due to geographic location, special expertise or emphasis, or reputation within the field), doing a rotation on site makes sense, due to mutual benefit. Not only does the program evaluate you - you also evaluate the program, there is something in it for you.

To experience a unique or "world class" rotation in an area of interest. For example, if your interest is pre-hospital care or toxicology, an EMS or toxicology rotation at an institution with a fellowship program or with an excellent or unique set up in these fields might be desirable for future career development whether or not you ultimately match to that particular program. If your interest is trauma, taking a trauma rotation at an institution with an acclaimed or unique trauma experience is something you will always remember and benefit from regardless of your future directions.

Pre-application checklist - edited 2008

THINGS TO DO BEFORE APPLYING TO AN EMERGENCY MEDICINE RESIDENCY (Felix Ankel, MD)

Read the Macy report on Emergency Medicine
The Macy report: "The Role of Emergency Medicine in the Future of American Medical Care" was published in 1995. It gives good insight on emergency medicine as a specialty.

Know the major issues in Emergency Medicine
Look at the major emergency medicine journals: Academic Emergency Medicine, Annals of Emergency Medicine, the American Journal of Emergency Medicine, and the Journal of

Emergency Medicine. Take an afternoon in the library and look at the editorials in these journals in the last 12 months. You will get a sense of issues important to emergency physicians. See who is on the editorial boards of these journals and who is writing chapters in the major emergency medicine textbooks. You'll find that it is still a relatively small world when it comes to academic emergency medicine.

Choose your mentor well
If you have been "assigned" one that is not an emergency physician, ask to set up an appointment with an emergency physician that has gone through or is a part of an emergency medicine residency program. Emergency medicine is such a rapidly changing field that advice is best gotten from people intimately involved in emergency medicine. Try the SAEM Virtual Advisor Program (editors note: SAEM VAP is out of service as of 2008 but plans are in motion to bring this program back).

Become a student member of the Society for Academic Emergency Medicine (SAEM)
Services offered include a subscription to the monthly journal Academic Emergency Medicine, a catalog of many emergency medicine residencies , a medical student rotation list useful for contemplating outside electives (also on the home page), the Newsletter which is published bi-monthly and a greatly reduced registration fee to attend the SAEM Annual Meeting, including a medical student forum. A one-day medical student session is offered at the Annual Meeting. Medical Student dues are reasonable and includes the monthly journal, Academic Emergency Medicine. Check out the Medical Student Section of the SAEM web site at www.saem.org for detailed information on all SAEM services and activities for medical students. (Dues info is currently available from the following web page: http://www.saem.org/saemdnn/AboutSAEM/Membership/JoinSAEM/tabid/82/Default.aspx)

Become a student member of the American College of Emergency Physicians /Emergency Medicine Residents' Association (ACEP/EMRA)
Services offered include a subscription to Annals of Emergency Medicine, and Top 30 Problems in Emergency Medicine, newsletters and other material. Medical Student members of EMRA will receive "Emergency Medicine: The Medical Student Survival Guide" a handbook to use when applying to an emergency medicine residency. Call 800-798-1822, touch 5, to receive an application. Medical Student dues for ACEP and EMRA are reasonable, plus applicable chapter dues. If you join ACEP only, the dues are also reasonable. (editor's note: Telephone number may have changed as well as availability of this handbook - see web sites for dues and more at www.emra.org and www.acep.org)

Join the emergency medicine interest group (EMIG) at your medical school
If you don't have one, start one. SAEM and ACEP/EMRA/MSA can be a resource on how to start one.

Plan your fourth year well
This should include working at a place where you will get sufficient direct contact with EM leaders that can write you good letters. Although good letters from outside EM may be helpful, you should have at least one letter from an emergency physician. Plan on doing a fourth year elective at a place that has an emergency medicine residency program. SAEM has a list of elective away fourth year emergency medicine rotations. (Link to Medical Rotations is available from the home page at www.saem.org - as of 2008.)

Buy Ken Iserson's book: Getting into a Residency: A Guide for Medical Students

From Galen Press 800-442-5369. This has all the basics about applications, curriculum vitae, and personal statements. ACEP/EMRA also sells Emergency Medicine Focus: A Handbook for Medical Students and Prospective Residents edited by Theodore Delbridge, MD, that is helpful for students specifically interested in emergency medicine.

Read: Koscove EM. An applicant's evaluation of an emergency medicine internship and residency. Ann Emerg Med 19:774,1990
Although this is a few years old, a lot of the issues mentioned in this article are still pertinent when interviewing at emergency medicine residencies today.

Three year verses Four year Residency

OPINION #1: FOUR YEARS ARE OPTIMAL (Peter Rosen, MD, FACEP)

As with many other things, there is a controversy on the correct configuration for residency training in emergency medicine.

Initially, residency training was set at two years. How this length of time was chosen is known only to the staff at Cincinnati and USC. When I started a residency at the University of Chicago in 1972, I opted for two years because I couldn't fund three years and because the only other residencies were two-year programs.

In the mid 1980's we added a third year of resident training at the Denver Health and Hospitals affiliated program. This evolved because of a series of observations regarding our residents, as well as other emergency medicine physicians.

These observations led to a single recurrent conclusion: the emergency medicine specialist had a singular inferiority complex. There was nothing wrong with the theoretical knowledge or the technical competency achieved in two years of residency. The problem was that emergency physicians did not believe in the knowledge. As a result, they were constantly being talked out of prudent behavior because of another specialist's work aversion in the middle of the night.

The average emergency medicine resident felt that there needed to be something else to make one into a competitive academic physician. In part this was created by the traditional specialties, dinosaurs in academic institutions who didn't realize that they were extinct and who believed that one could not perform academic emergency medicine except when boarded in internal medicine or surgery. The result was a weakening of the practice and satisfaction of our graduates.

We had kept several graduates as fellows in an effort to increase our research productivity. We were amazed at the quantum leap in self-confidence that occurred during the year of fellowship.

We explored when residents in other specialties began to think of themselves as specialists within their discipline, and it became clear that this happened about the fourth postgraduate year.

The American Board of Emergency Medicine then decided that it required 36 months of training to be eligible for board certification in emergency medicine. I was at that set of discussions and there was a feeling among the board members that the 36 months should follow post-graduate-year one. It was felt that the emergency physician needed an intensive in-patient year and that this should be the first year post medical school. The board opted to leave the 36 months as a 1,2,3 as opposed to mandating a 2,3,4 because at this time there still were only a small number of training programs and it was feared that some programs would have to close their doors because they would not be able to obtain funding for a full class of post-graduate-year-four residents.

In reality it is easier to start and maintain a 1,2,3 program because most institutions never have an adequate supply of first postgraduate-year house staff. Other specialties are less hostile to 1,2,3 programs because their senior house staff can continue to dominate the emergency medicine house staff whom they outrank in seniority and in self-confidence.

The arguments against the fourth year of training are neither compelling nor to the point. Any resident graduate should be able to pass the board certifying examination. Comparing three-year program success rates to those of four-year programs is meaningless. Moreover, given the rate of increase in malpractice suits, I don't think that the incidence of suits is a measure of competency. I wonder how many three-year graduates are sued for being convinced not to do the prudent thing by the consultant (who later denies that he was ever told the real situation of the case).

There is indeed financial pressure upon graduating medical students but that is hardly an argument against a fourth year since other students bearing the same financial pressures are opting for much longer training in disciplines such as surgery or the subspecialties of internal medicine.

Some have argued that only graduates who will select an academic career need the fourth year. I think that this is backwards; the academic emergency physician definitely needs skills beyond clinical competency, but his clinical abilities are frequently enhanced by the ready availability of other physicians whereas the private emergency physician is often alone.

The other attribute that we have observed in our fourth-year graduates is personal maturity. This

has enabled the resident to become much smoother in personal interactions, in understanding how to compromise while being firm in the interfaces that are so key to the successful practice of emergency medicine.

The long-term satisfaction of the emergency physician is dependent on feeling fulfilled by the professional tasks. There are numerous frustrations and difficulties in the delivery of a high quality emergency medicine practice. I feel that to achieve this satisfaction and quality, the emergency physician must feel competent; must have great self-confidence and must have the presence to interact with many others whose principal goal is to avoid doing something prudent because it means more work. Without this self-confidence, the emergency physician will be talked into discharging patients who need admission; talked out of diagnostic tests (angiograms or lung scans for example) that are necessary in the middle of the night; talked into therapies that are inappropriate or insufficient and always feel unsure that the knowledge so painfully acquired in residency is adequate or correct.

If you watch a group of physicians interact, the leader always has the greatest self-confidence, but not necessarily the greatest knowledge.

I have watched 1,2,3 graduates and 2,3,4 graduates from the same program. Certainly there are many fine 1,2,3 graduates who have major accomplishments in the field, but the majority of the graduates from the 2,3,4 years are more confident and I believe better prepared for their future professional tasks.

It is likely that the marketplace will make the ultimate decision for the training configuration, but in the meantime, I proffer my 20 years observations of the field.

We must believe in ourselves; we must think that what we do is important; we must not be easily dissuaded from prudent action. I believe that this is most likely to occur after a 2,3,4 training configuration.

To be respected, one must be respectable. This starts with self-respect.

OPINION #2: THREE YEARS ARE ENOUGH (Glenn C. Hamilton, MD)

Considering the success of his graduates from former two-year training programs - Michael Tomlanovich, Harvey Meislin, Vince Markovchick and others from Chicago; Robert Jordan, John Marx, Peter Pons and others (including me) from Denver - I am always amazed and slightly puzzled by Dr. Rosen's willingness to defend training programs twice their original length.

In his "Letter from Birmingham City Jail," Martin Luther King may have been writing directly to Dr. Rosen when he stated "I had also hoped that the white moderate would reject the myth of time. …All that is said here grows out of the tragic misconception of time. It is the strangely irrational notion that there is something in the very flow of time that will inevitably cure all ills. Actually, time is neutral. It can be used either destructively or constructively. …We must use time creatively and forever realize that the time is always right to do right." Now 30 years old, those words never ring more true than when looking at the advantages of the three-year training experiences versus a four-year passage of time.

Selected from many, the list below includes 10 reasons explaining the advantages of a three-year training program (PGY 1,2,3) in emergency medicine.

Creativity - Three years of training in our specialty covers a great deal of material in a relatively short time frame. A curriculum must be thoughtfully designed and effectively implemented to convey effectively the breadth of emergency medicine while allowing the opportunity for the depth to be experienced. It can certainly be done and done well, but it takes commitment, enthusiasm and an eye toward continual assessment and improvement. With a few exceptions, I have not witnessed these same energies applied to the last year of four-year programs. They tend to be short on training and long on "experience" in the ED. The "real" benefit seems to be to lighten the faculty's coverage load, particularly on the afternoon and night shifts. A few programs, particularly the University of Illinois, have developed specific tracks that lead to additional degrees. This is a better use of the time and certainly is more creative than most.

Large Pool of Residency Candidates - The number of positions in emergency medicine residencies have kept pace with the pool of medical students interested in the specialty. Having interviewed hundreds of them, it is my impression that they are more interested in three-year programs than in four-year programs. We have become accustomed to a 30-50 to one ratio of resident applicants to slots in the PGY 1,2,3 programs. There is little data to support similar competitiveness in the 1,2,3,4-year programs. The three-year programs that start at the second year also have a smaller pool of interested candidates. There are also some specific difficulties with this later matriculation into emergency medicine arrangement that will be addressed below.

Imprinting - The first face one of the "chicks" freshly out of the medical school egg should see is the Emergency Medicine Program Director. Imprinting is an important part of a resident's educational experience. It is essential to foster a commitment toward a career early in our specialty. It is most easily and best accomplished in the first postgraduate year after medical school. This is a specific problem of 2,3,4 programs.

Avoid the Need for Retraining - A corollary problem in 2,3,4-year programs is the need to retrain individuals with experience in other specialties. In our training program, we have the unique experience of having two of our military graduates from medical schools and the other two from the "field," all with prior experience in another specialty. Almost without exception, a number of months are lost within the latter group by the need for realignment of their decision-making approaches, getting them back into the pattern of being a student and occasionally just a basic attitude adjustment. This happens rarely, if ever, in those individuals coming directly from medical school.

Manpower Needs - Currently more than one-half the available positions in clinical emergency medicine are filled by non-residency trained or board-certified physicians. At a time when the manpower needs of emergency medicine are most critical, there is little reason to extend our training an additional year. There are challenges to the current structure and the pathways to board-certification from outside and within the specialty. "Restraint of trade" law suits against the American Board of Emergency Medicine present a challenge that not only effects our specialty but every other. This is a time to increase the productivity of the graduate medical education programs in emergency medicine.

Expensive GME - Of course, it is difficult to increase this productivity if one is asking the hospital to support an additional six to eight residents for an additional year at an average cost of $30,000 plus benefits per resident. Considering the distinct lack of attention to GME in the many proposals for health care reform, it is unlikely that a hospital will readily commit these additional resources without an extremely clear rationale or demonstrated benefit. This fact of limited resources makes the potential for expanding the current three-year programs or initiating new four-year programs very unlikely. When all the other arguments settle out, the reality of economics usually has the final say.

Expense to the Graduate - The average indebtedness of the medical student entering our program is approximately $50,000. These individuals are required to begin repaying this debt by the third year of their training program. An additional year of training increases the burden of that debt on them and their families. From a four-year program not too distant from us, we have heard the final year described as their "$100,000 mistake." Many of them try and make up the difference of that loss with an aggressive approach to moonlighting. Though having limited value, this extra curricular approach is not the way to foster residents' view of their career or well-being during residency.

Choice in the Fellowship - For those interested in academic careers, an additional year of

faculty development, research or subspecialty training allows them to exercise choice in deciding what is best for themselves and their career. Three years plus a fellowship or a chief residency certainly carries more tailored impact than four years in a training environment that is only partially under the trainee's control. As the number of fellowships in the specialty suffer from lack of applicants, there are individuals locked into four-year training programs who would just as soon be out in practice one year early and others who would prefer to have the ability to bring more academic emphasis to their experience. With the quantity and quality of fellowships currently available, it was difficult to imagine why one would actually choose to let someone else completely direct an additional year of training.

Self Image - One of Dr. Rosen's great strengths as a mentor was his ability to share a clearer vision of how emergency medicine should be practiced than anyone I have encountered to date. Part of that clear vision was based in the reality that a resident needed to have a clear view of his or her own competence and confidence from within. In our specialty, to require appreciation or even understanding from those in other specialties as part of our own personal support system, is unrealistic. It also unduly makes one vulnerable to the unenviable arm chair quarterbacking, hindsight and basic covering up for one's own. Much of the medical specialty system still operates from the perspective of "making yourself feel good by trying to make someone else feel bad." Therefore, it is critical that emergency medicine chart its own course. The concept of "second class citizenship" is only something that someone else can try to impose on you and respect is never gained by the simple pursuit of pleasing others. Though our specialty is never one to operate clinically in a vacuum away from other specialties, we must be committed to fulfilling our destiny as we see it through our own eyes and not through those of others.

Outcomes to Date - In this age of outcomes analysis, it is easy to return full circle to the first paragraph of this opinion. For more than 20 years, we have demonstrated the success of graduates from two and three-year programs. At Wright State, we have graduated 115 individuals. We have maintained a tracking and serial questionnaire system for over 10 years. Our most recent findings completed this year demonstrate the vast majority of them are satisfied with their training, the preparation it gave them and their careers as they are evolving in this specialty. The only eye of the needle all graduates must crawl through is the ABEM certifying exam. To date, there is no difference between a three-year and a four-year graduate in performance. To my knowledge, I never had one of my three-year graduates lose a position to a four-year graduate in any setting, academic or otherwise.

To close on an additional comment from Dr. King, "A shallow understanding from people of good will is more frustrating than absolute misunderstanding from people of ill will." Let us

recognize that a four-year program is an interesting exercise if one can find others with the time and money to support it. Beyond that, it seems to have become an anachronism of excess and will probably not survive the health reforms leading us into the next decade.

AT HOW MANY PROGRAMS SHOULD I APPLY TO AND INTERVIEW?

(Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD)

This depends on the number of variables; how academically competitive you are as a student, how competitive are the programs you are applying to, how many programs accept you for an interview, and how much exposure you've had to EM. I would advocate interviewing at a minimum of 6 and a maximum of 12 to 15 programs depending on the variables listed. This may require an application to 20 or more programs to secure the necessary number if interviews. For example, as a student in the top third of your graduating class of a 220 on the USMLE Steps I & II you may be a competitive candidate to many programs. If you apply to ten programs and accept interviews at three of the most competitive programs, there is a distinct possibility that you may not match to any program. See enough programs to be certain that you are an informed consumer, regardless of your exposure to EM. Utilize web sites to explore programs in depth, past the paper brochures. Time and money are issues, although securing the best-fit program is critical, and the extra spent now will be water under the bridge 10 years from now. Don't skimp!

ERAS Application

What Is ERAS? (Gus M Garmel, MD) ERAS = Electronic Residency Application Service ERAS has its supporters and detractors, yet it appears likely to stay. Don't be afraid of ERAS; it is simply an electronic "postal center" for incoming and outgoing data that make up your application. Find out from your medical school how much time you will be given to input personal information and how this time is scheduled. Make sure you are available for your scheduled time. Pay attention to application deadlines, typographical, and grammatical errors.

ERAS sounds pretty confusing. Can I trust it? (Peter DeBlieux,MD; Sam Keim, MD; Carey Chisholm, MD) Overall EM program directors have been pleased with most features of ERAS, and have not had significant technical problems. The workstation information for the 2000 match will be available at the ERAS web site (http://www.aamc.org/about/progemph/eras/start.htm) around the end of June. You will be given the second part (your common application form) from the Dean's office.

What components comprise the ERAS application? (Gus M Garmel, MD) Medical school honors/awards – include AOA and miscellaneous student awards or honors Work experience Volunteer experience Research experience Publications (CORD web site: bibliographic citation guidelines for EM residency applicants) Language fluency (other than English) Hobbies & interests Other accomplishments – try not to reply "none" for any of these categories Personal

statement – This is your chance to capture the reviewer's interest with your personal "story" of how you became interested in EM, how and where you grew up, why you are interested in a particular geographic region, or other personal information that might be distinguishing. This also serves as your writing sample. It should be fluid, well-written, and without errors. Don't personalize it for one specific program, as other programs might receive this 'personalized' personal statement. CV – much of this information may be found throughout your application Dean's letter – many schools give students the opportunity to review its content for accuracy Medical school transcripts – If possible, consider including or omitting undergraduate transcripts if you went to the same undergraduate and medical schools. Board scores Letters of recommendation – Usually 3 or 4 letters are preferred, from EM faculty, non-EM faculty, and/or faculty that know you well. EM faculty will likely use the Standardized Letter of Recommendation (SLOR). Make certain that your SLORs, LORs, and EM rotation evaluations have been received and reviewed. Consider bringing additional copies of each to distribute during your interview in the event they were not received. Certification – confirms that the information is true and no material omissions have been made

ERAS Made Easy (Pam Dyne, MD) The Electronic Residency Application Service, (ERAS), is the method by which application to emergency medicine residency is accomplished. ERAS was developed by the American Association of Medical Colleges (AAMC) to make the process of application to residency more efficient. The service uses the Internet for rapid delivery of residency applications, medical school transcripts, Dean's Letters and faculty recommendations from you and your school to program directors. It also allows your USMLE transcript to be transmitted at your request. ERAS was implemented for Emergency Medicine residency programs during the 1997-98 application cycle and has revolutionized the way in which information is transmitted and received. ERAS is easy to use but it is important for you to be well informed about the process. The ERAS web page includes a manual with detailed instructions outlining the entire process. You will want to read the manual and refer to it throughout the process.

The ERAS system includes three major components: MyERAS: This is the web-based residency applicant work area. Applicants complete an ERAS application, select programs, and assign supporting documents on-line. Dean's Workstation (DWS): The Dean's office scans each student's transcript, Dean's Letter, letters of recommendation, and photo and transmits the documents via the Internet to the ERAS PostOffice. These documents are then electronically distributed via the PostOffice to the programs that you have designated as recipients. Program Director's Workstation (PDWS): Residency programs download documents from the ERAS PostOffice into the ERAS Program Director's Workstation. PDWS software automatically sorts and directs each document to the correct applicant's file folder. Program Directors use the

PDWS software to review and print applicant files. E-mail messages can be sent to applicants for reminders of incomplete file status, interview information, etc.

Procedures and timelines: Research programs and contact them for information. Make careful note of individual program requirements and deadlines. It is the applicant's responsibility to be ensure compliance. Contact your Dean's office. The Dean's office will provide you with processing instructions and a token (special code necessary for ERAS access). Schools will begin to generate and distribute ERAS tokens to applicants in early July. You will need this number to register with MyERAS. You can use any computer with access to the Internet to complete your application and to work within the ERAS system. One of the following browsers is required: Netscape 4.74, Internet Explorer version 5, AOL 5.0 or Opera 5.0, or higher. The system is PC and Mac-compatible. Your application, personal statement, and program selections are transmitted directly from MyERAS to the ERAS PostOffice. Your designated Dean's office transmits your other application materials, (ie. supporting documents). It is highly recommended that you obtain an e-mail address, as programs are likely to send you important information via e-mail. Register with MyERAS. Point your web browser to www.myeras.aamc.org . You will need the token number that your dean's office provides to register and begin the application process. Steps in the process include: creating a profile, completing a common application form, working with supporting documents, selecting and applying to programs, assigning documents to specific programs, and finally, sending your application to programs. The system also allows for transmission of your USMLE transcript. A tracking system allows you to check the status of your ERAS application materials.

Fees: ERAS is free to the programs and the medical school Dean's offices. The fee for applicants to use ERAS is based on the number of programs selected for application. ERAS 2002 fees were $60 for up to 10 programs; for 11-20 programs they were $6 each, 21-30 programs $12 each, above 30 programs $25 each. National Board of Medical Examiners (NBME) charges a flat $50 fee to U.S. and Canadian applicants who request transmission of scores to programs, regardless of the number of transcripts requested. The NBME fee is included on your invoice and collected by AAMC. Prior to receiving an ERAS Token, International Medical Graduates (IMGs) are charged a fee of $75, payable to ECFMG. This ECFMG Application Fee includes preparation and transmission of the ECFMG Status Report to all programs. ECFMG will provide a USMLE transcript for $50, regardless of the number of transcripts transmitted.

Important Reminders About ERAS: Contact your Dean's office to check their schedule for ERAS processing. Don't expect your Dean's office to attach or transmit your files at the last minute. Processing may take a week or longer. Problems with transmissions could cause you to

miss important deadlines so leave extra time around important deadlines. It is your responsibility to be sure that application materials are transmitted to programs before their deadline. An active e-mail address is essential so programs can contact you for information and invitations to interview It is your responsibility to follow up with letter writers and to confirm that letters of recommendation reach your dean's office in time to meet program deadlines. Confirm that all programs that you are applying to participate in ERAS and that you understand and meet their requirements. Be sure to keep information provided in the "My Profile" section of the ERAS program current. In particular, contact numbers and addresses should be updated if they change to allow programs to contact you. Use the applicant document tracking system to check that documents are uploaded by your dean's office and downloaded by each program.

Special cases: If you have already graduated from a U.S. medical school, your application will be through the medical school from which you graduated. You will need to instruct the people writing letters of recommendation to send them to your old school's Dean's office. Contact your old school for further information. Graduates from foreign medical schools need to contact the ECFMG for their application materials and eligibility requirements. More information is available at http://www.ecfmg.org/erasinfo.htm . Canadian medical students who wish to apply to U.S. residency programs must contact the Canadian Resident Matching Service for ERAS processing information (phone: 613-237-0075).

Good luck! A wealth of information on all aspects of ERAS is available at http://www.aamc.org/eras , complete with the user's manual, frequently asked questions and an email help service. Your Dean's office can add additional support.

When should I have my application ready? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD) Your ERAS disk should be submitted by the 3 rd week of September. Visit the ERAS site early (e.g. NOW) for details about the mechanics of the application process. Their web site is located at (http://www.aamc.org/about/progemph/eras/start.htm) . The new workstation for the 2000 match will not be available until late June. Dean's letters come out the first part of November…some AOA caliber students will begin to receive invitations before then. Most invitations will come between 7 November and 21 November, with another 20% going into the second week of December. Try to batch interviews in order to make geographic circuits and take advantage of Saturday layovers if flying. Get your car services. Allow extra time for travel due to inclement weather (that 5-hour drive could become an 8-hour "white knuckle special". Some locations will provide a place to stay, while others can make recommendations. Staying with residents is a double-edged sword; the person may not be truly representative of the majority of the program's residents. Also, you may not "click" and this may harm your chances. Ideally, arrive in time to see some of the city, and observe in the ED. Review the materials the

program has provided to you, and know this information well. Prepare a list of "standard" questions and areas that you wish to investigate at every program, along with specific questions for that program. Write down answers as you go through the day. Your faculty advisor and current EM residents can be helpful in identifying key areas to investigate. Arrive for your interview ON TIME! As soon as possible after you leave that site, write down (or better yet, dictate into a tape recorder while you're driving) your overall impression and other items to investigate. Also be certain to get the names (spelling and title) of the folks that you spent time with (business card from faculty-- some programs provide you with a list). Be sure to interact with some residents (beware of the program that hides them away). I advocate sending a follow-up thank-you note about 1-2 weeks after the interview, although some programs may not wish to receive them (the secretary is a good resource to find out their preferences).

When should I have my application ready? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD) Your ERAS disk should be submitted by the 3 rd week of September. Visit the ERAS site early (e.g. NOW) for details about the mechanics of the application process. Their web site is located at (http://www.aamc.org/about/progemph/eras/start.htm) . The new workstation for the 2000 match will not be available until late June. Dean's letters come out the first part of November…some AOA caliber students will begin to receive invitations before then. Most invitations will come between 7 November and 21 November, with another 20% going into the second week of December. Try to batch interviews in order to make geographic circuits and take advantage of Saturday layovers if flying. Get your car services. Allow extra time for travel due to inclement weather (that 5-hour drive could become an 8-hour "white knuckle special". Some locations will provide a place to stay, while others can make recommendations. Staying with residents is a double-edged sword; the person may not be truly representative of the majority of the program's residents. Also, you may not "click" and this may harm your chances. Ideally, arrive in time to see some of the city, and observe in the ED. Review the materials the program has provided to you, and know this information well. Prepare a list of "standard" questions and areas that you wish to investigate at every program, along with specific questions for that program. Write down answers as you go through the day. Your faculty advisor and current EM residents can be helpful in identifying key areas to investigate. Arrive for your interview ON TIME! As soon as possible after you leave that site, write down (or better yet, dictate into a tape recorder while you're driving) your overall impression and other items to investigate. Also be certain to get the names (spelling and title) of the folks that you spent time with (business card from faculty-- some programs provide you with a list). Be sure to interact with some residents (beware of the program that hides them away). I advocate sending a follow-up thank-you note about 1-2 weeks after the interview, although some programs may not wish to receive them (the secretary is a good resource to find out their preferences).

ERAS: Personal Statement Is there any easy way around the "personal statement"? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD) Write this over a one-month time period. Draft it, leave it, then return and repeat the process. Share with others for critique, including your faculty advisor. Avoid small font (use 12 point). What strengths will you bring to the residency? Why do you think that you are a good career match? One page maximum. Avoid being bland or overly creative. Type, do not hand write! NO "SPELING" OR "GRAMER" ERRORS! ERAS does not have a spell check for the common application form, although your personal statement is importable as an ASCII file (non-formatted). To do this write your personal statement using your standard word processing program, spell check it, and then save as an ASCII file.

Pitfalls in writing your personal statement (Gus M Garmel, MD) Don't use terms in your personal statement like Emergency Room, ER Doc, ER Medicine, ER Physician, ER Resident, or Triage Doctor. These terms upset some individuals, particularly those with early roles in the development and establishment of our specialty. Emergency Medicine does not occur in a "room," but is much broader in scope. You will appear better informed about our specialty if you refer to it using the terms Emergency Medicine, Emergency Department (ED), Emergency Medicine Physician, Emergency Medicine Specialist, Emergency Medicine Residency, and Emergency Medicine Resident.

ERAS: CV What about my "CV"? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD) ERAS has taken away the traditional CV venue. However, you need to prepare a CV to present to any faculty who are writing letters of recommendation for you (I recommend that you prepare a packet containing your CV, personal statement, over letter, USMILE score(s) and latest transcript). Organize the information so that it is easy to find and flows logically. Provide as much detail as you feel comfortable. DO NOT pad your CV (or related sections of ERAS)!!! Many of us will inquire about specific activities that are listed (e.g. "describe your involvement with the homeless shelter" or "where do you go SCUBA diving"). Note proper terminology for stages of research publications (in preparation, submitted, in revision, in press). NEVER misrepresent data in your application! You may be expected to present copies of publications at the time of your interview. I personally recommend that you include a section in your application about personal interests. Yours may click with the program director's. A CV may be attached as one of your letters through ERAS. The program director also has the option to display the information you have entered in the ERAS "common application form" in a CV format. You may view this by selecting that option from the print menu when you have completed the ERAS Application.

ERAS: CV What about my "CV"? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD) ERAS has taken away the traditional CV venue. However, you need to prepare a CV to present to any faculty who are writing letters of recommendation for you (I recommend that you prepare a packet containing your CV, personal statement, over letter, USMILE score(s) and latest transcript). Organize the information so that it is easy to find and flows logically. Provide as much detail as you feel comfortable. DO NOT pad your CV (or related sections of ERAS)!!! Many of us will inquire about specific activities that are listed (e.g. "describe your involvement with the homeless shelter" or "where do you go SCUBA diving"). Note proper terminology for stages of research publications (in preparation, submitted, in revision, in press). NEVER misrepresent data in your application! You may be expected to present copies of publications at the time of your interview. I personally recommend that you include a section in your application about personal interests. Yours may click with the program director's. A CV may be attached as one of your letters through ERAS. The program director also has the option to display the information you have entered in the ERAS "common application form" in a CV format. You may view this by selecting that option from the print menu when you have completed the ERAS Application.

ERAS: Residency Programs At how many programs should I apply to and interview? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD) This depends on the number of variables; how academically competitive you are as a student, how competitive are the programs you are applying to, how many programs accept you for an interview, and how much exposure you've had to EM. I would advocate interviewing at a minimum of 6 and a maximum of 12 to 15 programs depending on the variables listed. This may require an application to 20 or more programs to secure the necessary number if interviews. For example, as a student in the top third of your graduating class of a 220 on the USMLE Steps I & II you may be a competitive candidate to many programs. If you apply to ten programs and accept interviews at three of the most competitive programs, there is a distinct possibility that you may not match to any program. See enough programs to be certain that you are an informed consumer, regardless of your exposure to EM. Utilize web sites to explore programs in depth, past the paper brochures. Time and money are issues, although securing the best-fit program is critical, and the extra spent now will be water under the bridge 10 years from now. Don't skimp!

Letters of Recommendation

Who should write my letters of recommendation?
Authors: Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD
Balance how well the letter writer knows you with how well they are known to the EM residency directors' community. A stellar letter from a community family practice preceptor will carry less impact than a solid letter from an EM program director that I know and trust. My concerns about

that community practitioner is that they may be comparing you to a different group (or with a different yardstick) tehn the EM applicant pool. Likewise, they may not understand attributes that make an excellent EM resident . They can provide information about your work ethic and interpersonal skills. Therefore, you need to have at least one letter from an EM program director. Most directors also want to see a letter from every EM program that you did a rotation with (the absence raises questions about how well you did). EM directors will use a SLOR (Standard Letter of Recommendation) that can be found on the CORD home page.

Authors: Adrienne Birnbaum, MD; Wallace Carter, MD

Students interested in a career in EM may feel pressure to make the "proper" contacts with faculty. Some pointers to keep in mind follow. First, a lukewarm letter of recommendation from a renowned leader in EM may make a less favorable impression on residency admission committee members than an enthusiastic evaluation from a less well-known faculty member that has worked closely with you and had an opportunity to get to know you personally. If you have not worked particularly closely with any individual who can write a letter for you, the preceptor of the student rotation will often be able to write a letter based on a composite of comments from individual faculty members that you have worked with. Be sure to choose an appropriate time to discuss your career issues with faculty members. In general, it is more appropriate to set up a meeting with a faculty member than to try to discuss personal issues during a hectic ED shift. Under the proper circumstances, most faculty members, including program directors and department chairs will be enthusiastic about discussing EM with students interested in a career in EM.

What is a SLOR? (Michelle Lin, MD)

In order to generate more evaluative data on EM applicants, the Council of Emergency Medicine Residency Directors designed a Standardized Letter of Recommendation (SLOR) form as a template for Emergency Medicine physicians writing letters of recommendation. This stand-alone document can be downloaded from the Council of Residency Directors (CORD) in EM website.

Standardized Letter of Recommendation (PDF)
http://www.saem.org/SAEMDNN/LinkClick.aspx?link=StdLettofrec.pdf&tabid=271&mid=768

Interviews

When should I plan on scheduling interviews with residency programs? (Louis Binder, MD)

The heaviest interview months for residency interviews in Emergency Medicine are in December and January. Some residencies may extend interview invitations earlier (October or November) to especially well qualified applicants, to students already on site undertaking away electives at that institution, or to applicants well known to the institution (i.e. students from their home school, repeat applicants, or those with clinical or research experience at the site). If you are offered an early interview and it is convenient to accept, go ahead. However, for planning purposes, anticipate that the majority of your interviews will occur in December and January, and plan accordingly for time off, flexible rotations that will allow absences for interviews, and so forth.

If you are planning to undertake a lot of out of town interviews around the country, it is generally a good idea to plan for time off in December and/or January in order to block travel for interviews and to avoid compromise of clerkship experiences and responsibilities. If you are planning fewer interviews that are predominantly close to home, you may be able to work them around your clerkship obligations, particularly if your clerkship at that time can be a flexible one regarding necessary absences and makeups with you for missed experiences.

What is the best time to interview? Author #1: (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD)

There's no consensus on this issue. Unlike what is advocated in Iserson's book, many of us feel that the last week of interview season is a bad choice…the program directors are tired, you are tired, and spontaneity is lost. There is also no bad weather buffer. There is a "learning curve" over 2 to 3 interviews, so perhaps target your "front runner" programs after you complete several. I particularly enjoy the time in December before the holiday season…and likewise would avoid the week after New Years.

Author #2: Michelle Lin, MD For more information on the best time interview, read the 2000 Academic Emergency Medicine journal article “Does Interview Date Affect Match List Position in the Emergency Medicine National Residency Matching Program Match?” by LM Lee, HW Park, and DT Overton. This retrospective multicenter study during the 1997-98 interview season found that EM applicants were ranked and unranked, independent of when they were interviewed. Does Interview Date Affect match List Position?

How to accept, decline or postpone invitations to interviews (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD)

The early-bird concept with accepting invites: Accept an invitation as soon as you are able to arrange travel plans. Advantage and ease of scheduling goes to the best prepared. Your options will be limited the longer you wait to respond. Some programs offer invitations and hold posts for a limited time only 2-3 weeks, some over a month, others indefinitely. If programs have not heard a response after that time frame, a second wave of invitations is sent out to other applicants. Be courteous to your peers.

If you are having difficulty with scheduling days and times let the program coordinators know that you are working on a way to make it, or that you may need to postpone for the time being.

Good communication skills will secure you a spot in the future when you uncover hidden funds. When declining an invitation, first make sure that you have secured enough interviews to suit your needs. To decline appropriately, do so early and be polite. Most program directors are understanding and sensitive to student's time and financial constraints.

Dos and don'ts of the interview trail (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD)

Do accept invites to stay with residents in the program if…. You are will informed and comfortable with the situation. For example, if you have shared interests or background with the resident. This can be a hit or miss situation and personalities play a large role. If you decline, ask for the resident to escort you through the hospital, didactic session, or to observe change of shift in the ED. This will increase your exposure to residents and faculty while preventing hurt feelings.

Do accept invites for second looks. Not offered by all programs, you might ask. It is a very positive move to communicate interest in a program and allows a student to meet with different residents and faculty that were not present during the interview day. Again, try to arrange a time with plenty of residents or faculty such as change of shift and didactic experiences. Financially, this can be taxing, but well worth it for your top choices.

Do write thank you notes. A must; consider writing notes to all those that interviewed student or program directors only. It is fair to ask how applicants are selected to help determine how many letters should be sent. Do not write identical thank you notes to all members of the selection committee; we compare notes. Try to mention something particular that we discussed during the interview, but it does not need to be novelesque in length. Try to include the program coordinator among your list of thank you's and do not underestimate their contributions to this process.
Do make follow up contacts. For those programs that you are particularly interested in a brief letter at the conclusion of the interview season is appropriate. It might reaffirm your interest after all interviews and include an update on board scores, rotation grades, or publications.

Don't be a "NO-SHOW"! Most programs have waiting lists, and several people to review your file before you arrive. Please do not waste their time, and likewise be courteous to your peers on the waiting list (and perhaps eliminate a competitor from the applicant pool!). Call ahead as soon as you decide you will not be going to an interview. You won't hurt our feelings. A "same-day" cancellation is almost as bad, unless of course there has been a personal emergency or travel problems.

However, EM is a small community and if you are a no-show at a program there is a good chance that word of this will spread around… and could affect your ranking. Do not underestimate how damaging this can be!

Don't be late or fall asleep during the process
Don't over or under dress
Don't be artificial. Be yourself!
Don't dominate the interview - let the interviewer set the tone and pace.

How should I handle inappropriate questions? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD)
These may be encountered, and your response should be tailored to the situation. We try to find out as much as we can about you as a person, but for some this may feel like prying. If you are uncomfortable answering a question, say so. One technique is to turn the question back on the person, or say something like "I'm curious why that information would be of interest to you?" Also keep in mind who is asking the question. If a faculty member or resident is asking, it usually is out of ignorance of the "rules" or simply genuine curiosity (an extension of our "history taking" skills). Few of these questions represent true malice, although I would have serious concerns if they are coming from a program director or chair.

What should I do if I REALLY like a program? (Peter DeBlieux, MD; Sam Keim, MD; Carey Chisholm, MD)
I strongly recommend a follow-up visit if feasible. Three or four years of your life are on the line, so make certain that those favorable first impressions hold. Get a better idea about the city. I also recommend a follow-up letter at the conclusion of interviews to the 3 or 4 programs that you like the most. Don't tell someone that you are ranking them first unless you really are (again we compare notes). Ask the program two pointed questions; "How would an applicant know if the program was really interested in them?", and "If an applicant is very interested in your program how should they communicate this?". The answers are variable and ranges widely from program to program. The only "illegal" activity would be for a program to promise you a position, or to request that you drop out of the match and they will guarantee you a position.

General Advice to EM Applicants

How can I learn more about the specialty of Emergency Medicine? (Gus M Garmel, MD)

Journals

- Academic Emergency Medicine
- American Journal of Emergency Medicine
- Annals of Emergency Medicine
- Emergency Medicine Clinics of North America
- Journal of Emergency Medicine

Textbooks

- Hamilton GC, et al. Emergency Medicine: Approach to Clinical Problem-Solving. 1991.
- Harwood-Nuss AL, et al. Clinical Practice of Emergency Medicine. 3rd ed. 2000.
- Roberts JR, Hedges JR. Clinical Procedures in Emergency Medicine. 3rd ed. 1998.
- Rosen P, et al. Emergency Medicine: Concepts and Clinical Practice. 4th ed. 1998.
- Tintinalli JE, et al. Emergency Medicine: A Comprehensive Study Guide. 5th ed. 2000.

Web sites

- www.embbs.com (The Emergency Medicine and Primary Care Home Page)
- www.emed.org (Emergency Medicine online)

- www.eMedHome.com (different types of emergency medicine information)
- www.emedicine.com (free on-line EM textbook)
- www.ncbi.nlm.nih.gov/PubMed (PubMed for journal article searches)
- www.ncemi.org (National Center for EM Informatics)
- www.mdconsult.com (free 10-day trial for physicians includes clinical information)

Residency program web sites

The most convenient resource may be the SAEM Residency Catalog that includes all approved EM residency programs, and direct links to almost all individual residency program web sites.

Professional organizations

- AAEM (American Academy of Emergency Medicine): www.aaem.org
- ABEM (American Board of Emergency Medicine): www.abem.org
- ACEP (American College of Emergency Medicine): www.acep.org (Many state chapters of ACEP also have their own web sites with varying amounts of information about the specialty).
- CAL-ACEP (California Chapter – ACEP): www.calacep.org
- CORD (Council of Residency Directors): www.cordem.org
- EMRA (Emergency Medicine Residents' Association): www.emra.org
- SAEM (Society for Academic Emergency Medicine): www.saem.org

How do I apply to emergency medicine residencies? (Wendy Coates, MD)

Set up a meeting with an EM Faculty Advisor. If you have no access to an EM Advisor, visit the SAEM Virtual Advisor Program. At the beginning of your fourth year, you and your advisor should: Select a number of programs and visit their websites. Prepare a personal statement reflecting your interest in emergency medicine. Obtain 3-4 letters of recommendation. (At least one should be from an emergency physician who has worked with you.) Letters by EM Faculty should use the standardized letter of recommendation (SLOR). Submit your application using the ERAS system. Information on how this works is available through the student affairs office at your medical school. Schedule interviews during the months of November through early February.

Things To Do Before Applying To An Emergency Medicine Residency (Felix Ankel, MD)

Read the Macy report on Emergency Medicine The Macy report: "The Role of Emergency Medicine in the Future of American Medical Care" was published in 1995. It gives good insight on emergency medicine as a specialty.

Know the major issues in Emergency Medicine Look at the major emergency medicine journals: Academic Emergency Medicine, Annals of Emergency Medicine, the American Journal of Emergency Medicine, and the Journal of Emergency Medicine. Take an afternoon in the library and look at the editorials in these journals in the last 12 months. You will get a sense of issues important to emergency physicians. See who is on the editorial boards of these journals and who is writing chapters in the major emergency medicine textbooks. You'll find that it is still a relatively small world when it comes to academic emergency medicine.

Choose your mentor well If you have been "assigned" one that is not an emergency physician, ask to set up an appointment with an emergency physician that has gone through or is a part of an emergency medicine residency program. Emergency medicine is such a rapidly changing field that advice is best gotten from people intimately involved in emergency medicine. Try the SAEM Virtual Advisor Program.

Become a student member of the Society for Academic Emergency Medicine (SAEM)
Services offered include a subscription to the monthly journal Academic Emergency Medicine, a catalog of all emergency medicine residencies, a medical student rotation list useful for contemplating outside electives (also on the home page), the Newsletter which is published monthly (except May) and a greatly reduced registration fee to attend the SAEM Annual Meeting, including a medical student forum. A one-day medical student session is offered at the Annual Meeting. Medical Student dues are $75 (includes monthly journal, Academic Emergency Medicine and $50 for membership without the journal subscription. Check out the Medical Student Section of the SAEM web site at www.saem.org for detailed information on all SAEM services and activities for medical students.

Become a student member of the American College of Emergency Physicians /Emergency Medicine Residents' Association (ACEP/EMRA).
Services offered include a subscription to Annals of Emergency Medicine, and Top 30 Problems in Emergency Medicine, newsletters and other material. Medical Student members of EMRA will receive "Emergency Medicine: The Medical Student Survival Guide" a handbook to use when applying to an emergency medicine residency. Call 800-798-1822, touch 5, to receive an application. Medical Student dues for ACEP and EMRA are $55, plus applicable chapter dues. If you join ACEP only the dues are $30.

Join the emergency medicine interest group (EMIG) at your medical school If you don't have one, start one. SAEM and ACEP/EMRA/MSA can be a resource on how to start one.

Plan your fourth year well This should include working at a place where you will get sufficient direct contact with EM leaders that can write you good letters. Although good letters from outside EM may be helpful, you should have at least one letter from an emergency physician. Plan on doing a fourth year elective at a place that has an emergency medicine residency program. SAEM has a list of elective away fourth year emergency medicine rotations.

Buy Ken Iserson's book: Getting into a Residency: A Guide for Medical Students From Galen Press 800-442-5369. This has all the basics about applications, curriculum vitae, and personal statements. ACEP/EMRA also sells Emergency Medicine Focus: A Handbook for Medical Students and Prospective Residents edited by Theodore Delbridge, MD, that is helpful for students specifically interested in emergency medicine.

Read: Koscove EM. An applicant's evaluation of an emergency medicine internship and residency. Ann Emerg Med 19:774,1990 Although this is a few years old, a lot of the issues mentioned in this article are still pertinent when interviewing at emergency medicine residencies today.

Become computer literate Lots of information is available at your fingertips. All emergency medicine residency programs are listed on the SAEM Residency Catalog, which has links to all residency program home pages and e-mail links to the residency directors. Major emergency medicine organizations such as SAEM, ACEP, AAEM, and AEP all have web sites. Joining the emed-l list will give you an idea of issues of interest to emergency physicians. Run from UCSF, this is a forum where many emergency physicians air their views. To subscribe, send e-mail to: listserv@itssrv1.ucsf.edu , skip subject and then in body write: Subscribe Emed-l . You will get approximately 5-10 e-mails/day.

Putting Your Best Foot Forward: Preparing Your Residency Application (Gus M Garmel, MD) A well-balanced application is essential for individuals interested in the specialty of emergency medicine, as the field is extremely competitive. Your application must address:

> **Scholarship:** Academic achievement is key. The ability to master pre-clinical material and excel in multiple clinical clerkships suggests that intellectual success is likely at several levels. This is of particular importance given the variety of challenges that emergency medicine residents and physicians face in their practice.
>
> **Research:** Whether in emergency medicine or other fields, clinical- or lab-based, even the "simplest" form of research (including manuscript preparation) demonstrates an understanding of academics, the ability to follow-through, and a sense of direction. Research and writing are also examples of creativity. Resourcefulness, the ability to get along with others, commitment, and work ethic are crucial for successful research.
>
> **Leadership:** Leadership roles provide insight into character. Positions with medical school admissions, ethics, or curriculum committees, EM interest groups, or elected

positions such as class officer suggest responsibility, dedication, and the respect of peers.

Volunteerism: Community activism, school-related activities (medical and non-medical), or responsibilities with religious organizations balance academics. Volunteering at student-organized clinics not only helps the community, but also provides additional patient care experiences and, in some instances, the opportunity to teach and supervise other students.

Interests: A wide variety of interests contribute to personal wellness. In addition, an application reviewer or applicant interviewer might share one of these interests. Your listed interests should be kept reasonable in number and scope.

Commitment: Candidates must demonstrate commitment to excellence, personal growth, and the specialty of emergency medicine.

6 P's of successful applicants

Personality
Performance
Productivity
Projects
Professionalism
Preparation

Hot topics in EM

HCFA E/M documentation guidelines ABEM continuous certification Ambulance diversions EMTALA / COBRA Patient satisfaction Physician wellness Physician productivity and ED efficiency Outcomes research and Evidence-Based Medicine Ultrasound

What you can do now to become a stronger applicant in Emergency Medicine

Learn about the specialty Discuss career objectives Find a good mentor(s) Start and/or finish projects Design your 4th-year curriculum carefully (consider Anesthesiology, Cardiology, Orthopedics, ICU/CCU, Pediatric EM, Ophthalmology, Otolaryngology, Radiology, Dermatology, Research) Plan your 4th-year rotations early (elective rotations at many hospitals fill, especially EM)

Pearls

- Learn about careers in EM in addition to the specialty itself
- Your application is only as good as its contents, and only part of the application process
- Be prepared for your interview
- Demonstrate enthusiasm, interest, and confidence at all times
- Have a question ready for each person who might ask if you have one

... in the long run, in the great battle of life, no brilliancy of intellect, no perfection of bodily development, will count when weighed in the balance against that assemblage of ... moral qualities, which we group together under the name of character.... - T. Roosevelt, The Strenuous Life, 1900

Reference List for Medical Students Interested in Emergency Medicine Textbooks:

Iserson KV. Ethics in Emergency Medicine. 2nd ed. Tucson, AZ: Galen Press, Ltd.;1995.

Iserson KV. Iserson's Getting Into a Residency: A Guide for Medical Students. 5th ed. Tucson, AZ: Galen Press, Ltd.;2000.

Keaney JK. The Rape of Emergency Medicine. 2nd ed. Santa Fe, NM: AAEM; 1992

Platt FW. Conversation Repair: Case Studies in Doctor-Patient Communication. Boston, MA: Little Brown and Company; 1995.

Salluzzo RF, Mayer TA, Strauss RW et al, eds . Emergency Department Management: Principles and Applications. St. Louis, MO: Mosby; 1997.

Schwenk TL, Whitman N. The Physician as Teacher. Baltimore, MD: Williams & Wilkins; 1987.

Zaslove MO. The Successful Physician: A Productivity Handbook for Practitioners. Gaithersburg, MD:Aspen Publication;1998.

Publications:

Andrew LB, Pollack ML. Wellness for Emergency Physicians. Dallas, TX: ACEP; 1995.

Garmel GM. Career Planning Guide for Emergency Medicine. Dallas, TX: EMRA; 1997.

Gluckman WA, Harkin KA, eds. EM in Focus: A Handbook for Medical Students and Prospective Residents. 2nd ed. Dallas, TX: EMRA;1997.

Henry GL, Sullivan DJ. Emergency Medicine Risk Management: A Comprehensive Review. 2 nd ed. Dallas, TX: ACEP; 1997.

Hobgood C, Zink B, eds. Emergency Medicine: An Academic Career Guide. EMRA/SAEM. 2000.

Role of Emergency Medicine in the Future of American Medical Care. Conference Sponsored by the Josiah Macy, Jr. Foundation (April 17-20, 1994, Williamsburg, VA). New York, NY;1995.

Scaletta T, ed. Rules of the Road for Emergency Medicine Residents and Graduates. 2nd ed. Milwaukee, WI: AAEM;2000.

Articles:

Adams J, Schmidt T, Sanders A, et al. Professionalism in Emergency Medicine. SAEM Ethics Committee. Acad Emerg Med. 1998;5:1193-1199.

Balentine J, Gaeta T, Spevack T. Evaluating Applicants to Emergency Medicine Residency Programs. J Emerg Med. 1999;17:131-134.

Blumstein HA, Cone DC. Medical Student Career Advice Related to Emergency Medicine. Acad Emerg Med. 1998;5:69-72.

Burdick WP, Jouriles NJ, D'Onofrio G, et al. Emergency Medicine in Undergraduate Education. SAEM Education Committee, Undergraduate Subcommittee. Acad Emerg Med. 1998;5:1105-1110.

Counselman FL, Griffey RT. Fourth-year Elective Recommendations for Medical Students Interested in Emergency Medicine. Am J Emerg Med. 1999;17:745-746.

Crane JT, Ferraro CM. Selection Criteria for Emergency Medicine Residency Applicants. Acad Emerg Med. 2000;7:54-60.

DeBlieux P, Keim S, Chisholm C. Taming the Residency Application Process . Medical Student Emergency Medicine Symposium, May 22, 2000. Society for Academic Emergency Medicine Web site.

Finkel MA, Adams JG. Professionalism in Emergency Medicine. Emerg Med Clinics NA, 1999;17:443-450. Garmel GM. Letters of Recommendation: What Does 'Good' Really Mean? Acad Emerg Med. 1997;4:833-834.

Keim SM, Rein JA, Chisholm C, et al. A Standardized Letter of Recommendation for Residency Application. Acad Emerg Med. 1999;6:1141-1146.

Koscove EM. An Applicant's Evaluation of an Emergency Medicine Internship and Residency. Ann Emerg Med. 1990;19:774-780.

Lubavin B, Phelps M. Pearls of Wisdom for Your Emergency Medicine Rotation. J Emerg Med. 2001;20:211-212.

Mahadaven SV, Garmel GM. The Outstanding Medical Student in Emergency Medicine. Acad Emerg Med. 2001 (in press).

Martin-Lee L, Park H, Overton DT. Does Interview Date Affect Match List Position in the Emergency Medicine National Residency Matching Program Match? Acad Emerg Med. 2000;7:1022-1026.

Rosen P, Hamilton GC. Pro vs Con: Four vs Three . Society for Academic Emergency Medicine Web site. Schneider SM, Hamilton GC, Moyer P, Stapczynski JS. Definition of Emergency Medicine. Acad Emerg Med. 1998;5:348-351.

Wrenn K, Slovis CM. The Ten Commandments of Emergency Medicine. Ann Emerg Med. 1991;20:1146-1147.

Your EM Rotations – Advice in Four Articles

WHEN AND WHERE TO DO AN EMERGENCY MEDICINE ROTATION (Adrienne Birnbaum, MD; Wallace Carter, MD)

Choosing an institution

Students may choose to perform a rotation at their home institution, visit another institution, or both. Potential reasons for choosing an "away" rotation include targeting a program or geographic area that the student has potential interest in as a residency training site.

In general, the performance of multiple EM rotations, especially more than two, at different institutions that simply duplicate experiences is probably best discouraged. The fourth year of medical school provides the student with a unique last opportunity to experience various areas of medicine with education as the primary goal. A student might consider supplementing core rotations at the home or other institution with an additional subspecialty elective in an area such as EMS, Toxicology, or Pediatric EM.

Students are encouraged to collect information on available rotations. Rotations may, for example, differ considerably in the level of responsibility for patient care afforded. The true sub-internship experience often allows the student to function, under faculty supervision, at the level of care-giver, while a more observational role is the norm in other institutions. Many programs offer a lecture series specially designed for students as well as conferences provided for EM residents. Experiences unique to certain institutions include a level one trauma experience, EMS experience in ambulance and/or helicopter transport, hyperbaric medicine, toxicology, pediatric EM fellowship program, etc. A good source of information on programs offering student electives in EM can be found by visiting the SAEM web page. The Undergraduate Rotations Directory can be found in the table of contents on the home page. This directory includes a variety of information such as: type of hospital(s); patient volume and variety; EMS opportunities; conference information; requirements of the rotation and unique opportunities afforded by the institution. Details about scheduling and availability are also provided.

While the student may be attracted to an institution because of the presence of a particular feature, such as a helicopter program, hyperbaric medicine, toxicology or pediatric EM, the assumption should not be made that students will automatically be exposed to that particular aspect during the standard student rotation. Specialized interests should be directed to the rotation preceptor in advance to design an individualized rotation that includes the specific request.

Begin planning early

Proper supervision of medical students requires faculty supervision, a resource that is limited. As a result, many institutions have a maximum quota of students that they are willing to accept for each rotation block. Students that are interested in EM residency training should plan to perform the student rotation early in the academic year (by October or latest, November) in order to confirm their interest in EM as a specialty and so that evaluations and letters of recommendation from these rotations will be available in time for residency application. Heavily subscribed student electives may fill their quota of students accepted into the rotation by spring of the academic year preceding the planned elective. To avoid being closed out of such rotations, start investigating options early. A student who has special interest in performing an elective at a particular institution that has filled its quota should speak directly to the preceptor of the rotation to express their specific interest in the program.

Advice to Students Beginning a Medical Student Rotation in Emergency Medicine (Adrienne Birnbaum, MD; Wallace Carter, MD)

Strategy
EM is largely fast-paced and hands-on. Students that show enthusiasm, initiative, and interest during the rotation will undoubtedly have the best experience and make the best impression on evaluators. Knowing one's limitations and asking for help when needed must, of course, temper this strategy. Demeanor is all-important in how the student will be perceived. Over-confidence at the student level will be perceived negatively, as will the sense that a student is working overly hard to make a favorable impression. Focus on learning, providing good care to patients and getting the most that you can from the provided experiences. Whenever possible, follow cases through to completion of the pertinent ED work-up and beyond. Ask to observe interesting cases and or procedures that you are not directly involved in.

Be prepared to think like an EM physician
The fast pace of the ED requires EM physicians to focus rapidly on the chief complaint and to efficiently tease out relevant information from the history and physical exam to generate a differential diagnosis and to make prompt decisions about necessary diagnostic tests, disposition and treatment. Depending on the acuity and nature of the problem, treatment may need to be instituted simultaneously with the performance of the history and physical exam. The EM approach to a sick patient is relatively unique in its focus on ruling out diseases in the differential diagnosis that are potentially life-threatening, i.e. the diagnoses that "one cannot afford to miss", even if such diagnoses are not the most likely possibility. Be prepared to rapidly and efficiently work up patients with undifferentiated complaints with this approach in mind.

Professionalism
Dress and act professionally. While ED attire is often casual, check out the policy on clothing such as scrubs and jeans before you start, to avoid appearing unprofessional. Be prepared to treat patients of diverse ethnic backgrounds, socioeconomic status, and variable levels of acuity of illness. Keep in mind that the ED serves as the only access to medical care for some patients and that what constitutes an emergency is often in the eyes of the beholder. Be prepared to encounter patients with various overlays of psychosocial issues as well as both organic and functional impediments to history taking and physical exam. Make an effort to be non-judgmental and persevere to do the best job possible under sometimes difficult circumstances. Consider volunteering to work one or more evening, overnight or weekend shifts, if not required. EM is a 24 hour per day operation. The "off-hours" experience may be significantly different in volume, patient mix, physician coverage and cadence than that of daytime.

Personal Safety
Be cognizant of personal safety. The hectic, fast pace of the ED, combined with the large number of procedures performed on ED patients, can be a recipe for disaster if the proper universal precautions are not adhered to. Students rotating through the ED are particularly prone to injuries such as needle-stick or other exposure to body fluids. Glove, gown, mask when appropriate. Never, never, never recap needles. Report any such exposures immediately. Seek help with potentially combative or violent patients.

Ask Around – The Informal Survey
Do, by all means, use the rotation as an opportunity to talk to as many residents and faculty as possible about EM and/or about their institution. Keep in mind that residents, and even attendings, may not be in a position to compare programs to one another or to give accurate

information about programs other than their own and that word of mouth information may be prone to inaccuracies. Finally, remember that no one program is right for everyone.

Reading list
General textbooks of the specialty, such as Rosen, et al. Emergency Medicine: Concepts and Clinical Practice. Mosby, can serve as valuable references but are too voluminous for even the most avid reader to master during a one month rotation in EM. Hamilton, et al. Emergency Medicine: An Approach to Clinical Problem-Solving. W.B. Saunders, is somewhat more manageable for this purpose and is written at the student/resident level. It is organized by chief-complaint, an approach that is particularly useful for students developing an approach to ED patients with undifferentiated problems. Tintinalli, et al. Companion Handbook to Emergency Medicine: A comprehensive Study Guide. ACEP , is an example of a handbook that can provide a portable source of basic information.

A final word...
A little planning and a lot of enthusiasm, initiative and positive attitude will maximize the likelihood of a positive experience on the EM rotation. Make the best of each clinical and didactic experience. Keep in mind that EM is a hands-on specialty, the art of which is often best learned at the bedside. Make an effort to take care of as many sick patients as possible and to discuss the cases with EM faculty. Enjoy the diversity, excitement, and privilege of being involved in saving lives or at least making a difference in the lives of the patients that you come into contact with in the ED.

EMERGENCY MEDICINE PATIENT PRESENTATIONS: A "How-To" Guide For Medical Students (Kerry B Broderick, MD; David E Manthey, MD; Wendy Coates, MD)

Patient presentation is an art. This art form is taught from the day the student does his or her first patient history and physical and presents to the physician preceptor. It continues to be molded and re-formatted throughout medical school and residency. Each medical specialty has different nuances of patient presentations. For instance, within the OB/GYN specialty, there is a more detailed and structured presentation of the patients OB/GYN history. In pediatrics, the gestational and birth history, immunization status, as well as height and weight statistics take on more importance when presenting that patient. Surgical patient histories focus on the perioperative period, while medical patient histories are typically detailed and complex. Emergency medicine (EM) has its own nuances for patient presentations that manifest themselves in several ways. First, different types of patients (e.g., trauma, pediatric, cardiac, and psychiatric) all have particular information that should be offered earlier in the presentation. This is similar to the data and pattern requested by the specific specialties. Second, there are dynamic nuances that depend on the overall activity level of department. For instance, when the emergency department is not exceedingly busy, a more detailed history on patients may be possible. When the department is busy, the student needs to include only the most important parts of the history including the pertinent negatives, having extraneous data available if requested. Third, the severity of the medical condition of the patient will dictate the type of presentation. A stable patient may allow for a complete presentation, while a patient who becomes unstable may require that the student answer specific and directed questions. Finally, the patient's presentation may occur in two or more parts. The first includes the presentation of symptoms and exam findings with development of an evaluation plan. This may be followed by the formulation of a disposition plan that takes into account all information derived from the initial evaluation.

GENERAL
There are several general principles to remember when presenting a history and physical to the EM attending (faculty).

1. **Acuity Level** - Convey how sick the patient is to the preceptor immediately. If you feel the patient is seriously ill, mention this at the start so that the presentation can occur in conjunction with patient management. If you feel certain aspects need immediate treatment (hypoxia, hypotension), present this first. For example, "Dr. Preceptor, as I present Mr. Blue to you, I believe we should immediately treat his hypoxia and wheezing. Mr. Blue is a 63 year old COPD patient who…" This is guaranteed to get their attention and moving toward the care of the patient. Although students often get the most stable patients, it is not unusual for a patient's status to change.

2. **Relevance** - Present only the pertinent data. Try to decide whether or not the data you are about to present will make a difference in the differential diagnosis, evaluation or treatment of a patient. For example, a patient's history of high cholesterol is not important in treating a trauma patient, but their tetanus status is. Remember that negative data such as no history of medication allergies or no history of bleeding disorders are also important. You may collect much more data than you eventually present. This information may or may not be requested as your attending reviews your presentation. A reasonable way to discern what information is important for a given presenting complaint is to ask yourself if you needed the data in your clinical reasoning process. As you gain more experience with clinical reasoning for various presenting complaints, your presentations will improve.

3. **Differential Diagnosis** - Prepare and present a differential diagnosis. You may present this either based on the most emergent or the most likely. Make sure all emergent conditions that would fit with the disease process are included. You may rule them out by the history and physical without further tests, but they should still be mentioned (and then summarily excluded). Include diseases that are common even though they are not emergent. While emergency physicians are viewed as the experts in the evaluation and management of critically ill patients, they often act as primary care physicians. Do not present zebra diagnoses unless you think they are realistic possibilities.

4. **Assessment and Plan** - Many students make the mistake of omitting their own assessment and plan and wait to be asked. Prepare and present your approach to the evaluation and treatment of the patient. As a medical student, you may have many questions about what to do. However, by presenting what your thought process is, the attending will be able to gauge your level of knowledge and experience as well as tailor their teaching to your level. In addition, by taking a "chance" to give your ideas, you will better understand what to do that next time you see a similar patient.

5. **Interpretation of Data** - During the second presentation to the preceptor, you will have gathered all or a portion of the information gathered after the first presentation. At this time, you should do several things. Interpret the laboratory, radiographic, and additional history and exam findings. In many cases, this involves the consultation of a textbook or on-line reference. Learning the basics prior to your presentation enables the attending to teach you at a more sophisticated level. When presenting your thoughts, use causal reasoning to explain the patient's symptom complex and laboratory findings into a cohesive diagnosis. This will require a refinement of the previous list of differential diagnosis based on the results of studies ordered.

6. **Disposition** - Prepare a plan for the patient's disposition, which includes reasons for admission and/or discharge as well as treatment and follow-up. Include this with your final presentation. When completing the chart, be sure to include discharge instructions to the patient advising them of reasons to return to the ED and outline your plan for their follow-up.

7. **Questions** - Feel free to ask questions. Many procedural questions can be answered by residents, nurses, or other students. Management or evidence based questions can be asked to the attending at any time during the patient work-up, but should generally be reserved for a time when the patient is stable. One author suggests keeping them until the end. At that time, you can present and ask about those areas that you were unsure of whether or how to present or evaluate. Another author suggests asking questions as they arise. That way, you can use your new information to complete the work-up of the patient. By asking questions, the attending can evaluate your level of understanding and teach you what you need to know at that moment. By doing this, you increase your knowledge of the condition so that you can begin at a higher level the next time you have a patient with similar complaints. This can help mold your next presentation.

8. **Evaluation** - Recall that the purpose of the patient presentation is three fold. One is to impart data to the attending for the purpose of caring for the patient. The second is to allow the attending to evaluate you. Most evaluations include your ability to perform a directed history and physical, interpret that data, develop a differential diagnosis list, design an evaluation and treatment plan, present a patient, as well as your overall knowledge level on different presenting complaints and specific disease processes. Third, it is often during the presentation that the attending physician addresses critical teaching points.

SPECIALTY AREAS

Remember that each medical specialty has developed its own particular issues and information that are important based on their relevance to the patients with these complaints. Learning what these are helps you to make an appropriately focused presentation to your preceptor and consultant.

1. **Trauma** - The majority of trauma patients seen by the student will be minor trauma. All trauma patient history and physical examinations require specific information. The history of the traumatic event includes information such as when it occurred, mechanism of injury, time since injury, as well what treatment has been done so far. A quick assessment of allergies, medications, past medical history, and time since the last meal are important for determining management. Pertinent examples may include: the patient is a hemophiliac or on an anti-coagulant drug, patient is a diabetic, or pregnant, or on prednisone. Even with minor trauma, it is important to ask briefly about medical history to prevent missing an important factor that may impact treatment or follow-up care.

    a. **MVA** - For motor vehicular trauma, restraint device use, impact of vehicle or patient, vehicular damage (i.e. amount of passenger space intrusion, steering wheel or windshield damage), ejection of patients or other occupants, as well as other occupant death are all important issues used to calculate a pre-test probability for injury. Extrication issues such as, prolonged extrication with a depressed level of consciousness versus self-extrication and ambulatory at the scene allow for evaluation of risk. Time from accident to treatment, documented loss of consciousness at the scene or en route to the hospital also help in deciding severity of illness.

2. **OB/Gyn** - A female with abdominal pain needs to have a brief ob/gyn history obtained and presented. The conciseness and cohesiveness of the presentation can be very different as illustrated by the following examples; Example 1: A 17 year old female presents with 2 days of abdominal pain; without vaginal bleeding, no fever, chills, slight nausea, no diarrhea, no urinary symptoms, no trauma. Her vital signs are.... Example 2: A 17 year old female G1P0 with LMP 6 weeks ago, history of GC and chlamydia one year ago, presents today with lower abdominal pain, worse on the left, non-radiating, without vaginal bleeding or discharge, with no associated urinary symptoms, no fever, chills, nausea, vomiting or trauma. The pain is constant and increasing, worse with movement. Her vital signs are..... A more detailed ob/gyn history up front helps the preceptor to organize the patient's risk stratification up front.

3. **Pediatric** - The younger the child the more unique the history will be, such as, prenatal, birth, and neonatal history. These may all be very relevant to the child's presentation to the ED. As the child gets older and further away from their birth, these factors become less important. Immunizations, developmental and family history are always important factors in assessing and presenting a child. Adolescents should be assessed for risky behaviors and depression as part of their evaluation.

4. **Medical** - Adults frequently present to the ED with an exacerbation of a chronic problem (some of these can be critical) or with a completely unrelated complaint.

a. For young, healthy adults with a focused problem, a pertinent history that addresses their chief complaint is usually enough. A simple query such as, "Do you have any medical conditions or take any medications?" is often sufficient.

b. A person with a chronic condition with a simple problem should be asked first about their presenting complaint. Then, an inventory of their medical history can be assessed. In some cases (e.g., a dirty foot laceration with a foreign body in a diabetic), the underlying condition will figure prominently in their treatment and should be discussed as a major part of the presentation. In other cases (e.g., the same laceration in a patient who has asthma), the underlying condition may be superfluous. It may be mentioned as part of the past medical history during your presentation.

c. The patient with an underlying condition who presents with an exacerbation should have a full history of the problem explored (e.g., A patient with known coronary artery disease who presents with accelerating chest pain). Information about their disease may include prior events, diagnostic studies (e.g., catheterization), medical management, etc.

SUMMARY Patient presentations are an art and as EM encompasses such a wide variety of medical specialties and patients, this 'art' is especially fun to learn and develop in the ED.

* Convey the patient's medical urgency immediately to the preceptor.
* Present only the pertinent data; Be concise and thoughtful.
* Be sensitive to the department's activity status overall and be tolerant of modifications that you may need to make in your presentations accordingly.
* Prepare and present your own differential diagnosis and an approach to the evaluation of the patient.
* Present the patient's completed evaluation and an updated differential diagnosis.
* Organize a disposition plan for your patient to discuss with your attending.
* Ask intelligent questions.
* Have fun!

Presenting Your Patient: A Guide for Medical Students Rotating in the Emergency Department (Tamara Howard, MD; Kerry B Broderick, MD)

Introduction

Welcome to the emergency department (ED)! The purpose of this guide is to assist medical students who are rotating through the emergency department with the development of presentation skills. The attending will want you to be able to present information on each patient that you see in a coherent, systematic, and time-efficient manner. Many patients are in the ED for a single, discrete issue or problem. However, a number of patients will be complex. They will probably have several chronic conditions, which may be the reason for the ED visit, or will impact the treatment plan and ED management.

As you see each patient, keep in mind that your goal is to identify and address the acute problem(s). The emergency department visit differs from a routine office visit, in which the physician may be addressing a number of issues. It is often unrealistic to attempt to address each health issue of the patient in the ED. ED treatment is confined to addressing only those issues that led to this ED presentation or which directly affect the type(s) of treatment the patient will require in the ED. What you do for the ED patient is also different from what you are expected to do when working up an admitted patient on the floor. When you are seeing floor patients, it is not unusual to spend 30 min or more with the pt each time you visit them. On the floor, you are assessing the efficacy of interventions made since admission. However, you can't spend this much time with each patient in the ED, and you are making the first set of interventions that will affect the remainder of the patient's course in the hospital.

Now, let's say you have seen your patient! Before you head off to find the attending or senior resident to present your patient, make sure you have checked the patient's chart and noted certain key pieces of information. Don't forget to read the nurse's notes and the triage sheet. Ideally you will do this before you see the patient, but sometimes in the ED you have to see the patient before the chart is available. Both of these documents will offer some sort of comment with regards to why the patient is here. If the chief complaint given by the patient to you differs from what is written on the triage sheet or the nurse's note, be sure to resolve the differences with the patient and remember to comment on them during your presentation. If you are at an institution with computerized patient records, you may want to check recent discharge summaries as well as determine date of last ED visit. Don't spend too much time on this task prior to seeing the patient; if this information isn't quickly available, see the patient, get a treatment plan going, and then check with the desk clerk to see what info can be obtained.

Anatomy of the Presentation

When you see the patient, you will gather a lot of data. Only some of it will be important enough to include in your presentation. Key questions to consider (and which will be in the mind of the listener): Why is the patient here? Can they be treated here and referred elsewhere for follow-up, or do they require admission? If they require admission, what level of care is appropriate (floor, step-down, ICU, isolation, etc.)?

ID patient, location in the department, and why the patient is here. Begin your presentation by identifying the patient. Use a name and a limited amount of demographic information (e.g. Ms. Rodriguez is a 38 year old female in bed 3). Don't call patients "the woman in room 2" or "the man with right arm pain". There are a lot of reasons to avoid doing this. The first reason is that each patient is a human with one or more immediate health care needs. They should be identified by their name, and not by their disease process(es). The second reason is that patients get moved around quite a bit by various individuals, for a lot of different reasons. The person who is moving the patients around may or may not notify you that your patient is being

moved to another room. The man who was in room 2 when you examined them can easily get moved to room 6 by the time you present the patient. Imagine the confusion that can result if the attending / senior resident goes without you to room 2 to see the patient there, but now room 2 (without your knowledge) now has a different man who will of course report something different to the attending /senior resident compared to what you have reported. State the chief complaint, and give a limited amount of history of present illness. Provide relevant details. How long has the symptom or problem been present? Has the patient had previous episodes? Is this an exacerbation of a previously diagnosed chronic condition such as asthma, GERD, or hypertension? What makes the symptom get worse? Better? Has the patient sought care regarding the problem in the past? If so, what was done? If the symptom is a pain, describe things such the character of the pain (e.g. sharp, dull, pulsating, constant, etc.); whether it radiates versus staying in one place; and any accompanying or associated symptoms (e.g. the person says they become nauseated or diaphoretic when the pain comes on). Briefly state how long symptoms have been present, exacerbating/relieving factors, whether the patient has had similar problems in the past, and if the patient has tried treatments prior to coming to ED. If this appears to be complication or exacerbation of a previously diagnosed problem, say so.

PMH

In preferably two sentences or less, indicate PMH. You can report it as a single sentence, such as "Ms. Foster has a 10 year history of hypertension, has end stage renal disease and has been on dialysis for 3 years. In limited cases, it is also appropriate to indicate that the patient does not have a history of such-and-such disease. For example, if the patient is a 60 year old male with a chief complaint of crushing chest pain associated with exertion and he says that he has no known medical problems, it is appropriate to state that the patient denies any history of angina or myocardial infarction. Keep in mind that the purpose of reporting the PMH is so that you and your listener can consider what aspects of the patient's PMH (e.g. previous fractures, migraine headaches, etc.) may directly or indirectly affect how you will manage the patient. For example, the patient's chief complaint may be cold like symptoms, which they define as a runny nose, nasal congestion, moderately decreased energy level, and sneezing. Such a patient probably has a URI. If they tell you that they have a PMH of hypertension, then remember not to give this patient Sudafed or any other sympathomimetic to treat the nasal congestion because such drugs will only aggravate hypertension. Special Note: if you are presenting a neonate, infant, or toddler, consider presenting information about presence/absence of prenatal care, birth history (spontaneous, induced, vaginal delivery C section, complications during or after delivery, days in hospital prior to discharge after birth).

PSH

Past Surgical History. This issue doesn't necessarily need to be reported for all patients. It becomes important if the patient's chief complaint may be suggestive of a surgical problem. For example, if the patient is a 40 year old female with abdominal pain, nausea, and vomiting, and she tells you that she had an appendectomy at age 25, it is appropriate to state in your presentation what the patient has told you. If she denies any history of surgery but has abdominal pain as her chief complaint, it is useful to indicate that she has no history of surgical procedures. Either way, the listener needs to hear about the presence or absence of previous surgeries in a patient with abdominal pain because the physical exam findings will give information in regards to whether the patient might be developing a surgical issue, or may be experiencing delayed complications (e.g. small bowel obstruction) of prior surgical procedures. Don't forget to ask about previous eye surgeries if the chief complaint involves the eye. Sometimes patients forget to tell you about aspects of their PMH or PSH. After you have asked the patient "do you have any medical problems?" and "have you ever had surgery?", a backup

way to elicit problems they might have forgotten to mention is to ask "have you ever stayed in the hospital overnight?" If they say yes, then ask when and why.

Medications

Ask what medications the patient is taking, and report them. Sometimes the patient willtell you they are taking a medication after they deny having any medical problems. They don't do this to mislead you. What happens is that in their mind, they don't have a medical problem because the medication is keeping whatever it is treating under control. By inquiring about current medications when you see the patient, you may also learn about chronic conditions that the patient has. In this way, when you are doing your presentation you can simply report in one or two sentences what medications the patient takes, and if there are questions about additional details from the attending /senior resident, you can fill in the details later on. Along the same lines, the patient may say they are taking no medications at all. Ask if they are supposed to be on any. You may find that they are supposed to be taking several different medications but, for whatever reason, they are not. This information is useful to include in the presentation because it may help explain the reason for the chief complaint.

Allergies

Always, always, always report whether the patient has any known allergies to medicines. If they state that they do, ask what happens when they take the medication. It would be quite dangerous to give to a patient something to which they are allergic. On the other hand, it may be that the person has identified an intolerance as an allergy. Report what the patient states, and then discuss with your listeners how you have interpreted the information.

Social History

Report whether the patient smokes, drinks, and uses any recreational or street drugs. In certain specific situations, other aspects of the social history should also be reported. For example, it is important to inform the listener of the patient's living (e.g. patient lives alone, is a group home resident, lives in a dormitory, is a prisoner, etc.) if, in light of the chief complaint, the living situation affects disposition or may suggest that other people are at significant risk for similar illnesses. For example, a patient who presents secondary to a head injury may need to be admitted for observation if they live alone and don't have anyone who can monitor them for possible deterioration. It is important to report whether a patient who appears to have contracted a potentially serious infectious illness such as meningitis lives with others versus lives with others or has come from an institutionalized setting, because it may become important to contact and treat others who live with the patient. Asking about the source of heating, or the presence of smokers in the place where the patient lives, is important if the complaint is a respiratory one (e.g. asthma exacerbation). Mentioning during your presentation that a patient has been a victim of domestic or other interpersonal violence is very important. In general, allow the chief complaint to guide you in regards to how much social history to elicit from your patient, and then decide whether or not it is something that needs to be included in the information that you present to the attending or other listeners. Other aspects of the social history to consider including in your presentation: * if the patient has emigrated here from another country, and if so, when * if the patient has been outside of the country within the past year * information about the patient's occupation if it is relevant to the chief complaint or would affect disposition or treatment.

Immunization Status

This question is important in most pediatric patients, but is sometimes also relevant for adult patients. If the patient is a child, ask the parents if the child's immunizations are up to date. Most parents will say yes. The next question is to ask the parents how they have determined that the child's immunizations are up to date. If they say that the child has received all the immunizations

each time that they were recommended by the PMD, then they are probably correct. If they look at you blankly and say, "Well, I guess they're up to date – they've gotten a lot of shots" then find out who the PMD is and at some point during the visit, attempt to contact this person to verify that the immunizations are indeed current. If the person is a child or adult who has emigrated from another country, don't assume that the immunization status is current. You can ask the patient or caretakers what immunizations have been given. They may or may not know. Just keep in the back of your mind whether their chief complaint should lead you to consider certain diseases that most people in the US don't contract if they have not had the opportunity to receive immunizations that are standard for US citizens.

Most people assume that if the child is enrolled in public school, that their immunizations are up to date. This is usually true but not always. There was a recent major problem in our nation's capitol in which thousands of schoolchildren were attending public school for months (or years) without proof of immunization. At some point, their parents were sent letters from school officials, but it took several months to either vaccinate or disenroll the children.

You don't need to comment on immunization status for most adult patients, unless the chief complaint involves burns, eye injury, or skin abrasions/lacerations. In these cases, remember to ask about tetanus status. If an injury like this has occurred and the patient has not had a booster in the past five years, they will need a booster during this visit. When you report immunization status, a simple statement will suffice. Sample statements that you may find helpful are as follows: "Immunization status for this recent emigrant from El Salvador is unknown." "Child's father says he thinks the child's immunization status is up to date but he isn't sure." "Child's mother has the child's immunization card with her which shows that the immunizations are current." "Mr. Brown says he doesn't know when he received his most recent tetanus booster." "Mr. Suarez says he last received a tetanus booster two years ago secondary to a forearm laceration."

GYN History
While information such as last menstrual period (LMP), previous pregnancies, and gynecologic diagnoses will be written somewhere on the chart of each female, it is usually not necessary to include all of this information in the oral presentation of each female patient. Include the information in the oral presentation when the chief complaint or likely treatment plan will be affected by this information. For example if the patient is a 25 year old female with a chief complaint of a finger laceration secondary to injuring it on broken glass, the only aspect of her GYN history that may need to be presented orally is the LMP. In such a patient, an x-ray will probably be obtained prior to laceration repair in an effort to search for retained glass fragments. Knowledge of the LMP is not absolutely essential because most attending will check a pregnancy test anyway (regardless of the LMP) prior to ordering the x-ray. If the patient is a 25 year old female complaining of abdominal pain, vaginal bleeding, or has symptoms that suggest any type of endocrine or gynecologic problem, then more detailed information about the GYN history is important and should be presented.

Vitals
If all the vital signs are normal, you can say this. But make sure to read the triage sheet carefully, and inform your listeners of any vitals that are not normal. For example suppose that the patient has a fever but all other vitals are normal. You can say that "vitals remarkable for a temperature of 101.3 degrees, with remaining vitals within normal limits." It is helpful to report a pulse ox and fingerstick in the vitals if these numbers are important to the patient's disease process.

Physical Findings
Look at the physical examination (PE) as a screening tool to show the cause of the chief complaint. It's not meant to be a comprehensive physical that one would do as part of routine well-baby or well-adult care. You don't have to state every single detail that you found during the exam. Start with the patient's general appearance, then give the findings from the physical exam that are relevant to the chief complaint and any findings that help to either rule in or rule out disease. Findings are pertinent if they: * help rule in or rule out disease * are related to the chief complaint * are a grossly abnormal finding, requiring either immediate attention in the ED, or at least a suggestion to the patient that they see a PMD about the issue.

Problem List, Assessment, and Plan
Before you make your assessment, make a problem list. Do not skip making a problem list. At the very least, make it in your head because it tells you what should be in your assessment. The problem list is typically going to consist of abnormalities identified either through the chief complaint or on physical exam such as "elevated blood glucose" or "fever" or "right lower quadrant pain". Once you make the problem list, prioritize the items. If the person has numerous items on this list, choose the ones that have to be addressed immediately and decide which ones can be handled on an outpatient basis by PMD or clinic referral. Prioritizing the patient's issues is also important with regards to deciding which tests or labs should be done.
Next, make your assessment. This is what you will report to the attending / senior resident. When you make your assessment, give consideration to a differential diagnosis (or diagnoses) that will tie together the elements of the problem list. Some patient's have an obvious problem (e.g. a lacerated forearm). For the rest of the patients, carefully consider 2-4 things that could be causing the chief complaint, and include them in you differential. After reporting your assessment, your listeners will want to hear your plan – that is, how you want to address the abnormalities you have identified. Your plan will lead you to which item in the differential is most likely. Therefore, the plan should be supported by the chief complaint and the data in your physical exam. When you give the plan, have in the back of your mind an idea of what you are looking for with each test that you order – because some attendings /senior residents will ask you why you want to order a given test.

Disposition
Disposition refers to what you want to do with the patient. There are, in general, two things you can do here: discharge or admit. Here is a simple strategy that may help you report your proposed disposition. Decide whether you think the patient can be safely discharged, whether you think more information is required before making a decision, or whether it is obvious the patient needs to be admitted and the only question is the level of care required. Don't worry about whether or not your initial thoughts end up being "correct"; all that matters at this point in the presentation is that you have given some sort of thought as to what needs to be done to allow the patient to either get admitted or go home. Report the disposition that you feel is appropriate; examples of this are listed below.

> Situation #1: You think the patient can be safely discharged. State that: After completing the actions mentioned in your plan to address the patient's issue, you plan to discharge the patient and refer them to their PMD or a clinic for follow-up, or After obtaining and evaluating the labs/x-rays discussed in the plan, you will make an intervention if necessary, then discharge the patient and refer them to their PMD or a clinic for follow-up.

Situation #2: You think you need more information before deciding that it is safe to discharge the patient. State that: After obtaining the results of the diagnostic studies discussed in the plan, you will make an intervention, then re-evaluate for possible discharge.

Situation #3: You think the patient needs to be admitted. You can report that you want to do one of the following options:

* admit to the floor
* explore options for a stepdown or monitored bed
* send the patient to an intensive care setting

Your disposition will need to be periodically re-evaluated by you. You will do this by checking up on the results of x-rays/labs/test, and re-examining the patient to see if interventions you have done have helped the patient. If you notice any abnormal labs or x-rays, consider what they mean and how they should be addressed. When you report back to your attending/senior resident with this data, remind them of who the patient is, then give a revised plan and disposition. Hopefully this guide will help you to synthesize information that you gather as you interact with your patient in the emergency department. Enjoy your stay and learn as much as you can!