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.