In an era when many schools are either implementing or have implemented novel approaches to medical education to enhance student learning, it is important for educational leaders to learn from the experiences of other institutions. The Curriculum Inventory provides that opportunity.

One of the issues educational leaders are evaluating is the length and purpose of different academic periods. Despite the many advances in medicine since the original Flexner Report in 1910, medical education has remained primarily a “2+2 experience” with the first two years of medical school providing pre-clerkship training and “Years 3 and 4” typically dedicated to clinical training. However, some schools are beginning to challenge this approach, changing what it means to be a first or second year student.

A number of schools now begin their required clerkships in January of what we have previously thought of as “Year 2” (Emory, University of Virginia, Mt. Sinai, and Vanderbilt to name a few) -- Duke has completely re-structured the curriculum so that “Year 2 “is entirely clinical, and Tulane begins
clerkships in May of Year 2. In these schools, it is important to re-define “Year 2” as a “second academic period” beginning either in the fall or winter of the second year in medical school. Students can no longer be automatically classified as clinical or “pre-clinical” by year of training, and it raises the question of what it really means to be a student in any “year” of the curriculum.

This is a particularly important question when comparing institutions both for benchmarking and qualitative comparisons. As seen in the above Curriculum Inventory Report, there are differences in the length of each academic period, although the actual changes in content and context to each academic period are not reported. Additional charts such as the one below, which shows the number of schools with clerkships in each academic level, provide additional information about changes that are occurring:

![Number of US Medical Schools with Required Clerkships in each Academic level](chart)

Though what we have historically referred to as “Years 1 and 2” have generally remained as year-long periods, most schools have moved to systems-based approaches that challenge the definition of the traditional courses (biochemistry, physiology, etc.) and are changing the entire dynamics of what truly represents the time periods for courses and Years 1 and 2. Some schools have implemented shorter or longer periods of time (e.g., six months or 18 months). “Years 3 and 4”, the traditional clinical years, are also part of this change, with some schools combining the “two years” into one 18-month experience that might begin in what we previously thought of as “Year 2”, and offering additional basic science oriented experiences. As a result, the traditional “curriculum year” no longer has the same meaning and has been replaced in the Curriculum Inventory with the more appropriate term “Academic Level.”

Based on data from the Curriculum Inventory, most schools continue to offer traditional clerkships in “Academic Level 3” while “Academic Level 4” of medical school provides additional clinical training with variable amounts of required and elective experiences. Some schools are beginning to extend the period in which traditional clerkships can be completed so that there are opportunities to explore other fields of medicine earlier, while some schools offer integrated clinical experiences that completely change the traditional clerkship experience.
For others to learn more about earlier clerkship experiences in Academic Level 2 and more flexible approaches to Academic Levels 3 and 4, there will need to be changes to how this data is reported so that institutions can fairly share their experiences. More importantly, outcome data is needed to appropriately determine advantages or disadvantages of one approach compared to another. In addition, different institutional requirements for when students are required to take or complete the USMLE Step 1 examination also have a major impact on how the academic levels are defined. (See Years or Phases of the Curriculum in Which Medical Schools Require Students to Take the United States Medical Licensing Examinations (USMLE))

The Curriculum Inventory’s use of Academic Levels makes it possible for schools to report their curricula in a more flexible manner, and provides a mechanism for producing reports that more accurately reflect how medical schools document the academic levels in their curriculum. However, this flexibility will require additional information to allow meaningful interpretation of reports as schools individually begin to re-define the educational program provided at each academic level. The importance or even necessity for understanding different academic levels will continue to change as we move towards competency-based medical education. The chart highlighted in this commentary is a step toward providing context for how schools are structuring their academic levels.

It is also important to recognize that this is just a first step, and significant changes that are relatively new to medical education require robust reporting to understand their impact on the future physicians that are being trained.

About the Authors

N. Kevin Krane, MD, is Vice Dean for Academic Affairs and Professor of Medicine at Tulane University School of Medicine. He was presented the Merrill Flair Award in Medical Education in November 2014 by the Association of American Medical College's Group on Educational Affairs.