Words From The Executive Associate Dean
Kenneth E Olive, MD FACP

The Quillen Class of 2011 has begun residency training programs lasting 3-6 years in duration. Some of these new graduates have come directly through the educational pipeline from high school, through college and medical school. They will be aged 29-35 when they complete residency training. A physician workforce study by the healthcare consulting firm The Lewin Group indicates that roughly one third of physicians will be working in the age range of 70-75 years. Thus, some of our most recent graduates will still be practicing medicine in 2055! How do we prepare physicians who will be practicing in ten years – much less 40 years from now? What physician practicing in 1970 could have imagined routine practices of 2011? Personal computers, cell phones, the internet, robotic surgery, laparoscopic colectomies, beating heart coronary bypass procedures, PET scans and monoclonal antibody based therapy would have seemed the things of science fiction. New disease entities, new treatments, new delivery systems, and much more diverse patient populations characterize today’s practice of medicine. Such changes are among the factors which make medicine a fascinating career. Yet what are the implications for medical educators? What is essential to prepare today’s medical students to be effective physicians in 2055?

Current students continue to need a strong scientific basis for future practice as many (perhaps most) major advances in patient care will be based in the science. But is this enough? What is truly core to the practice of medicine in the future?

Knowledge explodes at an exponential pace and critical new knowledge cannot simply be taught in an additive fashion to all that is currently being taught. Attempts to do that will result in students deciding what to learn as they cannot learn everything presented. At such an early stage in their careers they may not be in the position to appropriately judge what is most important. Thus, medical school faculty members have the responsibility of making decisions about pruning the curriculum to allow for new curricular growth. Because we learned it, because it is fascinating, because some medical student may someday encounter it, or because it is our area of expertise, are insufficient reasons to keep curricular content which may be relatively less important than new content. This forces difficult decisions for curriculum committees, course directors, and individual faculty members.

Let’s examine a few areas which might fall outside the traditional curriculum. Obesity is a national health epidemic leading to morbidity and mortality affecting almost all specialties. Arguably, it is one of the greatest health related problems our society faces. Some progress has been made in the science of understanding obesity. However, this has not had a meaningful impact on reducing the burden of obesity to date – rather it continues to increase. Some interventions at an individual patient level may have impact. These include exercise, nutrition, and behavior change. Pharmacologic agents may play a future role and surgery has a limited role. But interventions at a population level may have even greater impact on this problem.
Words From The Executive Associate Dean cont’d

than do those at the individual level. Issues related to culture (food choices), politics (nutritional policy), economics (ability to afford nutritious food), and food availability (transportation, city planning, zoning) are all related to this major health issue. Our current medical education system does a poor job of education related to these “nonmedical” factors. But future physicians will need to be involved in addressing these issues.

Over ten years have passed since the Institute of Medicine published its report “To Err is Human: Building a Safer Health System”, which outlined the data estimating that up to 98,000 people per year die due to medical errors in the U.S. Nonetheless wrong sided surgery and medication dosing errors continue to occur. Possible solutions to such problems include better understanding of health care systems, enhanced communications, utilization of medical informatics, and analysis of individual physician practice patterns. Physicians should be involved in the leadership of these processes, but development of leadership skills is not part of many medical school curricula. Medical education is only beginning to address such issues.

Systems based practice is one of the Accreditation Council for Graduate Medical Education (ACGME) general competencies. It is also one of the major categories for Quillen Commencement Objectives such as: “awareness of the types of healthcare coverage currently available” and “appreciation for providing cost effective care”. These are outside the domain of traditional undergraduate medical education but areas the QCOM curriculum is beginning to address.

Given the long career span for most medical school graduates, perhaps the most important emphasis in medical education should be not on imparting specific information but on facilitation of the life-long learning process. No medical educator can know with any degree of accuracy the specific pieces of information a physician practicing forty years in the future will be required to know. However, it can be known with certainty that physicians will need the ability to acquire and assimilate new knowledge into the care of patients. This is the rationale for the emphasis by the Liaison Committee on Medical Education (LCME) emphasis on active learning by medical students. This is addressed by LCME standard ED-5-A. “A medical education program must include instructional opportunities for active learning and independent study to foster the skills necessary for lifelong learning. It is expected that the methods of instruction and assessment used in courses and clerkships will provide medical students with opportunities to develop lifelong learning skills. These skills include self-assessment on learning needs; the independent identification, analysis, and synthesis of relevant information; and the appraisal of the credibility of information sources. Medical students should receive explicit experiences in using these skills, and they should be assessed and receive feedback on their performance.”

Quillen has a strong record of academic excellence. Our graduates are successful practicing physicians in a wide variety of settings. This is probably both because of the education provided here and because our Admissions Committee is proficient at selecting talented people who have the ability to succeed in any setting. The curriculum has evolved over our thirty year history to reflect changes in knowledge, society, and the health care environment. The continued ability to educate physicians for the mid-21st century and beyond will require that we continue to mold our curriculum to the changing environment.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Email to Faculty / Staff Meetings with Chairs / Clerkship Directors, and Course Directors Committee appointments Distribute Course / Clerkship Forms</td>
<td>Preliminary database compiled / distributed to committees / committees establish meeting dates</td>
<td>Reports due from Committees</td>
<td>Updates made to database</td>
<td>Self-study summary report and database to LCME</td>
<td>Site Visit</td>
</tr>
</tbody>
</table>

LCME Timeline
Academic Affairs Staff Spotlight

I joined the Office of Academic Affairs a little over a year ago as the Clinical Medical Education Coordinator. This position is responsible for developing, implementing, and maintaining both the third and fourth year student schedules, and I have found there are an incredible number of pieces required to make that happen! And I am still learning. I also schedule visiting students, serve as chief proctor for ordering and administration of the NBME exams for all classes, and am administrator for the Visiting Student Application Service provided by AAMC for those students applying for away electives. However, the greatest challenges this year have been implementing various components of the New Innovations student management system, which is still a work in process, and coordinating the first combined graduation/honors ceremony for the college. A major accomplishment of this past year has been the revising and updating of the student Senior Electives catalog to meet LCME expectations, and I am planning to do the same for the Senior Selectives this summer.

My MPH, Masters of Public Health, has uniquely prepared me for the varied program-curriculum planning and development opportunities I have enjoyed here at Quillen. During my 20 plus years with the College of Medicine I have coordinated the Appalachian Preceptorship program, worked with the medical student interest group, and handled resident recruitment for the Department of Family Medicine; developed and implemented the Health Promotions and Disease Prevention curriculum, and co-developed the Practice Management curriculum for the residents at the Johnson City Family Practice Residency Program; and most recently, medical education program planning and curriculum development in the Office of Continuing Medical Education.

As I am becoming more familiar with my role in Academic Affairs, I am seeking ways to facilitate and streamline the processes of this position, while identifying areas for improved service to the students, the faculty, and the college. I really enjoy interacting with the medical students, especially as they are pondering and planning their career paths. I never know what question a student will walk through the door with next. This makes each day unique. I like unique.

Assessment (Part B)
By Penny Little Smith, EdD

First ask “What do I want to assess?” and “Why do I want to assess it?” This will encourage you to focus on certain types of assessment.

Listed below are a wide range of ways in which you might assess student performance. Some types will be more appropriate for measuring knowledge, eg multiple choice questions (MCQs), others more suited to looking at performance skills, eg Checklists, and others best for focusing on attitudes, eg Rating scales.

- Essays
- Orals
- MCQs
- Extended Matching Items
- Objective Structured Clinical Examination (OSCEs)
- Modified Essay Questions
- Rating Scales
- Checklists
- Patient Management Problems (PMPs)
- Log Diaries
- Trainer’s Report
- Audit
- Simulated Patient Surgeries
- Long Case/Short Case
- Video Assessment
- Simulators
- Student Projects
- Critical Reading Papers
- Self-assessment
- Peer-assessment
- Standardized Patients

Continued on page 4
Assessment (Part B) cont’d

Assessment has many purposes and is used in many ways. A number of techniques are available for assessment. Much would be determined by what it is that you are trying to measure and what type of information you are seeking. Assessment allows measurement over time, evaluation of strengths and weaknesses, and can also be used to include and exclude items or concepts. Assessment also can be used to motivate.

Some assessments are more robust than others. Evaluations such as True/False and Multiple Choice are not considered robust. A student could easily get the question right without understanding why the others are wrong. Keep in mind that: assessment should be as objective and reproducible as possible.

Don’t forget to involve trainees in the evaluative process by getting them to assess themselves and each other. This is a good way to teach the students to develop the skill of life long learning.

Identify the objectives of your evaluation. Define clearly what you are going to evaluate and how you are going to evaluate it. Sometimes in sharpening your ideas, you will develop clearer objectives to guide your evaluation.

A wide variety of options exist from which you can determine which will give the information that you are seeking. The list of action verbs used for objectives on page 6 may offer you several alternatives to consider in gathering the information you are seeking. A clearly written measurable objective will often suggest the evaluation methodology.

The New Standards Project has written that American students are the “most tested but least examined” in the world. The stubborn problems in assessment reform have to do with a pervasive thoughtlessness about testing and a failure to understand the relationship between assessment and learning. The student is the primary client of all assessment, assessment should be designed to improve performance. (Wiggins)

Dr Ronald Hamdy Receives National Award for Contributions to Field of Clinical Densitometry

Dr. Ronald Hamdy, a professor of internal medicine at East Tennessee State University’s James H. Quillen College of Medicine and chairholder of the Cecile Cox Quillen Chair of Excellence in Geriatric Medicine, has received a national award in honor of his contributions to the field of clinical densitometry.

During a recent annual meeting of the International Society of Clinical Densitometry (ISCD), Dr. Hamdy received the ISCD Clinician of the Year Award, presented each year to an outstanding clinician for distinguished service to the field of densitometry in the areas of publication, education or leadership. Clinical densitometry focuses on bone mass measurement and the diagnosis and treatment of bone diseases such as osteoporosis.

Dr. Hamdy is the longtime medical director of the ETSU Osteoporosis Center, which is located on the first floor of Building 8 on the James H. Quillen VA Medical Center campus. He is actively involved in patient care, research and teaching in his main areas of expertise, which include osteoporosis, osteoarthritis and dementia. He has published extensively, with four books and over 200 articles in medical journals and numerous chapters in medical textbooks to his credit.

At the annual meeting, Dr. Hamdy was also appointed editor-in-chief of the Journal of Clinical Densitometry, the official journal of the ISCD. The journal presents practice-oriented research findings, current clinical techniques and relevant technical information related to the field, and explores new ideas and concepts that can influence the practical clinical management of osteoporosis and other metabolic diseases.
What is the LCME?

Medical education programs leading to the M.D. degree in the United States and Canada are accredited by the Liaison Committee on Medical Education (LCME). The LCME's scope is limited to the accreditation of complete and independent medical education programs where students are geographically located in the United States or Canada for their education and that are operated by universities or medical schools that are chartered in the United States or Canada.

Accreditation by the Liaison Committee on Medical Education (LCME) establishes eligibility for selected federal grants and programs, including Title VII funding administered by the Public Health Service. Most state boards of licensure require that U.S. medical schools be accredited by the LCME, as a condition for licensure of their graduates. Eligibility of U.S. students to take the United States Medical Licensing Examination (USMLE) requires LCME accreditation of their school.

The 17 members of the LCME are medical educators and administrators, practicing physicians, public members, and medical students. The Association of American Medical Colleges (AAMC) and the Council on Medical Education of the American Medical Association (AMA) each appoint six professional members. The AAMC and AMA each appoint one student member. The LCME itself appoints two public members, and a member is appointed to represent Canadian institutions.

The LCME is represented by ad hoc teams of evaluators who conduct on-site surveys of medical schools. Survey team members are a mix of basic science and clinical educators and practitioners. Members of the LCME and surveyors conducting field evaluations serve as voluntary, peer evaluators. The activities of the LCME are administered by two Secretariats, at AMA headquarters in Chicago, IL, and at the offices of the AAMC in Washington, DC. Members of the LCME and its survey teams, excluding full and part-time staff, serve the LCME without compensation.

Each year, the LCME reviews annual survey data and written reports on all of the accredited U.S. and Canadian medical schools, and conducts site visits to 20-30 institutions. The LCME holds two-day meetings three times a year, usually in October, February, and June. Following action by the LCME, a "Letter of Accreditation" transmitting the accreditation decision and a copy of the survey report are sent by the principal LCME Secretary to the president of the university (or the equivalent chief executive of the academic institution), with a copy to the dean of the medical school. (Source: www.lcme.org)

Faculty Recognition

The Scarlet Sash Society award recognizes and honors faculty for their excellence in the education and professional development of students. Faculty selected by the 2011 graduating class for initiation into the Scarlet Sash Society are: Basic Science - Robert Schoborg, PhD, Thomas Kwasigroch, PhD, and J. Kelly Smith, MD and Clinical Science - Howard Herrell, MD, Mary Hooks, MD, Stephen Loyd, MD, and Jason Moore, MD.

The first graduating class of the James H. Quillen College of Medicine began the tradition of recognizing two members of faculty, one from a basic science department and the other from a clinical department, as the Class Hooders - so named because the two faculty members place the hood on the graduate. The two faculty selected as Hooders this year are: Basic Sciences - Thomas Kwasigroch, PhD, Professor, Department of Anatomy and Cell Biology and Clinical Department - Mary Hooks, MD, Professor, Department of Surgery.

This year’s distinguished award in clinical teaching was given to Dr. Demetrio Macariola who has worked tirelessly with both students and residents, earning the title of “Master Teacher” within his department. Dr Mac humbly serves as a physician and teacher in both general pediatrics and pediatric infectious disease. A gifted teacher, he continually strives to improve the educational process within the department. Whether it’s a Jeopardy style game show or a monthly newsletter for learners, Dr Mac is continually pushing the envelope. He is certainly a master teacher from whom we can all learn.

Dr. Michelle Duffourc received the Dean’s Distinguished Award in Basic Science Teaching. An associate professor in pharmacology, Dr. Duffourc serves as the course director for the M2 medical pharmacology course. Whether it’s spending extra time outside of class discussing pharmacology or guiding a student through laboratory techniques in the core facility, it is readily apparent that Dr. Duffourc is the consummate teacher. She receives accolades yearly from both medical students and graduate students. Known for creating a nurturing, learning environment, Dr. Duffourc repeatedly engages students with her well-organized and enthusiastic approach to learning.
### Action Verbs for Objectives

<table>
<thead>
<tr>
<th>Recall</th>
<th>Comprehension</th>
<th>Application</th>
<th>Analysis</th>
<th>Synthesis</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retrieve previously learned information</td>
<td>Discover the meaning of information</td>
<td>Use previously learned information in new situations</td>
<td>Examine information and break into component parts to identify motives or causes, make inferences, determine relationships, or draw conclusions</td>
<td>Apply prior knowledge and skills to produce something new</td>
<td>Make judgments on basis of given criteria</td>
</tr>
<tr>
<td>define</td>
<td>classify</td>
<td>add</td>
<td>analyze</td>
<td>assemble</td>
<td>appraise</td>
</tr>
<tr>
<td>identify</td>
<td>cite</td>
<td>apply</td>
<td>arrange</td>
<td>combine</td>
<td>assess</td>
</tr>
<tr>
<td>list</td>
<td>convert</td>
<td>calculate</td>
<td>breakdown</td>
<td>compile</td>
<td>conclude</td>
</tr>
<tr>
<td>recall</td>
<td>describe</td>
<td>change</td>
<td>categorize</td>
<td>compose</td>
<td>criticize</td>
</tr>
<tr>
<td>name</td>
<td>detect</td>
<td>choose</td>
<td>classify</td>
<td>construct</td>
<td>critique</td>
</tr>
<tr>
<td>recognize</td>
<td>discuss</td>
<td>compute</td>
<td>compare</td>
<td>create</td>
<td>decide</td>
</tr>
<tr>
<td>state</td>
<td>distinguish</td>
<td>demonstrate</td>
<td>contrast</td>
<td>design</td>
<td>defend</td>
</tr>
<tr>
<td>label</td>
<td>explain</td>
<td>employ</td>
<td>deduce</td>
<td>devise</td>
<td>evaluate</td>
</tr>
<tr>
<td>duplicate</td>
<td>give examples</td>
<td>graph</td>
<td>derive</td>
<td>develop</td>
<td>estimate</td>
</tr>
<tr>
<td>match</td>
<td>indicate</td>
<td>illustrate</td>
<td>diagram</td>
<td>diagnose</td>
<td>grade</td>
</tr>
<tr>
<td>memorize</td>
<td>identify</td>
<td>implement</td>
<td>distinguish</td>
<td>invent</td>
<td>interpret</td>
</tr>
<tr>
<td>reproduce</td>
<td>inventory</td>
<td>instruct</td>
<td>differentiate</td>
<td>manage</td>
<td>judge</td>
</tr>
<tr>
<td>memorize</td>
<td>locate</td>
<td>examine</td>
<td>discriminate</td>
<td>modify</td>
<td>justify</td>
</tr>
<tr>
<td>reproduce</td>
<td>question</td>
<td>infer</td>
<td>examine</td>
<td>organize</td>
<td>measure</td>
</tr>
<tr>
<td>repeat</td>
<td>report</td>
<td>inspect</td>
<td>infer</td>
<td>plan</td>
<td>rank</td>
</tr>
<tr>
<td>record</td>
<td>select</td>
<td>outline</td>
<td>select</td>
<td>prepare</td>
<td>rate</td>
</tr>
<tr>
<td>sort</td>
<td>sort</td>
<td>relate</td>
<td>select</td>
<td>prescribe</td>
<td>score</td>
</tr>
<tr>
<td>summarize</td>
<td>translate</td>
<td>solve</td>
<td>separate</td>
<td>propose</td>
<td>support</td>
</tr>
<tr>
<td>teach</td>
<td>use</td>
<td>utilize</td>
<td>solve</td>
<td>rearrange</td>
<td>test</td>
</tr>
<tr>
<td>use</td>
<td>utilize</td>
<td>specify</td>
<td>subdivide</td>
<td>reorganize</td>
<td>value</td>
</tr>
<tr>
<td>utilize</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Only as high as I reach can I grow,**
**Only as far as I seek can I go,**
**Only as deep as I look can I see,**
**Only as much as I dream can I be**

---

-- Karen Ravn