Of the 125 allopathic medical schools that existed in the United States in 2002, only 56 had identifiable units in geriatrics. According to a 2008 stipulation of the Liaison Committee on Medical Education (LCME), educational opportunities must be available in medical schools in multidisciplinary content areas.

The Association of American Medical Colleges, in cooperation with the John A. Hartford Foundation, identified 26 competencies in geriatrics for undergraduate medical students with eight domains. These include: medication management, cognitive and behavioral disorders, self-care capacity, falls/balance/gait, health care planning and promotion, atypical presentation of disease, palliative care, and hospital care for elders.

In 2010, only 9 of 126 M.D. medical schools offered clerkships in geriatrics. The new Herbert Wertheim College of Medicine at Florida International University in Miami has integrated geriatric competencies throughout the four-year curriculum beginning with clinical exposures early in the program and local community-based experiences as well as rotations in partnership with local health care providers.

The geriatric curriculum is guided by the 26 competencies. In year one, students attend introductory lectures on concepts of functional decline in aging, and develop an awareness of the physiological, psychological, and social changes that occur with aging. They also learn the importance of older patient-physician communication and functional assessments as well practice physical examination on older adults.

Geriatric house visits expose students to community settings, including interprofessional quarterly visits to households. In addition, they present patients during clinical rounds every three months. This includes an assessment of functional status, cognitive evaluation, fall risk, and issues related to poly-pharmacy in groups of up to 10 students.

A second-year required geriatric clerkship exposes students to the spectrum of acute and chronic illness in a number of settings. It also involves them in evaluating disabilities and conducting preventive health maintenance. Students also are assigned to geriatricians at the Cleveland Clinic Center for Geriatrics Medicine in Weston, Florida. Upon completing the nine-month geriatric clerkship, they address cognitive and behavioral outcomes more thoroughly.

A neurology clerkship includes experiences with patients having dementia and Alzheimer's disease as well as in developing skills in electroencephalography and nerve-conduction studies. Several faculty mentors engage students in community-level health care planning and promotion with older populations.

Military Medicine in the Osteopathic Medical Curriculum

Murray R. Berkowitz, D.O., M.A., M.S., M.P.H., surveyed the U.S. osteopathic medical colleges regarding curricula offered in areas related to military medicine. Dr. Berkowitz, in addition to being a tenured associate professor at the Pennsylvania College of Osteopathic Medicine (PCOM) Georgia Campus, is a disabled veteran who served in both the U.S. Army and U.S. Air Force as a lieutenant colonel.

He indicates that in addition to combat-related injuries, the most-common medical issues in service members include musculoskeletal injuries such as low back pain and sprains and strains of the ankle and knee. Required PCOM third-year rotations take place at military hospitals and medical centers, exposing students to the military culture. Those osteopathic medical students who are in the Army, Navy, and Air Force Health Professions Scholarship Program are more likely to see patients with combat-related posttraumatic stress disorders (PTSD) and traumatic brain injuries (TBI).

Typically, osteopathic medical schools also have a chapter of the Student Association of Military Osteopathic Physicians, which has programs in military culture and military medicine attended by osteopathic medical students in the program as well as by civilian osteopathic medical students. It was noted, however, that while there is an increased prevalence of PTSD and TBI, the curriculum in military medicine does not provide enough instruction in this area.

(Berkowitz MR. Military medicine content in an osteopathic medical school curriculum. Journal of the American Osteopathic Association. 112 (416-417); July 1, 2012.)

Medical Gaps Resulting in Move to Outcomes-Based Education

The escalating costs of health care, together with evidence that patients are not always treated using standards of care that may even be harmful, is yielding a perfect storm. Physicians must not only acquire knowledge and competency, they also need to improve areas of weakness. To change physician practice and improve outcomes, patient education that is outcomes based is necessary.

Continuing professional development goes beyond traditional didactic continuing medical education (CME). It should include concepts of self-directed learning, personal development, leadership and communication skills, as well as considering organizational and systems factors. CME activities should employ pre- and post-tests followed up with knowledge and/or competence assessment. This should include a determination from attendees as to whether they implemented in their practice what was learned. Once physicians identify a knowledge gap, the physician can select the CME activities or other methods to close the gap.

The past chair of the American Academy of Dermatology’s Council on Education, Erik Stratman, M.D., stated, “Podium shows are entertaining, but if you aren’t making any improvements in your approach to patient care, what is the true value?” An example of a knowledge gap that affects prescribing habits is the use of gabapentin, a neurologic medication, in combination with antivirals for herpes zoster. Despite its benefits being demonstrated in an open-label study, few dermatologists are prescribing it. This is likely because few are sure how it is prescribed or what the side effects are.

It is suggested the physician go to a session on the management of herpes zoster to fill in this knowledge gap.

(Carl R. Bridging the gap: identifying practice gaps at core of move to continuous professional development, outcomes-based education. Dermatology World. 28-31: August 2012.)
Failure of Medical Schools to Value Teaching

Stanford University’s Charles G. Prober, M.D., pointed out the imperativeness to foster lifelong learners driven by the desire to be self-regulated, self-motivated practitioners of the future rather than memorizers of medical facts, some of which turn out to be untrue.

Facts should be packaged in an easily digestible and readily searchable form (e.g., mini-videos). The joy of learning should be cultivated in richly interactive and learnable experiences. Zubin J. Eapen, M.D., and others at the Duke Clinical Research Institute in Durham, North Carolina, indicate that with the advent of new technologies for disseminating educational content, there is an opportunity to better integrate research and education with clinical practice. In this way, there can be a learning health system in which providers can generate as well as consume knowledge during routine health care, improving patient care.

Neil Mehta, M.D., and Allan Hull, M.D., of the Cleveland Clinic Lerner College of Medicine of Case Western Reserve University in Cleveland, Ohio, emphasize the importance of helping medical students become self-regulated, self-motivated practitioners by requiring less dependence on standardized tests for assessment. That would avoid measuring retention of quickly outdated information, depending more on useful formative feedback and competency-based reflective portfolios.

This is in recognition of the fact that accessible information grows exponentially and the half-life of knowledge continues to shrink. Emphasis must shift from teaching to learning incorporating problem-based and team-based learning. The Cleveland Clinic Lerner College of Medicine of Case Western Reserve University has had a no-lecture education philosophy since 2004. (Correspondence. lecture halls without lectures. The New England Journal of Medicine. 367 (677-679); August 16, 2012.)

Education of Physicians Sensitive to Costs

How should physicians deal with current forces that have resulted in medical education failing to address the urgent issue of costs? Efforts to teach cost-consciousness will be measured by surveys and a sub score on national in-training exams. There also is a movement to make cost-consciousness and stewardship of resources a core competency by the Accreditation Council for Graduate Medical Education (ACGME).

Chris Moriates, M.D., a University of California, San Francisco resident, implemented a curriculum for residents in internal medicine teaching them to emphasize the principles of evidence-based medicine while providing information about associated costs. A collection of essays entitled Costs of Care provides instances where inattention to costs was harmful to patients. However, Art Caplan, Ph.D., a New York University bioethicist, says the real issue is the definition of ethical physician advocacy and the concern that issues of cost may undermine the obligation and duty to put patients first.

On the other hand, some physicians believe that considering costs also serves real patient interests. They remind us that among the leading causes of personal bankruptcy in the United States are medical bills. But Martin Samuels, M.D., who chairs the Department of Neurology at Boston’s Brigham and Women’s Hospital, cautions that each generation of physicians has been led to believe that medicine is on the “precipice of doom” and that unless it considers the greater good, society will unravel.

He further remarks that when physicians start weighing society’s needs compared to those of individual patients, they begin to lose the essence of what it means to be a doctor, and that when we lose our personal responsibility to individual patients, we are in deep trouble. (Rosenbaum L and Lamas D. Cents and sensitivity: teaching physicians to think about costs. The New England Journal of Medicine. 367 (99-101); July 12, 2012.)

Proposed Bill to Create More Federally Supported Residencies

Stephen Shannon, D.O., president of the American Association of Colleges of Osteopathic Medicine, who supports the expansion of Medicare-sponsored residencies to 15,000, stated that, “The shortage of physicians in our health care system, particularly in primary care, is nothing short of a national crisis.”

Durrell G. Kirch, M.D., president of the Association of American Medical Colleges, also mentioned that the proposed legislation would be the beginning of a comprehensive strategy to assure access to needed comprehensive care. The Physician Shortage Reduction and Graduate Medical Education Accountability and Transparency Act (HR 6352) sponsored by house representatives Aaron Schock (R) and Allyson Schwartz (D) would go a long way in easing the projected physician shortage.

This is particularly important since the Affordable Care Act provides 32 million people previously uninsured with coverage. Currently, there is a cap on the number of new residencies imposed by Congress in 1977. The proposed new legislation will result in 4,000 new physicians each year, but this is only about a third of the amount needed to avoid a shortage. In addition, measures are included that indicate how well residencies in both inpatient and outpatient settings meet such objectives as using health information technology and working in interprofessional teams. (Mangan K. Bill would create more medical residency slots, potentially easing physician shortage. The Chronicle of Higher Education; August 6, 2012.)
Medical Students Publish Health Care Handbook

Two Washington University School of Medicine students have self-published *The Health Care Handbook*, a user’s manual explaining the U.S. health care system. Elisabeth Askin and Nathan Moore pooled their talents during their third year as medical students to clarify in the 175-page book the complexities of the health care system in language easier to understand than that of policymakers, health care experts, and pundits.

It contains numerous graphics and references clarifying opaque terms, acronyms, organizations, and policies while presenting core ideas instead of minutiae. They have been able to distill the more than 2,000 page Affordable Care Act using a series of questions that can be read in less than 20 minutes. Medical students are studying in a constantly changing environment, and this book helps provide them with one of very few resources available to help them navigate this path. The students were able to write the book in under a year with the guidance of the former dean of the school, William A. Peck, M.D.

Primarily published as an e-book to allow for quick revisions, a paperback edition is scheduled soon. They intend to choose a group of students yearly to update and revise the book as needed. (Chen PW. Two medical students navigate health care maze. New York Times; July 12, 2012.)

Art, Music, and Literature in the Medical Curriculum

The aim of the Bioethics and Medical Humanities Scholarly Concentration (BEMH) at Stanford University School of Medicine is to enhance understanding of the contextual meanings of illness, health care, and the human condition. Physicians who also are creative writers discuss their novels and poetry. Visiting artists, who also are physicians, have come to the campus to share their personal and artistic experiences.

In April 2012, medical students read their original poems and performed original dance and music works. In addition, an art exhibit showcased paintings and sculptures. The program director, Audrey Shafer, a professor of anesthesia, stated that the concentration allows students to create work that includes medicine and bioscience as well as arts and humanities. (Goldman C. Diagnosing the human condition: Stanford medical students add art, music, and literature to studies. Stanford University News; July 2, 2012.)

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**Medical Education Digest**
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One (1) hour of continuing medical education credit may be obtained by reading the *Medical Education Digest* and completing the following evaluation that is being used to assess the reader’s understanding of the content. Please circle the answers you believe to be correct for all four questions located on this two-sided form. To acquire CME credit, physicians must mail, fax, or deliver the form (also available online at [http://medicine.nova.edu](http://medicine.nova.edu)), including both the completed quiz and evaluation form by October 15, 2012 to: Office of Education, Planning, and Research, Nova Southeastern University College of Osteopathic Medicine, 3200 South University Drive, Fort Lauderdale, Florida 33328. Email: lspeiser@nova.edu; Fax: (954) 262-3536. Please complete and return the evaluation form attached on the reverse side by fax or email.

AOA or AMA No. ____________________ Print Full Name ____________________

The correct answers will be published in the next issue of the *Medical Education Digest*.

1. **In addition to combat-related injuries, the most common medical issue in military service is:**
   a. Abdominal problems
   b. Head injuries
   c. Musculoskeletal injuries
   d. Eye disorders

2. **The proposed Physician Shortage Reduction and Graduate Medical Education Accountability and Transparency Act includes all of the following except:**
   a. Insurance for 32 million people previously uninsured
   b. Funds for new residencies resulting in 4,000 new physicians annually
   c. Eases shortage of physicians
   d. Removes cap on the number of new residencies

3. **An example of a gap in continuing medical education that is not emphasized is:**
   a. Knowledge
   b. Skills with new procedures
   c. Concepts of self-directed learning
   d. Competency

4. **Two University of Washington medical students developed a manual that:**
   a. Prepares students for national boards
   b. Directs students to hard-to-get residencies
   c. Explains the complexities of the health care system
   d. Provides advice about practice locations

**Answers to the July/August 2012 CME questions:**
1. (b) 2. (c) 3. (d) 4. (a)

**Target Audience and Objectives**
The target audience includes physicians who have faculty appointments at a medical school or who train residents and fellows in hospital-based environments. It also is for non-physician faculty members who have the responsibility for teaching medical students and others who seek education in the continuum of medical education (e.g., residency, continuing education). Also, since residents are typically responsible during their training to train medical students, they too are part of the audience to which the *Medical Education Digest* is directed.

- To provide an overview from the world literature of medical education knowledge, concepts, and skills of contemporary, new, and innovative ways to facilitate learning among medical students, residents, and practicing physicians
- To identify sources of information regarding the medical education process
- To create curiosity among those responsible for the medical education process to read in depth some of those articles that are summarized in the *Medical Education Digest*. 
**September-October 2012 Evaluation Form**

**Medical Education Digest**

In a continuing effort to fulfill your professional interests and to improve the educational quality of continuing education, please complete this form. Please darken bubble ☐

1) Your field / degree: ☐ MD ☐ DO/AOA # ____________________________

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2) Reading this issue of Medical Education Digest has influenced the way that I will treat future patients. 

   ☐ Strongly Agree ☐ Agree ☐ Neither Agree Nor Disagree ☐ Disagree ☐ Strongly Disagree

3) The contents of this issue will be useful in my practice.

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