



## ACCELERATED BACCALAUREATE/M.D. PROGRAM OFFERS ALTERNATIVE PATHWAY TO BECOMING A PHYSICIAN

Of the 141 accredited M.D. medical schools in the United States, 57 offer one or more combined degree programs. These programs range from 10 to 50 students and have missions varying from targeting honors students, accepting those from disadvantaged backgrounds, integrating premedical and medical learning environments, and preparing primary care physicians, as well as those pursuing scientifically oriented careers.

The last review of these programs was in 1997, with an analysis of United States Medical Licensing Examination (USMLE) scores for students in the combined degree program vs. those in the traditional program. Critics express concern about the maturity of the students who enroll in the accelerated programs when entering medical school, while proponents claim the programs lessen the academic pressures often associated with being a premed student.

Northwestern University Feinberg School of Medicine created an accelerated Honors Program in Medical Education (HPME) in 1961 for gifted students similar to the one developed by Boston University. Initially, the Feinberg program was for two years of undergraduate study before matriculation in the medical school, but in 1980, the program was converted to three years of undergraduate school.

About one third (30 students) of the medical school class participated in the program during the 1970s and 1980s, but now there are 20 such students participating. Students are expected to explore areas of interest in medical research, public health, global health, or health policy. They can, however, major in any subject if they are in the School of Arts and Science or in human communication or in biomedical engineering if they are in the McCormick School of Engineering or in the School of Communications.



HPME students are not required to take the MCAT. Over the past 15 years, the overall threshold GPA requirement was 3.0, and in the sciences 3.2, but the average GPA in the last decade was 3.63. Those who matriculate in the medical school are fully integrated into the class and complete all four years.

Of 2,583 students in the program between 1999 and 2013, just under one half were women and more than three quarters were Asian/Pacific Islander compared to 23.6 percent for non-HPME students. Underrepresented minorities include 15 students, or 2.8 percent of the HPME matriculants.

The HPME average age was 21.3 compared to 23.5 for non-HPME. There was no significant difference between HPME and non-HPME in completing the M.D. degree, nor were there any statistically significant differences in class rank or average Step 1 or Step 2 USMLE scores, including those in-

ducted into the medical honor society, Alpha Omega Alpha.

There also were no significant differences in residency match success. Undergraduate students in the HPME were surveyed and said that if they had been in a conventional program, they would not have pursued a major in philosophy, music, foreign languages, or other liberal arts.

Potential advantages of reduced overall time taken to complete the degree include reduction in debt, increase in students entering primary care, and younger physicians entering practice. Concerns of critics about the immaturity of students matriculated in accelerated programs were suggested to not be warranted and, in fact, such acceleration may be an advantage.

*(Green MM, Welty L, Thomas JX, and Curry RH. Academic performance of students in an accelerated baccalaureate/M.D. program: education paths. Academic Medicine. (91) (2); pp 256-261, 2016.)*

## FACULTY MEMBERS BENEFIT FROM STANDARDIZED PATIENT PARTICIPATION STUDY

Faculty members commonly compare residents' performance against their own skills; however, there may be variability or deficiency in the skills of faculty members. Standardized patient (SP) assessments have been successfully integrated into continuing medical education, helping physicians improve their skills or learn new ones.

A study enlisted internist faculty members from 30 internal medicine residencies in the mid-Atlantic region. On their first day, participating faculty members completed an 8-station SP assessment, including common general internal medicine scenarios—many of which had been previously used with practicing physicians. Participants elicited a patient history, performed physical examinations, and counseled the SPs. The SPs completed a 13-item questionnaire regarding the physician's overall skills in collecting data, interpersonal communication, information giving, organization, and overall patient satisfaction.

The study also investigated the impact of faculty members receiving feedback about their performance from the SP for five minutes, including strengths and areas for improvement. Participating faculty members received individualized writ-



ten scores that summarized their performance, which combined a case-specific content checklist with the 13-item questionnaire. Some faculty members enjoyed the process, while others were anxious and nervous. They became less anxious, however, as they moved along to each SP.

A majority of faculty members (69 percent) received feedback, which they requested even if it made them uncomfortable. Some of the faculty members agreed with the feedback, but others did not. While some found the experience uncom-

fortable, many thought the experience was not as bad as they had anticipated, and they appreciated the positive constructive feedback, feeling that they had learned from the assessment. They also described how the SP assessment influenced them as educators and clinicians.

*(Conforti LN, Ross KM, Holmboe ES, and Kogan JR. Do faculty benefit from participating in a standardized patient assessment as part of rater training? A qualitative study. Academic Medicine (91) pp 262-271; 2016.)*

## SURVEYS SHOW EXCEPTIONALLY HIGH RATE OF ALCOHOL ABUSE AMONG MEDICAL STUDENTS

Lotte N. Dyrbye, M.D., professor of medicine and medical education at the Mayo Clinic College of Medicine, reported on a study that revealed about one-third of medical students were alcohol abusers or dependent. This is double the rate of age-matched nonmedical student peers. Burnout and high educational debt were primarily to blame according to the researchers.

According to a 2012 national survey that included 4,402 medical students, 32.4 percent met the diagnostic criteria for alcohol abuse or dependence as measured by the Alcohol Use Disorders Identification

Test, compared to 15.6 percent of college-educated persons 22-34 years of age in the United States. Risk factors associated with alcohol abuse include burnout, depression, low mental quality of life, and low emotional quality of life.

Alcohol abuse/dependence was also shown to be present among those who were younger, single, and with a student loan debt of more than \$100,000. In 2014, the average medical student graduated with a debt of \$180,000. If concern over debt continues to rise, and in the face of lower earnings, it could lead to a psychological toll that might become more severe.

The investigators also remarked that there was an increase in suicidal ideation in medical students (9.4 percent) compared to the general U.S. population of 18 to 29 year olds (5.7 percent). Allison B. Ludwig, M.D., assistant dean for student affairs at Albert Einstein College of Medicine, was not surprised that the rate of alcohol abuse/dependence was higher among medical students than the general population.

*(Melville NA. Med students: exceptionally high rates of alcohol abuse. www.medscape.com/viewarticle/860967\_print; March 24, 2016.)*





## INITIATIVES AND PROGRAMS FOCUS ON MEDICAL EDUCATION IN HIGH-VALUE CARE

Education in the delivery of high-value care is part of the new Science of Health Care Delivery curriculum at the Mayo Medical School. Beginning this year, the required curriculum that starts with the first year and spreads through all four years also covers health care policy, economics, and technology, leadership, person-centered care, team-based care, population-based care, and lower-cost care. It was noted that students “need to understand this challenge early in their training.”

The Denver Veteran Affairs Medical Center, affiliated with the University of Colorado, began the Do No Harm Project in which students have an opportunity once a month to submit medical overuse stories. Trainees receive a day free from clinical duties to submit their

stories—part of a growing movement to better educate students, as well as residents, about high-value, higher-quality care.

The program was inspired by the Teachable Moments series in the *Journal of the American Medical Association Internal Medicine*. Stephanie Starr, M.D., the new curriculum’s co-director, uses the term the “third science” to describe this component of education that accompanies basic and clinical sciences. Students hear from practicing clinicians about balancing the complexities of delivering higher-quality care and encouraging medical schools to conduct similar efforts.

Another initiative is Choosing Wisely at Vanderbilt University Medical Center, led by a resident in the Department of Pathology



and chief resident in medicine. Launched in 2012 by the American Board of Internal Medicine Foundation and *Consumer Reports*, the initiative focuses on decreasing daily laboratory tests and resulted in a 95-to-60 percent decrease of patients receiving daily labs.

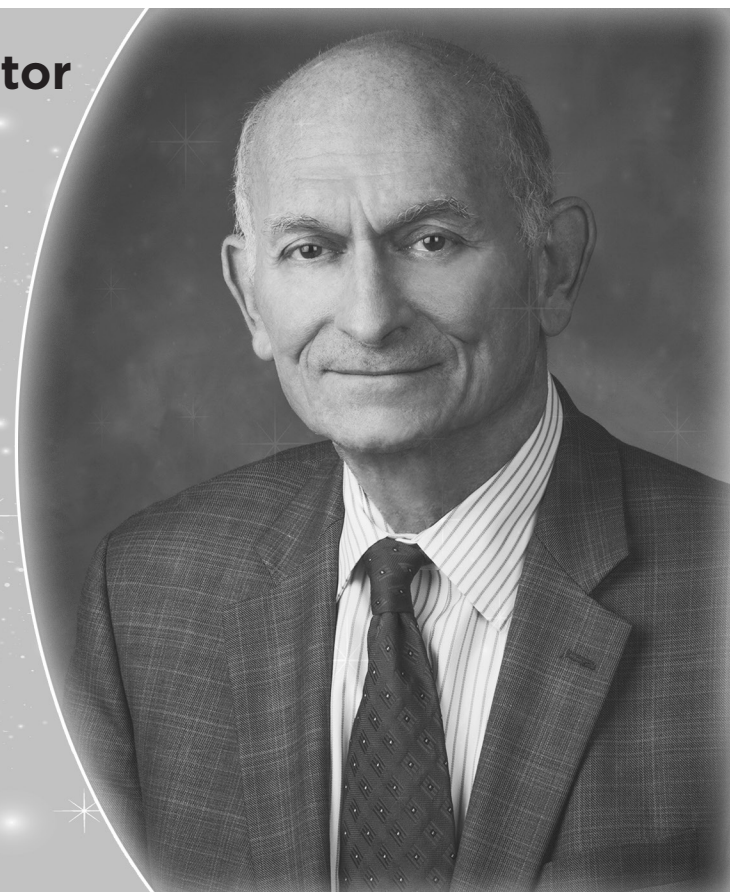
Nilay Patel, M.D., a cardiology fellow at Massachusetts General Hospital, received a Clinical Care Innovation Challenge and Pilot Award in 2014 from the Association of American Medical Colleges to develop a high-value core curricu-

lum for internal medicine residents that promoted five Choosing Wisely recommendations. The curriculum included small-group conferences, lectures, and one-on-one teaching with faculty advisers. The initiative resulted in residents being more comfortable thinking about the cost of care and feeling better equipped to deliver high-value care.

*(Krisberg K. Innovations in medical education: push to provide high-value care takes root in medical training. AAMC Reporter; February/March 2016.)*

## Medical Education Digest Editor Retiring After 17 Years

**Leonard A. Levy, D.P.M., M.P.H.,** associate dean for research and innovation at Nova Southeastern University College of Osteopathic Medicine, who has served 17 years as editor of the Medical Education Digest, announced his retirement effective June 30. Published every other month without interruption since 1999, Levy founded, researched, wrote, and edited the publication’s 103 editions.



# MEDICAL STUDENTS' EXPECTATIONS DESCRIBE FALSE BELIEFS RELATED TO RACIAL BIAS

A National Science Foundation study concluded that similar to white laypersons, many white medical students and residents believe there are biological differences between blacks and whites, with many of the differences being false and fantastical.

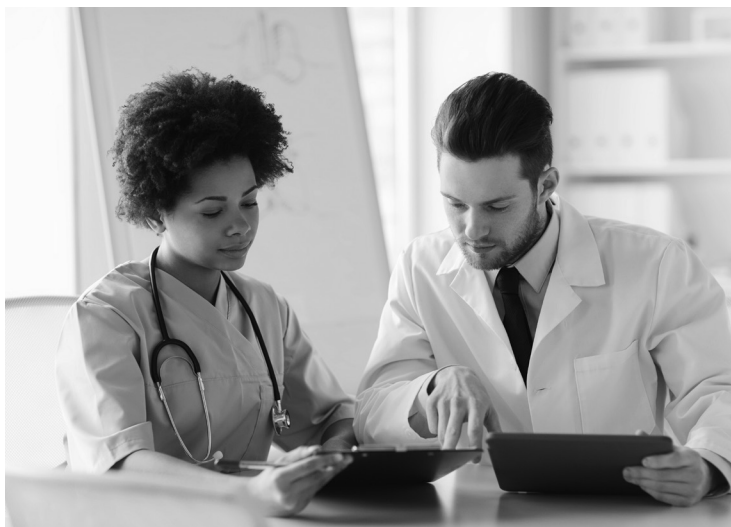
The beliefs are related to racial bias in pain perception. The study revealed white medical students and residents, who endorsed false beliefs, showed racial bias in the accuracy of their pain-treatment recommendations. Participants who endorsed more of these beliefs reported a black (vs. white) target patient would feel less pain and were less accurate in their treatment recommendations for the black (vs. white) patient.

In contrast to white medical students and residents who endorsed such false beliefs, those who did not endorse (or endorsed fewer) false beliefs reported that a white (vs. black) target patient would feel less pain. This perhaps reflects real-world differences, as previous work has shown that black patients tend to report greater pain than do white patients. This opposite bias may reflect participants' attempts to

compensate for known racial disparities. The medical students and residents did not exhibit racial bias in treatment recommendations. Endorsing fewer false beliefs was associated with the perception that whites feel less pain, but not with insufficient treatment recommendations for white patients.

In contrast, endorsing more false beliefs was associated with perceptions that blacks feel less pain and a "commensurate" insufficient treatment recommendation for black patients. Racial bias in pain perception has pernicious consequences for accuracy in treatment recommendations for black patients and not for white patients. This pattern of results is consistent with research on intergroup bias, demonstrating that discrimination often occurs due to in-group favoritism rather than out-group hostility.

In this study, it may be shifts in perceptions of the white target (and not the black target) that reflect this kind of bias, and that these shifts reflect positive (empathic) cognitions about white in-group members rather than negative (callous) cognitions about black out-group members. Future work



needs to examine if white and non-white medical personnel in more advanced stages of their careers also believe in biological differences between blacks and whites, and if they have consequences for pain assessment and treatment in real medical contexts.

There is a need to delve into the nature of the racial bias and discern whether it reflects in-group favoritism rather than out-group derogation. This study provided the first evidence of racial bias in pain assessment associated with racial bias in the accuracy of pain treatment recommendations. It reveals substantial numbers of white people—laypersons with no medical training and medical students and residents—hold beliefs about biological differences between blacks and

whites, many of them being false and even fictitious in nature.

Racial disparities in health and health care are a problem in the United States, requiring action toward ending health disparities. Beliefs continue about biological differences between blacks and whites—dating back to slavery—with the perception that black people feel less pain than do white people and with inadequate treatment recommendations for black patients' pain.

*(Hoffman KM, Trawalter <http://www.pnas.org/content/early/2016/03/30/1516047113>. full - aff-1 S, Axt JR, and Oliver NM. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. Proceedings of the National Academy of Sciences. [www.pnas.org](http://www.pnas.org); 2016.)*



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