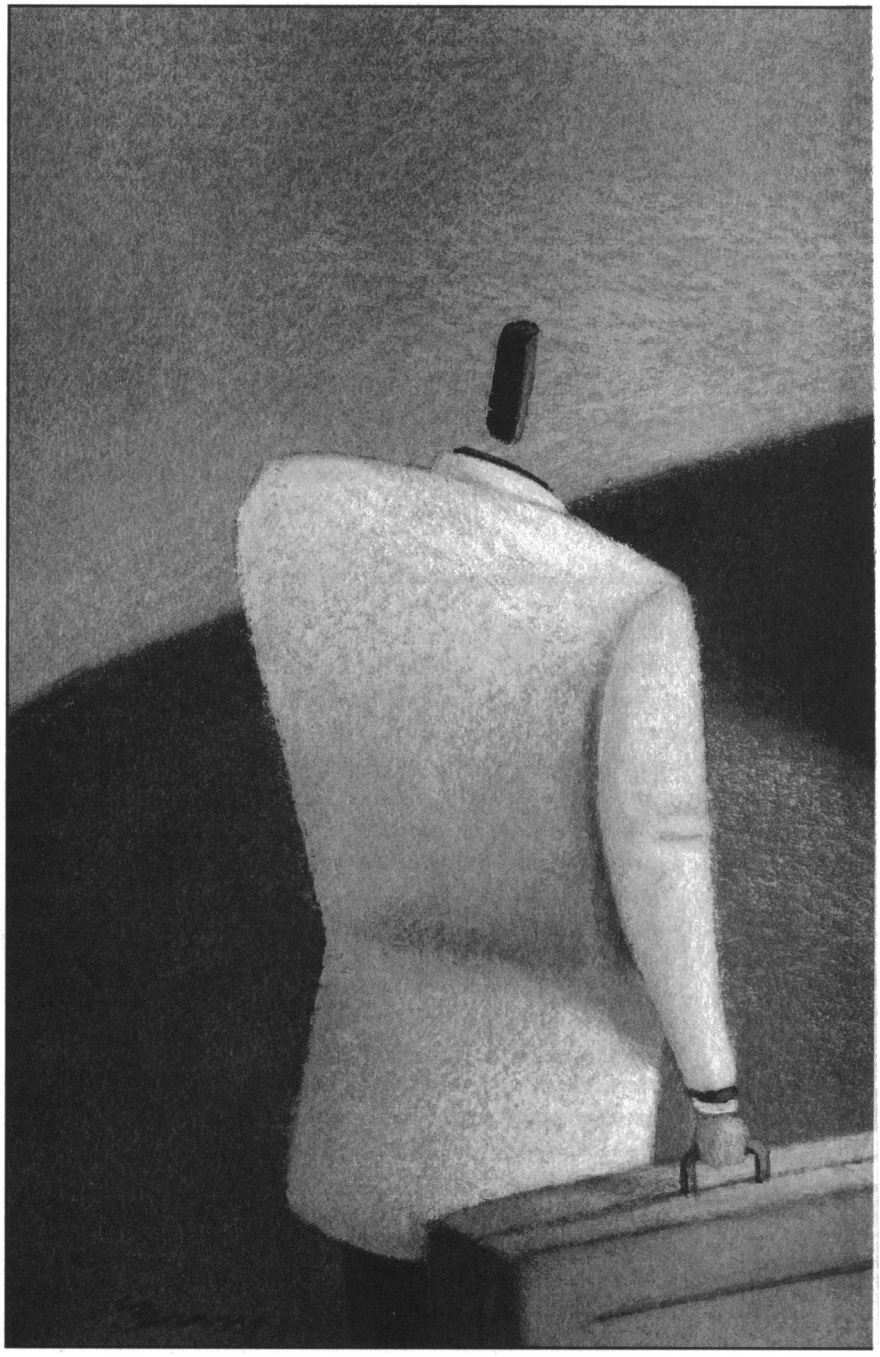
Another GO at the Experiment

Leslie W. Howard, PA
Karen A. Garman, EdD
Rose-Elaine McCann, PA MSEd



SYNOPSIS

A NUMBER OF STATES have experimented with legislation that would allow unlicensed international medical graduates to become physician assistants. These attempts have failed.

The authors conducted a pilot evaluation study in California in response to legislative efforts. They examined the medical knowledge of a group of unlicensed international medical graduates and compared their clinical skills with those of a control group of recent graduates from a physician assistant training program. The unlicensed international medical graduates were below standard in medical knowledge and clinical skills and failed to make critical diagnoses in the tests with standardized patients.

The authors conclude that unlicensed international medical graduates need additional training to be incorporated into the U.S. health care system as physician assistants.

Motivated by an urgent need for more medical practitioners in underserved areas, a number of States have experimented with automatic legislating of unlicensed international medical graduates as physician assistants (PAs). Each attempt has resulted in legislatures and professional certifying bodies deciding against automatic licensing (*1,2*).

In 1993, the American Medical Association passed a resolution to explore the feasibility of "grandfathering" as physician assistants international medical graduates who were unlicensed as physicians in the United States. The governing council recommended against grandfathering, suggesting instead, that unlicensed medical graduates who want to be certified as physician assistants should enter accelerated PA training programs designed specifically for them.

Unexpected problems arose in 1993 when the PA program at City University of New York-Harlem Hospital Center developed a fast-track sequence that allowed unlicensed international medical graduates to skip a major portion of the curriculum.

Eighty-four participants took an assessment examination using 400 questions designed for second-year students in the PA programs at Harlem Hospital Center, Oklahoma University, and Baylor University in Texas. Percentages of correct responses ranged from one to 51. A week later, the

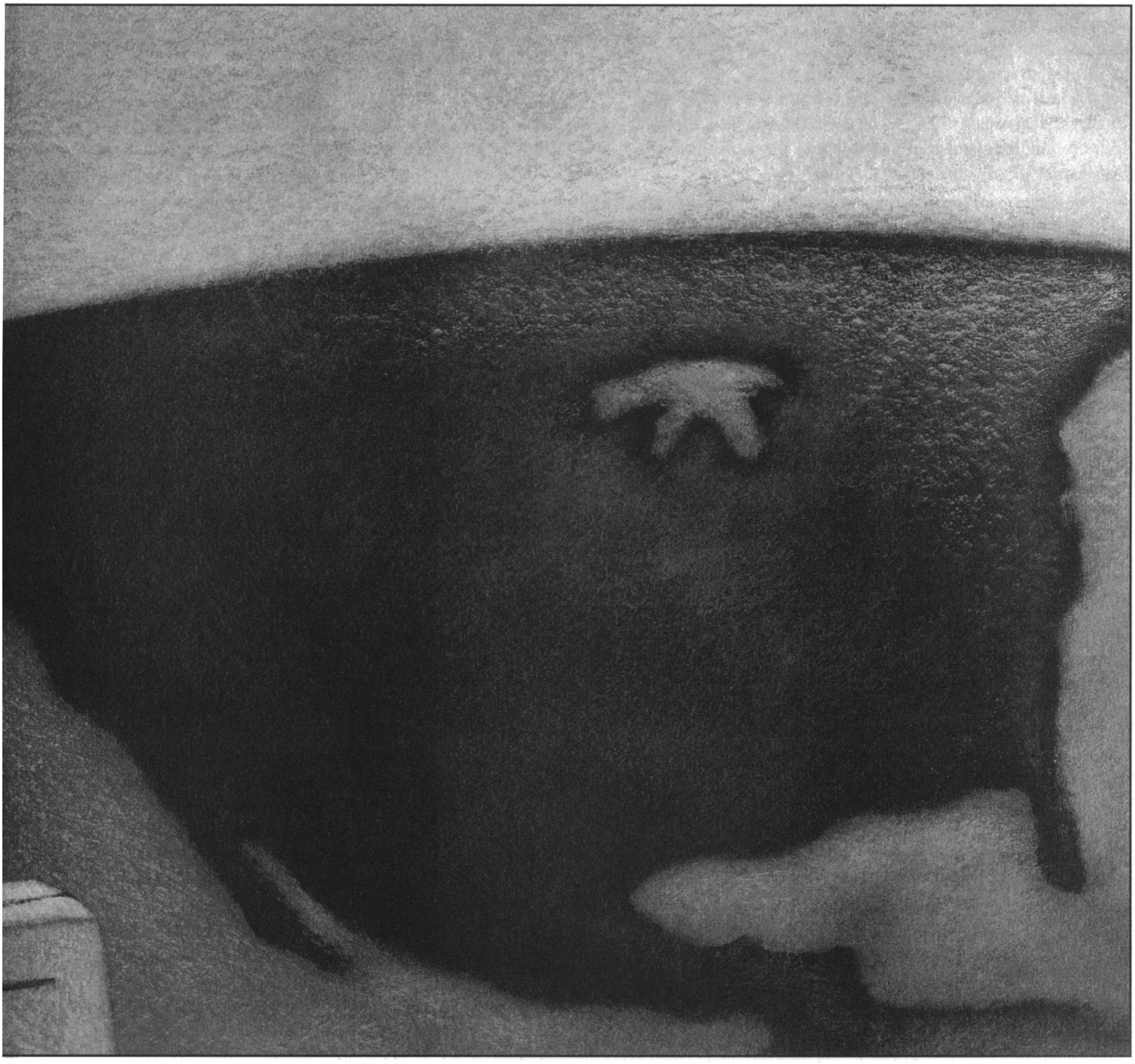


Illustration by John Berry

participants were given a 21-station objective structured clinical exam (OSCE) on which they answered between 13 and 53 percent of the questions correctly. Twenty-five percent of the examinees made what would be fatal decisions on at least one of the OSCE stations, and no candidate succeeded on a simulation that dealt with identification of risk factors and patient education. The top 15 examinees were chosen for enrollment in the fast-track curriculum, but this selected group had so much trouble with the material that the curriculum had to be revised to include the basic sciences and physical examination and diagnosis information that originally had been excluded.

Table 1. Mean Scores, by percentages, of 10 unlicensed international medical graduates in the Objective Structured Clinical Examination (OSCE) and Clinical Performance Examination (CPX) versus six recent physician assistant graduates

Examination	Unlicensed international medical graduates	Recent physician assistant graduates
OSCE (114 items) ($P = .0001$)	37	66
CPX-Standardized Patient station (215 items) ($P = .0001$)	26	41
CPX - Interstation (20 items) ($P = .05$)	23	68

Concurrent with the development of the New York fast-tract program, a bill was introduced in the California General Assembly that would have facilitated PA licensing of international medical graduates. The initial version of the bill called for licensing those who passed a written examination. This bill would have adulterated the certification standards of the profession—graduation from an accredited PA programs and passing the national board examination.

Because of the difficulties in other States (see Past Legislative and Educational Efforts) and the experience of the fast-track program at City University of New York-Harlem Hospital Center, the president of the California

Evaluation Measures Used in the Pilot Study

1. The Test Item Bank (TIB) Examination. Between 1980 and 1991, 21,201 physician assistant students in programs across the nation took at least one comprehensive examination drawn from this computerized test item bank. The Kuder-Richardson reliability coefficient, an internal consistency test, for the performance of seniors who took these examinations nationwide was .85 to .93.

The examination consisted for 225 multiply choice questions. Each question was classified according to one of ten clinical specialty areas relevant to primary care. Additionally, each question was classified into one of twelve clinical methods.

2. Objective Structured Clinical Examination (OSCE). These 31 problems included 114 items specifically evaluating knowledge of pediatrics-adolescent medicine and obstetrics and gynecology since these areas (in particular pediatrics) were not emphasized in the clinical performance examination (CPX). Up to six problems were assigned to a station, and examinees were allowed 22 minutes for each station.

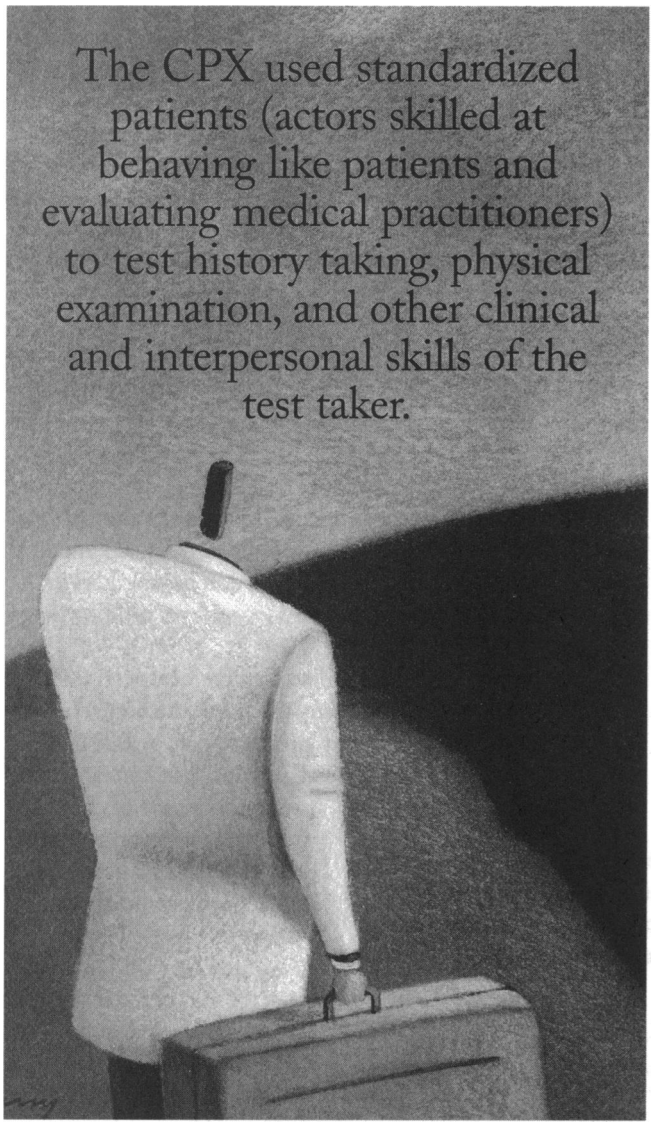
3. The Clinical Performance Examination (CPX). The examination consisted of eight patient problems with a reliability coefficient of .71 originally developed for fourth-year medical students by a consortium of five medical schools in Southern California. The use of clinical performance examinations in medical school assessment has been well documented in recent years, following the significant experience of the Southern Illinois University School of Medicine, where passing a CPX has been a graduation requirement since 1985 (*11*).

Each case in the CPX examination had two parts: an encounter with a standardized patient and an interstation written followup of the patient encounter. Standardized patients are people carefully trained to portray a patient accurately with a specific medical problem. The Southern California Consortium CPX included encounters with eight such standardized patients who presented medical conditions commonly seen in primary care settings.

Chief complaints included chest pain, abdominal pain, high blood pressure, headache, claudication (calf pain occurring after walking), scalp laceration (in a situation involving drug-alcohol abuse and domestic violence), breast mass followup, and well care in a sexually active adolescent. Eight classrooms were set up as examining rooms with a standardized patient in each, and the examinees went from patient to patient as they would in a real clinic.

Each patient encounter was followed by an interstation exercise asking up to four questions about the patient just reviewed. Examinees were allowed 15 minutes for the standardized patient interview and (if indicated) physical examination followed by seven minutes to answer the interstation questions.

While each examinee answered the interstation questions, the standardized patient completed a 20-30-item checklist on the examinee's clinical behaviors.



Academy of Physician Assistants recommended opposing the initial version of the California Assembly bill and helped develop a revised bill that passed on January 1, 1994. This version required the Office of Statewide Health Planning and Development to coordinate the establishment of a 12–15-month accredited PA training program for international medical graduates. Those completing the program who subsequently passed the national PA board examination and the Test of English as a Foreign Language (TOEFL) would be licensed as PAs (*3*).

The California Office of Statewide Health Planning and Development focused its efforts on making unlicensed international graduates more competitive for existing PA programs. In 1994, a contract was awarded to the University of Southern California Physician Assistant Program to develop a pilot project, called International Medical Graduates in New Careers (IMGINC), that had two components, (*a*) orientation to the profession of a group of unlicensed international medical graduates applying to PA programs and (*b*) objective evaluation of participants' medical knowledge and clinical skills to determine whether they would qualify for advanced placement if accepted in a PA program.

The orientation component included a series of lectures by physician assistants and roundtable discussions with international medical graduates presently practicing as PAs. The lectures and discussions helped participants understand the role of the physician assistant, develop better study and test-taking skills, and prepare for admissions

Past Legislative and Educational Efforts

Washington, 1980: State law was revised to require unlicensed international medical graduates to attend an accredited physician assistant (PA) program and pass the national PA certification examination.

Michigan, 1986: The State amended its law to permit only formally trained PAs to be eligible for state certification. When eight unlicensed international medical graduates sued the State to allow them to take the national PA board examination, they failed it. When they then requested to take it a second time, all eight again failed.

Illinois, 1987: The Physician Assistant Practice Act amended the definition of physician assistant to exclude medical school graduates.

Alabama, 1988: The Board of Medical Examiners revised its regulations and discontinued the practice of automatically credentialling medical school graduates as PAs.

Florida, 1990: The legislature mandated the creation of a fast-tract PA program and a one-time administration of a state PA certifying examination for a unlicensed international medical graduates before licensing them as PAs.

Rhode Island, 1991: The Rhode Island Practice Act was amended so that people with medical degrees could no longer qualify for PA licensure.

New York, 1992: The Practice Act was changed to require passage of the PA certifying examination in order to practice. To take this certifying examination, an individual must either graduate from a PA program or obtain permission from the Commissioner of Health.

Maryland, 1994: The Governing Council of the Maryland Board of Physician Quality Assurance opposed the passage of a bill that would have permitted unlicensed international medical graduates to practice as uncertified PAs once they passed a Board designed examination.

California, 1994: The California Assembly passed a bill requiring unlicensed international medical graduates to graduate from an accredited PA training program developed specifically for this group, to pass the PA board examination, and to pass the Test of English as a Foreign Language before practicing as PAs.

interviews. In addition, the director of the pilot project evaluated each participant's ability to meet the prerequisites for California's PA programs and counseled them on how to correct any deficiencies.

Objective Evaluation Measures

The objective evaluation consisted of three tests—the 225-item computerized test item bank (TIB) examination was compiled from a computerized test item bank originally developed by Jesse Edwards at the University of Nebraska's Physician Assistant Program (*4,5*). The Objective Structured Clinical Examination involved 31 problems developed by the authors. For each problem, examinees answered questions regarding specific clinical findings represented in X-rays or photographs of medical laboratory findings, electrocardiograms, and physical examination findings. The Clinical Performance Examination (CPX) examination was prepared and administered by the Department of Medical Education at the University of California School of Medicine. This examination tests knowledge of the same patient problems and medical knowledge objectives used to educate students at the University of Southern California PA program. The CPX used standardized patients (actors skilled at behaving like patients and evaluating medical practitioners) to test history taking, physical examination, and other clinical and interpersonal skills of the test taker. The medical education literature documents the effectiveness of using standardized patients as an evaluation technique (*6-9*).

While 32 unlicensed international medical graduates participated in the orientation project, not all of them took part in the three objective evaluation examinations; 27 took the TIB examination and, of the 27, 10 took the OSCE and CPX. These numbers were low because of scheduling problems. Six recent graduates of the University of Southern California Physician Assistant Program were included as controls for the OSCE and CPX examinations.

The unlicensed international medical graduates in the pilot project were physicians who had graduated between 2 and 35 years earlier from medical schools in the Philippines, China, India, Cambodia, Mexico, Central America, South America, Poland, Hungary, or the Soviet Union. Sixteen percent graduated between 36 and 32 years ago; 27 percent graduated between 25 and 21 years ago, and 57 percent had completed their medical degrees within the last 10 years. Two of the unlicensed international medical graduates who took the clinical skills examinations had passed the examination given by the Educational Commission for Foreign Medical Graduates.

Results

Each of the international medical graduates failed all of the evaluation measures. Their mean score on the TIB examination was 46 percent, significantly lower than the 62 percent national mean score of PAs taking the examination across the United States. In a t-test analysis of the national mean score compared to those of the unlicensed medical graduates' scores, the unlicensed international medical graduates demonstrated a significantly lower level of knowledge ($P = .001$).

The mean score for the unlicensed medical graduates on the OSCE was 37 percent, compared with the 66 percent of the recent physician assistant graduates ($P = .0001$). The mean scores for the unlicensed medical graduates on the two components of the CPX were 36 percent on the standardized patient assessment and 23 percent on the interstation exercise. The recent PA graduates had a mean score of 41 percent on the patient assessment and 68 percent on the interstation exercise (table 1).

Table 2. Mean scores, in percentages, in individual components of the Clinical Performance Examination (CPX)-standardized patient stations by 10 unliciensed international medical graduates versus six recent physician assistant graduates

Component	Unlicensed international medical graduates	Recent physician assistant graduates
History (78 items) ($P = .004$)	41.03	60.9
Physical examination (58 items) ($P = .0001$)	20.3	50.8
Patient education (18 items) ($P = .001$)	33.3	70.4
Physician/PA patient interaction (53 items) ($P = .0001$)[1]	51.7	83.5
Patient satisfaction (8 items) ($P = .0001$)	10	87.5

[1]The CPX scores were broken down into the critical clinical skills: history taking, physical examination, patient education, physician/PA interaction, and patient satisfaction.

The unlicensed international medical graduates were significantly weaker in every area of clinical skill, including physical examination, communication, and patient satisfaction (see table 2). Since English is a second language for many of these international graduates, cultural and language differences may have affected patient communication and satisfaction. Physical examination skills, however, are evaluated by the patient surrogates according to medically accepted standards.

These evaluation results clearly demonstrated that the 10 tested unlicensed international medical graduates had more substandard knowledge and below-average clinical skills than the recent PA graduates.

Discussion

Clearly as a group, unlicensed international medical graduates need further training before certification as physician assistants. This training should include basic science knowledge, clinical skills, and awareness of the rights and restrictions of the physician assistant profession. The assumption of many well-meaning legislators that the knowledge and skill of a physician can be transferrable was a reasonable one. However, experience has shown that medical school training in other countries does not always meet the carefully developed standards of the physician assistant profession in the United States.

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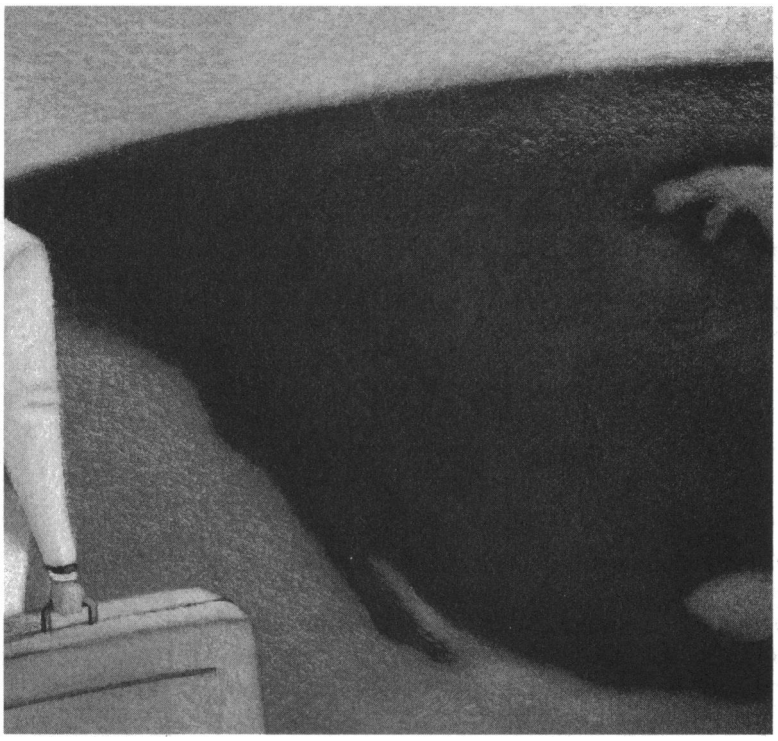

Every institution that has tried to develop educational programs based on the assumption that unlicensed international medical graduates have the knowledge and skills to perform effectively as PAs and every State that has tried to develop legislation based on this assumption have failed.

The American Academy of Physician Assistants recommends that any person who wants to become a PA attend an accredited PA program and pass the national certification examination. It is the obligation of the PA program to evaluate the qualifications of all applicants for admissions and not to discriminate on the basis of prior medical education. However, despite research results to the contrary, some State laws continue to allow individual PA programs to grant advance standing to an applicant based on evaluation of prior training.

Mr. Howard is Director of Development and External Affairs, University of Southern California Primary Care Physician Assistant Program. Dr. Garman is currently Assistant Dean for Curriculum and Director of the Office of Learning Resources at the School of Medicine, University of California, San Diego. Ms. McCann consults on medical curriculum development, problem-based learning, and faculty development.

Tearsheet requests to Rose-Elaine McCann, 5802 Vicstone Ct., Culver City, CA 90232.

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