

Should Psychologists Have Prescribing Authority?

Editor's Note: The Patient Safety Forum is an occasional feature of the journal in which expert discussants address questions related to medical errors and other safety issues. Benjamin Grasso, M.D., is guest editor of the forum. Contributing to this month's forum are two psychologists—Deanna F. Yates, Ph.D., program director in psychopharmacology at Texas A&M University in San Antonio, and Jack G. Wiggins, Ph.D., of the Missouri Institute of Mental Health in St. Louis—as well as three psychiatrists—Jeremy A. Lazarus, M.D., who is in private practice in Colorado; James H. Scully, Jr., M.D., medical director of the American Psychiatric Association (APA); and Michelle Riba, M.D., president of APA. Dr. Grasso, who is affiliated with the Institute for Self-Directed Care in Portland, Maine, invites readers to contribute questions for discussion (e-mail, bgrasso1@maine.rr.com).

A Psychologist's Perspective

Deanna F. Yates, Ph.D.

While the issue of psychologist prescribing has become a highly politicized debate, the real issues are the need for—and competence of—prescribing psychologists.

Regarding need, the acute shortage of psychiatrists has been well established by both the Surgeon General's Report on Mental Health (1) and the President's New Freedom Commission on Mental Health (2). In part because of this shortage, more than 70 percent of all psychotropic medications are prescribed by nonpsychiatric physicians, typically after six weeks' training in psychiatry.

Psychologists are among the most highly trained doctoral-level providers of mental health services. In addition, psychologists who seek prescribing authority are required to receive a minimum of three years of medical training before they are allowed to prescribe. Furthermore, as part of the existing legislation for prescribing authority, prescribing psychologists are required to collaborate with their patient's pri-

mary care physician. The combined extensive mental health and medical training—with ongoing physician collaboration once the psychologists start prescribing—suggests that psychologists are potentially more competent than primary care physicians.

Psychiatry contends that if psychologists want to prescribe they should go to medical school. The issue should not be where psychologists receive their training but, rather, whether psychologists can be trained to safely prescribe psychotropic medications.

The research that we do have demonstrates that prescribing psychologists can be taught to safely prescribe psychotropic medications. Between 1991 and 1997, the Department of Defense trained ten psychologists to prescribe through what is known as the Psychopharmacology Demonstration Project (PDP). Several reviews of the PDP have been conducted, although only a few objective studies have been done. Although the military is unique in terms of cost and need is-

sue, the general consensus is that psychologists in the Department of Defense are safe prescribers.

A study by the American College of Neuropsychopharmacology (3) showed that the "graduates of the PDP filled critical needs, and they performed with excellence wherever they served." According to the U.S. General Accounting Office, "Without exception, these supervisors—all psychiatrists—stated that the graduates' quality of care was good." (4). Although the demonstration project has ended, psychologists continue to train and prescribe in the military.

What about the safety of other nonphysician prescribers? A growing number of nonphysician groups are prescribing, such as dentists, optometrists, podiatrists, and nurse practitioners. The few studies in existence suggest outcomes that are at least equivalent to those of physicians (5). If safety were being compromised by these providers, one could assume that there would have been a public outcry by now, and physician interest groups would certainly not have remained silent on the issue (5). There is no evidence that nonphysician prescribers are less safe than physician prescribers.

Some argue that psychologists receive insufficient medical training to safely prescribe. Here two issues must be considered: the educational requirements for practicing psychology, and the added training required in order that a psychologist be able to prescribe. Psychologists' training begins with a four-year undergraduate degree, as is the case with physicians. Although these degrees generally do not focus on the biological sciences of a premedical education, many psychology students choose electives in the biological sciences, such as biology and chemistry.

After psychologists complete their undergraduate degree, they complete a minimum of seven additional years of training. During the first five years, psychologists take courses in human development and behavior, normal and abnormal psychology, psychological assessment, and statistics. In addition, they take courses in the anatomy and physiology of the brain and the evaluation, diagnosis, and treatment of brain disorders. During these five years, psychologists also have hundreds of hours of practice in which they evaluate, diagnose, and treat patients with mental disorders in both outpatient and inpatient settings. Finally, psychologists complete two year-long residencies during which they treat patients who have mental disorders, generally in medical settings under the supervision of psychologists and physicians. After completing a national examination, psychologists can apply for licensure.

Prescribing psychologists receive an additional three years of training. The first two years include courses in biochemistry, anatomy and physiology, pathophysiology, neuroanatomy, neurochemistry, neurophysiology, pharmacology, psychopharmacology, physical and neurologic examinations, interpretation of laboratory results, and ethics in prescribing (6). At the same time, they continue to work with patients and use their new knowledge in discussing medications with their patients and other professionals. These two years of course work are then followed by a year of residency during which prescribing psychologists apply what they have learned to their patients while being supervised by a physician. The prescribing psychologist makes recommendations for medication and conducts medication follow-ups with his or her patients, while the medication prescriptions are written by a physician. Prescribing psychologists must then pass a national examination before applying for certification to prescribe. This is far from a "simple psychopharmacology course" or "a crash course in prescribing," as has been suggested by opponents of psychologist prescribing.

Prescribing psychologists receive their medical training not in medical school, but within their own disci-

pline, just as dentists, podiatrists, optometrists, and nurse practitioners do. The only difference is that prescribing psychologists are already licensed and practicing before they even begin their medical training. By the time prescribing psychologists are allowed to prescribe, they have ten years of training postcollege in the treatment of mental disorders. Primary care physicians, on the other hand, while having more general medical training, typically have a four- to eight-week clerkship in psychiatry during medical school. Given this comparison, it would seem likely that prescribing psychologists would be better at prescribing psychoactive medications to their patients than would other nonpsychiatric physicians.

Legislation that will allow qualified psychologists to prescribe has now been passed in two states—New Mexico and Louisiana. In both states, safeguards for the public have been built into the legislation. In New Mexico, after training, a prescribing psychologist will receive a conditional certificate allowing him or her to prescribe for two years under the supervision of a physician. Provided that the prescribing psychologist completes this two-year period successfully and passes a national examination, he or she could then apply for a certificate that would allow non-supervised prescribing. Even then, prescribing psychologists must collaborate with their patients' primary care physicians. In Louisiana, after a prescribing psychologist has com-

pleted the training and passed the national examination, he or she will be certified to prescribe independently; but, as in New Mexico, he or she will be required to confer with the patient's primary care physician on the prescribing psychologist's choice of medications.

In addition to the comprehensive training and legislative safeguards, it should be noted that psychologists see their patients more regularly than do most other providers. As a typical standard of practice, primary care physicians do not follow up with patients as regularly as psychologists do. Psychologists typically see their patients on a weekly or biweekly basis, whereas primary care physicians generally see patients for physical examinations and for treatment of acute medical problems. General practitioners are not in a position to conduct follow-up visits with their patients as regularly as psychologists. Because of the frequent interaction with their patients, and the level of trust and communication inherent in the therapeutic relationship, prescribing psychologists will be in a position to manage medications more efficiently than most physicians. Compared with primary care physicians, psychologists can be expected to more readily address side effects, make appropriate medication changes and adjustments, and monitor the overall efficacy of medication.

In conclusion, the question should not be "Can psychologists safely prescribe?" but rather, "How could they not safely prescribe?"

Beyond Medication Errors

Jack G. Wiggins, Ph.D.

Although *Psychiatric Services'* Patient Safety Forum has succinctly addressed the importance of reducing medication errors in psychiatry, the issue of patient safety extends beyond medication errors.

Another important safety issue is inadequate access to specialty mental health services. *Therapy in America 2004* (7), a Harris report, notes that 37 percent of respondents who reported symptoms that were suffi-

ciently distressing to warrant treatment in the previous two years did not receive treatment. This percentage translates into an estimated 24 million people, or about one in ten adults. Leading barriers to care included cost (39 percent of respondents), a belief that mental health treatment would not help (32 percent), and lack of insurance (26 percent). Of the estimated 59 million people who received mental health

treatments as reported in the *Therapy 2004* poll, 80 percent received medications, and about half of these (47 percent) received medications as their only form of treatment. One-third received drugs and psychotherapy, and 19 percent received only psychotherapy. Patient satisfaction was about the same for either medication or therapy, with an overall satisfaction rate of 80 percent.

Psychotropic medication has become the dominant form of mental health treatment. In a 1998 study, Pincus and associates (8) reported a 40 percent increase in the preceding decade in the number of prescriptions written for psychotropic medication. Therefore, it is timely to examine the benefits and risks of these medications.

The Agency for Healthcare Research and Quality (9) reported that 3 billion prescriptions for medications were written in 2001, at a cost of \$132 billion. Classen and colleagues (10) estimated that the costs for treatment of medication-related injuries range from \$72 to \$172 billion per year. Thus the annual cost of increased harm from medication approaches—or may exceed—the cost of the medications themselves. Furthermore, psychotropic medications do not necessarily result in improved patient functionality that lowers the costs of care (11). Overreliance on drug therapies alone can increase the rate of treatment failure and increase the cost of mental health care (12,13).

Psychological interventions can help maintain patients on medication treatment regimens while lowering the overall costs of mental health care (12). Mental health carve-outs and other managed care entities tend to emphasize psychoactive drug therapy and limit the use of psychotherapy. Yet psychotherapy can reduce the relapses of depression treated solely with antidepressants by nearly 40 percent (14). Prompt psychological intervention can avoid 32 percent of first admissions to hospitals among patients with mental disorders and up to 85 percent of all psychiatric hospital admissions (15).

Wiggins and Cummings (16) reviewed one million cases of combined psychotherapy and pharma-

cotherapy and found that 68 percent of the beneficiaries were taking psychotropic medications just prior to treatment. During psychotherapy, patients' use of psychotropics fell to 22 percent. Only 13 percent of the patients who received psychotherapy continued to take medication after termination. The unwanted side effects of medication and potential adverse drug events were thereby eliminated for 80 percent of the patients who received combined psychotherapy and pharmacotherapy. From a psychological perspective, overprescribing psychotropic medications while underutilizing effective psychotherapeutic treatments creates a potential patient safety hazard.

For the past half-century, psychologists have routinely monitored, managed, and cared for patients with chronic illnesses being treated with psychotropic and other medications in collaboration with their medical colleagues. Psychologists are often asked to provide consultation about drug selection, dosage, and side effects of psychotropic medications to nonpsychiatric physicians. During the past two decades, psychologists with specialized training in psychopharmacology have been prescribing psychotropic medications safely and effectively under federal auspices. The importance of making accurate diagnoses, selecting appropriate psychotropic medications, and carefully monitoring for adverse drug events with appropriate referral to specialty care is an integral part of the specialized training that psychologists receive in order to prescribe.

Murray and Lopez (17) reported that four of the top five nonfatal disabling health conditions were psychological disorders, with depression projected to be the second leading cause of disability from all health conditions by the year 2020. This finding suggests that mental health care needs a pointed focus on treatments for depression. This focus would include study of adverse drug events related to the use of antidepressant medications in specific populations—for example, suicidality among children and adolescents.

People who lack access to or funds

for specialty care often turn to their family doctor for help with depression and other mental conditions. Primary care physicians are the “de facto mental health system” in the United States and treat 70 percent of persons receiving mental health care without the aid of a mental health specialist (18). Katon and associates (19,20) demonstrated that collaboration between primary care physicians and psychologists significantly improved clinical outcomes in the treatment of depression over the generalists' usual care. However, Lin and colleagues (21) found that the improved physician prescribing practices noted by Katon and associates faded upon withdrawal of the mental health specialist and the systematic monitoring of treatment. This finding underscores the importance of mental health specialty training as well as the need for expertise in the psychotropic treatment of mental conditions.

Patient-centered mental health diagnosis and treatment that trains informed patients in new skills of daily functioning and alerts them to the side effects of medications can be a value-added patient safety practice. Requiring informed consent by patients has been a key to improving patient safety in medical research. Similarly, full doctor-patient discussion of the risks and benefits of psychotropic treatments may reduce any potential harm associated with treatment.

Informed consent makes the patient an active partner in treatment success and gives him or her the ability to recognize and report adverse drug events promptly. In daily practice many factors, such as time constraints and the patient's mental state, may interfere with obtaining informed consent. Special arrangements are necessary to address these circumstances. Psychologists who will be prescribing in Louisiana, New Mexico, and Guam are familiar with informed consent strategies and are trained to be alert for potential adverse drug events when prescribing. Doctors and patients working together through the informed consent model can reduce medication errors due to misunderstandings and thereby improve patient safety.

Implications for Medication Errors and Patient Safety

Jeremy A. Lazarus, M.D.

With the recent passage of legislation in New Mexico and Louisiana granting psychologists prescribing authority, patients are having foisted upon them unprecedented expansion of the scope of nonphysician practice. The implications for patient safety and medication errors are currently not quantifiable. These two states will begin to serve as an uncontrolled experimental study on the practice of medicine by legislatures. Even as the educational requirements for medical students, psychiatric residents, and other physicians are becoming more stringent and uniform, the accountability of psychologists in these two states will be loosely controlled.

The only previous experience of psychologist prescribing was the Department of Defense (DoD) program that trained ten psychologists under close supervision in a military facility. The U.S. Government Accounting Office audited the DoD program and in an April 1, 1997, report recommended that the program be discontinued, concluding that future authorization was doubtful unless psychologists practiced under a psychiatrist's supervision. A review of the program by the American College of Neuropsychopharmacology (ACNP) found the following: psychologists were allowed only to treat persons between the ages of 18 and 65 years; their scopes of practice were similar to those of dependent practitioners, such as physician assistants; patients were allowed to be seen by program graduates only after first receiving a medical evaluation; patients were screened for clinical complexity (most had uncomplicated depression); and most of the graduates interviewed by the ACNP team believed that they were weak in knowledge of general medicine, physical diagnosis, and use of the laboratory (testimony of General Monte Miller [ret.], former Surgeon General of the U.S. Air Force, before the California Senate Committee on Business and Professions, April 27, 1998).

A careful reading of the regulations in New Mexico shows that even the limited DoD supervision controls and medical oversight are diminished dramatically—only a handful of the 25 recommendations made by the psychiatric community in New Mexico were incorporated into the final regulations. Although regulations have not yet been implemented in Louisiana, there is almost no requirement for medical oversight; a telephone call to a patient's primary care physician may suffice. There also appear to be fewer academic and clinical requirements than with the DoD program.

The Federation of State Medical Licensing Boards recently issued a report called "Increasing Scope of Practice: Critical Questions in Assuring Public Access and Safety." The report includes the following: "It is important for boards and legislatures to recognize that the education provided to nonphysician practitioners is not the equivalent of and may be significantly different in prerequisites, intensity, and content from that provided to physicians Non-physician practitioners must be willing and able to identify symptoms, conditions, diseases, and complications that are beyond their training and expertise and be required to refer those patients to a licensed M.D. or D.O."

A critical question in addressing patient safety is whether psychologists would be aware of what they don't know and then be aware of the need to refer. This unanswered question begs for data and raises very significant concerns about patient safety.

Many psychologists themselves are concerned about the safety of psychologist prescribing. One states the following: "The issue is, who knows enough to prescribe safely to the wide range of persons who will present themselves to persons who prescribe? Will that person know enough to know his or her own limits? For all its faults, medical training is the best way to come to this

knowledge (22)." Another states the following: "As for the [DoD] PDP study, it did show successful training of non-physician psychologists; however, it did so under controlled, military settings. It is grossly inappropriate to argue this study 'conclusively demonstrated psychologists' ability to prescribe safely and effectively,' especially in regard to non-military psychologists prescribing independently (23)." It goes on to state: "The New Mexico program lacks almost 40% of the didactic recommendations, requires none of the recommended prerequisite education, lacks more than 80% of the recommended clinical internship time, and excludes the additional weekly seminar classes completed by the PDP participants."

So, we are in uncharted territory when we speculate about patient safety. We can, however, speculate on areas of significant concern in patient safety. Let's think of those patient groups that are the most vulnerable: children, the elderly, patients with comorbid medical conditions, patients with severe and chronic mental illnesses, suicidal and homicidal patients, and individuals with severe character pathology. In all cases, full knowledge of psychopharmacology, general medicine and medical illness, medication interactions, and supervised clinical experience with numerous patients in both inpatient and outpatient settings have been requirements in psychiatric training. Physicians who do not have formal psychiatric training are, for the most part, aware of their diagnostic and therapeutic limitations and can be expected to refer to specialists.

There is good evidence that, in collaborative treatment relationships between psychiatrists and other mental health professionals, the possibility of medical errors is influenced by the numbers of patients seen in a day, the nature of the patient-physician interaction, the amount of time spent with the patient, and the degree of direct communication between those treating the patient (24). It would be reasonable to extrapolate such a risk assessment to psychologists who are

prescribing with minimal or no physician oversight.

In summary, we can speculate that the patients of prescribing psychologists will be at greater risk of medication errors and other medical errors because of insufficient medical training and knowledge. Even among psychiatrists, medication errors and other medical errors appear

to pose a substantial risk (25,26). Adding another cog to a problem-prone system can only reduce safety for patients and return us to an era that eventually called for the Flexner Report (27). In the meantime, psychiatry and organized medicine must do whatever is possible to protect the public and advocate for patient safety.

In the rest of the world, most treatment of mental illness is undertaken by general physicians. Most countries have national health insurance of one kind or another, and despite the fact that very few countries have as many physicians per capita or psychiatrists per capita as the United States (30), in no country are psychologists allowed to prescribe.

Passing parity laws so that people with mental illness will receive the same coverage for their illness as for their other medical illnesses would do more for access than allowing partially trained nonphysicians to prescribe. Whether psychologists gain prescribing privileges or not, most people will still go to see their primary care physician when they are ill. Furthermore, the most important safety issue is not whether nonpsychiatric physicians can recognize psychiatric illness (they can) or treat it as well as psychiatrists, but whether psychologists can recognize and treat non-mental illnesses that are so common. The cavalier dismissal of the need to understand the general (non-mental illness) aspects of health care by the proponents of psychologist prescribing is the most dangerous aspect of this proposal.

The argument that psychologists can meet the needs of rural populations is also highly questionable, and fundamentally dishonest. Psychologists are less likely by far than family physicians to practice in remote rural areas (31).

Nearly 100 years after the reform of medical education in America, perhaps we now take for granted the quality and rigor of education received by those who are allowed to prescribe medications to treat illness. Proponents of psychologist prescribing state that "prescription privileges is no big deal" (32). All that education and study are no proof that psychologist prescribing will be safe, and of course no real data will be available unless it is allowed to go forward.

People—patients—will be guinea pigs in this unwise experiment. It will not solve problems of access. It will not improve care. It will be a return to 19th-century unscientific education, and it will not be safe.

A Great Leap Backwards

James H. Scully, Jr., M.D.

The proposals that psychologists prescribe medications and the laws passed in two states—New Mexico and Louisiana—represent a great leap backwards in providing health care to American citizens.

Nearly 100 years ago, medical training in the United States was much like that proposed by some psychologists—apprenticeships lacked scientific rigor, there were economic conflicts among educators and certifying entities, and there was no assurance of patient safety. The Flexner Report of 1910 (27) was the basis of reform and has been so successful that it has perhaps been taken too much for granted. Since the reform, medical education has been based on long years of study in accredited and monitored academic institutions with the independent authorities to certify, monitor, and license both the educational institution and the physicians (28).

One result of increasing standards was a decrease in the number of doctors. By 1915, the number of medical schools in the United States dropped from 131 to 95 (28). Most of the closed schools were proprietary schools organized much like the schools that have offered to train psychologists in pharmacology today. The same arguments that are now being heard about access were heard then to oppose higher educational standards. "In the controversy over reform of medical education," writes Paul Starr in *The Social Transformation of American Medicine* (28), "one objection frequently raised against

eliminating the proprietary medical colleges was that they provided poor communities with doctors."

Mental illnesses are medical illnesses, and the use of biological treatments such as medications that involve multiple body systems beyond the central nervous system require knowledge of biology, biochemistry, anatomy, and physiology. These areas must be mastered to then understand pharmacokinetics (how the body handles a drug) and pharmacodynamics (the effects of the drug on the body). Many organ systems are involved besides the brain, including the gastrointestinal, hepatic, renal, and circulatory systems and sometimes even the skin.

It is now well known (or should be!) that many nonpsychiatric illnesses cause or worsen psychiatric symptoms. Endocrine disorders, diabetes, malignancies, heart disease, and infections are but a few of the common illnesses that may present with psychiatric symptoms. The types of superficial courses offered in the brief curriculum for psychologists are dangerously inadequate.

Most Americans who have a mental illness get their care from a nonpsychiatric physician (29), probably for a number of reasons, including stigma, but also because most people go to their doctors when they feel bad. Primary care physicians need to improve their skills in managing these illnesses. However, to do so will require much less training than that required to teach psychologists to safely prescribe.

Evidence of the Dangers of Nonphysician Prescribing

Michelle Riba, M.D.

Prescribing by nonphysician practitioners puts patients at risk. That's not just the American Psychiatric Association's view; it's an evidence-based statement.

Those who have followed scope-of-practice issues know that nonphysicians are attempting to expand their scope of practice into several areas of medicine, including, for example, ophthalmology and anesthesiology. It is essential that we put all that we know into this context.

Even leaders of the psychologist-prescribing effort see it this way (but for other reasons). During a recent debate, Commander Morgan Sammons, Ph.D., a Department of Defense prescribing psychologist who was representing the American Psychological Association, said that prescribing psychologists are an "epiphenomenon"—a phenomenon that coincides with changes in the health care system and the growth in the number of physician assistants, nurse practitioners, and the like (33). His is an effort to cast psychology's attempts as an outgrowth of the coming of age and development of expertise of all nonphysicians as independent practitioners in their own right.

Sammons said that physicians always counter nonphysicians' arguments for expanded scopes with "the patient safety issue" (33). The evidence, he said, is that "nonphysician practitioners aren't killing patients." Interestingly, he also admitted that psychopharmacology training for psychologists is "not up to the standards" he would like to see.

Anesthesiologists and ophthalmologists are seasoned veterans in the fight for patient safety. They, no doubt, take a different view of Sammons' claims. Like many soldiers, those in these medical specialties have won and lost battles—and where they have lost, patients have lost, too. The evidence is worth examining.

Nurse anesthetists are authorized to prescribe in some states, as are optometrists. In April, optometrists in Oklahoma secured a law permitting nurse anesthetists to perform eye sur-

gery with scalpels. Psychologists, on the other hand, are not prescribing in any state as of this writing; New Mexico and Louisiana, the two states with psychologist-prescribing laws, have not yet fully implemented those laws.

Mounting evidence shows that prescribing by nonphysician practitioners does, indeed, put patients at risk. Consider, for example, nurse anesthetists' claim that there is "no evidence" of a difference in care provided by an anesthesiologist and a nurse anesthetist. Now consider the facts: all anesthesia outcome studies to date have clearly suggested that the involvement of a physician—either an anesthesiologist or another physician—improves patient outcomes (34).

The most comprehensive of these studies was published in the July 2000 issue of *Anesthesiology*, a peer-reviewed medical journal widely regarded as the premier scientific publication related to anesthesiology (35). This University of Pennsylvania study compared cases in which an anesthesiologist directed the patient's care against cases in which such direction was not included. Many of the nondirected cases involved supervision of a nurse anesthetist by the surgeon or some other physician. The study revealed a rate of 25 excess deaths per 10,000 Medicare surgical cases when a physician anesthesiologist was not directly involved in the case.

Another study, published in *AANA Journal* (the journal of the American Association of Nurse Anesthetists) in 2003, reported results consistent with the Pennsylvania study: 45 deaths per 10,000 cases in hospitals in which all anesthetics were administered by anesthesia nurses supervised by a non-anesthesiologist physician—an 18 percent increase over when anesthetics were administered by an anesthesiologist or anesthesiologist-anesthesia nurse care team (36).

Although nurse anesthetists, optometrists, and psychologists all seek expanded scope of practice, psychologists have the distinction of being behavioral scientists. Their training is not based in biology, biochemistry, anat-

my, or physiology. Yet these areas of science are the foundation of a physician's training and key to understanding basic pharmacokinetics and pharmacodynamics—two processes that become even more complex when multiple drugs are administered, a common situation among psychiatric patients. Those who prescribe must be able to evaluate not only the drugs they prescribe but also the drugs that others prescribe for nonpsychiatric conditions.

There are further complexities in prescribing medication to special populations. For example, the use of antidepressants among children has recently received considerable scrutiny. The decision to administer an antidepressant and to manage such treatment over time must be made by a physician who is fully trained in all the areas mentioned above, in conjunction with the child and family members, who must be well informed by the physician before they give their consent. As another example, although some medications are known to harm the fetus when taken by pregnant women, the effects of many medications on fetal development are unknown. Again, medical training is needed to evaluate the risks and benefits of medication use in pregnancy and to present these risks and benefits to the expectant mother.

None of the data suggests that nonphysician practitioners—including psychologists—do not play key roles in the provision of services. What the data do suggest is that physicians, equipped with appropriate medical training and experience, secure superior outcomes for patients, which makes sense.

Some psychologists have said that they deserve prescription-writing authority so that they will have an opportunity to prove that such a change in public policy will not adversely affect patient outcomes. Such a premise is unethical, logically perverse, and unsupported by evidence.

Other psychologists have given a generous interpretation to a handful of reports that were conducted on the Department of Defense's Psychopharmacology Demonstration Project (PDP), which trained ten military psychologists at a per capita cost of more

than \$600,000 per psychologist trained. (For that capital commitment, many more physicians could have gone through medical school and residency training. Indeed, I understand that some PDP trainees went on to medical school.) These reports, however, do not support the claim that psychologists in a given state should be granted prescription-writing authority. The incidence of mental illnesses in the military is far lower than that in the general population, and no psychologist-prescribing legislation introduced to date would set training requirements that are comparable to the level of training received by the psychologists in the PDP program.

I'm reminded of a useful analogy: marriage counselors are not cardiologists simply because they know about matters of the heart; neither are psychologists psychiatrists by virtue of their knowledge of the brain and mental illnesses. Appropriate medical training is essential to safe prescribing.

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