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Psychology as a Health Care Profession

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This article reviews the concept that professional psychology is synonymous with mental health. The acceptance of this concept results in limiting the potential impact that psychology has for both individuals and society. Historical antecedents of both psychology and professional psychology are considered as laying a foundation for a necessary paradigm shift from primarily mental health to health. Clinical neuropsychology, health psychology, and prescriptive authority are considered as three examples that may assist in guiding professional psychology toward inclusiveness into a broader health care arena. Limitations of the proposed paradigm and directions for its future are considered.

Keywords: health care, economics, professional psychology, paradigm shift

Economics is a major factor in the development of a health care profession (Barr, 2007). As a consequence, economics is critical, if not the deciding factor, in how professional psychology evolves. A major mechanism for the effect of economics on professional psychology is the American Medical Association's (AMA's) Current Procedural Terminology (CPT). The CPT Panel sets policy on what health care services can be performed, how the health care procedure is implemented, and the reimbursement value of the service provided in the United States. I was the representa-

tive of the American Psychological Association (APA) on the Health Care Professional Advisory Committee of the CPT Panel since its inception in 1993 (through 2008, at which time I was elected to one of the 17 voting seats on the CPT Panel itself), when APA was given a seat along with 10 other nonmedical professions. This article is a summary of an over two-decades effort to shift the paradigm of the practice of psychology from one focusing almost exclusively on mental health to one encapsulating all of health care and to bring parity between physicians and psychologists using the CPT system. The paradigm shift is based on both historical and economic fundamentals.

Background

Beginning with Freud's treatment of Anna O. chronicled in Studies of Hysteria (Freud & Brauer, 1884), on one continent, and, in North America, Lightner Witmer's establishment of a clinic to address problems associated with learning disabilities at the University of Pennsylvania, the professionalization of psychology quickly established itself according to two fundamental concepts: (a) The primary procedures used by psychologists would be testing and therapy, and (b) these procedures would be applied for mental health problems and in mental health settings (with psychologists typically charging a fee for service). These paradigms were chronicled as early as 1928 by Fernberger and more recently by Fox in 1982. Other types of health problems, such as cardiovascular disease, and other types of procedures, such as case management (i.e., evaluation and management in medicine), have historically been ignored by professional psychology. The outcome has been that psychology is sandwiched between psychiatry, which now has left psychotherapy in favor of medication management, and social work, which has endorsed the idea that psychotherapy can be effectively delivered with a master's degree in social work. Further, the focus of professional psychology has been to attempt to reach where psychiatry is or has been and to make sure that psychology, as a profession, was one step ahead of social work.

Policy and advocacy efforts pursued by Bryant Welch (first director of APA's Practice Directorate) and Nicholas Cummings (innovator of Kaiser Permanente's mental

Editor's Note

Antonio E. Puente received the Award for Distinguished Professional Contributions to Independent Practice. Award winners are invited to deliver an award address at the APA's annual convention. A version of this award address was delivered at the 119th annual meeting, held August 4–7, 2011, in Washington, DC. Articles based on award addresses are reviewed, but they differ from unsolicited articles in that they are expressions of the winners' reflections on their work and their views of the field.

health system) considered psychiatry to be psychology's professional benchmark. Fundamentally, their view was that professional psychology should not venture far from mental health. This restriction has similarly been reflected in the professional and scientific literature. In reviewing the published literature, I found that among all articles referenced since the inception of PsycINFO to the present, there were 5,863 articles in which the phrases "professional psychology" and "mental health" were interfaced, compared with 1,150 articles in which "health care" was substituted for "mental health." There were 1,027 articles in which the phrase "mental health service" appeared and 107 articles in which "health care service" appeared. I also reviewed the contents of Professional Psychology: Research and Practice since its inception 42 volumes ago to determine the focus of APA's primary journal for the topic in question. Specifically, a review of all volumes (since its founding in 1969) revealed that only a small percentage of articles are about health care in general. The total number of articles on mental health is 591, and the total number of articles on health care is approximately 150, or 9.5% of the total number of articles published. However, the number of articles involving health care has increased dramatically over historic baselines.

Another perspective on the literature is provided by De-Leon and VandenBos (2000), who described *Professional* Psychology's progress by comparing two time periods, 1989-1994 and 1995-2000. In the category of health psychology, medicine, and primary care, the percentage of articles from the earlier period was 4.9, and from the later period it was 7.8. Articles on prescription privileges increased from 2.2% to 3.9%. No citations were found for telehealth, telemedicine, and physical disability in the early period, but they combined to account for 4.65% of the articles in the later period. By any metric used, the number of health-care-related articles is, at best, no more than approximately 10%. Despite the founding of journals such as Health Psychology in 1978 and the inclusion of "health" in APA's mission statement about a decade ago, the disparity is so significant and has been present for so long that, at this rate, it would take a significant amount of time for mental health and health citations to be proportionally equal. The focus of the professional psychology literature has been and continues to be on "mental health."

I propose that the most effective way to produce a paradigm shift from "mental health only" to "health" is through an economic catalyst. The basic premise in Kuhn's (1962) analysis of paradigm shifts in his historic book *The Structure of Scientific Revolutions* is that the existing paradigm comes to lose the initial impact it brought to the original situation. In this regard, psychiatry controlled the use of psychotherapy until the introduction of state licensing laws for psychology in the 1960s and 1970s (up until 1979, when Missouri was the last state to gain licensure). Previ-

ously it was common for psychotherapy to be directed and cosigned by psychiatrists, similar to what is now referred to as "incident to" in health care. This occurs when an independently licensed health professional orders a procedure to be administered by a technician—much like the situation with radiologists and radiological technicians. In essence, psychologists were ancillary to psychiatrists and with that status came a reimbursement system that reflected that hierarchy. To make matters worse, in the proposed Social Security Improvement Act of 1989, psychologists were identified as "technicians" and not as "physicians" (i.e., independently licensed doctoral-level health care providers).

There is no question that psychology's impact on mental health has been significant (see Cummings, 2006). This has occurred in part because of the expansion of the scope of practice owing to lawsuits such as Virginia Academy of Clinical Psychologists and Robert J. Resnick v. Blue Shield of Virginia et al., through which psychologists obtained the right and privilege to bill insurance companies. With that success, the paradigm of mental health being controlled by psychiatry began to shift. With the advent of health maintenance organizations, preferred provider organizations, and related third-party changes, psychiatry has largely left psychotherapy, and psychologists have filled the void that was created by the departure. However, social workers have begun to provide psychotherapy, albeit at a much lower reimbursement rate. In 2011, according to the only public database available, the Centers for Medicare and Medicaid Services (CMS), social workers provided the largest number of psychotherapy encounters in the United States and were typically reimbursed approximately 25% less than psychologists. In some ways, as the concept of mental health evolved, psychiatry left psychology, and social work joined psychology, in the practice of psychotherapy. A paradigm shift did occur, and the end result was continued second-class citizenry for psychology within mental health in general and certainly within health care.

If psychology is going to abandon this professionally and economically limiting paradigm and initiate another one, something more than prescribing psychoactive medicines and providing better or more intense psychotherapy has to occur. Professional psychology must find some way to not be limited to mental health. Mental health has historically been a disproportionately small portion of the health care budgets both in the United States and in other countries. Saxena, Sharan, and Saraceno (2003) reported that in their sample of close to 200 nations, one third did not have a budget for mental health. For those that did, less than one third budgeted less than 1% for mental health. To complicate matters, the allocated amounts for mental health have dropped precipitously both internationally and nationally during the present worldwide recession. In the United States, for example, the Substance Abuse and Mental Health Services Administration (SAMHSA) budget has undergone a significant restructuring with the shifting of established programs into new line items in the agency budget as well as having reduced funding for them. Overall, SAMHSA's proposed budget is \$3.387 billion, \$44 million less than the Fiscal Year 2010 budget, which was close to \$3.431 billion. The biggest decreases in mental health funding may not be at the federal level, but at state levels, primarily through Medicaid programs, where cuts started in 2008 and show no signs of abating.

The future of a professional psychology that focuses exclusively on mental health is in serious jeopardy. The reimbursement is shrinking and the market is now being shared not so much with other doctoral-level providers (i.e., psychiatrists), but with master's-level providers (i.e., social workers). Cummings (2006) suggested that the primary reasons for the decline in professional psychology were associated with psychologists "ignor[ing] warnings" of insurance reform and "the biomedical revolution" (p. 598). He indicated that behavioral health care is "underfunded and underappreciated" (p. 603). However, Cummings emphasized behavioral health for mental health. Further, Cummings, Cummings, and O'Donohue (2009) argued that psychology is "not a healthcare business" (p. 7), but that it is integrated into the health care delivery system.

The "mental health only" paradigm for professional psychology has run its course, and a new paradigm needs to replace it. The lack of focus on expansion and on health care economics is tantamount to professional suicide. The future of professional psychology is intrinsically linked to expanding its horizon to include all health-related problems and to expanding its repertoire from testing and psychotherapy to include, at the minimum, case management or evaluation and management. These three services (two are procedures, and the other, case management, follows a model similar to that used by all other doctoral-level health care providers) should continue to be delivered to mental health patients *and* should also be expanded to include delivery to all types of health patients as well.

Rationale for a Paradigm Shift

In this section, I examine in some detail the historical and economic reasons for needing to change the current paradigm in professional psychology. Beginning with a brief analysis of psychology's history, I posit that when psychology adopted a behavioral paradigm, the original focus on physiology (and its corollary, health) was abandoned. That shift resulted in the narrow focus primarily on mental health.

Historical Antecedents

Roots of psychology. According to Carpintero (1980), the origins of. psychology are traceable back to a unique

interface between philosophy and medicine. Psychology was brought in as a methodology to answer long-debated questions in philosophy using a physiological/medical/ health model. Wundt (1874) described psychology as involving physiological processes. He devoted the majority of the chapters in what is often considered the first text-book in psychology, *Principles of Physiological Psychology* (Wundt, 1874), to the interface between physiological and mental processes. The same is true of the father of American psychology, William James. Like Wundt's approach, the approach taken by James (1890) was physiological in nature, and the vast majority of his book *Psychology* focused on the underlying physiological processes associated with mental function.

By the time World War I emerged, Watson's (1919) behaviorist theory as espoused in Psychology from the Standpoint of a Behaviorist began a shift in psychology away from the physiological underpinnings described by Wundt and James. It was not until the 1960s that the work of Neal Miller, Roger Sperry, and others began to change this paradigm from a behavioral one to a more cognitive and, subsequently, biological one. For example, Sperry's winning the Nobel Prize for Physiology and Medicine in 1981 spoke volumes about the acceptance of the interface between cognition and the brain by the general scientific community. His seminal work on the split brain (Sperry, 1981) signaled a resurgence in and an acceptance of bringing psychology back to the roots established by Wundt and James and thus allowed psychology a much broader focus than simply a behavioral one. I propose that a paradigm shift ought to occur within professional psychology: By loosening the behaviorist grip on the field and expanding the mental health focus of professional psychology to other models (e.g., neuropsychological) and other disorders (e.g., brain dysfunction), a different paradigm that embraces the historical roots of psychology could emerge. Such a paradigm, for example, could be expressed by the application of neuropsychological assessment to all health disorders; from traditional ones (e.g., dementia) to nontraditional ones (e.g., diabetes). Another example would be the application of health psychology (e.g., biofeedback) to all medical problems (e.g., pain).

Roots of professional psychology. Psychology has been divided into two large epochs, pre– and post–World War II (Benjamin, DeLeon, Freedheim, & VandenBos, 2003). In reviewing the psychological literature, I found approximately 10 articles about professional psychology that were published before the war. In contrast, almost all articles written on the topic were published beginning right after the war and now comprise the majority of the psychological literature today. The early literature on professional psychology focused on the application of psychological principles to mental health problems. For example, the American Association for Applied and Professional Psy-

chologists (AAAPP) was proposed in and described by Fryer (1937) in the first issue of the *Journal of Consulting* Psychology (later the Journal of Consulting and Clinical Psychology). The development of AAAPP occurred at a meeting held in Minnesota on August 30-31, 1937. Attendees discussed the idea of a separate clinically based association since the American Psychological Association (APA) was not attending to the needs of such psychologists (National Committee for Affiliation of Applied and Professional Psychology, 1937). Professional psychology programs were being established as early as 1943, as reported in the Journal of Consulting Psychology. By 1947, the APA Policy and Planning Board (Hilgard, 1947) had established standards for training in psychology that included a doctoral degree as well as five years of experience. "Lower" standards were necessary, according to the Policy and Planning Board, and could be established with licensure at state levels. In each of these cases there was a common theme: standardization of training, professionalization of practice, and a mental health focus.

Professional psychology's focus on mental health solidified when psychology was brought in to assist psychiatry in the newly developed Veterans Administration (VA) and the U.S. Public Health Service after World War II. Then, as now, psychiatry was not a particularly large segment of medicine and was often preferred for work in outpatient settings (Kutash, 1947). In the first description of the role of the psychologist in a VA "Mental Hygiene Clinic", Kutash (1947) described the psychologist as a diagnostician and therapist as well as a teacher and researcher, but the emphasis was on mental health. Zlotlow, Nelson, and Peterson (2011) outlined the history of scientific psychology relative to professional psychology. They described how in 1944 APA appointed David Shakow to lead the Committee on Training in Clinical (Applied) Psychology. Shakow and colleagues included educational requirements that were based on scientific psychology with a primary concentration on mental health—often referred to as the Boulder model (Belar, 2000). Again, the focus of these efforts was primarily, if not exclusively, mental health.

The growth of the practice of psychology has historically fueled a corresponding growth in research (Freedheim, 1976). Benjamin and Baker (2004) outlined in their book *From Séance to Science: A History of the Profession of Psychology in America* how professional psychology expanded quickly after the war in mental health circles. Pickren (2007) outlined the growth of professional psychology in post–World War II American psychology by focusing more specifically on the importance of large-scale federal funding. He described how in 1953 alone, the Department of Defense, the National Institute of Mental Health (NIMH), and others provided \$5 million for research. The NIMH supported graduate education in clinical psychology from 1948 to 1986 with over \$230 million. By

the 1960s, outside funding had become the lifeblood of clinical psychology's expansion. Baker and Pickren (2006) described how the VA has trained over 20,000 clinical psychologists in departments of psychiatry since 1946. In the first 15 years alone, NIMH programs had spent \$17 million on training. These and related shifts were also chronicled by Walsh (1979) in an article in *Science*. However, in each of these cases the focus was on mental health.

The unprecedented growth in funding for professional psychology arose from the need to train clinical students. The Boulder model, guided by Shakow and as discussed by Albee (2000), favored scientific in combination with professional understanding. In contrast, Kovacs (1991) suggested that clinical training in PhD programs was deficient and that a more "professional" model, often referred to as the Vail model (Kenkel, 2010), was increasingly becoming more appropriate. Whether it was the Boulder model or the Vail model, one thing was for certain—professional psychology was poised for significant growth, but with a mental health focus. And significant growth did occur, but within mental health. For example, Pickren (2007) reported that Division 12 (Clinical Psychology) of the APA grew from 821 members in 1948 to 2,376 members around 2005. Today, according to the APA Division Services Office, they have a total of approximately 4,000 members, making it the third largest division within the APA, interestingly now behind the Division of Clinical Neuropsychology.

With the advent of licensing laws came the possibility for psychologists to work outside of institutional settings. Unfortunately, health care insurance at the time did not allow for the inclusion of nonmedical personnel. In 1989, Welch and the APA Practice Directorate led lobbying on Capitol Hill for inclusion of psychology into the federal health care system, primarily Medicare. In doing so, a tactical policy mistake was made that resulted in the inclusion of psychologists in Medicare programs, but not as "physicians." Welch argued before Congress that psychologists were not physicians, which in terms of our history was completely correct. However, the Social Security Improvement Act of 1989 being proposed at the time defined only two types of professionals in health care. There were "physicians," who were loosely described as doctorate-level personnel who worked independently in health care; dentists, chiropractors, and optometrists, who did not hold medical degrees, but had doctoral degrees and practiced health care independently were considered to fall in the "physician" category. The other category of providers was "technicians," who did not engage in "cognitive work" and were "incident to" doctorate-level, independently licensed health care professionals. Our attempt to define ourselves differently from "physicians" inadvertently resulted in our being legally considered by the federal government as "technicians" and thereby fundamentally placed on professional psychology an artificial professional and economic glass ceiling.

The resulting consequence of the preceding categorization was that admission to the independent practice of psychology and to insurance panels effectively placed psychology outside of mainstream health care and squarely within mental health, often in "carve-outs" that have been traditionally isolated from general health care insurance programs. This is most clearly seen in the AMA's CPT system. In that system, there are over 8,000 codes or procedures that the health care industry has agreed are national in scope and evidence based. Of these, approximately 50 are accessible to psychology, and these codes have been historically found within the psychiatry section of the CPT coding system (AMA, 2011). That placement has come with, at least until recently, a professional and economic stigma of significant proportion. First, general health care patients were not accessible to psychologists. Also, insurance companies historically required patients to pay a co-pay for health procedures (e.g., surgery), and the co-pay has traditionally been 20% of allowable charges; for mental health procedures, the co-pay has traditionally been 50%. Further, the yearly caps for general health care are much higher, often 100 times higher, than those for mental health care. Finally, most insurance panels have historically not provided general health care patients access to psychologists. And now that "parity" is federal law, the migration toward general health care has been stymied by internal insurance company policies still limiting psychologists to Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association, 2000) diagnoses and a reimbursement system that still undervalues the work of professional psychologists. The Model Act for State Licensure of Psychologists (APA, 2010a) is sufficiently robust that a paradigm shift is indeed possible within its boundaries. The questions remain as to how and when such a shift will occur.

A Paradigm Shift to Health Care

To avoid professional and economic glass ceilings, artificial or otherwise, professional psychology should migrate toward embracing both mental health and health. This mindset, however, must be accompanied by a vehicle for accomplishing the shift.

A Focus on Health

At present, mental health services represent a fraction of mental health, which, in turn, reflects a small fraction of all health care services. Most estimates place the delivery of psychological services well below 5% of the health care budget and closer to about 1% or less of the health care budget. Presently, the health care industry ranks second to defense as the primary focus of the Gross Domestic Product (GDP). The Congressional Budget Office (CBO) re-

ports that by 2020 health care will move into the number one position in terms of the federal budget. In *The Budget and Economic Outlook: An Update* (CBO, 2010), the CBO estimates that Medicare will take up 14% of the budget, followed by Medicaid at 10%, for a total of 24% of GDP. In contrast, Social Security will represent 21%, defense 16%, with interest on the debt at 14%, and other spending at 22%. While these are staggering numbers, the estimate of the GDP for psychology will continue to be exceedingly small if professional psychology remains firmly entrenched within the "mental health only" paradigm.

Whereas there have been earlier attempts to expand psychology from a mental health enterprise to a health-focused one, the paradigm shift has not been achieved. There are several reasons why psychology could and should complete the paradigm shift and embrace all of health care. I provide three examples as support for such expansion. First, I posit that professional psychology can effectively deal with diseases that kill. Second, psychology can similarly address costly and chronic diseases using behavioral health procedures rather than medical procedures. Third, the application of psychological knowledge to health care can and will reduce the current spiraling costs of health care (a primary focus of the Patient Protection and Affordable Care Act). In turn, the expansion of professional psychology will fuel an expansion of academic psychology.

Druss (2002) indicated that the following disorders cost the United States over \$10 billion dollars each per year (in order of highest to lowest): ischemic heart disease, motor vehicle accidents, acute respiratory infection, athropathies, hypertension, back problems, mood disorders, and diabetes. The ranking shifts when it is based on costs per person. Again from highest to lowest, they are: ischemic heart disease, cerebrovascular disease, motor vehicle accidents, cardiac arrhythmias, peripheral vascular disease, mood disorders, and diabetes. The costs range from \$6,324 to \$1,098 per person per year. Each of these disorders is highly correlated to lifestyles and, as a consequence, is amenable to behavioral interventions—an area in which professional psychology carries great expertise and a vast scientific literature to guide such expertise.

Another perspective with regard to the economic impact of diseases can be gained by considering deaths that are attributable to behavior patterns. Danaei et al. (2009) indicated that for deaths attributed to individual risk factors, the top five risk factors were as follows (in order of highest to lowest): smoking, high blood pressure, obesity, physical inactivity, and high blood glucose. Smoking alone results in close to half a million deaths per year, which are evenly distributed among cardiovascular, cancer, and respiratory problems. Again, each of these disorders is also a lifestyle-based problem that responds well to behavioral interventions.

The assumption exists that if professional psychology grows (which it will if a broader paradigm is embraced). then traditional academic areas of psychology, such as experimental psychology, would be affected negatively. That assumption is flawed because professional psychology, whether it is delivered according to a Boulder model or a Vail model, still relies on the science of psychology. With larger numbers of consumers of the product, more science will have to guide and support the practice of psychology. In the book Competency-Based Education for Professional Psychology (Kenkel & Peterson, 2010), numerous references were made to the foundation of a scientific psychology to guide the practice of psychology. Even the measurement of the competencies required to satisfy the achievement of competencies was based on a scientific model (Krishnamurthy & Yalof, 2010).

APA's Division of Health Psychology and its journal, Health Psychology, had begun to expand the role of psychology from an exclusively mental health profession to a health one. This expansion occurred through the application of psychological approaches to physical diseases. Within this contextual shift, Blanchard (1980) was one of the first to suggest that professional psychologists should be trained formally in "behavioral medicine" settings as a means to expand the influence of psychology. More specialized suggestions were later outlined by one of the founders of health psychology, George C. Stone (1979), in his important article on the establishment of health psychology as a specialty within psychology. Matarazzo (1982) further expanded this idea by encouraging the engagement of psychology with the control and abatement of disease and the promotion of wellness as well.

Another concern that is sometimes raised in this context is the issue of insufficient education on the part of psychologists. The mean number of years of graduate education for those with PsyD degrees is 5.35, and for those with PhDs it is 6.62 (APA, 2010b). These figures include one year of internship, which is often followed by one or two years of postdoctoral training. This amount of education compares favorably, in terms of years of total education, to that of all other doctorate-level providers, including those in medicine. Also, the rigor of the training can be estimated by the rigor of admission to the training program. Acceptance rates to PhD programs hover around 10%, and to PsyD programs around 30% (APA, 2010b). Again, these findings are similar to those for other doctoral-level professions. The issue is not insufficient education, but the focus of that education. In essence, psychology needs to continue to focus on establishing its practice models based on science and practice, but now it must add an economic aspect as well. And, of course, the focus should shift from mental health only to encapsulate all of health care. The following three examples provide illustrations of how a paradigm

shift could increase not only the scope of the practice of psychology but its economic base as well.

Paradigm Shift Examples

Prescription authority. As early as the 1970s, psychologists had considered prescription authority. As President of APA in 1974, Nicholas Cummings (2006) appointed a task force to address this issue. After two years of study, the group did not support the idea. The next push for prescriptive authority was chronicled by DeLeon, Fox, and Graham (1991), who predicted that prescription privileges might be psychology's next frontier. To further that possibility, the APA Board of Directors convened a blue ribbon panel in the early 1990s to study the concept of psychologists prescribing psychotropic medications. Smyer et al. (1993) suggested that prescription authority should be based on educational and training competencies and further, that such education should begin as soon as feasible and certainly no later than at the undergraduate level in chemistry, physiology, and pharmacology. Specialty tracks should be available at the doctoral as well as postdoctoral levels. Proficiency would be measured and levels of competency would be described. What was unique about this proposal was that it called for all professional psychologists to be versed in psychopharmacology at the most basic level. Further, competencies would be determined on the length and type of training in psychopharmacology. Close to two decades later, Fox et al. (2009) provided a report on the status of prescription authority. They described the origins of the movement with a bill introduced in 1985 in Hawaii; since that time, 88 bills had been introduced in 21 different jurisdictions, but only Louisiana and New Mexico have achieved this goal. Moore, with the Indian Health Service in Montana, and Sammons (2010), with Alliant University, described the future of prescribing psychology. In addition to New Mexico and Louisiana, the Armed Forces, the Indian Health Service, and the U.S. Public Health Service have all endorsed the idea that appropriately trained psychologists can prescribe psychoactive medications. Unfortunately, whereas several states have continued studying the issue and introducing legislation, the initial round of success has met with significant opposition from a variety of sources, including psychology itself, thus limiting its potential impact for expanding the scope of the practice of psychology using prescription authority.

Health psychology. In 1976, Schofield suggested that psychologists must understand health and illness and that psychologists should become integrated into health care delivery systems, not just mental health. Dörken (1979) predicted that the practicing psychologist would flourish in the private health care arena. However, in the book in which Dörken's chapter was found, Psychology and National Health Insurance: A Sourcebook (Kiesler, Cummings, & VandenBos, 1979), the focus was entirely on

mental health. Within the book's 55 chapters written by prominent psychologists of the time, possibly only one (Gottfredson & Dyer, 1979) may have been looking toward a future in which psychologists would be considered "health service providers."

The evolution of health psychology was later outlined by Johnstone et al. (1995). These authors suggested that psychology was developing into a primary health care profession. Their article combined the perspectives of 20 leading professional psychologists who were involved in the delivery of psychological services in a variety of health care settings. Their overall approach was to encapsulate the research and clinical practices that had occurred over the past two decades and to craft a professional psychology that was well interfaced with general health care. Settings included health psychology, clinical neuropsychology, and rehabilitation psychology. A focus was placed on psychology's interface with primary care, including family practice, internal medicine, and pediatrics. In retrospectively reviewing these experts' ideas, it appears that the trajectory proposed was simple—integration, regardless of specialty, of professional psychology into traditional health care.

Brown and colleagues (2002) provided a robust interpretation of the aforementioned proposal less than a decade later. Fundamental to this paradigm was the addition of prevention at multiple levels. Additional engagement of psychology was occurring, according to the authors, with assessment (e.g., cancer), intervention (e.g., cardiovascular), and liaison (e.g., death and dying). The role of the professional psychologist was placed in multiple settings, both inpatient and outpatient and both in mental health and traditional health care settings as well as schools and prisons. The role of reimbursement underpinned the future vitality of such efforts. In a comprehensive analysis of the impact of the journal Health Psychology, Frosch and colleagues (2010) conducted a citation analysis. In a 10-year span of publications, 408 articles were examined, with about 40% of these being cited by medical journals. Hence, the impact was significant, and the emergence of health psychology and its integration into general health care continue to be vibrant and evolving.

Clinical neuropsychology. Clinical neuropsychology has had a long past and a relatively short history, but it has had a significant impact on moving professional psychology toward an expanded model of health care delivery (Puente, 1992). The idea proposed by pioneers in the field, from Luria to Reitan, was that cognitive disruption was secondary to an underlying problem with brain activity. Without neuropsychologists intending to have an economic impact, especially in the case of Luria in Russia, neuropsychology was introduced to the health care arena without the challenges that were faced by clinical psychologists with psychiatrists. The inclusion of neuropsychology outside of mental health was the first viable and successful

entry of psychology into traditional health care using the reimbursement system used by the federal government (i.e., CPT) and by almost all third-party payers in North America. This occurred with the opportunity to bill services outside of mental health and using the *International Classification of Diseases (ICD;* World Health Organization, 2007) system of diagnosing instead of the *DSM*.

In the next section I explain how the paradigm shift from "mental health only" to the broader health care arena occurred within the CPT system. This shift occurred initially because clinical neuropsychological services were placed outside of mental health. Subsequently, health and behavior procedures followed.

Method for a Paradigm Shift in Professional Psychology

CPT

Billing for health care procedures in the United States is based on a coding system developed by the AMA in conjunction with the Centers for Medicare and Medicaid Services (CMS). The system was developed in 1966 by physicians (initially surgeons) and was extended to nonphysicians in 1993 (through the Health Care Professional Advisory Committee). Each health procedure is assigned a code, which is a specific five-digit number with a description of the services and a reimbursement value. For example, 90801 is "psychiatric interviewing," which is often considered the "base" or "primary reference" code for mental health procedures. This code, which is the only untimed code available for psychologists, was used over 1 million times in 2008 and is reimbursed at approximately \$150. Health care services must be empirical in scope and used by multiple providers across numerous locations in the United States. There are approximately 8,000 codes in Category I of the current version (5th edition). The CPT system is used by CMS for Medicare and Medicaid and by approximately 98% of third-party reimbursers in North America and, increasingly so, abroad. These codes describe what health care procedures can be done, how they can be done, and how much one will be reimbursed for providing those services (AMA, 2011). CPT is the gold standard and the benchmark for health care procedures.

Of the 8,000 codes currently available, approximately 50 are available to psychologists. When psychologists gained access to and began using these codes approximately 25 years ago, they were restricted to about five codes including psychiatric interviewing, psychotherapy, and psychological testing, all found within the psychiatry section of CPT. This placement resulted in psychological procedures being sectioned apart from general health care and with it all the economic and professional limitations that accompany such placement.

Since 1993 when AMA opened up the CPT Panel to nonphysicians and when I was made APA's representative

to the Health Care Advisory Group of the CPT Panel, a movement began to expand service codes available to psychologists outside of mental health. The goal was to expand services both within mental health and outside of mental health. This process actually began in North Carolina through the North Carolina Psychological Association in the late 1980s when I attempted to obtain a code from North Carolina Blue Cross Blue Shield for neuropsychological (rather than psychological) testing. The effort to expand mental health services and to develop codes for services outside of mental health has taken over 25 years to evolve, largely through diplomacy, networking, and tenacity. Initially, several psychological services were expanded (primarily psychotherapy). Biofeedback was then placed outside of psychiatry, although the impact of this change was minimal based on code usage data. The major paradigm shift to place psychology outside of psychiatry began with placing neuropsychological testing in the neurology section of CPT on January 1, 1996 (AMA, 1996) and then continued with the placing of all forms of testing codes in their own section separate and apart from psychiatry. Next, health and behavior codes followed, allowing psychologists who were trained and licensed the opportunity to gain access to the remaining appropriate health care procedure codes. These later codes evolved through work by and pressure from APA's Interdivisional Health Committee approximately a decade ago.

In addition to these successes during the last decade, the concept of "technician" was also introduced for psychological and neuropsychological testing. This concept, by default, made it clear that within psychological services, there are "professionals" and there are "technicians." This also resulted in the acknowledgement by CMS that whatever codes (e.g., neuropsychological testing, 96118) could be used by physicians could be used by psychologists and that, further, the codes were to be reimbursed similarly for both professions. In essence, this allowed reimbursement for "cognitive work" and not just technical work, which psychology had not received since inclusion into the Medicare system. More recently, CMS indicated that despite the fact that psychologists were not listed as physicians in the Social Security Improvement Act of 1989, reimbursement for psychologists should be equal to that for physicians. Over time, the largest number of codes used by psychologists came to reside outside of the psychiatry section. Theoretically speaking, placement of psychological services outside of mental health, before parity (a) decreased co-pays (making the service more affordable to patients), (b) avoided mental health lifetime limits, and (c) allowed for the expansion of the diagnostic system from the DSM (for mental health disorders nationally) to the ICD (used for all health disorders universally). With expanded services outside of psychiatry and with equal

reimbursement for this service, professionally, psychology (a) has gained the possibility of economic equality not just with psychiatrists but with physicians and (b) has expanded to include psychological assessment and intervention services for all health disorders. These gains were further supported with recent federal legislation regarding parity. These expansions essentially mean that professional psychology's glass ceiling has now been shattered. And because the expansion has been an economic one as well as a professional one, the era of "mental health only" for professional psychology has ended and the era of professional psychology in the context of the entire health care system has begun.

The Patient Protection and Affordable Care Act

With this expansion come the challenges of inclusion in emerging health care markets. Though new horizons await the expansion of professional psychology into all of health care, questions about the effects of new federal legislation on the future of this expansion must be considered. The new Patient Protection and Affordable Care Act provides new possibilities for further interfacing of professional psychology and all of health care. These possibilities arise from the following areas covered by the new law: (a) lack of limits on pre-existing conditions, (b) guaranteed renewal, (c) limiting ratings on patients' base health, (d) a ban on the use of annual and lifetime caps, (e) addressing of personnel shortfalls, (f) initiating medical home pilot projects, and (g) initiating reimbursement for preventive care (including elimination of co-pays).

The integration of behavioral health with traditional health care is found throughout the new health care bill, especially in the preventative health section. Throughout the history of professional psychology, services have been geared toward those with disorders. The new legislation provides a tremendous opportunity by adding prevention as a reimbursable service. In addition to adding approximately 35 million more people to the pool of potential clients, the reimbursement of prevention services means that the typical patients who are seen by behavioral health specialists, such as those with diabetes and dementia, will now be more comprehensively covered. Health Insurance Exchanges may also be a robust source of activity for professional psychology.

However, such opportunities do not come without challenges. The major challenges include (a) the need to develop performance metrics for services provided as health care moves away from fee for service to fee for performance; (b) an increase in transparency and in reporting/documenting services, which is the downside of being included in mainstream health care; and (c) an increase in auditing both pre- and post-service associated with the provisions of the Patient Protection and Affordable Care Act.

Future

Thus far three approaches to professional psychology have been discussed: prescriptive authority, health psychology, and clinical neuropsychology. These illustrations all have limitations. Hence, alternative approaches may be useful in ensuring that the proposed paradigm shift occurs. The most salient is the continued expansion of professional psychology within the CPT system into general health care as well as the expansion of mental health services (e.g., a model for psychotherapy reimbursement that adds to the variable of time the variable of complexity). Another is increased integration within the Patient Protection and Affordable Care Act. This would most likely involve engagement with interdisciplinary care, participation in "health care homes," and expansion of services to include prevention and wellness. One example of what professional psychology might look like in a decade is provided by the concept of community health centers, which not only encourage but require the integration of multiple providers at various educational levels to interface their services in a cohesive diagnostic and treatment plan.

Another possibility involves the concept of "medical homes," an idea that has been around for half a century but that has received increasing attention over the past few years. The concept focuses on the idea that health care patients should have a permanent home where records are stored and decisions are made. The original concept was that primary care physicians would be the "owner" of such homes and would direct traffic accordingly. Recent movement is afoot to shift the concept from "medical homes" to "health homes," which would allow for a more robust interpretation of what kind of problems could be handled within such a home and what types of professionals could be involved and act as "directors" of such "homes." Another possibility that is emerging is that "homes" could be disease specific. In other words, some disorders (e.g., brain injury) may best be handled by a specialist who is a nonphysician, such as a clinical neuropsychologist.

Now that the Patient Protection and Affordable Care Act is a law and no longer a bill, the focus has shifted from legislative to regulatory implementation. This means that interpretations of such concepts as the "medical home" are being left up to agencies, such as CMS. The inclusion of professional psychologists in an expanded interpretation of our traditional services requires an interpretation by both federal (most important) and state agencies (i.e., primarily Medicaid) that behavioral health care should be an integral part of all of health care. Almost certainly, nongovernmental health care agencies and payers will follow.

Limitations of a New Paradigm

There are some potential limitations that arise from a paradigm shift that involves professional psychology moving into the larger health care arena. These include (a) in-

traprofessional fragmentation (e.g., mental health vs. health), (b) changes in existing power bases (i.e., has been mental health and will become health), (c) losing the comfortable familiarity with the current mental health paradigm (e.g., shifting from *DSM* to *ICD*), (d) the field of mental health becoming a second-class citizen (largely because of reimbursement), (e) creation of a two-tier (MA and PhD) system (with MAs becoming "technicians"), (f) CPT and insurance company difficulties in accepting the paradigm shift, and (g) having to deal with the public perception that psychology is synonymous with mental health only.

Of these seven potential problems just listed, five concern the profession of psychology. In essence, the major challenge will be within the ranks of psychology and not within health care. Since the inclusion of "applied" psychology almost 75 years ago into mainstream psychology (i.e., APA), the challenges of integrating the profession and the science of psychology have persisted. The likelihood is that this type of schism may now evolve within professional psychology between those embracing the "mental health only" model and those endorsing the expanded health care model. For example, there are power bases within psychology, such as APA Divisions 12 (Society of Clinical Psychology) and 42 (Psychologists in Independent Practice), that have by design considered professional psychology as synonymous with mental health. It may be that some individual psychologists begin to feel fragmented or disenfranchised and that all of psychology would be hurt without their engagement as leaders. In addition, as with any zeitgeist, if the existing paradigm loses its attractiveness, especially to students, it could very well be that those entrenched in mental health would come to see themselves, incorrectly, as second-class citizens in this new professional psychology.

From the outside, insurance companies and policymakers will have to similarly endorse such a paradigm as the practice of psychology expands. Over the two-decades history of the APA's involvement with CPT, the pattern appears obvious, and CMS and insurance companies have endorsed the new paradigm outlined here (e.g., neuropsychological testing as well as health and behavior codes). If a health care service is national in scope and is evidence based, then it is just a matter of time before that service is included in the CPT system. Finally, the public will have to be educated that professional psychology includes both mental health and health, thus breaking away from a century-old paradigm and embracing a new system that they hardly understand.

Conclusion

The time for professional psychology to fully embrace all of health care has arrived, while the era of professional psychology being synonymous with mental health has ended. Professional psychology has re-embraced the connection to psychology's historical roots. The inclusion of professional psychology is beginning to occur at various levels, including but not limited to licensure, policy, practice patterns, reimbursement, and science. The use of the CPT system is an excellent example of how progress in the science and pedagogy of psychology has expanded the scope of practice of psychology and provided greater economic opportunities. The more robust interpretation of professional psychology further allows the serving of more individuals as well as expands the role of the teaching and science of psychology.

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