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Guidelines Regarding Psychologists' Involvement in Pharmacological Issues

Division 55 (American Society for the Advancement of Pharmacotherapy)

Task Force on Practice Guidelines

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Several factors have converged that will inevitably increase psychologists' involvement in the medication management of the individuals they serve. One is the increasing use of psychotropic medications for the treatment of psychological disorders, a clinical practice which will be referred to as pharmacotherapy in this document. A national survey of physician records suggested the proportion of the population using antidepressants increased from 6.7% in 1990 to 15.1% in 1998, an increase of 125.4% even after adjusting for population growth (Skaer, Sclar, Robison, & Galin, 2000). According to VandenBos and Williams (2000), practicing psychologists on average estimated that 43% of their current patients were using psychotropic medications. Another factor is the movement for prescriptive authority within psychology. Appropriately trained psychologists are now eligible for prescriptive authority in two states (Louisiana and New Mexico) as well as in the military. With similar legislative agendas emerging in a number of other states, the number of states offering prescriptive authority to psychologists will inevitably increase further.

In response to a series of articles describing the professional challenges faced by psychologists as they become prescribers (e.g., Antonuccio, Danton, & McClanahan, 2003; Buelow & Chafetz, 1996; DeLeon, Robinson Kurpius, & Sexton, 2001; McGrath et al., 2004), it was recognized in discussions among members of the American Psychological Association (APA) Division 55, the American Society for the Advancement of Pharmacotherapy, that the implications of the APA (2002b) *Ethical Principles of Psychologists and Code of Conduct* (the Ethics Code) specifically for psychologists' involvement in pharmacotherapy merited clarification. Beth Rom-Rymer, president of the division at that time, convened a task force to explore the issue. Three of seven task force members were psychologists with prescriptive

authority in the civilian or military sector. The task force also included representation from Division 18 (Psychologists in Public Service).

Members of the task force reviewed relevant literature and participated in formulating the content of the guidelines. The literature review began with a document titled *Policies of Other Organizations and Background Materials: Pharmaceutical Marketing, Gifts, and Financial Support* (APA, 2002c), which provided primary sources addressing the relationship between prescribing professionals and the pharmaceutical industry. This document was updated with more recent publications on the topic. Medicine, nursing, pharmacy, and the pharmaceutical industry have all generated guidelines relevant to the objective practice of pharmacology. These were reviewed as well. Finally, the task force considered specific implications of the APA's (2002b) Ethics Code for psychologists' involvement in the practice of pharmacotherapy.

The guidelines presented in this document are intended to provide a resource to psychologists interested in the issue of what represents optimal practice in pharmacotherapy. As background to these guidelines, it may be noted that psychologists' activities reflect three different levels of involvement in pharmacotherapy. The first level occurs when the psychologist serves as the prescriber. As indicated above, psychologists currently can only prescribe in the U.S. military and in two states. The population of psychologists with prescriptive authority is therefore small, but is one that is sure to increase in size in the coming years. It should be noted that some psychologists prescribe only through a second license, for example, as a nurse practitioner or physician. Such individuals must determine for themselves the degree to which the guidelines presented here for prescribing are relevant to their activities.

The second level occurs when psychologists actively collaborate in medication decision-making. The psychologist is not ultimately responsible for the decision that is made in these

circumstances, but does play a substantive role in the decision-making process. VandenBos and Williams (2000) found that 87% of their sample of practicing psychologists reported they had been involved in the decision to prescribe medication for at least one of the patients on their caseloads. However, it is unclear what role they played in the decision, especially since over 80% also indicated this was not a frequent occurrence. On the other hand, 7% of respondents indicated they participated in the decision to prescribe for more than half their patients, suggesting that they were consistently and perhaps formally involved in decisions about the appropriateness of medications for their patients.

The third, and probably most common, level of involvement occurs when psychologists play what will be referred to as an advisory role in the process of pharmacotherapy. Examples of advisory activities include reporting concerns about the treatment to the prescribing professional, referring patients for a medication consult, or discussing with patients how to address their concerns about the medication with the prescriber. The advising psychologist may offer opinions relevant to the pharmacotherapy, but does not play a formal role in the decision-making process. It is likely that many of those psychologists who indicated to Vandenbos and Williams (2000) that they were infrequently involved in the decision to prescribe did so in an advisory role.

Some of the guidelines presented in this document are targeted specifically at the population of psychologists with prescriptive authority. Others are considered relevant in any case where the psychologist is actively involved in decision-making, whether as a prescriber or collaborator. Still others are considered applicable any time a psychologist is involved in the practice of pharmacotherapy whether as a prescriber, collaborator, or advisor. Given the unique elements of the population of psychologists who can prescribe on the one hand, and the frequency with which psychologists participate in collaborative and advisory activities on the other, it was

considered important to provide guidelines appropriate to each set of activities. However, it is important to recognize that a principle of optimal practice may have different implications in the context of active participation versus advising.

Technology-based alternatives to face-to-face contact with patients are proving particularly useful in the conduct of pharmacotherapy (Hyler, Gangure, & Batchelder, 2005). The telephone has dramatically affected the nature of interactions with patients; videoconferencing can expand these options even further, particularly in rural areas. E-prescribing and e-mail correspondence between patients and providers regarding medication will be used more and more as a mechanism for service delivery. For example, prescription renewal can often be safely and efficiently accomplished without face-to-face contact between the prescribing professional and the patient. These guidelines should be considered relevant across all modalities of contact.

Standards versus Guidelines

To clarify the goals of the present document, it is worth summarizing the differences among *treatment guidelines* (or *clinical guidelines*), *standards*, and *practice guidelines*. Treatment guidelines provide recommendations for clinical interventions that are usually specific to a certain disorder and/or method of treatment (APA, 2002a). Practice guidelines and standards differ from treatment guidelines in that they have to do with general professional conduct in a particular domain of psychological practice. Practice guidelines refer to statements that suggest or recommend general principles of optimal behavior or conduct for psychologists. Guidelines differ from standards in that standards are mandatory and may be accompanied by an enforcement mechanism. Guidelines are instead aspirational in intent. They are intended to facilitate the continued systematic development of the profession and to help encourage a high level of professional practice by psychologists. Guidelines are not intended to be mandatory or

exhaustive and may not be applicable to every professional or in every clinical situation. They are not definitive and they are not intended to take precedence over the judgment of psychologists.

Given the degree to which involvement in pharmacotherapy represents a new activity for psychologists, and the level of controversy that has surrounded the use of psychotropic medications in general and the prescriptive authority movement for psychologists in particular, it is tempting to proscribe or mandate certain behaviors or professional practices associated with pharmacotherapy. This is not the intention of the present document. The task force speculated that at some point psychologists may decide it would be judicious to establish standards specific to the conduct of pharmacotherapy. However, such a decision at this time would be premature given the nascent state of prescriptive practice in psychology.

Finally, nothing in these guidelines is intended to contravene any limitations set on psychologists' activities based on ethical standards, federal or local statutes or regulations, or—for those psychologists who work in agency and public settings—the policies of those agencies in which they provide services. In particular, the discussion of medication by psychologists may be prohibited in certain settings under certain conditions (e.g., several states have passed legislation prohibiting discussion of medication by school personnel, including psychologists employed by schools). As in all other circumstances, psychologists must be aware of the standards of practice for the jurisdiction or setting in which they function and comply with those standards.

In particular, psychologists who participate in collaboration and advising should be aware of local statutory and regulatory language concerning their involvement in pharmacotherapy and the use and interpretation of laboratory tests. Thirteen jurisdictions have explicitly identified

certain activities related to medication management as within the scope of practice of psychology—California, District of Columbia, Florida, Louisiana (for psychologists without prescriptive authority), Maine, Massachusetts, Missouri, New Hampshire, New Jersey, Ohio, Oklahoma, Tennessee, and Texas—though the description of permitted activities and circumstances under which they are permitted varies. In contrast, several states have passed legislation prohibiting discussion of medication by school personnel (including psychologists employed by schools). Even so, the legal status of involvement in pharmacotherapy for psychologists who cannot prescribe remains an open question in other jurisdictions.

The Guidelines

The list of guidelines, with the types of activities for which each is relevant, may be found in Table 1.

General

Guideline 1. Psychologists are encouraged to consider objectively the scope of their competence in pharmacotherapy and to seek consultation as appropriate before offering recommendations about psychotropic medications.

Rationale. Ethical standard 2.01 of the APA (2002b) Ethics Code indicates psychologists provide services within the boundaries of their competence. Two factors complicate psychologists' efforts to comply with this standard in the context of pharmacotherapy. The first factor is pressure exerted on psychologists to serve in a collaborative or advisory role. Patients or family members who find it difficult or uncomfortable to request information from the prescriber may look to the psychologist with whom they have established a therapeutic relationship for specific advice. Primary care physicians and other prescribers with limited specialized training in

psychological disorders and their treatment, or who do not know the patient as well as the psychologist does, sometimes look to the psychologist for input on the choice of medication.

The second factor affects psychologists at all three levels of involvement, that being the rapidly evolving nature of treatment guidelines in pharmacotherapy. While the psychologist with prescriptive authority faces a statutory obligation to remain current, their level of expertise can vary across treatment populations and classes of medications. The psychologist asked to serve in a collaborative or advisory role has no similar statutory obligation, though APA has established educational expectations for the psychologist who serves in a collaborative role (American Psychological Association Board of Educational Affairs Working Group on Psychopharmacology Education and Training; 1997).¹ These factors can combine to create a situation in which psychologists can feel pressured to discuss their patients' treatment with medication at a level beyond their expertise.

Implications. Psychologists are encouraged to evaluate objectively their level of competence for addressing questions raised by other professionals, patients, or significant others. At any level of involvement in pharmacotherapy, psychologists clarify their role in the process and admit the limits of their own competence when appropriate, up to and including refusing to offer an opinion if the psychologist objectively considers doing so to be inappropriate. Particularly when asked to serve as prescribers or collaborators, psychologists are encouraged to consider the extent to which their beliefs about the appropriate course of action comes from reliable sources (such as peer-reviewed journals or reputable summaries of that literature) or from potentially biased or unreliable sources (such as unfamiliar websites, sales representatives, advertisements, or casual conversations with colleagues who may be relying on the same unreliable sources of information). It is important to remember that research suggests health care providers can be

susceptible to relying on easily accessible sources of information even when the source of that information is potentially unreliable (Haug, 1997).

Guideline 2. Psychologists are urged to evaluate their own feelings and attitudes about the role of medication in the treatment of psychological disorders, as these feelings and attitudes can potentially affect communications with patients.

Rationale. There is some evidence to suggest the clinician's faith in the treatment can be an important predictor of treatment response (Jacobson & Hollon, 1996). Unfortunately, treatment with medication has at times been associated with both excessive optimism and with skepticism bordering on cynicism (e.g., Kramer, 1993; Valenstein, 1998), and both positions have been exaggerated by media attention. Psychologists will inevitably form their own opinions about medications. These opinions can in turn affect patients' decisions about taking a prescribed medication, and even medication effectiveness, if they are not addressed openly in the process of discussing psychopharmacological interventions.

Implications. Psychologists who are aware of their attitudes and feelings towards medications, and who openly accept the possible validity of alternative viewpoints, are in the best position to discuss the potential risks and benefits of using medication in a balanced manner. Psychologists are encouraged to explore their own feelings about medication, and to consider the possible role of those feelings in discussions about pharmacotherapy with the individuals they serve.

Guideline 3. Psychologists involved in prescribing or collaborating are sensitive to the developmental, educational, gender, health status, and cultural/ethnicity factors that can moderate the interpersonal and biological aspects of pharmacotherapy relevant to the populations they serve.

Rationale. Principle E of the Ethics Code (APA, 2002b) focuses on the importance of considering cultural and personal variables in the populations served. This standard takes on additional implications in the context of pharmacotherapy, because individual differences can affect the interpersonal aspects of medication management, the effectiveness of the treatment, and its side-effect profile. Issues that can be important include the following (Lin, Smith, & Ortiz, 2001; Smith, Mendoza, & Lin, 1999; U.S. Department of Health and Human Services, 2001):

1. Differences in presentation:
 - a. Psychological conditions in certain ethnic groups can masquerade as physical disorders.
 - b. Culture-related syndromes such as *evil eye* among Mexicans and Puerto Ricans, *ataque de nervios* among Puerto Ricans, *fright* among Taiwanese and Chinese, *faiblesse* among Haitians, and genital retraction syndrome (*Koro*) among individuals from Southeast Asia can be difficult to characterize in terms of the standard Western nosology of mental disorders that serves as the basis for empirically validated treatment guidelines (e.g., Chowdhury, 1996).
2. Differences in participation in treatment:
 - a. Psychosocial factors such as differences in help-seeking behaviors and symptom expression, beliefs about the doctor-patient relationship, and beliefs about healing can influence the interpersonal context of pharmacotherapy.
 - b. Certain cultures encourage the use of alternative healing practices including herbal and other allopathic remedies that can moderate the effectiveness and safety of psychotropic medications.

- c. Age, intellectual development and disability can affect communications about and compliance with pharmacotherapy.
 - d. The patient's level of health literacy, which has been defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions" (U.S. Department of Health and Human Services, 2000, p. 11-20), must be considered in all aspects of treatment planning.
3. Differences in response to treatment:
 - a. Biological correlates of cultural status, age, and gender, such as genetic polymorphisms, dietary factors, and other lifestyle habits may affect drug protein binding, metabolism and clearance. These can in turn affect bioavailability and subsequent therapeutic and adverse effects.
 4. Differences in access to appropriate treatment:
 - a. Socioeconomic factors can affect treatment availability and adherence. These can include both the cost of medication and the ability to participate in treatment effectively.
 - b. Limited diversity in treatment trial samples can raise concerns about the generalizability of results across populations.

Implications. As the preceding list illustrates, the number and variety of person variables that can potentially moderate the process or outcome of pharmacotherapy is daunting, and is potentially beyond the capacity of any one person to master fully. Psychologists who prescribe or collaborate strive to educate themselves on those factors that are particularly relevant for populations of individuals they serve on a regular basis, and are sensitive to the possible role of such factors in the psychopharmacological treatment of other subgroups as well.

Education

Guideline 4. Psychologists are urged to identify a level of knowledge concerning pharmacotherapy for the treatment of psychological disorders that is appropriate to the populations they serve and the type of practice they wish to establish, and to engage in educational experiences as appropriate to achieve and maintain that level of knowledge.

Rationale. Where Guideline 1 focused on practicing within one's scope of competence, this guideline focuses on involvement in continuing education activities that are appropriate for providing optimal care to one's patients. Various studies suggest most doctoral programs in professional psychology offer training in psychopharmacological interventions, but the educational requirements are fairly limited in scope (Collins, 2000; Monti, Wallander, & Delancey, 1983; Smyer et al., 1993). For the psychologist with prescriptive authority, state legislation will ultimately establish the minimum criteria for basic and continuing education and the boundaries of acceptable practice. The psychologist who at times plays a collaborative or advisory role operates under more ambiguous expectations about the appropriate degree of continuing education. At this time only one state mandates continuing education in psychopharmacology as a condition for maintaining licensure.

Implications. Psychologists are encouraged to consider what level of formal education and training about psychotropic medications would be appropriate to the populations they serve. The range of options is greater for the psychologist without prescriptive authority, since there is often no mandated minimum training. In making judgments about how much training is important, psychologists who find themselves involved in advisory activities may consider various factors, including:

1. The proportion of their patients receiving psychotropic medication.

2. The severity of side effects associated with those medications.
3. The degree to which specialized psychiatric care is available to their patients. For example, in communities where psychiatric services are unavailable, the psychologist may experience a stronger motivation to seek a level of education that will allow him or her to collaborate effectively with primary care providers.

The three levels of participation in pharmacotherapy—prescribing, collaborating, and advising—parallel the three levels of education and training that have been suggested for training in pharmacotherapy for psychologists (Smyer et al., 1993). Level 1 represents basic education in pharmacotherapy, with the expectation that this level of education can be obtained through a single graduate-level course. The APA Board of Educational Affairs provides a model curriculum for such a course (Kilbey et al., 1995). Level 2 is specifically intended to represent the level of education and training appropriate for active collaboration with prescribers in decision-making about medication. A similar didactic curriculum has been generated to identify the additional didactic training beyond Level 1 considered appropriate for this role (Kilbey et al., 1997). Since programs have not developed specifically for purposes of Level 2 training, in practice many psychologists interested in collaborating with prescribers pursue the didactic training associated with Level 3. At present, a revised description of the didactic and experiential training for Level 3 is in development, and should represent APA policy by the time these guidelines are completed. These documents provide guidance to the psychologist seeking to identify the appropriate level of training for their intended or anticipated involvement in pharmacotherapy.

Psychologists with prescriptive authority are encouraged to evaluate their need for initial and continuing education beyond the minimum defined in statute or regulations. Such an evaluation

might involve consideration of patient populations, classes of medications, treatment of side effects, the evaluation of contraindications, and other factors.

Guideline 5. Psychologists strive to be sensitive to the potential for adverse effects associated with the psychotropic medications used by their patients.

Rationale. Adverse effects of medication are widespread and in some studies represent the most common reason cited for premature termination of pharmacotherapy (e.g., Ashton, Jamerson, Weinstein, & Wagoner, 2005; Brambilla, Cipriani, Hotopf, & Barbui, 2005; Kampman & Lehtinen, 1999). Iatrogenic medication effects can arise from a number of sources, including the patient's reaction to a medication protocol, a drug-drug interaction, a drug-diet interaction, a known or undiagnosed medical condition, or poor patient adherence with the medication schedule or dosing (Brown, Frost, Ko, & Woosley, 2006). Newly introduced medications may prove to be associated with unexpected adverse effects. Often, these adverse effects are not identified until well after the medication has received Food and Drug Administration approval (Lasser et al., 2002). The possibility even exists that effects may not emerge until many years later, particularly in developmentally immature patients.

Implications. The prescribing psychologist maintains access to current information about the side effect profiles of the medications he or she prescribes, and uses this information in treatment planning and monitoring. This expectation does not apply to the psychologist providing psychotherapy to an individual receiving medication from another prescribing professional. However, it is important to keep in mind that this psychologist typically sees the patient more frequently than the professional who is responsible for medication management, and can therefore play a useful role in the early detection of possible side effects. All psychologists are sensitive to the possibility that physical events subsequent to initiating treatment can represent

adverse events, and either intervene or refer the patient for intervention as appropriate within their scope of practice.

Guideline 6. Psychologists involved in prescribing or collaborating are encouraged to familiarize themselves with the technological resources that can enhance decision-making during the course of treatment.

Rationale. The practice of pharmacotherapy is undergoing rapid change as information is gathered about the positive and negative effects of various medications. Mastery of the relevant literature is difficult to develop and maintain, especially when one considers such issues as drug-drug and drug-diet interactions. A range of electronic resources has emerged in recent years that many prescribing professionals find indispensable in their daily practice.

Implications. Psychologists with prescriptive authority and direct collaborators are urged to familiarize themselves with Internet and other resources (e.g., www.guidelines.gov, www.cochrane.org) that offer critically evaluated synthesized information about the effective practice of pharmacotherapy. In terms of daily practice, psychologists with prescriptive authority and psychologists who directly collaborate in medication decision-making are well-served by products now available for computers and/or personal digital assistants which offer extensive and frequently updated information about pharmaceutical agents. This software offers a supplement to personal knowledge of the pharmacotherapy literature, not an alternative.

Assessment

Guideline 7. Psychologists with prescriptive authority familiarize themselves with key procedures for monitoring the physical and psychological sequelae of the medications used to treat psychological disorders, including laboratory examinations and overt signs of adverse or unintended effects.

Rationale. Methods of assessing medication effects and indications, both positive and negative, represent a body of knowledge that is distinct from the literature devoted to the medications themselves. The psychologist with prescriptive authority strives to remain current in both bodies of literature as a means of ensuring optimal patient care.

Implications. Among the topics relevant to this guideline are knowledge of laboratory tests, normative ranges, test interpretation, and how often such tests are warranted, particularly in the populations served. When the psychologist with prescriptive authority encounters anomalies that indicate a medical health issue, the psychologist endeavors to ensure rapid and appropriate consultation with the patient's primary medical caregiver or another appropriate resource.

No position is offered here concerning the appropriate level of involvement of the psychologist with prescriptive authority in the practice of physical assessment. This is a matter for the psychologist with prescriptive authority to consider in light of the nature of his or her practice, the population served, and local statutory and regulatory limitations. Psychologists should also be sensitive and responsive to concerns expressed about physical examinations, particularly in the case of pediatric patients or members of certain cultural groups.

The extent to which it will be appropriate for psychologists to integrate psychological tests into prescriptive practice is unclear at this time. To date, there is almost no research on whether the use of psychological tests can be used to identify person characteristics that can enhance the quality of medication decision-making, but it is a potentially fruitful avenue for future efforts.

Guideline 8. Psychologists with prescriptive authority regularly monitor the physiological status of the patients they treat with medication, particularly when there is a physical condition that might complicate the response to psychotropic medication or predispose a patient to experience an adverse reaction.

Rationale. When serving as a prescriber, a psychologist is participating in the medical treatment of the patient at a level previously unparalleled in the history of psychology. A thorough medical history represents an important starting point for optimal medical care and for avoiding adverse reactions.

Implications. Psychologists with prescriptive authority are encouraged to consider co-morbid medical conditions that can complicate the course of treatment with pharmaceutical agents, as well as possible drug-drug and drug-diet interactions. These relationships at times can be quite complicated. A thorough medical history that includes all other medications (over the counter, herbal, and dietary agents) that the patient is taking can contribute a great deal to understanding the patient's current physiological status (Beitman & Klerman, 1991; Sammons & Schmidt, 2001; Sperry, 1995). This is an instance where certain characteristics of the individual, such as age, can play a particularly important role (e.g., Mulsant & Pollock, 2004).

Guideline 9. Psychologists are encouraged to explore issues surrounding patient adherence and feelings about medication.

Rationale. Adherence rates in pharmacotherapy are quite poor. Olfson, Marcus, Tedeschi, and Wan (2006) found 42% of patients discontinue use of antidepressants within 30 days; 72% stopped within three months. Patients fail to adhere with treatment for many reasons, including ambivalence or fears about the medication; distressing side effects; misinformation about the latency of the therapeutic effect; shame or self-consciousness about taking psychoactive medications; the perception (which can be valid but is sometimes mistaken) that the treatment is ineffective or insufficiently effective; and concerns about medication changing their behavior or ways of thinking. As a result, many patients receive less than optimal benefit from their medication (Mitchell, 2006). The frequent contact between psychologist and patient that

characterizes traditional psychological treatment provides a setting for monitoring patient feelings about the medication and willingness to continue.

Implications. This guideline is not intended to imply any recommendation concerning the frequency of inquiry into patients' reactions to or use of their medications, particularly in the case of psychologists who serve only in an advisory role. At the least, it does suggest that when the psychologist perceives ambivalence or negative feelings about the medication, the psychologist can play an important role in monitoring this aspect of the patient's treatment more closely and deciding on an appropriate course of action. This can be particularly important when working with families, if parents/caregivers demonstrate conflicting views about the medication among themselves, or if a pediatric patient disagrees with the views of the parents/caregivers. Finally, the possibility of diversion should also be considered with stimulants and other drugs that have resale value.

Intervention and Consultation

Guideline 10. Psychologists are urged to develop a relationship that will allow the populations they serve to feel comfortable exploring issues surrounding medication use.

Rationale. This guideline is intended to complement the previous one. A sizeable proportion of patients who terminate medication treatment prematurely do so without informing the prescribing professional of this decision, and may even report continued use of the medication to the prescriber (e.g., Maddox, Levi, & Thompson, 1994). Research consistently demonstrates the communication style of the provider is a significant predictor of adherence to medication (Bultman & Svarstad, 2000; Di Matteo, 2003). Whether the psychologist serves as a prescriber, collaborator, or advisor, the effectiveness of monitoring attitudes concerning and adherence to

prescribed medications depends on the degree to which the patient perceives the relationship with the psychologist as one that allows for such discussion.

Implications. In any exchange concerning medication, the psychologist may want to consider the potential impact of moderating factors that can interfere with the free flow of information, such as intellectual, development, emotional, interpersonal, or cultural factors. When a psychologist serves in the role of prescriber, this can include reticence on the part of the patient to express uncertainties about their adherence to the medication regimen. Assessment and intervention using the stages-of-change model and motivational interviewing may be useful approaches to evaluating and addressing motivation for treatment (Beitman et al., 1994; Miller & Rollnick, 2002).

Psychologists in general can help create such an environment by simply monitoring the patient's use of and concerns about their medications. When it is relevant to the flow of the conversation, this may involve posing specific questions to evaluate the level of adherence, promote adherence when it is sub-optimal, and normalize the patient's concerns about medication. It is left to the psychologist to evaluate what is the appropriate level of inquiry for each patient. Supervisors of clinical trainees (practicum students, interns, etc.) are urged to consider supervisees as one of the populations for which this guideline is relevant, to create an environment in which trainees can raise concerns about their patients' medications, and to encourage trainees to address questions to their patients about their medications at appropriate points.

Guideline 11. To the extent deemed appropriate, psychologists involved in prescribing or collaboration adopt a biopsychosocial approach to case formulation that considers both psychosocial and biological factors.

Rationale. The biopsychosocial model for the understanding of human health (Engel, 1977) represents the dominant model in the healthcare disciplines. At a minimum, this model suggests that psychosocial factors (including interpersonal, intrapersonal, cultural, spiritual, and socio-economic variables) play an important role in the etiology of and response to medical conditions, as well as the recognition that psychoeducational and psychological services can be essential in coping with and recovering from illness. Within this broad perspective, there is much room for variation in the degree to which these different perspectives are considered important for understanding the nature of psychological disorders.

The prescribing or collaborating psychologist conducts a full evaluation of the patient's current condition in light of the psychological and social issues relevant to treatment. It would seem that a biopsychosocial approach to prescribing or collaborating in medication decision-making that is appropriate for psychologists would be based on the assumption that behavioral, social, psychological, and educational interventions should be treated as equal to, and perhaps superior to, biological interventions in importance in certain circumstances. What those circumstances are represents an essential question for future research on optimal treatment.

Mantell, Ortiz, and Planthara (2004) noted the lack of information on the best means for integrating traditional psychological and biological treatments, and outlined some of the challenges and issues involved in creating an integrated model of treatment. One of the important tasks for the first generation of psychologists with prescriptive authority will be the development of formal recommendations, perhaps even treatment guidelines, concerning the best integration of biological interventions into a broader psychological and social context of treatment.

Implications. Psychologists actively involved in decision-making about medication are encouraged to consider both the interpersonal/psychosocial and the biological aspects of

treatment. Increasing hopefulness, reducing demoralization, and providing support represent elements of good patient care, and maximize the potential for effective intervention (Stewart et al., 1995). The psychologist may conclude a sufficient biopsychosocial evaluation can require more time than is currently typical for medication management (Olfson, Marcus, & Pincus, 1999).

Psychologists with prescriptive authority will sometimes find themselves called upon to provide consultations to other healthcare providers solely for purposes of evaluating the patient for medication, for example, when on call or when asked to serve as a consultant to another professional who is providing psychosocial services. Even so, the psychologist with prescriptive authority is encouraged to evaluate the clinical presentation from a biopsychosocial perspective to the extent possible. Even in emergency circumstances, or when the patient has an on-going relationship with another mental health provider, the psychologist with prescriptive authority is encouraged to consider psychosocial and interpersonal as well as biological issues and interventions. This can be an important tool for avoiding over-reliance on medications even when psychologists are involved specifically because of their prescriptive authority.

Guideline 12. The psychologist with prescriptive authority uses an expanded informed consent process to incorporate additional issues specific to prescribing.

Rationale. The APA (2002b) Ethics Code requires psychologists to obtain informed consent before any professional interaction unless there are mitigating circumstances that render informed consent impossible, as when an activity is legally mandated even without consent, or when the individual is incapable of giving consent. The decision to prescribe medication for a patient optimally results from collaboration between that patient and the psychologist, rather than

from a unilateral decision by the prescriber. A collaborative decision depends upon appropriate education of the patient about alternative treatments and full informed consent.

Implications. Even when the recipient of the intervention is incapable of giving informed consent, the psychologist with prescriptive authority considers what sorts of information may be useful or anxiety-reducing for the individual. The use of medication increases the universe of topics which may meet these goals. The following is a sample of the sorts of topics a psychologist with prescriptive authority may choose to discuss with a patient when pharmacotherapy is being considered as a treatment option (Grisso & Appelbaum, 1998):

1. Describing the agent to be used.
2. Indicating the symptoms it is intended to address.
3. Providing the rationale for the treatment relative to other treatment options.
4. Describing how the proposed treatment was chosen over alternative options.
5. Describing the benefits and potential risks of the protocol, including both therapeutic and potential adverse effects of the medication.
6. Estimating the duration and cost of treatment, and the time to therapeutic effect. Simply indicating how long to remain on the medication has been found to reduce the rate of premature termination (Bull et al., 2002).
7. Providing information about relative or absolute contraindications for the treatment and possible drug interactions.
8. Reviewing the risks associated with sudden, unilateral discontinuation of the medication.
9. Outlining alternatives to the recommended treatment, including a review of other medications that can be considered as well as non-pharmacological treatment options.

10. Providing an explanation of any indicated laboratory examinations or requirements for ongoing therapeutic monitoring of drug levels.
11. Offering appropriate references for further patient education, in formats that are accessible to and understandable by the patient.
12. Describing the ongoing psychologist-patient partnership in deciding on medication changes (including titration) or criteria for termination of medication. This can involve orienting patients to the psychologist's new combined role of prescriber and psychotherapist.
13. Remaining open and responsive to the patient's questions and concerns including, at the patient's request and with appropriate consent, providing information and education to family members or significant others.
14. Underscoring how psychopharmacology can be a key component, but often not the exclusive component, of a successful treatment plan.
15. When psychotherapy and psychopharmacology are used together, explaining why the combination is recommended over either intervention alone and how sessions will be structured to combine the two, and estimating the expected time course for treatment as a whole.
16. Inviting questions and the expression of concerns. It is important to remember that concerns can be practical and financial as well as physical, so explicitly encouraging questions about the range of obstacles can be helpful.
17. Evaluating the patient's likelihood of adherence to the treatment selected.

In regard to the last component, it is important to remember that acceptance does not imply agreement. Patients may accept the prescription with little or no intention of complying, with mixed feelings about the treatment, or with the full intention of complying. The psychologist

with prescriptive authority is encouraged to look beyond patients' acceptance of the prescription to evaluate their likelihood of compliance with the treatment.

As with any good informed consent process, the psychologist with prescriptive authority seeks to address patients in terms that are congruent with their level of education and their ability to understand the language. The collaborative agreement that emerges from the informed consent process can benefit from individual tailoring with regard to any disability that might impair the patient's ability to give full informed consent. Informed consent is a dynamic process that can be revisited intermittently throughout the treatment. The process is best completed in an environment in which the patient feels safe to disagree with the psychologist, to pose questions, and to report difficulties complying with the protocol.

Guideline 13. When making decisions about the use of psychological treatments, pharmacotherapy, or their combination, the psychologist with prescriptive authority considers the best interests of the patient, current research, and when appropriate, the needs of the community.

Rationale. There is increasing evidence that, at least in some circumstances, combined psychotherapy and pharmacotherapy is superior to either treatment alone (Friedman et al., 2004; Thase, 2003; The Treatment of Adolescent Depression Study Team, 2004). The therapeutic relationship, characterized by empathic interaction with the patient and the enhancement of awareness, often provides the optimal framework for focal interventions including medication. However, the situational factors that predict which treatment option to select remain largely unknown. In the absence of clear guidelines, personal preferences for one approach or the other can become predominant in a practitioner's decision-making, rather than an individualized analysis of the best course of action. For example, given psychologists' traditional reliance on

psychotherapy as a primary treatment, it would not be surprising to find some psychologists with prescriptive authority elect never to prescribe except in the context of a psychotherapeutic relationship.

Implications. The psychologist with prescriptive authority is encouraged to remain current in terms of the literature on additive and multiplicative effects associated with the effectiveness of pharmacotherapy and psychosocial interventions. Until these processes are better understood, the psychologist with prescriptive authority is encouraged to consider what might be reasonable predictors of the relative efficacy of alternative interventions. Not all patients who are interested in pharmacological treatment desire or are appropriate for psychological interventions. In rural areas, in economically distressed areas, or in agencies with insufficient resources for the catchment population, psychologists may also decide that serving solely as a prescriber in some cases represents the best response to the community's public health needs.

On the other hand, there is evidence that patients and guardians often report more positive feelings about psychosocial than pharmacological intervention (MTA Cooperative Group, 1999; Pyne et al., 2005). As in any therapeutic decision, the patient is the ultimate decision maker regarding the choice of therapy, and their preferences, expectations, and decisions must be continually assessed throughout the course of treatment. It is also important to note that *a referral from another professional for pharmaceutical treatment does not create an obligation to prescribe*, or to restrict one's focus to the physical aspects of the disorder. The psychologist with prescriptive authority is encouraged to consider combined treatment, or a shift from one treatment modality to the other, as part of decision-making either as the primary clinician or as a consultant.

Guideline 14. Psychologists involved in prescribing or collaborating strive to be sensitive to the subtle influences of effective marketing on professional behavior and the potential for bias in information in their clinical decisions about the use of medications.

Rationale. A substantial literature indicates the pharmaceutical industry potentially influences decision-making about medications in at least four ways. First is through its role in research and journal publications. A recent comparison of seven meta-analyses published with pharmaceutical industry support versus parallel meta-analyses published under the auspices of the independent Cochrane Collaboration found every one of the former recommended the medication without reservations while none of the latter did, even though mean effect sizes reported were similar (Jørgensen, Hilden, & Gøtzsche, 2006). Panels created for the development of treatment guidelines rely heavily on researchers receiving funding from the pharmaceutical industry (Choudhry, Stelfox, & Detsky, 2002). However, even relatively independent analyses of the literature must rely on primary research which is heavily funded by pharmaceutical companies, and such studies tend to support the superiority of the funder's products (e.g., Heres et al., 2006; Lexchin, Bero, Djulbegovic, & Clark, 2003). This effect presumably reflects the funder's role in both the design of the research and the decision whether or not to publish the results (Davidoff et al., 2001).

Second, the pharmaceutical industry remains the primary source of support for continuing education in medication (Holmer, 2001; Society for Academic Continuing Medical Education, 2004). Third, direct-to-consumer advertising has a demonstrated tendency to increase the volume of prescriptions, even when the prescribing professional is ambivalent about the medication's appropriateness (Mintzes et al., 2003). Fourth, the industry markets directly to prescribers through advertisements, which studies find are often misleading about the effectiveness and

safety of medications (Villanueva, Peiró, Librero, & Pereiró, 2003; Wilkes, Doblin, & Shapiro, 1992), and through sales representatives (Avorn, Chen, & Hartley, 1982).

It is difficult to evaluate whether the net effect of this comprehensive and well-funded marketing system on healthcare practices is positive or negative. However, there can be no doubt that the system exists primarily to increase prescribing rates. The elements of that system have been spelled out in some detail here to emphasize the intensity of efforts to influence decision-making in pharmacotherapy.

Implications. Psychologists are encouraged to engage in activities likely to improve their awareness of pharmaceutical industry marketing on prescriptive practice, examples of which include:

1. Reviewing research on the effect of pharmaceutical industry advertising on prescriptive practice, and on the relationship between industry funding and the published literature.
2. Reading conflict of interest statements in publications of drug trials, as the presence of a financial relationship with the maker of a medication is consistently found to be a significant predictor of positive outcomes (e.g., Perlis et al., 2005).
3. Relying primarily on independent reviews of the literature, such as Cochrane reviews (www.cochrane.org).
4. Examining study methodology carefully to detect potential biases in patient or treatment selection or other threats to internal or external validity that might bias the outcome in favor of a pharmaceutical intervention (e.g., Smith, 2005).
5. Engaging in continuing education activities that challenge standard practice in pharmacotherapy.
6. Critically evaluating published literature for methodological weaknesses or medication risks.

Psychological research has contributed substantially to the understanding of interpersonal processes such as marketing. To cite a pertinent and particularly well-known example, while current professional standards in the prescribing professions focus on limiting the size of gifts, cognitive dissonance theory suggests that small gifts can sometimes have a more powerful effect on attitudes and behaviors (Festinger & Carlsmith, 1959). There is also research suggesting that more familiar products are generally assumed to be superior (Goldstein & Gigerenzer, 2002). This assumption is often effective in daily practice in that the better option is referenced more frequently, but marketing corrupts this process by directly increasing familiarity independent of relative effectiveness. Psychologists involved in prescribing or collaboration may benefit from considering the possible influence of well-known methods for attitude change on their decision-making.

Psychologists with prescriptive authority may also find it helpful to review their own prescribing practices: the number of prescriptions written, the frequency of prescriptions written for various medications, the length of time patients remain on medication, and so forth. This information can alert psychologists to subtle marketing influences that have unintentionally affected their prescribing patterns.

Guideline 15. Psychologists with prescriptive authority are encouraged to use interactions with the patient surrounding the act of prescribing to learn more about the patient's characteristic patterns of interpersonal behavior.

Rationale. The patient's characteristic patterns of interpreting interpersonal situations inevitably play a role in the desire for medication, the reaction to the recommendation of medication, and compliance with the treatment regimen (e.g., Brockman, 1990; O'Neill & Bornstein, 2001).

Implications. The psychologist with prescriptive authority is encouraged to consider reactions such as excessive faith in the effectiveness of the medication, emotional reactions to the medication, and overt or passive resistance to the medication as clues to the patient's cognitive assumptions or characteristic patterns in interpersonal situations, or at least in interpersonal situations that involve health care professionals. These responses, and the hypotheses they generate about the patient, can be useful in achieving a transition from a purely biological intervention to a more biopsychosocial approach to the patient's difficulties.

Relationships

Guideline 16. Psychologists with prescriptive authority are sensitive to maintaining appropriate relationships with other providers of psychological services.

Rationale. There are various circumstances in which one mental health professional may refer to another for specialized services, referral for assessment perhaps being the most common. The emergence of the psychologist with prescriptive authority will undoubtedly produce circumstances in which mental health professionals refer to a psychologist for purposes of medication consultation only. Within this division of labor there exists the potential for miscommunication, differences in interpretation of the patient's problems, and differences in beliefs about optimal interventions. Rivalry can also develop between therapists, with unintended iatrogenic effects. Feldman and Feldman (1997) noted that

Potential problems with two-therapist integration always exist, such as miscommunication, conflict, and competition between therapists ... [and as a result] the patient may receive contradictory messages about their diagnosis or treatment. Therapists must avoid competing for the role of primary treatment

provider because it interferes with the collaborative process, and by extension, optimal patient care. (p. 2)

Implications. Psychologists with prescriptive authority are encouraged to be alert to the potential for conflict when collaborating with non-prescribing therapists. This can include maintaining frequent contact, and/or working collaboratively to establish a comprehensive treatment plan that encompasses the activities of both providers.

Guideline 17. Psychologists are encouraged to maintain appropriate relationships with providers of biological interventions.

Rationale. Ethical standard 3.09 of the APA (2002b) Ethics Code highlights the importance of cooperation with other professionals in service to patients. Psychologists who prescribe, collaborate, or advise on pharmacotherapy will find themselves working with other healthcare professionals at times. Collaborating and advising psychologists by definition work in conjunction with prescribing professionals, most of whom are not psychologists at this point, though they increasingly may be. Prescribing, collaborating, and advising psychologist are often dealing with patients who demonstrate co-morbid medical conditions. Given the potential for drug-drug interactions and medical complications in such situations, collaboration with other healthcare providers actively involved in treating the patient can be particularly important.

Implications. When making referrals for biological interventions, psychologists consider the competencies of the provider. For example, psychologists may prefer to refer pediatric patients to a prescribing psychologist without considering whether that prescribing psychologist has pediatric competency. Thus, the psychologist is encouraged to consider the competencies of the other professional when making referrals for medication.

The psychologist with prescriptive authority is encouraged to make contact with other healthcare providers involved in patient care, with appropriate authorization, and to establish clear guidelines regarding responsibilities within their overlapping functions. Psychologists with prescriptive authority make an effort to update the patient's primary medical caregiver of the pharmaceutical treatment plan as appropriate. The psychologist with prescriptive authority is also encouraged to establish policies to prevent confusion or redundancy in roles played or the medications prescribed. When a transfer of care or consultation with another provider is indicated and requested by the patient, the psychologist with prescriptive authority is encouraged to seek appropriate communication between all parties, and to ensure optimal continuity of care.

Whenever a psychologist is involved in the practice of pharmacotherapy, the psychologist is encouraged to maintain on-going consultation with the patient's primary health care provider(s), assuming the patient agrees to such contact. The primary care provider may in turn be reminded to alert the psychologist to any changes in the patient's health status that could affect the patient's treatment by the psychologist, whether that treatment involves pharmacotherapy or psychosocial interventions.

Author Note

These guidelines were developed by the American Psychological Association (APA) Division 55 (American Society for the Advancement of Pharmacotherapy) Task Force on Practice Guidelines. The task force was chaired by Robert E. McGrath, Ph.D. (Fairleigh Dickinson University). Task force members included Stanley Berman, Elaine LeVine, Elaine Mantell, Beth Rom-Rymer, Morgan Sammons, and James Quillin. Additional input on the guidelines was provided by Robert Ax, representing Division 18 (Psychologists in Public Service). None of the individuals involved in the development of this document has any personal investment in pharmaceutical products of any kind, nor did the developers receive any financial support for its creation.

The task force anticipates these guidelines may deserve reconsideration in a relatively brief time frame, given anticipated changes in psychologists' role in pharmacotherapy, as well as changes in the perceptions and use of psychotropic medications. In particular, it is the belief of the members of the task force that future efforts should include consideration of whether some elements of the enclosed guidelines merit elevation to the level of practice standards. Accordingly, this document is scheduled to expire as APA policy in five years from publication, by _____. After this date, users are encouraged to contact the APA Practice Directorate to confirm whether this document remains in effect.

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Footnotes

¹This document is currently under review for revision.

DRAFT

Table 1

List of Guidelines

	Relevant Activities		
	Prescribing	Collaborating	Advising
General			
Guideline 1. Psychologists are encouraged to consider objectively the scope of their competence in pharmacotherapy and to seek consultation as appropriate before offering recommendations about psychotropic medications.	X	X	X
Guideline 2. Psychologists are urged to evaluate their own feelings and attitudes about the role of medication in the treatment of psychological disorders, as these feelings and attitudes can potentially affect communications with patients.	X	X	X
Guideline 3. Psychologists involved in prescribing or collaborating are sensitive to the developmental, educational, gender, health status, and cultural/ethnicity factors that can moderate the interpersonal and biological aspects of pharmacotherapy relevant to the populations they serve.	X	X	
Education			
Guideline 4. Psychologists are urged to identify a level of knowledge concerning pharmacotherapy for the treatment of psychological disorders that is appropriate to the populations they serve and the type of practice they wish to establish, and to engage in educational experiences as appropriate to achieve and maintain that level of knowledge.	X	X	X
Guideline 5. Psychologists strive to be sensitive to the potential for adverse effects associated with the psychotropic medications used by their patients.	X	X	X
Guideline 6. Psychologists involved in prescribing or collaborating are encouraged to familiarize themselves with the technological resources that can enhance decision-making during the course of treatment.	X	X	
Assessment			
Guideline 7. Psychologists with prescriptive authority familiarize themselves with key procedures for monitoring the physical and psychological sequelae of the medications used to treat psychological disorders, including laboratory examinations and overt signs of adverse or unintended effects.	X		
Guideline 8. Psychologists with prescriptive authority regularly monitor the physiological status of the patients they treat with medication, particularly when there is a physical condition that might complicate the response to psychotropic medication or predispose a patient to experience an adverse reaction.	X		
Guideline 9. Psychologists are encouraged to explore issues surrounding patient adherence and feelings about medication.	X	X	X
Intervention and Consultation			
Guideline 10. Psychologists are urged to develop a relationship that will allow the populations they serve to feel comfortable exploring issues surrounding medication use.	X	X	X
Guideline 11. To the extent deemed appropriate, psychologists involved in prescribing or collaboration adopt a biopsychosocial approach to case formulation that considers both psychosocial and biological factors.	X	X	

	Relevant Activities		
	Prescribing	Collaborating	Advising
Guideline 12. The psychologist with prescriptive authority uses an expanded informed consent process to incorporate additional issues specific to prescribing.	X		
Guideline 13. When making decisions about the use of psychological treatments, pharmacotherapy, or their combination, the psychologist with prescriptive authority considers the best interests of the patient, current research, and when appropriate, the needs of the community.	X		
Guideline 14. Psychologists involved in prescribing or collaborating strive to be sensitive to the subtle influences of effective marketing on professional behavior and the potential for bias in information in their clinical decisions about the use of medications.	X	X	
Guideline 15. Psychologists with prescriptive authority are encouraged to use interactions with the patient surrounding the act of prescribing to learn more about the patient's characteristic patterns of interpersonal behavior.	X		
Relationships			
Guideline 16. Psychologists with prescriptive authority are sensitive to maintaining appropriate relationships with other providers of psychological services.	X		
Guideline 17. Psychologists are urged to maintain appropriate relationships with providers of biological interventions.	X	X	X