SPECIAL COMMUNICATION

The DSM-IV-PC: A Manual for Diagnosing Mental Disorders in the Primary Care Setting

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September 1995 marked the publication of the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Primary Care Version* (DSM-IV-PC).[1] This manual, the result of a 5-year collaboration among leaders in mental health and primary care fields, is published by the American Psychiatric Association as an official task force report. The following organizations formally participated in the development process by recommending participants and providing resources: American Academy of Family Physicians, American Board of Family Practice, Society of Teachers of Family Medicine, Association of Departments of Family Practice, American College of Physicians, Society of General Internal Medicine, American College of Obstetrics and Gynecology, American Academy of Pediatrics, and American Psychiatric Association. The American Medical Association, acknowledging that this cooperative effort was unprecedented, also participated. We will describe the reasons for such a manual, the process whereby it was developed, its form and content, its limitations, and its intended uses.

Diagnoses are fundamental to clinical conversation—they make it possible to measure the content of practice and to generalize across practices. They are an essential prerequisite to the measurement of treatment effectiveness and are indispensable to the clinician who wishes to know whether a treatment shown effective in a clinical trial is likely to help an individual patient.

Mental diagnoses in the primary care setting, however, have always been problematic. Family medicine from the outset made an explicit commitment to the mental health of patients by endorsing the biopsychosocial model, by establishing behavioral science curricula in its residency training programs, and by defining family physicians as available to deal with whatever concerns their patients have—which often turn out to be mental health concerns. We know that the majority of patients who seek help for a mental disorder do so from a primary care clinician.[2,3]

The knowledge upon which we base our mental health care was originally appropriated, more or less en bloc, from the fields of psychiatry, clinical psychology, and family therapy. This knowledge includes their diagnostic classification conventions. Practitioners in these mental health fields, however, neither do quite what family physicians do, see patients quite like the ones family physicians see, nor work under quite the same conditions as family physicians do. Consequently, the diagnostic systems, clinical descriptions, and treatment recommendations from these fields, while enormously helpful, do not fit the clinical reality of family practice. One solution is to modify this material to fit the family physician's unique situation.

What classification systems and diagnostic conventions are available for modification? At this point it is useful to draw a distinction between a classification system and a diagnostic system. The *Ninth Revision, International Classification of Diseases, Clinical Modification*, (ICD-9-CM)[4] is a classification system. Because ICD-9-CM codes are required by all payers for reimbursement of services, it is safe to say that all family physicians use this system. Furthermore, because family physicians are bound by international agreement to classify according to ICD conventions, they are not free to modify its coding structure. The ICD, however, is simply a listing of recognized conditions—it is not a diagnostic system. It contains neither diagnostic criteria nor a systematic frame-

Submitted, revised, 1 December 1995.

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work for clinical decision rules to guide clinicians and researchers in making diagnostic judgments. It is altogether inadequate for the building of a clinical knowledge base.

On the other hand, the *Diagnostic and Statistical Manual of Mental Disorders* (DSM), which was developed and published by the American Psychiatric Association, is a diagnostic system, containing explicit diagnostic criteria for mental disorders. The DSM system, currently in its fourth edition (DSM-IV),[5] is the de facto standard for diagnosis in mental health settings; it is also used by many mental health professionals working in primary care settings. All clinical research studies in the mental health literature use or refer to the DSM-IV to characterize subjects. This diagnostic system has revolutionized the field of psychiatry and caused an explosion in our knowledge about mental illness, largely by virtue of its explicit, measurable diagnostic criteria. The DSM-IV is linked to the ICD-9-CM system, as required for billing, by using official ICD-9-CM classification codes for all the conditions listed in the DSM-IV; and all the DSM-IV terms appear in the ICD-9-CM index. Nevertheless, despite the national and international penetration of the DSM system into mental health care settings and the extraordinary empirical research it has facilitated (and on which it is based), its use has been extremely limited in primary care settings, where most mental health care is rendered.

This situation provoked the National Institute of Mental Health to sponsor two meetings, one in July 1989 and one in January 1990, to understand the reasons for this lack of use and to explore solutions. These two meetings brought together those responsible for the development of the DSM-IV and leading experts from the primary care disciplines. Participants confirmed that the DSM-III[6] and DSM-III-R (DSM-III-Revised)[7] were rarely used in training or practice by primary care physicians and generated a list of reasons why not.

Two reasons were most apparent. The first was the sheer size and scope of DSM-III. The DSM system includes detailed and complex diagnostic information about a large number of disorders, many of which are rarely seen in the primary care setting. Primary care clinicians need detailed information about relatively few conditions and brief, succinct information about the remainder. The second reason was that the DSM presumes a knowledge of the general organization of mental disorders as a whole and is structured accordingly. Disorders are grouped logically but not necessarily by related symptom patterns. Primary care clinicians, however, neither have nor need this type of organizational superstructure, which makes the DSM difficult to navigate.

Related concerns were that the DSM system might not contain information valuable to the primary care physician, eg, detail regarding the typical clinical symptoms of mental disorders common in primary care, a method for differentiating among disorders with similar symptoms, and explanations of terms or criteria that might not be familiar to the primary care physician. A system based on symptoms with an emphasis on recognition and differential diagnoses was considered to be more useful. Other limitations were described, such as the emphasis on individual psychopathology at the expense of relational or interactional factors, and the deep interaction between medical problems and mental problems in primary care. Solutions and alternatives were explored. The limitations notwithstanding, participants agreed that a DSM created for primary care physicians could be extremely valuable.

A Diagnostic Manual of Mental Disorders for Primary Care

For these reasons, work on the primary care version of the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-PC) began in 1990. Primary care organizations participated to ensure that the DSM-IV-PC would be written to meet their needs. This process included representatives from the fields of family practice, internal medicine, obstetrics and gynecology, pediatrics, and psychiatry, as well as the American Medical Association.

At the outset, the group established the following list of principles to guide the development of the manual.

Clinical utility. The manual must be organized to be compatible with how a physician manages the primary care visit, for example, by presenting (clinical) symptoms. The manual must be user-friendly—it must be succinct and must be designed for ease of use.

Educational utility. The manual must provide a rubric for differential diagnoses and must provide useful "clinical pointers."

Research utility. The manual must provide clear and specific diagnostic definitions and an appropriate cross-reference to research criteria sets, particularly those common in the primary care setting (eg, minor depression).

Compatibility with the DSM-IV (and thus, also the ICD-9-CM). Compatibility is essential to ensure that the system produces billable diagnoses and correct medical record keeping, and to facilitate communication within primary care specialties and with all mental health clinicians, educators, and researchers.

The Process of Development

Working groups were formed from the main committee to focus on major diagnostic classes: a mood-anxiety working group, a somatoform working group (somatoform disorders and disorders of sleep, sex, eating, and pain), a psychosocial-environmental working group (focusing on psychosocial problems that are common in primary care even though not formally mental disorders), a substance use disorders working group, and a childhood disorders working group. Three of these working groups were chaired or cochaired by family physicians. Disorders that are less frequently diagnosed in the primary care setting, and thus would be described in less detail (eg, disorders of impulse control, dissociative disorders, personality disorders) were reviewed by all working groups. In addition to the succinct DSM-IV-PC description of disorders usually first diagnosed in infancy, childhood, or adolescence, a more detailed pediatric manual, with an emphasis on developmental variation, will be developed as the Classification of Child and Adolescent Mental Conditions in Primary Care (DSM-PC Child and Adolescent Version). This effort is being coordinated by the American Academy of Pediatrics in conjunction with the American Psychiatric Association and other child health care organizations.

Each working group reviewed the relevant literature and sorted the disorders within their purview into three groups: those that are rarely diagnosed in primary care (eg, paraphilias) and thus could be collapsed or summarized; those that are at an appropriate level of detail for primary care use already (eg, sleep disorders); and those for which an expanded description would be helpful (eg, mood disorders, psychosocial problems). This determination was based upon the overall occurrence of the disorder, pervasiveness of the disorder in primary care settings, salience of the condition (ie, importance of its recognition by primary care clinicians), evidence of frequently missed or misdiagnosed disorders in primary care, and educational importance.

The DSM-IV diagnostic definitions were taken as the usual point of departure and then reworded for clarity in the primary care setting. In some cases rewording involved collapsing or simplifying subtypes, providing explicit examples of criteria, or explicating technical terms. In other cases information beyond the criteria set, eg, differential diagnosis pointers, were added. The working groups then arranged the conditions into various symptom clusters, and those symptom clusters common in primary care formed the central organizing structure for the manual—the diagnostic algorithms.

Using the Manual

This process of selecting, rephrasing, and rewording resulted in a manual organized into several sections (Table 1). After three chapters of introductory material, Chapter 4, "Algorithms for Common Primary Care Presentations," describes those disorders and conditions most frequently encountered in primary care. This chapter makes up the major portion of the manual. The disorders are presented in nine algorithms. Chapter 5 includes psychosocial problems that are a focus of clinical attention but are not considered a mental disorder (eg, relational [family] problems or psychological factors affecting general medical conditions). Chapter 6 describes disorders that are rarely first diagnosed in primary care (eg, dissociative disorders); these disorders are not presented algorithmically, but are clustered by common symptomatology. Chapter 7 contains clusters of disorders usually first diagnosed in infancy, childhood, or adolescence. This chapter is followed by appendices, as described below.

A list of presenting symptoms guides the clinician to one or more of the nine major algorithms (eg, loss of energy leads the clinician to the depressed mood algorithm; difficulty concentrating leads the physician to the impaired memory algorithm). Using initial symptoms as the organizational basis of the manual is consistent with other diagnostic systems designed for primary care clinicians.[8]

Table 1. Table of Contents: Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition: Primary Care Version.

Consistent with the general structure of clinical algorithms, a series of steps, or decision nodes, guides the clinician. These decision nodes take the form of "consider" or "rule out" steps. The structure of each algorithm varies according to what is most relevant for that group of disorders. The order of the algorithm can be based on frequency of occurrence (eg, disorders encountered more frequently are listed first), salience (eg, those disorders considered more important to clinical care or most important to recognize are listed first), or severity (eg, the most impairing disorders are listed first). Although the organizational principles differ somewhat by algorithm, consistency across algorithms was maintained in part by having the first step of each algorithm be essentially identical: to consider first whether the initial symptoms could be better accounted for by a general medical condition, substance use, or other mental disorders not included in the grouping.

Within each step, the ICD-9-CM code and DSM-IV definition of the condition are highlighted and distinguished (by being boxed and shaded) from information that is available for the clinician who wants additional detail. The additional clinical information is indented (to indicate its secondary importance) and can include the following: specifier or subtype information, differential diagnostic pointers, and additional clinical information (eg, definitions of terms used in the criteria sets, specific examples of the criteria, onset, and course information). Disorders are often accompanied by an additional paragraph of text providing coding pointers, if relevant.

A few paragraphs of introductory text also accompany each algorithm. The text is divided into

Table 2. Depressed mood algorithm.

Presenting symptoms might include
- decreased energy
- insomnia
- weight loss
- unexplained general medical complaint (e.g., chronic pain, gastrointestinal distress, dizziness)

STEP 1 Consider the role of *a general medical condition or substance use* and whether the depressed mood is better accounted for by *another mental disorder.*

A.	**293.83**	**Mood Disorder Due to a General Medical Condition**
B.	**291.8**	**Alcohol-Induced Mood Disorder**
	292.89	**Other Substance-Induced (Including Medication) Mood Disorder**
C.		**Other Mental Disorders**

STEP 2 If depressed mood or loss of interest or pleasure *persists over a 2-week period,* consider

296.20* Major Depressive Disorder, Single Episode
296.30* Major Depressive Disorder, Recurrent

NOTE: If individual has ever had a Major Depressive Episode (but current symptoms do not meet full criteria), consider 296.25 Major Depressive Disorder, Single Episode, In Partial Remission or 296.35 Major Depressive Disorder, Recurrent, In Partial Remissions

NOTE: If criteria for a Major Depressive Episode are met, and there is a history of elevated, expansive, or euphoric mood, consider 296.7 Bipolar I Disorder (see p. 149) or 296.89 Bipolar II Disorder (see p. 150).

STEP 3 If depressed mood has been present for *most of the past 2 years* (in adults; or 1 year in children), consider

300.4 Dysthymic Disorder

STEP 4 If depressed mood is associated with *the death of a loved one and persists for less than 2 months,* consider

V62.82 Bereavement

STEP 5 If depressed mood occurs *in response to an identifiable psychosocial stressor* and does not meet criteria for any of the preceding disorders, consider

309.0 Adjustment Disorder With Depressed Mood or
309.28 Adjustment Disorder With Mixed Anxiety and Depressed Mood

STEP 6 If the depressed mood is clinically significant but the criteria are not met for any of the previously described disorders, consider

311 Depressive Disorder Not Otherwise Specified

STEP 7 If the clinician has determined that a disorder is not present but wishes to note the presence of *symptoms,* consider

780.9 sadness
780.7 decreased energy
780.52 insomnia

From the DSM-IV-PC.[1]

four sections: epidemiology (eg, prevalence of the disorders among the general population or the primary care population, sex ratio), primary care manifestation (eg, common symptom patterns of patients who might seek care from the primary care physician), differential diagnosis and common associated conditions, and organization of the algorithm (ie, explanation of the principles by which the algorithm is organized, such as by prevalence).

An Example: Depressed Mood Algorithm

The depressed mood algorithm (Table 2) illustrates the approach of the manual. The clinician is directed to this algorithm by looking up the patient's symptoms in the Symptom Index for Common Presentations. The following symptoms point to the depressed mood algorithm: sadness or depressed mood, decreased energy, insomnia, and unexplained general medical complaints. Somatic complaints were included because of their frequency among depressed primary care patients.[9,10] (Note that somatic complaints also refer the clinician to the unexplained general medical condition algorithm; if the initial symptom is insomnia, the clinician is also referred to the sleep disorders algorithm.)

The steps of the algorithm guide the clinician through the disorders included in the grouping. For consistency and simplicity, the first step in this and every algorithm is to consider whether the patient's symptoms might be better accounted for by a general medical condition, substance use, or other mental disorders not included in the algorithm. This step reminds clinicians that symptoms

can be caused by a general medical condition (eg, hypothyroidism causing depressive symptoms), substance use (eg, alcohol dependence causing depressive symptoms), or another mental disorder not listed within the algorithm (eg, a primary sleep disorder causing insomnia or depressive symptoms associated with schizophrenia). Of course, a given symptom can be related to multiple causes and several disorders; the algorithms are structured to accommodate this possibility. The remaining steps guide the clinician in differential diagnosis through the depressive disorders.

Because it is so important to recognize and is so often undetected, major depressive disorder is considered in the second step. The full DSM-IV criteria set for major depressive disorder is included because of the educational and therapeutic importance for primary care. Two notes at this step remind the clinician that subthreshold symptoms might be related to major depression in partial remission or to bipolar disorder (if there is a history of a manic or hypomanic episode). Step 3 directs the clinician to consider dysthymia if depressive symptoms have persisted for a 2-year period. A summary of the more complex DSM-IV criteria set for dysthymia is provided in the definition box. In step 4 the clinician is reminded to consider bereavement as a possible cause for the depressive symptoms and is provided with differential pointers to help distinguish normal bereavement from the potentially more serious major depressive disorder. Adjustment disorder is the next step, because it is not diagnosed if the symptoms are accounted for by one of the preceding disorders in the algorithm. The residual "not otherwise specified" (NOS) category is next to last for clinicians who feel that a disorder exists but the symptoms do not meet the specific criteria for the preceding disorders in the algorithm. Additional text (not shown) provides brief definitions of NOS categories (ie, minor depressive disorder, brief recurrent depressive disorder, mixed anxiety-depressive disorder, premenstrual dysphoric disorder, and suspected or masked depression) that are described in the DSM-IV Appendix B (Criteria Sets and Axes Provided for Further Study), with the reader being referred to this appendix for further information. The algorithm's final step lists symptom codes that can be used if the clinician has determined that the patient does not have a disorder but wishes to note the presence of symptoms.

The depressed mood algorithm is the first of nine diagnostic algorithms; the others, listed in Table 1, closely follow the form of the depressed mood algorithm outlined here. For example, the anxiety algorithm opens with a list of possible clinical symptoms, which include fear, worry, repetitive thoughts or actions, and unexplained medical complaints. Step 1, as always, is to consider the role of general medical conditions, substance use, and whether the anxiety is better accounted for by another mental disorder. If the initial complaint is panic attacks, step 2 directs the clinician to the diagnostic criteria for panic disorder, with or without agoraphobia, and other anxiety disorders characterized by panic. These conditions are near the top of the algorithm because they are common in primary care, cause much suffering and expense, are frequently overlooked, and are treatable. Steps 3 through 8 deal with symptoms of anxiety, fear, or worry associated with a variety of specific situations or behaviors, and contain diagnostic criteria for various phobias, separation anxiety disorder, obsessive-compulsive disorder, post-traumatic stress disorder, acute stress disorder, adjustment disorder with anxiety, and generalized anxiety disorder. As with all the algorithms, each step contains coding tips and clinical information specific to the symptom or disorder at hand. Finally, step 9 contains criteria for anxiety NOS, and step 10 is for the clinician who wishes to note the presence of anxiety even though there is no disorder.

Other Features of the Manual

In addition to the four major sections previously described, the manual contains three introductory chapters: "Using the DSM-IV-PC," "DSM-IV-PC Classification Coding Guide," and "Quick Reference to the Diagnostic Algorithms." These chapters explain the organization and use of the manual, offer a brief distillation of the manual using pictorial summaries of the nine algorithms, and present a quick coding guide. (The algorithm summaries can be reduced onto a fold-over laminated card that fits into the clinician's pocket.) In addition, the manual contains three appendices. The first includes aspects of the DSM-IV multiaxial system: the psychosocial-environmental check list (axis IV) to remind clinicians to consider also the potential effect of the individual's environment on his or her care; and the global assess-

ment of functioning scale (axis V), which provides a measure of overall social and occupational functioning. The second appendix acknowledges those who participated in the development process, and the third appendix is a symptom index for common clinical complaints.

Conceptual Issues

Two conceptual issues central to the development of the manual were compatibility and inclusiveness. Above all, this manual was written to be as relevant to primary care practice as possible; however, compatibility with the DSM-IV (and ICD-9-CM) was also necessary for the reasons stated above. Compatibility does not mean that the systems needed to be identical. For example, a complex set of DSM-IV criteria was often summarized and simplified in the DSM-IV-PC, but was still consistent in terms of the categorization of cases. Further, in the DSM-IV-PC it was at times appropriate to add a sentence or two explaining a disorder label and how the disorder typically is manifest in patients. It could turn out that, upon further research, categories would need to be modified more drastically than envisioned in this initial effort.

Since a common complaint about the DSM-III-R was that it was too detailed and complex for primary care use, an important priority of this project was to produce a succinct manual. This priority was counterbalanced against the need to provide enough information to assist the clinician in recognizing a disorder and to teach learners how to make the diagnosis. These competing requirements were resolved by providing a different level of detail for different conditions, that is, disorders more commonly seen in primary care are more extensively discussed. For example, the inclusion of subtypes differs among disorders in the DSM-IV-PC: (1) they were eliminated if they provided limited utility in primary care; (2) they were simplified and mentioned briefly in the additional clinical information section, purely for informational purposes; or (3) they were retained with definitions and criteria if they had particular relevance to primary care (eg, specifiers related to the postpartum period).

Another concern expressed by primary care clinicians was the extent to which individuals manifest psychiatric symptoms that fall below the threshold for a specific DSM-IV disorder. Because these manifestations might involve impairment in functioning and might represent an increased risk for the development of a specified disorder,[11,12] it is important that such symptoms be discussed in the DSM-IV-PC. For these situations an NOS category was used, which includes brief descriptions of common subthreshold syndromes (eg, minor depressive disorder). For those interested in research criteria, a cross-reference citation to the appendix of the DSM-IV is provided.

The process of revising the DSM-III-R to the DSM-IV required an extensive review of the empirical literature, and changes from the DSM-III-R were made only when they were supported by substantial empirical evidence. To the extent possible, the DSM-IV-PC was likewise built on empirical evidence; however, because there is much less research on diagnosis and assessment of mental and addictive disorders in primary care, the DSM-IV-PC relied considerably on extrapolation of specialty-setting data and clinical consensus.

Implementation

Before publication, drafts of the DSM-IV-PC were sent to approximately 100 primary care clinicians for review and comment. Each clinician was asked to use the DSM-IV-PC to evaluate the conditions of 5 patients who were suspected of having a mental disorder or substance use problem. Recommendations derived from review of this feedback were used to revise the DSM-IV-PC. This pilot test was helpful in assuring the acceptability and user-friendliness of the manual for its target audience.

Development of the DSM-IV-PC, however, is only a first step in the promotion of educational, clinical, and research collaboration among mental health professionals and primary care physicians. Up to this point we have emphasized the need for and value of this manual to primary care physicians. But the DSM-IV-PC could prove equally valuable to psychiatrists, especially consultation-liaison psychiatrists, as well as psychologists, family therapists, and other behavioral scientists and clinicians seeking improved communication, collaboration, and educational linkage with primary care physicians. The participation of the major primary care associations in this effort represents an unprecedented collaborative effort and has provided the foundation for a more successful integration of the mental and the medical domains.

The resulting product, the DSM-IV-PC, is equally unprecedented—nowhere else in primary care have we developed a diagnostic system tailored to our specific clinical reality.

Limitations and Further Tasks

There is no question that the DSM-IV-PC as presently formulated will need revision; in fact, it was developed with that assumption in mind. There are several areas where radical work needs to be done, such as when dealing with the concept of comorbidity and multiaxial assessment. In the primary care setting the interplay of physical and mental symptoms and disorders is extensive and inextricable, and we still have not developed a classification that captures this complexity in a manner practical for primary care. Other elements that need work in the future can easily be found; for example, even though this manual is one eighth the size of the DSM-IV, it is probably still too large and complex, and efforts to simplify, streamline, and computerize it are appropriate and would be welcomed. This manual would appear to be very well suited to the task of residency training, but such training must be undertaken and evaluated.

By committing categories and criteria to paper, this effort defines a clear research agenda. Now there is a standard against which to measure alternative diagnostic possibilities. For example, we have known for some time that primary care clinicians will not diagnose depression in certain patients whose symptoms might meet the DSM criteria for this condition, whereas other patients who do not meet DSM criteria are considered depressed[13]; with the DSM-IV-PC criteria in hand, we can now carefully evaluate the elements of the criteria set that lead to these discrepancies and begin to understand and resolve them. Another example might be the opportunity to explore more parsimonious and clinically helpful criteria sets for patients who qualify for several diagnoses but are difficult to profile with the DSM system as it currently exists, such as patients who have been abused and exhibit symptoms of depression, anxiety, and somatization.[14] In other words, primary care investigators now have an opportunity to engage in an ongoing developmental, empirically based process, adjusting the classification system to fit actual primary care. This process should lead to more accurate characterization of our patients and their problems, and ultimately to better health care.

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