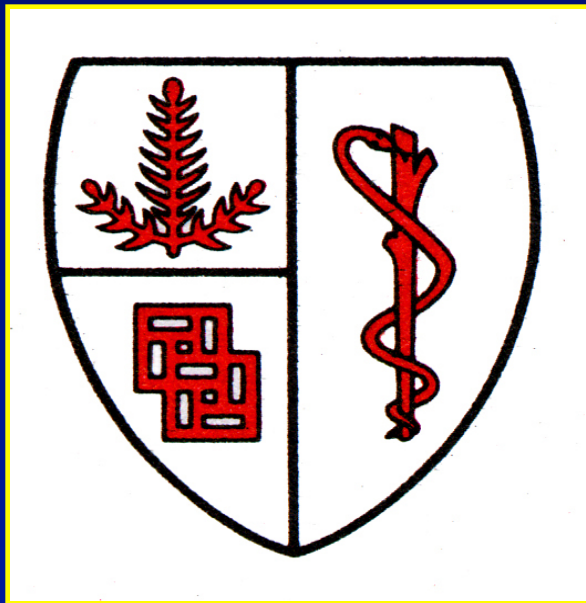


# DSM 5 MAJOR CHANGES FROM DSM IV: NEUROCOGNITIVE DISORDERS

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# Disclosures

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- **No financial relationship with the pharmaceutical industry or any industry**
- **Member of DSM 5 Sleep Wake Workgroup**
- **This presentation refers to work in progress – and not final DSM-5 criteria**

# What is Diagnosis?

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- **Origin (Greek): Thorough Knowledge**
- **Determining the nature and the cause/s of an illness by studying symptoms**
- **Diagnosis is generally the first step toward optimal treatment**

# History of DSM

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- 1844 – Formation of Association of Mental Institution Superintendents; one specified goal – to collect statistical information on insanity**
- 1917 – Adoption of Statistical Manual for use of mental hospitals**
- 1934 – 8<sup>th</sup> edition of the Statistical Manual included new Standard Classified Manual of Diseases**
- 1952 - DSM**
- 1968 - DSM-II**
- 1980 - DSM-III (1987 - DSM-III-R)**
- 1994 - DSM-IV (2000 – DSM-IV-TR)**
- 2013 - DSM-5**

# Primary Purpose of DSM

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- **Primary purpose:**
  - To enhance clinical utility
  - To enhance diagnostic reliability
  - To enhance diagnostic validity
  - To provide criteria for diagnostic categories in order to enable clinicians and researchers to:
    - Reliably diagnose
    - Communicate about
    - Research
    - Treat people with mental disorders

# Critical Developments in DSM 5

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- **Radical Simplification of Nosology**
- **Moving Away from Causal Attribution**
- **Emphasis on Dimensional Measures of Severity**
- **Incorporate Major Scientific and Clinical Advances since DSM IV**
- **Emphasis on Developmental and Lifespan issues**

# **Critical Developments in DSM 5**

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**Functional Consequences of (disorder) across the Lifespan**

**Variations in Dimensional Measures across the Lifespan By Gender By Race/Ethnicity**

**Differential Diagnosis By Gender By Race/Ethnicity**

**Associated Comorbidity**

**General Medical Conditions**

**Psychiatric Conditions**

# Procedures for Writing DSM-5

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- **Chair and Vice Chair**
  - David Kupfer, MD, University of Pittsburgh
  - Darrel Reiger, APA
  
- **DSM-5 Task Force, Staff support**
  - Charles Reynolds, MD
  - Steven Hyman, MD
  - Daniel Pine, MD
  - Jan Fawcett, MD
  - Susan Swedo, MD
  - Kimberly Yonkers, MD
  - Many more



# Procedures for Writing DSM-5

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- **Formation of 13 Work Groups (Disorder Categories) Based Largely on the DSM-IV**

## Work Groups

[ADHD and Disruptive Behavior Disorders](#)

[Anxiety, Obsessive-Compulsive Spectrum, Posttraumatic, and Dissociative Disorders](#)

[Childhood and Adolescent Disorders](#)

[Eating Disorders](#)

[Mood Disorders](#)

[Neurocognitive Disorders](#)

[Neurodevelopmental Disorders](#)

[Personality and Personality Disorders](#)

[Psychotic Disorders](#)

[Sexual and Gender Identity Disorders](#)

[Sleep-Wake Disorders](#)

[Somatic Symptoms Disorders](#)

[Substance-Related Disorders](#)

# Procedures for Writing DSM-5

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- **Formation of Multiple Work Groups**
- **Advisors to the Work Groups**

# Procedures for Writing DSM-5

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- **Conflicts-of-Interest Committee**
- **DSM-5 Process Oversight Committee**
- **Scientific Review Committee**
  - **Robert Friedman, MD, UColorado, Editor American Journal of Psychiatry**
  - **Kenneth Kendler, MD, Virginia Commonwealth**
- **Clinical & Public Health review Committee**
- **Consultants for Field Trials**
- **Forensic review**

# Critical Developments in DSM 5

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- **FOR SECTIONS THAT ARE INCONCLUSIVE OR LACK DATA**

(e.g. if there are no data that support gender differences in a certain disorder, etc), suggestion is to retain the subheading for the relevant section and state briefly one of the following scenarios:

- The HAS NOT been addressed in systematic research (i.e., the data do not exist) so no conclusion or assertion can be provided.
- The issue HAS been addressed in research and there are no positive findings showing an effect (e.g., no gender effect)
- The issue HAS been addressed in research but the magnitude of evidence is not sufficient to reach a firm conclusion.

# **Neurocognitive Disorders Work Group**

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**Dilip Jeste, MD (Chair Emeritus)**

**Dan Blazer, MD (Chair)**

**Ronald Petersen, PhD, MD (Co-Chair)**

**Deborah Blacker, MD**

**Mary Ganguli, MD**

**Igor Grant, MD**

**Jane Paulsen, PhD**

**Perminder Sachdev, MD**

# DSM-5

## Neurocognitive Disorders (NCD)

- Delirium
- Major NCD ( = Dementia)
- Mild NCD
- (NCD Not Otherwise Specified)

# DSM 5 Criteria

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- Neurocognitive Disorders Work Group proposes that a new category of Neurocognitive Disorders replace the DSM IV Category of —Delirium, Dementia, Amnesic, and Other Geriatric Cognitive Disorders".
- The defining characteristics of these disorders are that their core or primary deficits are in cognition and that these deficits represent a decline from a previously attained level of cognitive functioning; the latter feature distinguishes them from the neurodevelopmental disorders in which a neurocognitive deficit is present at birth or interferes with development.
- However, it is possible to develop a neurocognitive disorder superimposed on a neurodevelopmental disorder, for example Alzheimer's disease in a patient with developmental delay associated with Down Syndrome.

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# DSM 5 Criteria

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- **Disorders in this section are attributable to changes in brain structure, function, or chemistry. The etiologies of these syndromes, when known, are to be coded as subtypes.**
- **Typically, the etiology is more likely to be identifiable in Delirium and Major Neurocognitive Disorder than in Minor Neurocognitive Disorder, although this will vary across etiologic subtypes.**

# Subclassification by Etiology

**Alzheimer's disease**

**Lewy body Disease**

**Frontotemporal dementia**

**Vascular neurocognitive impairment**

**Traumatic brain injury**

**HIV**

**Huntington's disease**

**Other causes**

# DSM 5 Criteria

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- **Delirium is distinguished from Minor or Major Neurocognitive Disorder based on its core characteristics:**
  - **A disturbance in level of awareness and the ability to direct, focus, sustain, and shift attention.**
- **While some level of disturbance of awareness and attention can be observed in all Neurocognitive Disorders, particularly in the more severe form of Major Neurocognitive Disorder, these disturbances are not prominent in Major or Minor Neurocognitive Disorder (the relative absence of this disturbance was previously referred to as "clear consciousness").**
- **However, delirium can, and frequently does, co-exist with Major or Minor Neurocognitive Disorder.**

# DSM 5 Criteria

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- **The distinction between Major and Minor disorders is primarily one of severity, with the threshold for Major Neurocognitive Disorder encompassing a greater degree of cognitive impairment and hence a loss of independence in instrumental activities of daily living.**
- **In most progressive disorders such as the neurodegenerative disorders and some forms of vascular cognitive impairment, Minor and Major may be earlier and later stages of the same disorder. In these settings, the differences may involve impairment in additional cognitive domains as well as more severe impairment within the domains as the patient crosses from the Minor to Major level of impairment.**
- **However, Neurocognitive Disorders of other etiologies may involve nonprogressive deficits (as in the sequelae of a traumatic brain injury or stroke), waxing and waning impairment (e.g., as in multiple sclerosis), or improvement (as in successful treatment of HIV or prolonged abstinence from substances of abuse).**

# Criteria for Mild vs. Major NCD

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## A. Neurocognitive decline

1. Report by patient, informant, clinician

**AND**

2. **Neurocognitive deficits: 1-2 vs. >2 SD's**

**B. Interference with independence in IADLs  
(- even with greater effort, etc.)**

C. Not exclusively due to delirium

D. Not primarily attributable to other Axis 1  
psychiatric disorders

# Neurocognitive Domains

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**Complex attention**

**Executive abilities**

**Learning/Memory**

**Language**

**Visuoconstruction**

**Visuoperception**

**Social cognition**

# Descriptive Features

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- **With Psychosis**
- **With Mood Disturbance**
- **With Apathy**
- **With Agitation**
- **With Other Behavioral Disturbance (Specify)**

# Biomarkers

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- Biomarkers such as MRI, amyloid imaging, CSF a-beta/tau ratio are not yet recommended for clinical diagnosis and are still in the realm of research criteria
- Genetic testing not recommended at this stage
- This field is moving fast, and one or more of these biomarkers may be incorporated into the clinical diagnostic criteria in the foreseeable future



# Changes from DSM-IV

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- **Addition of Mild Neurocognitive Disorder**
- **Use of objective neurocognitive assessment**
- **Removal of memory impairment as an essential criterion for Neurocognitive Disorders**
- **Better specification of behavioral symptoms and syndromes**
- **Emerging role of biomarkers in future criteria**

# Changes in DSM 5 from DSM IV

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- The term in DSM IV was —Delirium, Dementia, and Amnestic and Other Cognitive Disorders, which the committee felt was unwieldy and did not represent a conceptual whole.
- The new term is simpler and encompasses a range of disorders in which the primary/principal manifestation is an acquired loss of cognitive ability attributable to known or assumed brain damage/disease. The disorders span all age groups, as long as there is a decline from a previously higher level of cognition (unlike autism or mental retardation).
- As currently envisioned, they do not include disorders in which acquired cognitive impairment/decline is present but is not the primary/principal manifestation (e.g. schizophrenia, major depression).

# Eventual Outcome

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- **DSM-5 will be more consonant with current scientific understanding of most psychiatric disorders**
- **DSM-5 will be criticized - fairly and unfairly**
- **Major changes can be difficult in the beginning, but are inevitable with progress**
- **Future revisions in DSM-5 will occur on a continual but small-scale basis, affecting specific disorders only (DSM-5.1, 5.2, ....): i.e. DSM 5 as Living Document**
- **Psychiatric diagnoses will be increasingly driven by scientific advances, with instant feedback from the community**

# **Information on DSM 5 Criteria and Emphasis**

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- **American Psychiatric Association Website**
- **DSM5.Org**
- **Upcoming American Journal of Psychiatry  
dedicated to Clinical Purpose of DSM 5**