Transitioning to DSM-5 and ICD-10: deciphering coding and criteria changes

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Objectives

1. To accurately apply diagnostic criteria for DSM-5 neurocognitive disorders.

2. To have working knowledge of major new DSM-5 diagnoses and of significant changes to diagnoses carried over from DSM-IV.

3. To have working knowledge of ICD-10 coding and crosswalk of major diagnoses from DSM-5 to ICD-10.

Speaker financial disclosure

1. I have no financial relationships to disclose.

2. I will not discuss commercial products other than DSM-5.

Timeline of DSM and ICD

- 1978 ICD-9 (ICD-9-CM in USA)
- 1980 DSM-III
- 1987 DSM-III-R
- 1992 ICD-10 (ICD-10-CM)
- 1994 DSM-IV
- 2000 DSM-IV-TR
- 2013 DSM-5
- 2015 switch from ICD-9-CM to ICD-10-CM

ICD-9-CM (1978) Organic psychotic conditions

293 Transient organic psychotic conditions

- 293.0 Acute delirium
- *293.1 Subacute delirium*
- 293.8 Other specified transient organic mental disorders
  - 293.81 Organic delusional syndrome
  - 293.82 Organic hallucinosis syndrome
  - 293.83 Organic affective syndrome
  - 293.89 Other
- 293.9 Unspecified transient organic mental disorder

294 Other organic psychotic conditions (chronic)

- 294.0 Amnestic syndrome
- 294.1 Dementia in conditions classified elsewhere
- 294.8 Other specified organic brain syndromes (chronic)
- 294.9 Unspecified organic brain syndrome (chronic)

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DSM-III (1980) innovations

- diagnoses linked to ICD-9 codes
- detailed inclusion/exclusion criteria
- 5 axes
- increased number of diagnoses
- introduced GAD, MDD
- interrater reliability of major diagnoses

Top 10 changes in DSM-5 (2013) for neuropsychologists

1. Introduction of mild neurocognitive disorder
2. Outline basic cognitive domains
3. Prioritization of neuropsychological testing
4. Guidelines for cognitive assessment
5. Defining etiologic subtypes by course & pathology

Top DSM-5 changes cont'd

6. Revision of somatoform disorders
7. Consolidation of Autism spectrum
8. Criteria changes to ADHD, intellectual disability, and PTSD
9. No more axes
10. De-emphasis on malingering

DSM-5 de-emphasis on malingering

- malinger, malingering, etc.

  appear 70 times in DSM-IV vs. 35 in DSM-5

- feign, feigning, etc.

  appear 23 times in DSM-IV vs. 14 in DSM-5

Case example mild TBI: Hx

- 20 y/o male college student
- Hx ADHD, ETOH and opiate abuse
- assault

Case example mild TBI: Hx

- Glasgow Coma Scale score=15
- CT head – L frontal hemorrhagic contusion
- no deterioration below GCS 15
- EEG normal 2 days later
- ENT Dx benign paroxysmal positional vertigo

Case example mild TBI: testing

- forensic neuropsychological evaluation 5 years after injury
- some test results identified as abnormal & as evidence of neurocognitive impairments due to TBI
- employed as supervisor, finishing college

DSM-IV diagnostic options for TBI

1. Amnestic disorder due to head trauma (294.0)
2. Dementia due to head trauma (294.1)
3. Cognitive disorder not otherwise specified (NOS) (294.9)
4. Personality change due to head trauma (310.1)

DSM-IV Dementia due to head trauma

A. multiple cognitive deficits including

(1) memory impairment

(2) one or more of:

(a) aphasia

(b) apraxia

(c) agnosia

(d) executive functioning impairment

DSM-IV Dementia due to head trauma cont'd

B. impairments in A1 and A2 each cause significant functional limitations & represent a decline from baseline

C. causation by direct physiological consequence of medical condition

D. not only during delirium

DSM-IV Cognitive disorder NOS (294.9)

- cognitive impairment is direct physiological consequence of medical condition
- not classifiable as a delirium, dementia, or amnestic disorder
- text description only, no criteria list

DSM-IV Appendix B non-coded options for TBI

- Postconcussional disorder
  (ICD-9 *Postconcussion syndrome*)

- Mild neurocognitive disorder
  (ICD-9-CM *Mild cognitive impairment*)

Mild NCD proposal for DSM-IV (1994)

A. Cognitive impairment in at least 2 domains (memory, executive functioning, attention/speed of information processing, perceptual-motor abilities, language), lasting at least 2 weeks, as reported by the patient or reliable informant

B. Evidence of a medical condition etiologically related to the cognitive disturbance

C. Evidence from neuropsychological testing or quantified cognitive assessment of abnormality or decline in performance

DSM-IV Mild NCD

- influenced by mild cognitive impairment (MCI)
- placed in Appendix B (for further study)
- coded as Cognitive disorder NOS (294.9)
- 2006 MCI added to ICD-9-CM
- reimbursement issues

DSM-5 diagnostic options for TBI

1. Delirium
2. Major neurocognitive disorder d/t TBI (F02.8x)
3. Mild neurocognitive disorder d/t TBI (G31.94)
4. Unspecified neurocognitive disorder (R41.9)*
5. Other specified mental disorder d/t [another medical condition] (F06.8)*
6. Unspecified mental disorder d/t [another medical condition] (F09)*

* text description only

DSM-5 criteria for Major NCD due to TBI (F02.8x)

A. major neurocognitive disorder (syndrome)

B. TBI as evidenced by one or more of:

- LOC, PTA, disorientation/confusion, neurologic signs or imaging (neurologic features, biomarkers)

DSM-5 criteria for Major NCD d/t TBI (F02.8x) cont'd

C. occurs immediately after injury and persists past the acute post-injury period (course)

Criteria for DSM-5 Major NCD (syndrome)

A. significant decline from baseline in at least one cognitive domain, demonstrated by:

   1. concern of the patient, informant, or clinician, and
   2. substantial impairment in cognitive test performance

Change from DSM-IV syndromes to DSM-5 domains

DSM-IV syndromes + domains

- memory*
- aphasia
- apraxia
- agnosia
- executive function

DSM-5 domains

- complex attention
- executive function
- learning & memory
- language
- perceptual-motor
- social cognition

DSM-5 Major NCD syndrome criteria cont'd

B. not independent in instrumental ADL, requires assistance

C. not only during delirium

D. not better explained by another mental disorder

Summary of DSM-5 major NCD syndrome criteria (pp. 602-603)

A. cognitive decline
B. functional decline
C. delirium exclusion
D. other exclusion

DSM-5 criteria for Mild neurocognitive disorder due to TBI (G31.94)

A. mild neurocognitive disorder (syndrome)

B. TBI as evidenced by one or more of LOC, PTA, disorientation/confusion, neurologic signs (neurologic features, biomarkers)

C. occurs immediately after injury and persists past the acute post-injury period (course)

DSM-5 criteria for Mild NCD syndrome

A. modest cognitive decline from baseline in at least one domain (complex attention, executive function, memory, language, perceptual-motor, social cognition), demonstrated by:

(1) concern of the patient, informant, or clinician, and

(2) modest impairment in cognitive test performance

DSM-5 criteria for Mild NCD syndrome cont'd

B. functionally independent; may be suboptimal, need extra effort, strategies & accommodations

C. not only during delirium

D. not better explained by another mental disorder

Comparison of DSM-5 major vs. mild NCD syndromes

Major NCD

A. significant cognitive decline
   1. concern
   2. substantial impairment in cognitive performance
B. not independent in everyday activities
C. not only during delirium
D. not better explained

Mild NCD

A. modest cognitive decline
   1. concern
   2. modest impairment in cognitive performance
B. independent in everyday activities
C. not only during delirium
D. not better explained

Case example mild TBI: DSM-5 diagnoses given

- Major neurocognitive disorder due to TBI, mild, with mood disturbance (294.11)
- No description of functional decline
- Re-testing showed non-credible test performance

Malingering in DSM-5 NCD

"In some instances, severity of neuro-cognitive symptoms may appear to be inconsistent with the severity of the TBI. After previously undetected neurologic complications … are excluded, the possibility of diagnoses such as somatic symptom disorder and factitious disorder need to be considered." (p. 627)

DSM-5 NCD due to TBI: Injury severity vs. NCD severity

- "The severity rating of the TBI does not necessarily correspond to the severity of the resulting NCD" (p. 625)
- mild TBI "complete resolution typical by 3 months" (p. 626)

DSM-5 cognitive test interpretation guidelines

- need norms appropriate to age, education & culture
- exclude if performance impaired due to sensory or motor limitations

DSM-5 test interpretation guideline for significant cognitive decline

Major NCD "performance is typically two or more SDs below appropriate norms (3rd percentile or below)." (p. 607)

(No guidance for number of tests)

DSM-5 test interpretation guideline for modest decline

Mild NCD "performance typically lies in the 1-2 SD range (between the 3rd and 16th percentiles)." (p. 607)

(Cutoffs removed from criteria in later revision)

DSM-5 endorsement of neuropsychological testing for NCD

- neuropsychological testing “is part of the standard evaluation of NCDs” (p. 607)

- neuropsychological testing “is particularly critical in the evaluation of mild NCD” (p. 607)

DSM-5 criteria for Major/mild NCD due to Alzheimer's disease

A. major/mild neurocognitive disorder

B. insidious onset & gradual progression (course)

C. probable or possible AD (certainty level)

- AD genetic mutations (biomarker), neurocognitive profile, steady decline, absence of other pathology

B. not better explained by other disorder (exclusion)

DSM-5 criteria for Major/mild vascular NCD

A. major/mild neurocognitive disorder
B. onset of deficits temporally related to cerebrovascular events (course) or prominent declines in complex attention or frontal-executive function (profile)
C. evidence of cerebrovascular disease (pathology, biomarker)
D. not better explained by other disease (exclusion)

DSM-5 Major NCD other etiologic subtypes

- substance/medication-induced
- Lewy body disease
- HIV
- Parkinson's disease
- Huntington's disease
- prion disease
- other medical condition
- multiple etiologies
- unspecified

Rationale for changes in DSM-5 Neurocognitive disorder

- name change to avoid “Alzheimerization”
- common structure of acquired brain disorders
- cognitive domains from DSM-IV Mild NCD
- etiologies from DSM-IV dementia
- use of course, pathology, & biomarkers to distinguish etiologic subtypes & level of certainty

Limitations of DSM-5 Neurocognitive disorder

1. Ambiguity in applying test-score cutoffs
2. Assumes correspondence between cognitive performance and functional independence
3. Limited subtyping based on cognitive domain profile. For example, no amnestic mild NCD
4. Minimal guidance for malingering

Key points for DSM-5 mild NCD

- Concept similar to MCI
- Cognitive impairment + independent in IADL
- ‘Concern’ criterion from MCI
- Coded as MCI in ICD-9-CM and ICD-10
- Poor reliability in field trials

Key points for DSM-5 major NCD

- Replaces DSM-IV Dementia
- Cognitive impairment + assistance needed with IADL
- Adequate reliability in field trials
- Problem of diagnosing a medical disease in terms of social consequences
- Data used to determine level of certainty may fall data outside of traditional psychology scope of practice

Questions about Neurocognitive disorders?

DSM-5 Posttraumatic stress disorder

case example PTSD: Hx

- 40 y/o male construction supervisor
- prior alcohol abuse
- struck by falling object

case example PTSD: psychiatric exam

- not immediately aware of injury events
- no immediate experience of threat to life or serious injury
- concludes PTSD not justified
- diagnosis = Adjustment disorder

case example PTSD: forensic psychology exam

- endorsed symptoms on interview, PTSD rating scale
- report notes change in DSM-5 requirement of acute emotional response
- concludes dx of PTSD is justified

PTSD stressor criterion
DSM-IV vs. DSM-5

DSM-IV	DSM-5
A. exposure to traumatic event w/ both	A. exposure to actual or threatened death, serious injury, or sexual violence
1. experienced, witnessed, or confronted with actual or threatened death, serious injury, or threat to physical integrity of self or others	1. victim 2. witness 3. Learn of violence or accident to family or friend 4. repeated, extreme exposure to aversive details (electronic exposure only if work-related)
2. responded with intense fear, helplessness, or horror	

DSM-IV re-experiencing vs. DSM-5 intrusion criteria

DSM-IV	DSM-5
B. re-experiencing (1+)	B. intrusion symptoms (1+)
1. recurrent, intrusive recollections	1. recurrent, involuntary, intrusive memories
2. recurrent distressing dreams	2. recurrent distressing dreams
3. acting or feeling as if re-occurring	3. dissociative reactions, as if re-occurring
4. emotional distress evoked by exposure to related cues	4. similar
5. physiologic reaction evoked by exposure to related cues	5. similar

DSM-IV avoidance-numbing vs. DSM-5 avoidance criteria

DSM-IV

C. avoidance and numbing (3+)

1. avoids thoughts, feelings, conversations
2. avoids activities, places, people
3. amnesia
4. decreased interest
5. detachment
6. restricted affect
7. foreshortened future

DSM-5

C. Avoidance (1+)

1. avoids thoughts, memories, feelings
2. avoids external reminders that evoke thoughts, memories, feelings

DSM-IV avoidance-numbing vs. DSM-5 cognition-mood criteria

DSM-IV

C. avoidance and numbing (2+)

1. avoidance of thoughts, feelings, conversations
2. avoidance of activities, places, people
3. amnesia
4. decreased interest
5. detachment
6. restricted affect
7. foreshortened future

DSM-5

D. altered cognition, mood (2+)

1. amnesia
2. negative beliefs
3. distorted blame
4. negative emotional state
5. decreased interest
6. detachment
7. reduced positive emotions

PTSD arousal criterion: DSM-IV vs. DSM-5

DSM-IV	DSM-5
D. increased arousal	E. altered arousal, reactivity
1. insomnia	1. Irritable behavior, outbursts
2. irritability, outbursts	2. reckless, self-destructive
3. concentration difficulty	3. hypervigilance
4. hypervigilance	4. exaggerated startle
5. exaggerated startle	5. concentration difficulty
	6. insomnia

Key points for DSM-5 PTSD changes

- Elimination of A2 criterion
- Revised symptom criteria
- “Militarization” of PTSD
- May increase heterogeneity
- Minimal guidance for malingering

DSM-5 PTSD de-emphasis on malingering

- Multiple disorders mentioned in PTSD differential diagnosis section
- Malingering or factitious disorder not included

Questions about PTSD?

DSM-5 Somatic symptom disorder

case example Somatic symptom disorder: Hx

- 40 y/o male food service line supervisor
- PMH obesity
- struck by falling object

case example Somatic Symptom disorder: symptom onset

- returned to work on same day
- next day reported multiple, severe symptoms
- degenerative disc disease
- off-work status per chiropractor

case example Somatic Symptom disorder: diagnoses given

- Major depressive disorder
- Somatic symptom disorder (F45.1), with predominant pain*

*specifier

DSM-5 criteria for Somatic Symptom disorder (300.82)

A. Somatic symptoms that are distressing or disrupt daily life

B. Excessive preoccupation
   1. disproportionate thoughts about seriousness
   2. anxiety about health or symptoms
   3. devotes excessive time/energy

C. Duration at least 6 months

(elimination of medically unexplained symptom criterion)

DSM-IV somatoform vs. DSM-5 somatic symptom disorders

DSM-IV	DSM-5
• Somatization • Undifferentiated somatoform • Conversion • Pain disorder • Hypochondriasis • Body dysmorphic disorder • Somatoform disorder NOS	• Somatic symptom disorder • Illness anxiety disorder • Conversion (Functional neurologic symptom disorder) • Psychological factors affecting other medical conditions • Factitious disorder • Unspecified somatic symptom & related disorder

Key points forDSM-5 Somatic Symptom disorder

- Consolidates somatoform disorders
- Removes medically unexplained symptoms criterion
- DSM-IV Pain disorder replaced by specifier
- Includes patients with medically explained symptoms
- Clinicians may prefer ICD-10 diagnoses that correspond to DSM-IV

Questions about Somatic symptom disorder?

DSM-5 Attention-deficit hyperactivity disorder

case example adult ADHD: Hx

- 24 y/o male engineer
- PMH healthy
- bachelor's degree
- CC difficulty concentrating, distractibility, multi-tasking

case example adult ADHD: Hx

- no difficulty during elementary school
- first noticed difficulty during middle school (grade 6) around age 11
- no academic setbacks

ADHD
DSM-IV vs. DSM-5

DSM-IV

- symptoms w/ impairment before age 7
- 6+ symptoms in either category
- impairment in 2+ settings
- hyperactive vs. inattentive subtypes
- clinically significant impairment of function

DSM-5

- several symptoms before age 12
- 6+ symptoms if age < 17, 5+ if older
- symptoms in 2+ settings
- hyperactive-impulsive vs. inattentive presentations
- interfere w/ or reduce quality of function

case example ADHD: diagnoses given

- Attention-deficit/hyperactivity disorder, predominantly inattentive presentation (314.00/ F90.0)
- didn’t meet DSM-IV age of onset or impairment criteria

Key points of DSM-5 ADHD changes

- Older age of onset
- Requires only h/o symptoms, not h/o impairment
- Fewer symptoms required if age > 16
- Probably increased prevalence in adults and older teens

DSM-IV Asperger's disorder

DSM-5 Autism spectrum disorder

DSM-5 Social (pragmatic) communication disorder

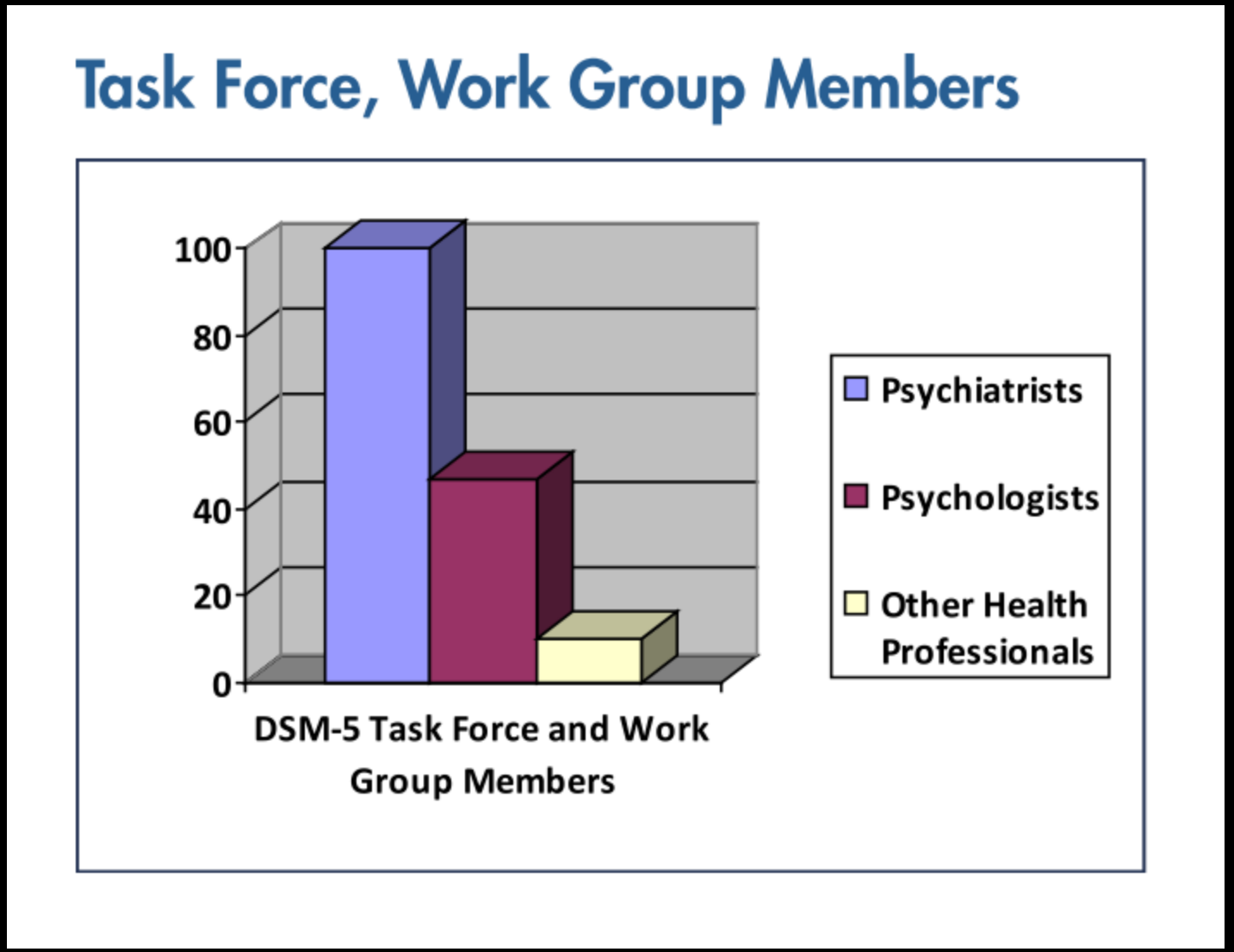
Key points for DSM-5 Autism Spectrum Disorder

- Includes DSM-IV Autism disorder
- Excludes higher-functioning pts
- Creates new dx Social Communication Disorder
- Possible decreased prevalence of ASD
- Concern for access to services
- Grandfathering of existing Autism diagnoses
- Clinicians may prefer ICD-10 diagnoses

DSM-5 Intellectual Disability

- Adaptive functioning is key measure
- IQ unclear role
- Possible increased prevalence of mild ID and decreased reliability

DSM-5 participation by psychologists

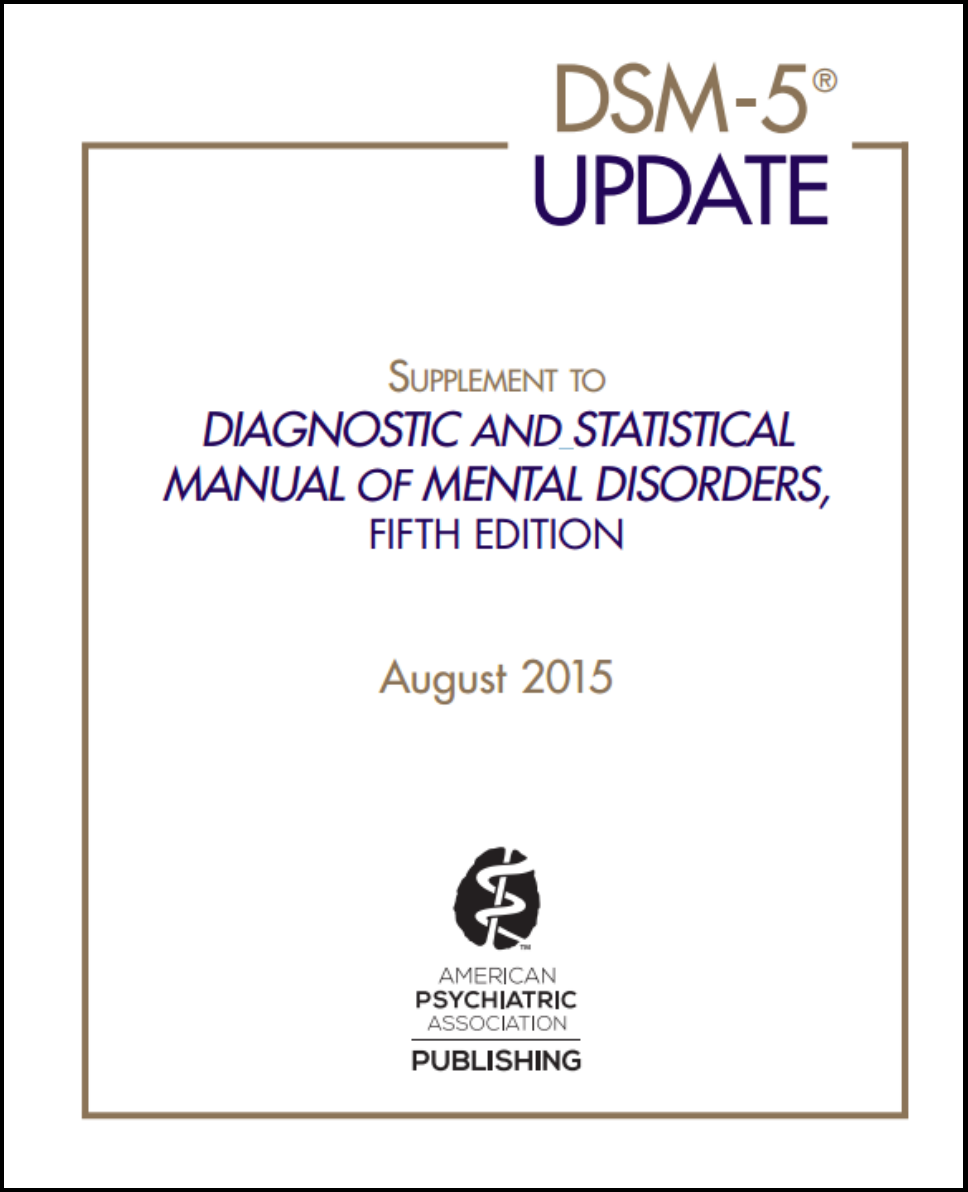


DSM-5 personality disorders

- DSM-5 Personality Disorders work group proposed dimensional approach to replace DSM-IV categories
- Proposal approved by DSM-5 Task Force
- ApA Board of Trustees rejected proposal and reinstated DSM-IV categories

Events since DSM-5 publication

- ApA submits new diagnoses for ICD-10-CM
- Coding revisions issued
- Delayed notice of COI by DSM-5 director
- Criticism of DSM-5 autism work group
- APA recommends psychologists use ICD-10-CM



http://dsm.psychiatryonline.org/pb-assets/dsm/update/DSM5Update2015.pdf

Implications of DSM-5 for neuropsychologists

1. Endorsement of neuropsychological testing
2. Recommendation of domain-oriented cognitive assessment
3. Promotion of social cognition assessment
4. Introduction of mild NCD
5. Extension of mild NCD to new etiologies

Implications of DSM-5 for neuropsychologists

6. Ambiguity in applying recommended test-score cutoffs
7. Expansion of diagnostic options to replace Cognitive disorder NOS
8. Criteria revisions of common psychiatric disorders leading to greater inclusivity

Questions?