



Supplemental Health, DI & LTC Conference

Mental Health Risk: Trends & Tips Post COVID-19 and Beyond





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COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide

Wake-up call to all countries to step up mental health services and support

2 March 2022 | News release | Reading time: 3 min (927 words)



The Coronavirus Disease 2019 (COVID-19” pandemic and associated mitigation policies created a global and economic health crisis of unprecedented depth and scale, raising the estimated prevalence of depression by more than a quarter in high-income countries...”

<https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide>
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10079130/>



Mental Health Risk Trends & Tips: Post COVID-19 and Beyond

- **Introduction: The Importance of Mental Health Issues**
 - Symptoms vs Illness
 - A tapestry of comorbidities
 - Biopsychosocial Model
- **Evolving Trends**
- **Psychiatric Conditions: Tips for Underwriting and Claims**
 - Timeline
 - Diagnosis, Comorbidities
 - Severity Indicators
 - Treatment challenges
 - Insights: Pharmacotherapy by Trial and Error;
- **What's New?**
- **Conclusions**



Is the distinction between “poor mental health” and “mental illness” clear?

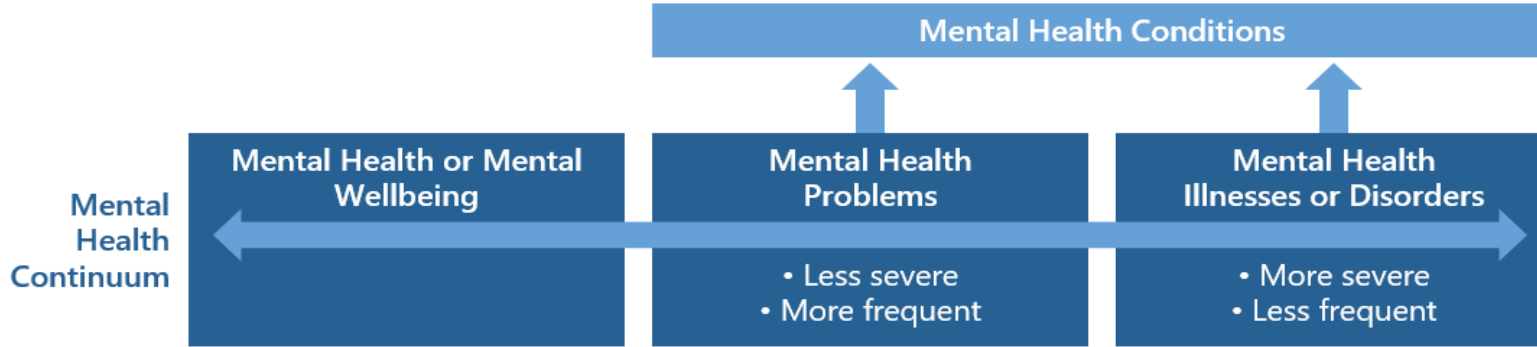
- A. Yes
- B. No
- C. Unsure

Mental Health Continuum



“Mental Health is a state of wellbeing in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community”

–*World Health Organisation, 2018*



Source: <https://www.thecroforum.org/wp-content/uploads/2021/12/CRO-Forum-Mental-Health-2021.pdf>; WHO

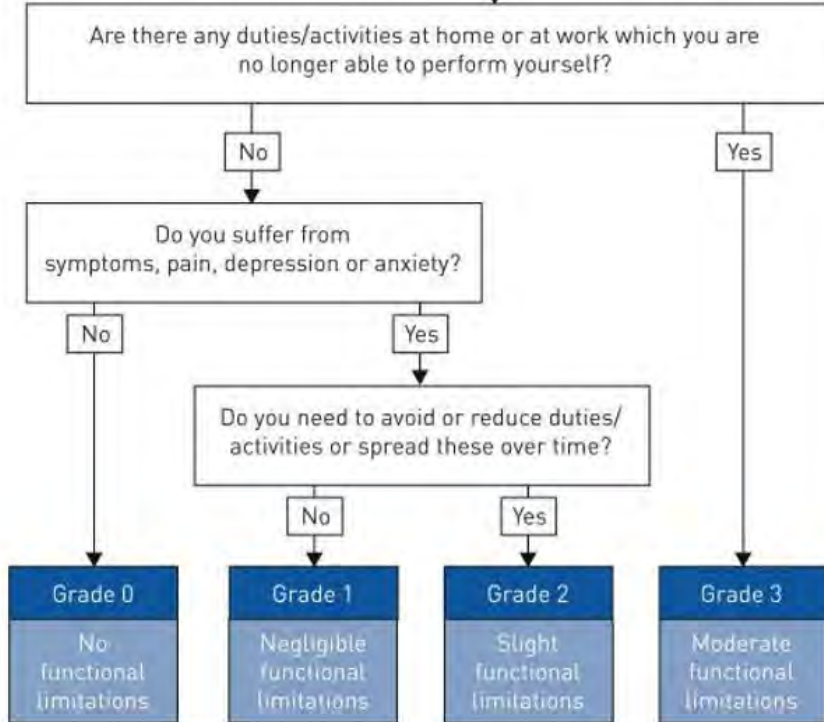
Courtesy: Dr. Chris Ball



Interpreting Data: Symptoms or Disease?



Post COVID Functional Status Scale (PCFS) Excerpt:



Sample Q: “Do you have problems relaxing or do you experience COVID-19 as a trauma?”

(“Trauma” is defined as suffering from intrusive memories, flashbacks or avoidance responses...)”

Diagnosis and Disability



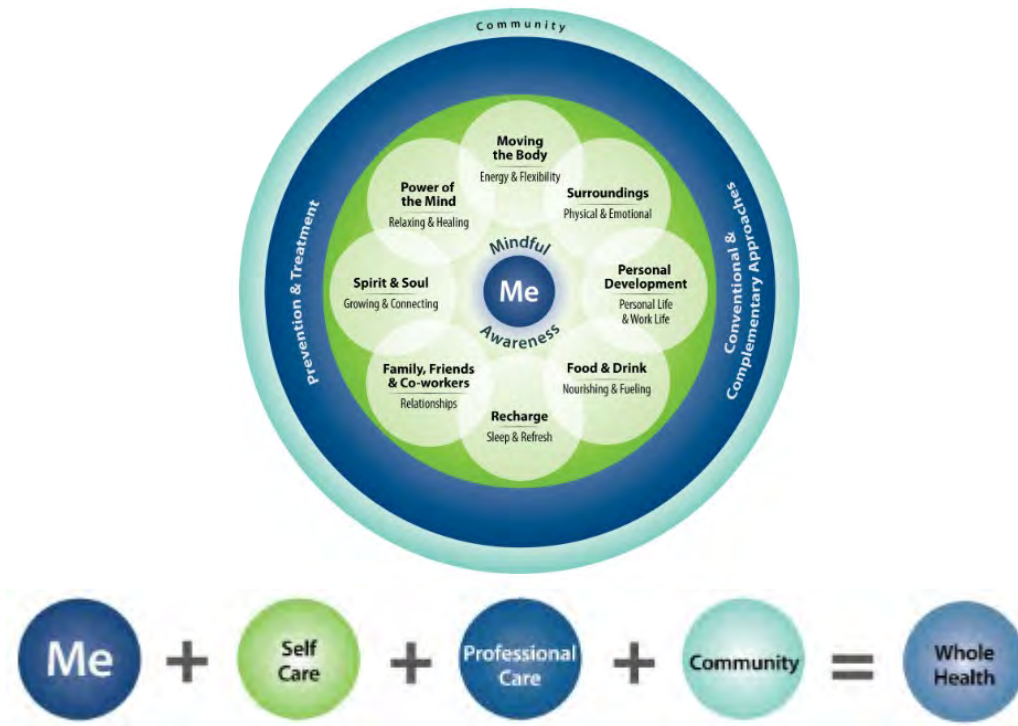
Assessing Functional Impairment

- Diagnosis does not equal disability
- Is functional impairment present? This is a requirement
- The 3 “C”s: **C**onsistency, **C**redibility and **C**onsensus (among health care providers)
- **Restrictions** – What **CAN** and **CAN'T** the insured do because of what?
- **Limitations** – What activities or duties need to be modified to support the restrictions?

Courtesy: Fiona Kossmann



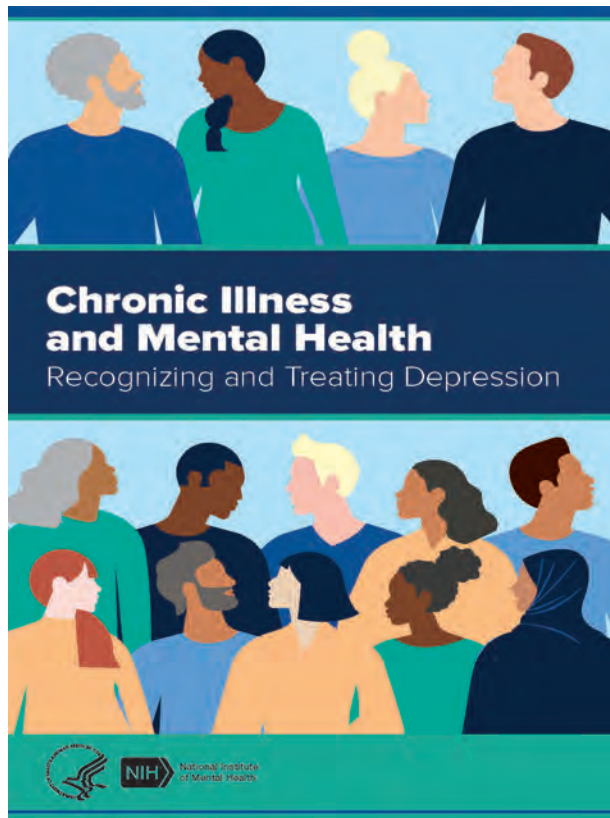
The Biopsychosocial Model: Whole Health



Source: <https://www.va.gov/wholehealthlibrary>



Mental Health and Nonpsychiatric Comorbidities



Source: <https://www.nimh.nih.gov/health/publications/chronic-illness-mental-health>

- Obesity
- Cardiovascular disease
- Diabetes
- Cancer
- Musculoskeletal issues
- Pain
- Sleep disorders



Some Reflections

- Presentation of psychological distress is highly socially mediated
- There is a great deal of confusion about the language
- Not all psychological distress is a mental health condition
- Mental health conditions are syndromes
- The biopsychosocial model helps to consider risk holistically
- It helps develop a narrative for the individual applicant
- Be able to justify decisions on evidence not stereotypes

Courtesy: Dr. C. Ball



Underwriting DI: Which Poses the Greatest Challenge?



Case 1 Male age 23, business owner, axe throwing company; Accelerated Underwriting, No APS; Declares Wellbutrin and Adderall since age 19; Alternative data source: daily marijuana use; ER visit for vomiting July 2022. No primary health care provider.
Rx check blank.

Case 2 Female age 45, nurse; Fully Underwritten
Hx eating disorder, depression diagnosed age 14;
Hospitalized age 22 for suicide attempt; Rx included electroconvulsive therapy
Declares symptoms fully resolved; no counseling or treatment for depression or eating disorder since age 23.

Case 3 Male age 57, physician (hospitalist); Fully Underwritten; Income decreased by 40% since COVID-19 pandemic
Declares job “burnout” in 2020 and reduced work hours to “normal hours” to improve health; States that no-one understands health care worker stress
Rx: Wellbutrin; Last MD visit 18 months ago



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Rx: Wellbutrin; **Last MD visit 18 months ago**



How Big is the Mental Health Crisis in the US?

What Indicators Are Used to Gauge the Severity of the Problem?





In the US, what percentage of those with Anxiety or Depression are Untreated?

- A. 10%
- B. 20%
- C. 30%
- D. >50%

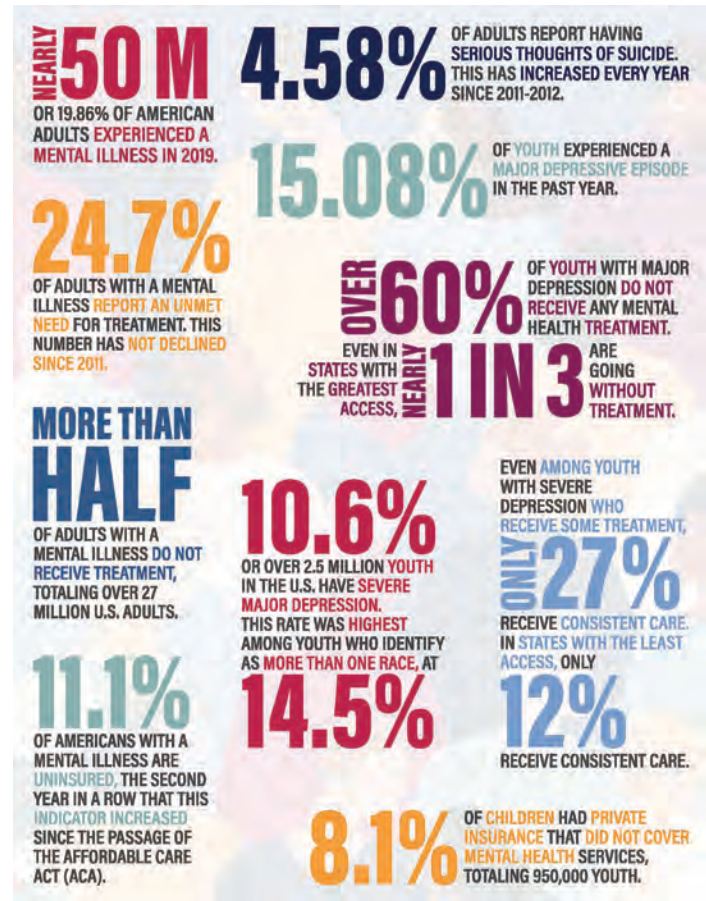


2023

THE STATE
OF MENTAL
HEALTH
IN AMERICA



Source: 2022 State of Mental Health in America.pdf (mhanational.org), [https://mhanational.org/sites/default/files/2022 State of Mental Health in America.pdf](https://mhanational.org/sites/default/files/2022%20State%20of%20Mental%20Health%20in%20America.pdf)



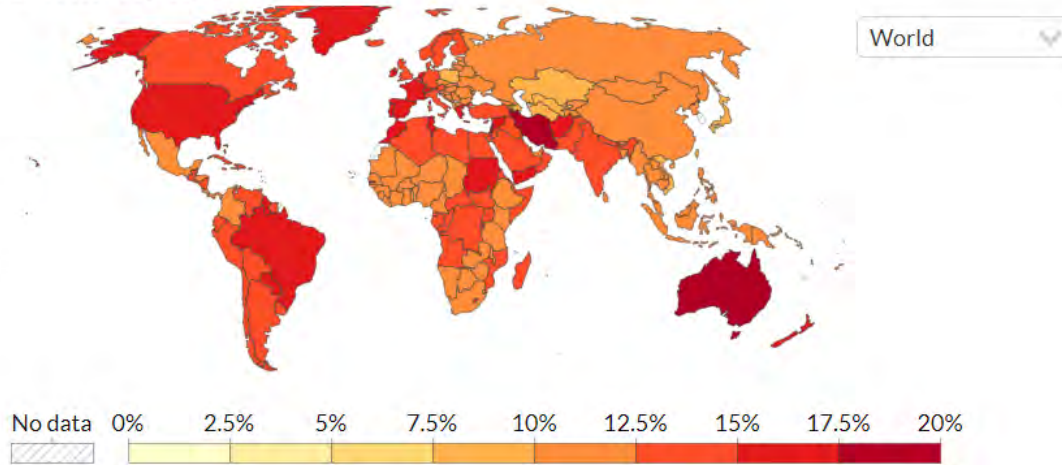
Mental Health Disorders: Global Data



Share of population with mental health disorders, 2019

Share of population with any mental health disorder; this includes depression, anxiety, bipolar, eating disorders and schizophrenia. Due to the widespread under-diagnosis, these estimates use a combination of sources, including medical and national records, epidemiological data, survey data, and meta-regression models.

Our World
in Data



Source: IHME, Global Burden of Disease (2019)

OurWorldInData.org/mental-health • CC BY

Note: To allow comparisons between countries and over time this metric is age-standardized.

▶ 1990 ————— ○ 2019

Source: IHME: Global Burden of Disease (2019)



- Highly prevalent in adults, globally
 - Developed Countries and Resource-limited country differences in estimated lifetime prevalence
- Consider
 - Reporting limitations, sample selection/bias
 - Cultural determinants/Stigma
 - Diagnostic criteria-inconsistencies

What About the Kids?

Emergency department visits for suspected suicide attempts among U.S. girls ages 12–17 have increased during the COVID-19 pandemic*

February–March 2021

51% ↑

From the same period in 2019

* After an initial drop
CDC.GOV

Suicide can be prevented

- ▶ Increase social connections for youth
- ▶ Teach youth coping skills
- ▶ Learn the signs of suicide risk and how to respond
- ▶ Reduce access to lethal means (like medications and firearms)



Help is available 24/7 at suicidepreventionlifeline.org

bit.ly/MMWR61121

MMWR

Some Risk Factors for Mental Illness:

- Young Age
- Female
- Social Media Exposure
- Geographic Regions
- Specific Populations including underserved





AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health

[Home](#) / [Advocacy](#) / [Child and Adolescent Healthy Mental Development](#) / AAP-AACAP-CHA Declaration of a National Emergency in Child and Adolescent Mental Health

This worsening crisis in child and adolescent mental health is inextricably tied to the stress brought on by COVID-19 and the ongoing struggle for racial justice and represents an acceleration of trends observed prior to 2020. Rates of childhood mental health concerns and suicide rose steadily between 2010 and 2020 and by 2018 suicide was the second leading cause of death for youth ages 10-24. The pandemic has intensified this crisis: across the country we have witnessed dramatic increases in Emergency Department visits for all mental health emergencies including suspected suicide attempts.

Source: <https://www.aap.org/en/advocacy/child-and-adolescent-healthy-mental-development/aap-aacap-cha-declaration-of-a-national-emergency-in-child-and-adolescent-mental-health>



Some Indicators to Gauge Population Mental Health



- Surveys
 - Population
 - Facilities
 - Claims
 - Disability- Private
 - SSDI
 - Health care utilization
- Prescription Data
 - Psychotropic medications
 - Substance Abuse Data
 - Suicide





Do Population Surveys Reflect Mental Illness Incidence Trends?

A. Yes

B. No



Surveys – Challenges include but are not limited to:

- Definitions – Self-reported Symptoms vs. Any Mental Illness (AMI) vs. Severe Mental Illness (SMI)
 - Indirect “indicators” of diagnosis
- Population – Civilian, non-institutionalized, age 18+
- Collection – Online vs. in-person interviews
- COVID-19 pandemic – Limitations of data collection – cannot compare to previous years
- Facilities – Sample/ascertainment bias
- May or may not include Substance Abuse data – N-SSATS combined with N-MHSS > N-SUMHSS 2021
- Analyses – Include modeling of data (National Survey on Drug Use and Health NSDUH)
- Response Rate – Low (NSDUH: 53%)
- Data Suppression

Some Data Sources: Mental Illness Trends



- CDC
Behavioral Risk Factor Surveillance System,
<https://www.cdc.gov/brfss/index.html>
- NIMH National Institute of Mental Health
<https://www.nimh.nih.gov/health/statistics/mental-illness>
- Global Scale Up Hubs
[https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366\(20\)30347-3/fulltext](https://www.thelancet.com/journals/lanpsy/article/PIIS2215-0366(20)30347-3/fulltext)
- SAMSHA
<https://store.samhsa.gov/sites/default/files/pep23-07-00-001.pdf>
- White House
<https://www.whitehouse.gov/cea/written-materials/2022/05/31/reducing-the-economic-burden-of-unmet-mental-health-needs>
- Mental Health America
- Integrated Benefits Institute
- SSDI
- SOA





Psychiatric Conditions and Disability Insurance

Psychiatric Comorbidities to Consider



- Anxiety disorders
- Mood disorders
 - Unipolar Depression
 - Bipolar Disorder
- Personality disorders
- Posttraumatic stress disorder
- ADHD
- Substance Use disorders
- Sleep disorders
- Somatic symptom disorder



Underwriting Challenges: Psychiatric Conditions



- Data
 - Limited, including exploration of Risk, functional impairment
 - Mostly from PCP; specialist reports focus upon their area, scant psychiatric records
 - Health care provider as advocate
- Subjective self-report may not align with medical reality
- Inconsistencies
- Diagnostic uncertainty
 - Subjective basis
- Therapeutics – variable, complex, Ad hoc, non-adherence
- Disease severity – difficult to ascertain
 - No quantitative markers





How Would You Assess this Case?

56 yo male, nonsmoker, business owner; DI application, 90EP to age 65, Accelerated Application, no APS, Exam, or labs

Declared build: 5'10", 240 lb (BMI 34.4), No Rx records found; Issued Standard.

Application, declared:

- Weight loss 10lb in last year due to diet, exercise, Ozempic
- Last office visit January 2021 “cold”; fully recovered

Case Question



Post Issue APS obtained due to MIB code for Bipolar Disorder

- Ht. 5"10", Wt. 270lb (BMI 39), BP 146/85, HR 72/min
- Bipolar Disorder and Depression
 - Nurse Practitioner: "long history psychiatric condition, Bipolar disorder Type 1"
- Most records refer to Depression as psychiatric diagnosis
- Multiple medication changes; Paxil, Trazodone, Lamotrigine; applicant stopped medications in 2016
- Back pain: oxycodone daily, same dose 2015 to present
- Alcohol 3/day; no alcohol criticism
- Recurrent hospitalization for psychiatric symptoms, suicidal ideation January 2012, October 2011; Rx medications and Electroconvulsive therapy



Case: Application Questions



1. ***In the last 10 years, have you been evaluated, diagnosed, treated or been given medical advice by a licensed medical professional for:***

- Anxiety, depression, stress, attention deficit hyperactivity disorder (ADHD), eating disorder, or other psychiatric or mental health disorder? **NO**

2. ***Other than noted above, have you within the past 5 years:***

- Had a checkup or consultation with a licensed medical professional for sickness, injury or surgery; been a patient in a hospital, rehabilitation center or other medical facility... **Office visit for cold January 2021**

3. ***List any medications (prescription or nonprescription) you currently are taking***

Ozempic



Case: Questions To Consider



1. Did the response to application questions align with medical evidence?
2. Did the medical records include ambiguities?
3. Did the applicant understand his diagnosis was bipolar disorder? Did he have the mental capacity to understand the difference between bipolar disorder and depression?
4. Based upon the application, is there material misrepresentation? Was it intentional?
5. What are the key learning points?



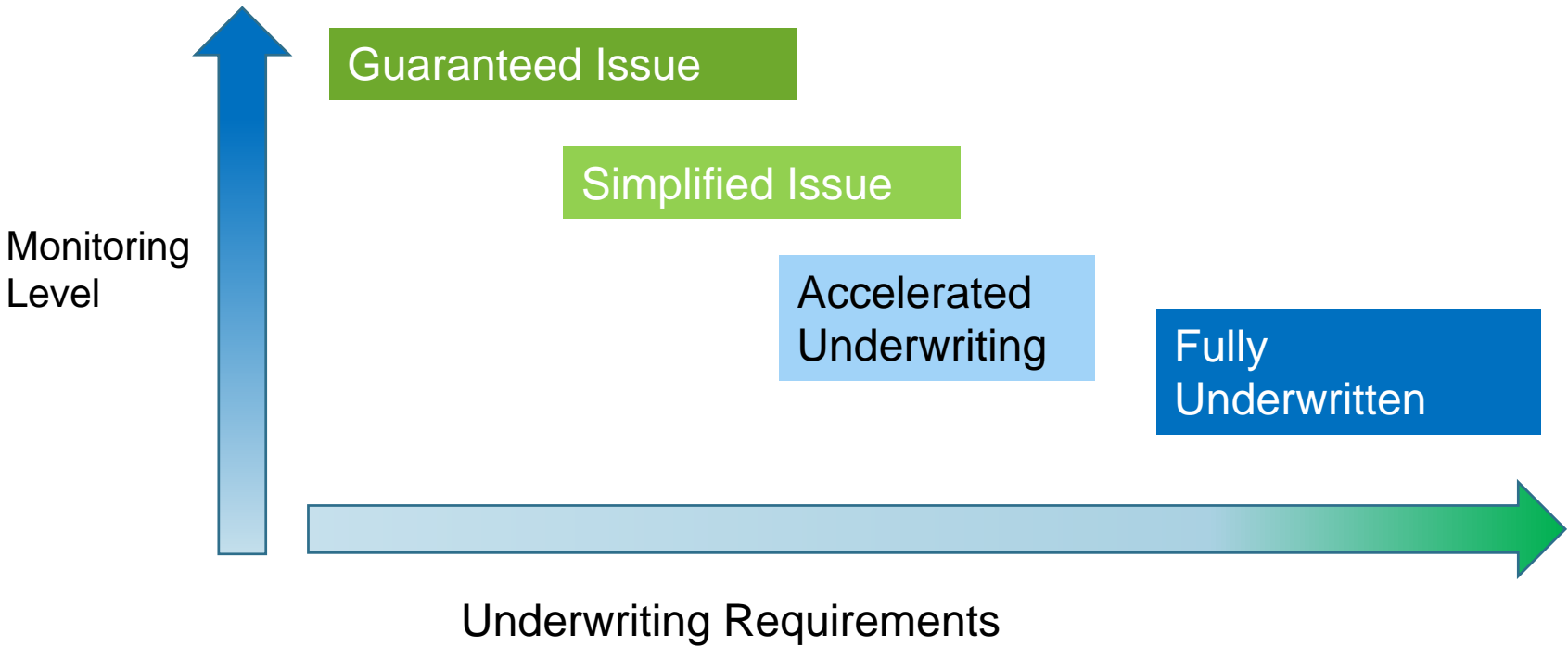
Case: Learning Points



- Importance of Application Question Wording
- Applicant: Did they understand the application terminology?
- Risk Clues (from APS)
 - Psychiatric History reflects severity, chronicity
 - Inconsistencies: Was the diagnosis bipolar disorder or depression?
 - Multiple medication changes
 - Applicant stopped using prescribed medication
 - Daily opioid use > 7 years, same dose
 - Declared Alcohol Use
- Lab tests and Rx check may not be informative
- Assess Comorbidities: Psychiatric history, Chronic Pain, Substance Use
- Absence of Treatment may reflect higher Risk
- Use of MIB data
- Importance of Post Issue Monitoring



With Decreased Requirements: Increased Need for Post-Issue Monitoring





Post COVID Condition/PASC/Long COVID

Definition Long COVID



Post-COVID condition – Broad range of symptoms (physical and mental) and symptom clusters that develop during or after COVID-19, continue for **≥2 months** (ie, three months from the onset of illness), have an impact on the patient's life, and are **not explained by an alternative diagnosis**.

Over 200 symptoms

Source: UpToDate accessed July 23, 2023

Challenges with Long COVID Studies



Challenges include but are not limited to:

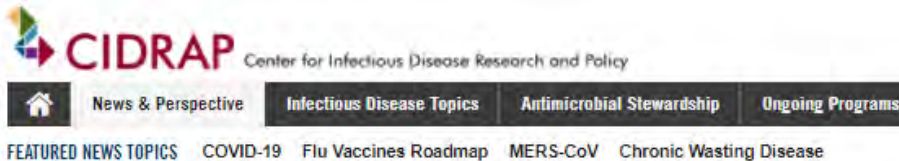
- Study design/data collection
- Diverse populations – Variable outcomes
- Subjective evidence
- Laboratory documentation of infection is inconsistent
- Bias – Ascertainment, reporting, confounding factors including premorbid state
- Overall (high) prevalence of mental health conditions around COVID pandemic
- Perceived risk
- No long-term data



Long COVID: Health Care Workers



Impairment in Health Care Workers



Health workers report 'long COVID' after just mild illness

Fifteen percent of healthcare workers at a Swedish hospital who recovered from mild COVID-19 at least 8 months before report at least one moderate to severe symptom disrupting their work, home, or social life, according to a [research letter](#) published yesterday in *JAMA*.

A team led by scientists at Danderyd Hospital, part of the Karolinska Institute in Stockholm, conducted the study from April 2020 to January 2021. The research involved obtaining blood samples and administering questionnaires to healthcare workers participating in the ongoing COVID-19 Biomarker and Immunity (COMMUNITY) study.



<https://www.cidrap.umn.edu/news-perspective/2021/04/health-workers-report-long-covid-after-just-mild-illness>; <https://pubmed.ncbi.nlm.nih.gov/33830208/>; <https://www.medscape.com/viewarticle/966151>

> *Occup Med (Lond)*. 2021 Jun 16;71(3):144-146. doi: 10.1093/occmed/kqab043.

Persistent post-covid symptoms in healthcare workers

T A-Z K Gaber ¹, A Ashish ¹, A Unsworth ¹

News > Medscape News UK

Healthcare Workers 'Most Likely to Report Long COVID Symptoms'

Peter Russell
January 06, 2022



Long COVID: Key Points for Insurers



1. Communicate with Empathy – A highly sensitive topic
2. Prevalence – Variable, but frequently seen following mild infection
 - May not have evidence of past infection or intervals between symptoms
3. Data – Evolving, consider limitations
4. Underwriting – Consider context, including biopsychosocial issues
 - Hospitalized cohort vs. Mild disease
5. Claims – Leverage best practices for subjective claims



Depression and Anxiety



Which of these are markers of disease severity in anxiety and depression?

- A. Medication Changes
- B. Loss of time from Work
- C. Multiple Medications

Diagnosis: Major Depressive Episode



DSM-5 diagnostic criteria for a major depressive episode

A. 5 (or more) of the following symptoms have been present during the same 2-week period and represent a change from previous functioning; at least 1 of the symptoms is either (1) depressed mood or (2) loss of interest or pleasure.
NOTE: Do not include symptoms that are clearly attributable to another medical condition.
1) Depressed mood most of the day, nearly every day, as indicated by either subjective report (eg, feels sad, empty, hopeless) or observations made by others (eg, appears tearful). (NOTE: In children and adolescents, can be irritable mood.)
2) Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day (as indicated by either subjective account or observation).
3) Significant weight loss when not dieting or weight gain (eg, a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day. (NOTE: In children, consider failure to make expected weight gain.)
4) Insomnia or hypersomnia nearly every day.
5) Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down).
6) Fatigue or loss of energy nearly every day.
7) Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly every day (not merely self-reproach or guilt about being sick).
8) Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by their subjective account or as observed by others).
9) Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide.
B. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.
C. The episode is not attributable to the direct physiological effects of a substance or to another medical condition.
NOTE: Criteria A through C represent a major depressive episode.

Source: UpToDate accessed July 22, 2023



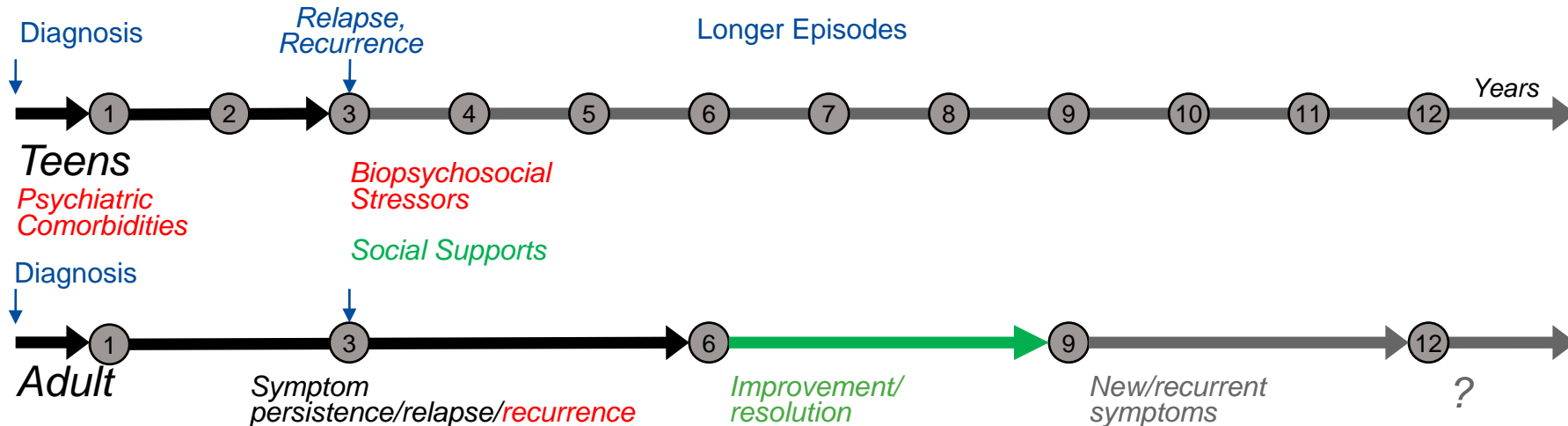
Depression: A Continuum of Severity



Heterogeneous: Symptom profile highly variable

Symptoms: Unexplained by alternative diagnosis; **Recurrent**

Natural History of Major Depressive Disorder



Major Depressive Disorder: Severity Indicators



- Core Symptoms:

- **Highly Recurrent**
- Disabling
- **Suicide Risk: It is difficult for clinicians to determine short term risk of suicide, violence and homicide**

- Consider:

- Symptoms and Response to treatment
- Instability
- **Functional Impairment**
- Inconsistencies





Which groups had the highest rates of Depression and Anxiety during the COVID-19 pandemic?

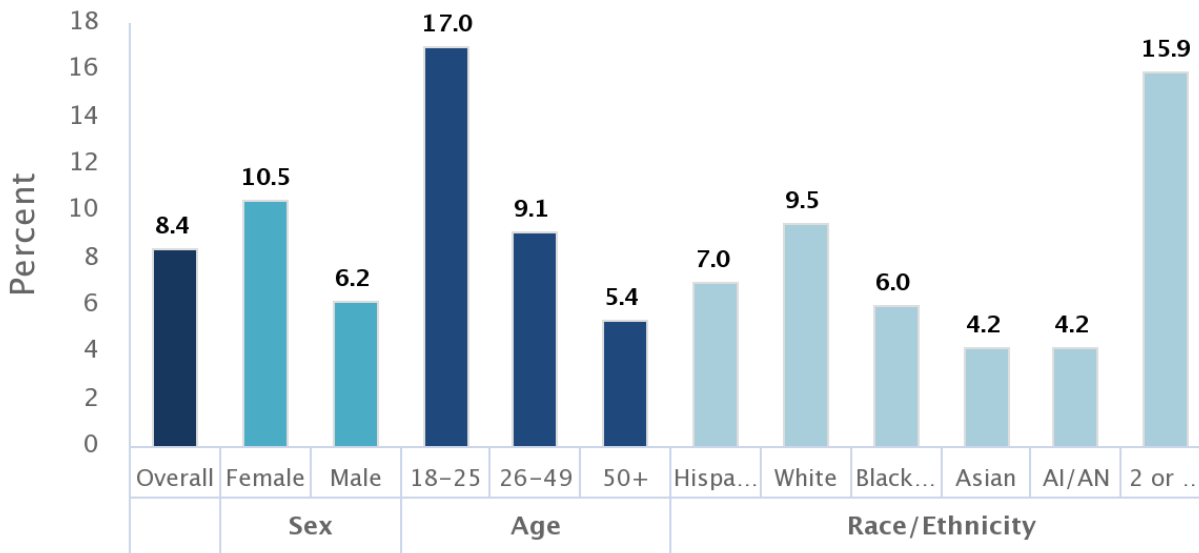
- A. Those in areas most affected by COVID-19
- B. Males more than Females
- C. Ages 18-24 compared to all other age groups

Prevalence MDD Adults: Younger Ages



Past Year Prevalence of Major Depressive Episode Among U.S. Adults (2020)

Data Courtesy of SAMHSA



*Persons of Hispanic origin may be of any race; all other racial/ethnic groups are non-Hispanic

AI/AN = American Indian / Alaskan Native.

Note: The estimate for Native Hawaiian / Other Pacific Islander group is not reported in the above figure due to low precision of data collection in 2020.

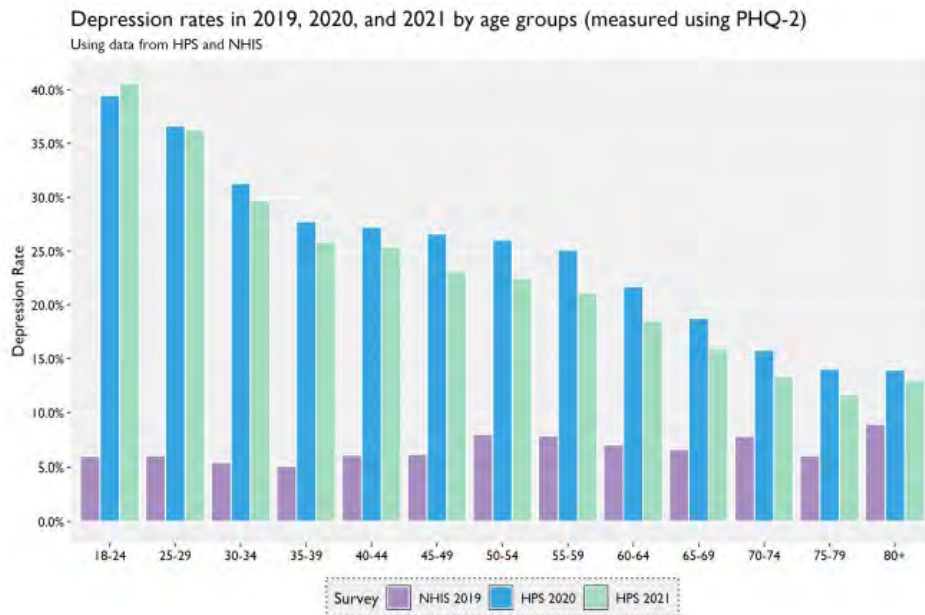
Source: <https://www.nimh.nih.gov/health/statistics/major-depression>



Depression Rates and Younger Ages



Depression rates in 2019, 2020, and 2021 by age groups (measured using PHQ-2)



PHQ-2: Patient Health
Questionnaire 2-item

NHIS: National Health Interview
Survey

HPS: U.S. Census Bureau
Household Pulse Survey

Source: <https://www.brookings.edu/wp-content/uploads/2022/03/Despair-and-Resilience.pdf>



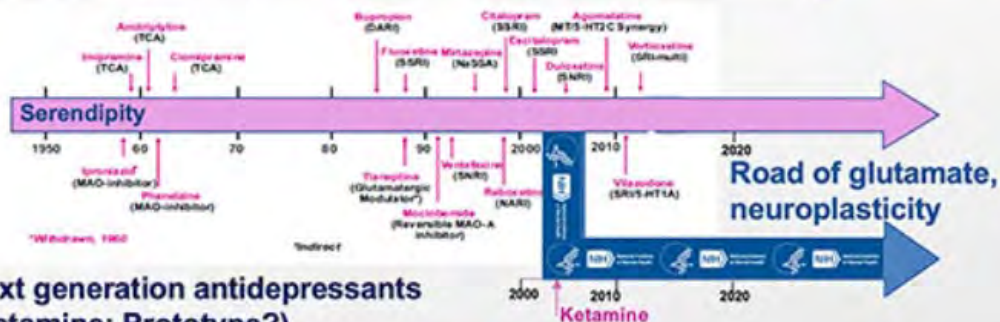


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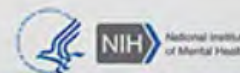
Drug Discovery and Development for Depression

Road monoamines serotonin, NA, DA: Conventional antidepressants:



Next generation antidepressants (Ketamine: Prototype?)

- Rapid acting antidepressant
- Robust efficacy in Treatment-Resistant Depression (TRD)
- Analgesic effects
- Antifatigue properties



Source: <https://irp.nih.gov/catalyst/v27i6/2019-research-festival-plenary-ii>





Non-Adherence/Early Drop Out/Treatment Failure is Common

- Psychotherapy and Pharmacotherapy most effective
- Pharmacotherapy
 - Variable Efficacy (!)
 - Moderators of Response not understood
 - Antidepressants vs Placebo
 - Drug choices; include Ad Hoc
 - Dose: start low and titrate up
 - Durability of Response- not understood
 - **Switching from one antidepressant to another is common**
 - Side effects limit adherence
 - Withdrawal

Source: <https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2761561>





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Generalized Anxiety Disorder (GAD)



Most common mental health issue in the US

- Affects 40 million people in US age 18 and older
- Readily treatable, but most are untreated
- Commonly comorbid with depression
- Features:
 - Worry and anxiety difficult to control
 - Associated with impairment
 - Most days for 6 months





Individualized

- **CBT (cognitive behavioral therapy) and/or pharmacotherapy**
- **First line: SSRIs** (serotonin reuptake inhibitors)
 - All similar efficacy: response rates 60-70%
 - Choice: medication effect profile, patient preference, drug-drug interactions
- **Benzodiazepines are NOT recommended as first line monotherapy**
 - Due to Risk of dependence and efficacy data
 - Limited duration use only
- **Complementary Therapies**
 - Exercise



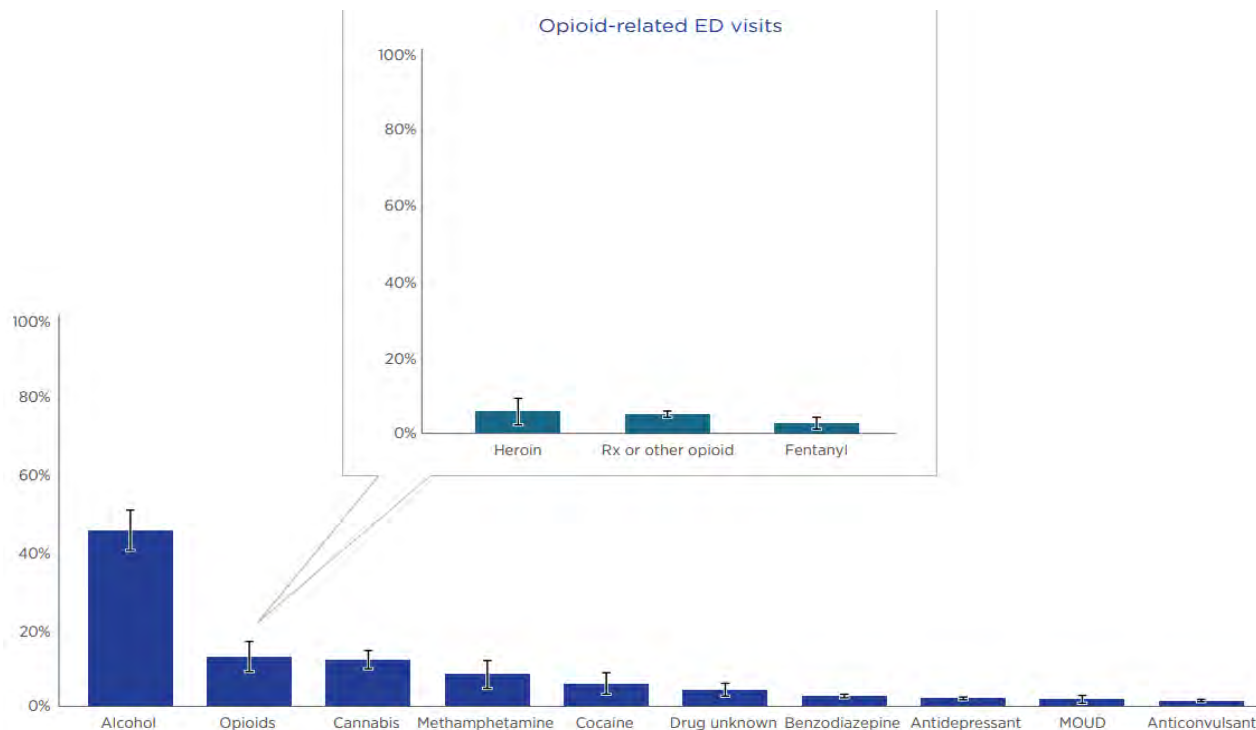
Substance Use and Abuse



In the US, what is the most common substance use disorder?

- A. Opioids
- B. Marijuana
- C. Alcohol
- D. Stimulants

Top 10 Substances in Drug Related ER visits 2022



Alcohol Opioids MJ

Drug Abuse Warning Network (DAWN), Findings from Drug-Related Emergency Dept. Visits, 2022; <https://www.samhsa.gov/data/>





In the US, what is the most common substance use disorder?

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- D. Stimulants

Substance Use Disorders (SUD)



- Highly Prevalent
 - US: 14.5% age 12+ had a diagnosable SUD in past year
- Comorbid with Mental Illness
- Polysubstance Use eg. opioids and benzodiazepines
- Lab tests
 - limited utility for diagnosis, but can detect recent use
 - Cannot identify frequency/intensity of use
- Diagnosis via Clinical Interview Tools (self-report); Multidimensional Assessment ideal

Source: UpToDate accessed July 22, 2023

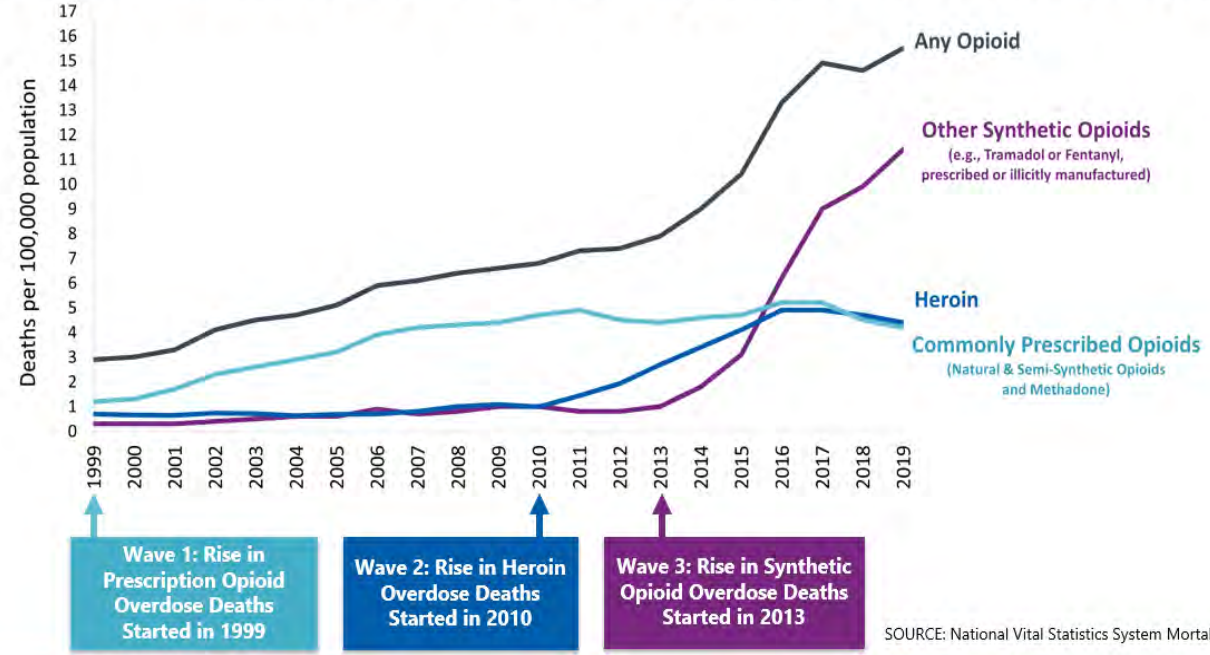
Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: Results from the 2020 National Survey on Drug Use and Health. HHS Publication No. PEP21-07-0, Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration; Department of Health and Human Services, Rockville, MD 2021.



Three Waves of the Rise in Opioid Overdose Deaths



Three Waves of the Rise in Opioid Overdose Deaths



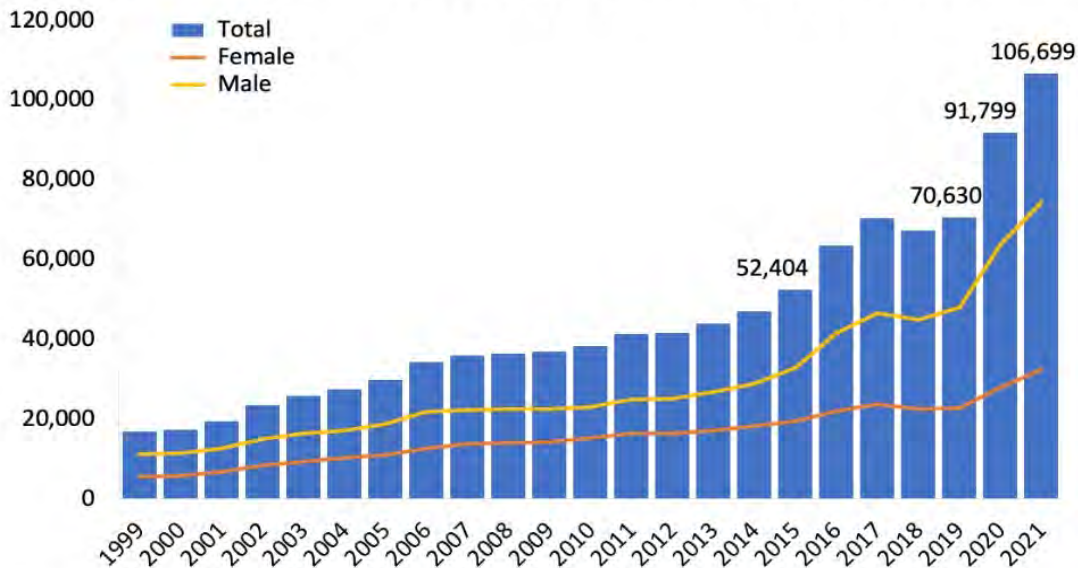
Source: National Vital Statistics System Mortality



Trend: Increasing Overdose Deaths



Figure 1. National Drug-Involved Overdose Deaths*, Number Among All Ages, by Gender, 1999-2021



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.


<https://nida.nih.gov/research-topics/trends-statistics/overdose-death-rates>





Suicide Data and Statistics

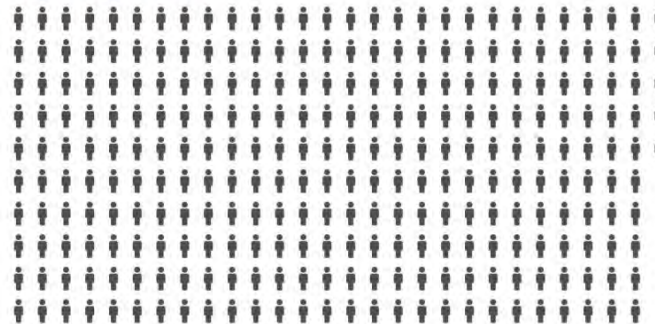


For every suicide death, there are*:

 **4** Hospitalizations for suicide attempts**

 **8** Emergency department visits related to suicide**

 **27** Self-reported suicide attempts***

 **275** People who seriously considered suicide***

* Based on the latest year of available data for adults ages 18 and older.

** Source: CDC WISQARS

*** Source: 2020 SAMHSA's National Survey on Drug Use and Health
Source: <https://www.cdc.gov/suicide/suicide-data-statistics.html>

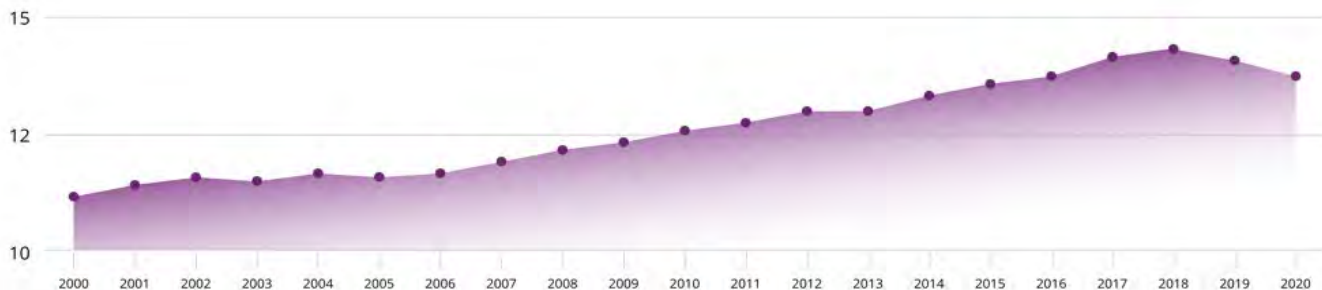




The overall suicide rate increased during the COVID-19 pandemic

- A. True
- B. False

Suicide in the US over Time



Age-adjusted rates per 100,000



- Firearm – 52.8%**
(24,292 total number of suicides)
- Suffocation – 27.2%** (12,495)
- Poisoning – 12.0%** (5,528)
- Other – 8.0%** (3,664)

Suicide is a leading cause of death in the United States, with 45,979 deaths in 2020. This is about one death every 11 minutes.

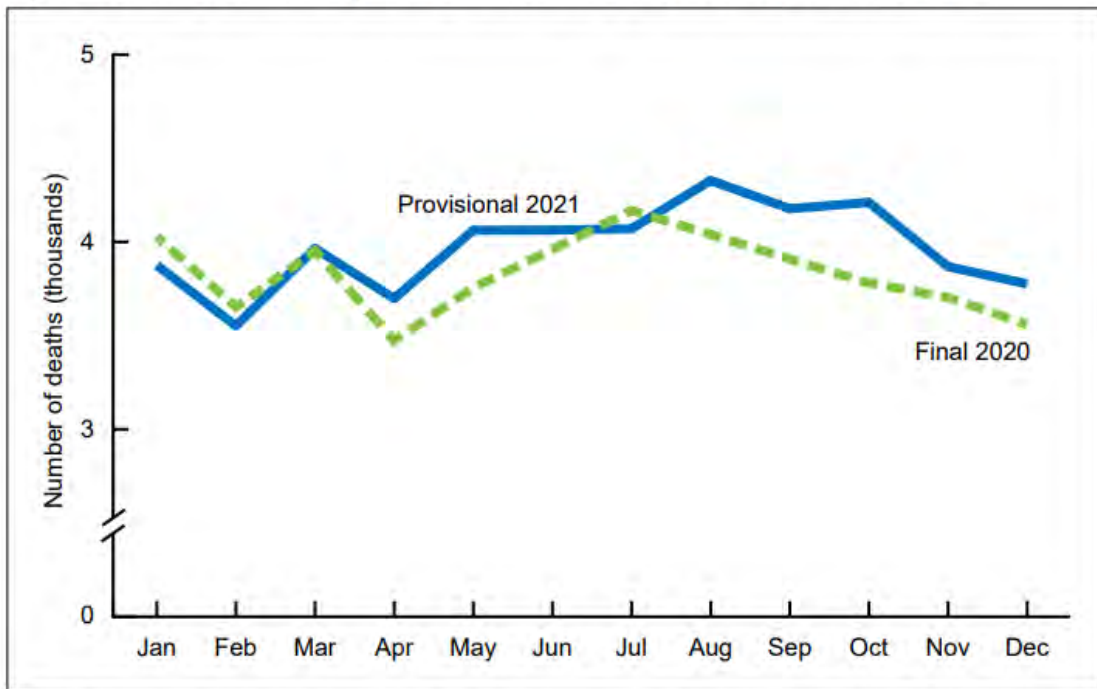
Source: *Suicide Data and Statistics | Suicide | CDC*. Accessed 15/03/2023; *Facts About Suicide | Suicide | CDC*

Courtesy: Dr. Chris Ball



Suicide in the U.S. 2020—2021

Figure 1. Number of suicides, by month: United States, final 2020 and provisional 2021



NOTES: Suicides are identified with *International Classification of Diseases, 10th Revision* underlying cause-of-death codes U03, X60–X84, and Y87.0. Provisional 2021 data are based on death records received and processed by the National Center for Health Statistics as of May 15, 2021.

SOURCE: National Center for Health Statistics. National Vital Statistics System. Mortality.

Source: <https://www.cdc.gov/nchs/data/vsrr/vsrr024.pdf>

the overall age-adjusted suicide rate increased 4% from 2020 (13.5) to 2021 (14.0) but was 1% lower than the recent peak in 2018 (14.2). The 3% increase in the age-adjusted rate for males (from 22.0 to 22.7) was greater than the 2% increase for females (from 5.5 to 5.6), whose change was not statistically significant. By age group, the largest statistically significant percentage increase from 2020 to 2021 was for males aged 15–24, by 8%.

A limitation of this report is that the changes in rates for some age groups were underpowered (insufficient numbers of deaths) to detect statistical significance...

... the suicide rate for females aged 10–14 increased 15% from 2020 to 2021, the largest increase of any age group. However, the change did not reach statistical significance because it was based on relatively few cases: 204 deaths in 2020 and 237 in 2021.

Suicidal Behavior vs Mortality



Health Topics ▾

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Mental Health and COVID-19: Early evidence of the pandemic's impact: Scientific brief, 2 March 2022

2 March 2022 | COVID-19: Scientific briefs

Key findings

- Data on suicide mortality are mixed and do not clearly indicate a change in rates since the pandemic began.
- Data indicated higher risk of suicidal behaviors among young people.
- Exhaustion (in healthcare workers), loneliness and positive COVID-19 diagnosis increased risk for suicidal thoughts.

[WHO-2019-nCoV-Sci-Brief-Mental-health-2022.1-eng \(2\).pdf](#)



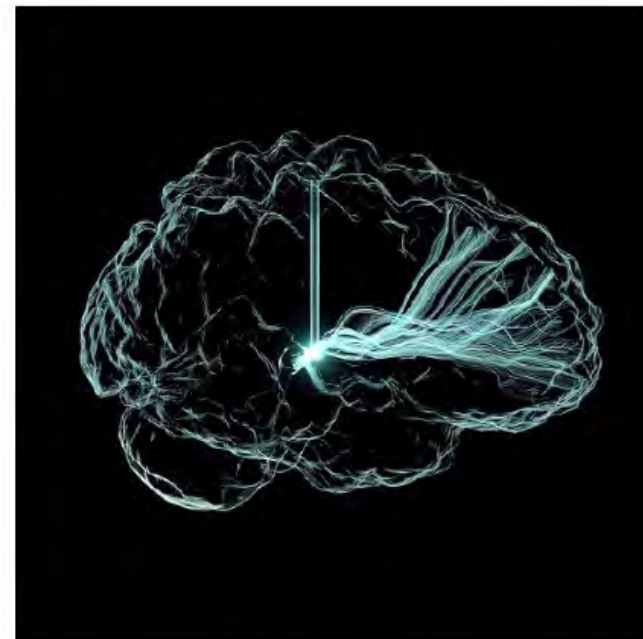


What's New?

New Approaches in Treatment of Depression



- Pharmacogenomics guides Treatment
- Alternative Therapies
- Other Therapies
 - Transcranial Magnetic Stimulation
 - Deep Brain Stimulation
 - Ketamine or esketamine
 - Psilocybin (research only; not FDA approved)
- Virtual Treatment
- Digital Approaches
- Enhancement of psychotherapy



Deep Brain Stimulation Illustration. *NINDS*

Source: <https://www.nih.gov/about-nih/what-we-do/nih-turning-discovery-into-health/mental-health>

Cytochrome P450s (CYP): An Enzyme Superfamily



Major system for metabolism of therapeutic substances

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Drug Interactions Flockhart Table™

This site is dedicated to the memory of a pioneer in clinical pharmacology and pharmacogenetics and the creator of this site/page, **Dr. David A. Flockhart, MD, PhD**

*Please note it may take several seconds for the table to render completely with all references.

Note: Click on the drug name to view further information. If you're on a Mobile device, please go to the [Search](#) area to interact more easily.

Substrates

1A2	2B6	2C8	2C9	2C19	2D6	2E1	3A4/5
acetaminophen	artemisinin	amodiaquine	amitriptyline	amitriptyline	alprenolol	acetaminophen	abemaciclib
amitriptyline	bupropion	cerivastatin	azilsartan	atomoxetine	amitriptyline	aniline	abiraterone
apremilast	clobazam	dabrafenib	capecitabine	brivaracetam	amphetamine	benzene	acalabrutinib
caffeine	cyclophosphamide	enzalutamide	celecoxib	carisoprodol	aripiprazole	chlorzoxazone	alectinib
clomipramine	efavirenz	olodaterol	clopidogrel	chloramphenicol	atomoxetine	enflurane	alfentanil
clozapine	ifosfamide	paclitaxel	diclofenac	citalopram	brexpiprazole	ethanol	alprazolam
cyclobenzaprine	ketamine	ponatinib	doxepin	clobazam	bufuralol	halothane	amitriptyline
diazepam	moxifloxacin	rosuvastatin	fluvastatin	clonidine	carisoprodol	levofloxa	vedolizumab

Source: <https://drug-interactions.medicine.iu.edu/MainTable.aspx>





PGx testing explains previous lack of response to citalopram

Citalopram
Celexa

Antidepressants - SSRI

You have more than one gene variant impacting your predicted response to this medication.

You have a variant in gene **CYP2C19**
Rapid Metabolizer

You should select an alternative medication to Citalopram.

You have a variant in gene **HTR2A**
You may have a reduced response to this medication.

Several green options



Antidepressants - Others

- Lithium
- Bupropion
- Trazodone

Antidepressants - SNRI

- Duloxetine
- Levomilnacipran
- Milnacipran
- Venlafaxine

Antidepressants - SSRI

- Citalopram
- Escitalopram
- Paroxetine
- Sertraline
- Fluoxetine
- Fluvoxamine
- Vilazodone
- Vortioxetine

Antidepressants - Tricyclic

- Amitriptyline
- Clomipramine
- Doxepin
- Imipramine
- Trimipramine
- Desipramine
- Nortriptyline
- Mirtazapine
- Protriptyline

Inogene

Courtesy: Dr. K. Siminovitch



True or False?

A. COVID-19 Pandemic worsened trends in Mental Health issues

True

Multiple biopsychosocial factors affected diverse population groups differently

- Adverse impact upon Mental Health condition prevalence
- Long COVID is considered to be a non-psychiatric group of conditions
- Disparities impacted outcomes
- Substance abuse and opioid overdoses worsened
- Risk to Youth greater than other ages

B. COVID-19 Pandemic Increased Awareness of Mental Health Risks

True. Long term effects will take time to identify.





ALM BENEFITS PRO

Report: Pandemic shakes up disability claims numbers for 2020

By Scott Wooldridge

January 26, 2022 at 09:26 AM

In particular, pandemic-related stress was driving high levels of disability claims for diseases of the digestive system.

The [2020 Benchmarking Trends](#) report, released by the Integrated Benefits Institute (IBI), is drawn from the nation's largest dataset of claims filed with employer-sponsored short-term disability, long-term disability, [federal family and medical leave](#), and Workers' Compensation benefits programs. The report includes data from 13 carriers and third-party administrators, covering 10.6 million claims.

Source: Report: Pandemic shakes up disability claims numbers for 2020 | BenefitsPRO; DI Integrated Benefits Institute Mental-Health-Report-FINAL.pdf



Implications for Underwriting DI Insurance



Morbidity Impact of Depression and Anxiety

- Post COVID impact will take years to determine

Red Flags

Consider Severity, Comorbidities, Context

- Impairment: occupational and social
- Substance use/abuse history
- Symptom/mood instability
- Non-adherence to treatment
- Concurrent conditions: eg. sleep disorders, ADHD, pain, non-psychiatric conditions
- Rx: chronic benzodiazepine, opioid use

Yellow Flags

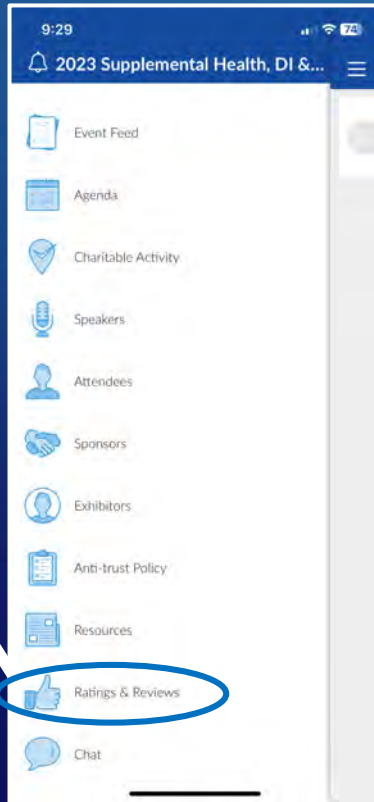
Medication changes: Consider Symptom severity, rationale

- Inconsistencies/gaps in medical care
- Increasing drug doses may not be relevant to risk assessment
- Occupational impact: may be difficult to determine if self-employed or high-risk occupation

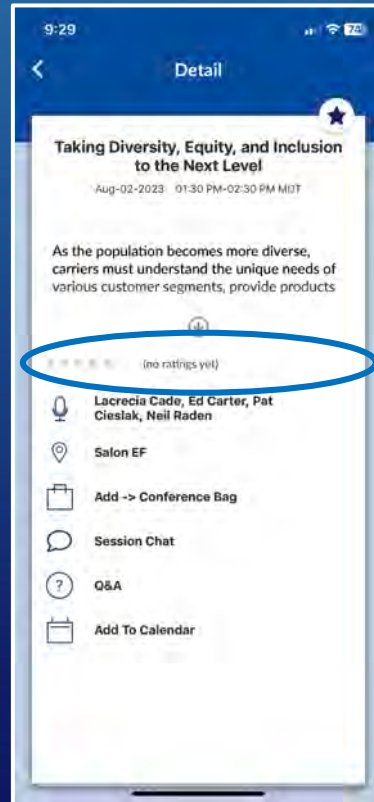


Please Provide Your Feedback on the Conference App

OPTION 1



OPTION 2



Thank You



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loraine.omanganes@genre.com

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