# Instructions for using the NIH RCDC database:

- Go to Estimates of Funding for Various Research, Condition, and Disease Categories
  (RCDC)
- Select disease category and year. This will give you the amount spent on research for that disease and year by all 27 NIH institutes and centers.
- To get the amount spent by a specific institute click on the column labeled "funding IC". This will sort the Institutes. Then add the amount spent for all the NIMH grants.
- For details of any given grant, click on the grant number. This will provide you with the project information, including an abstract, a statement on public health relevance, and the grant's funding history.

The RCDC database includes extramural grants and contracts as well as intramural research projects. A computerized NIH program analyzes each funded research grant and assigns it to one or more specific disease categories. For example, a research study of a gene thought to be related to a specific neurotransmitter would be assigned to both schizophrenia and bipolar disorder if the grant application says that the gene is important to both disorders.

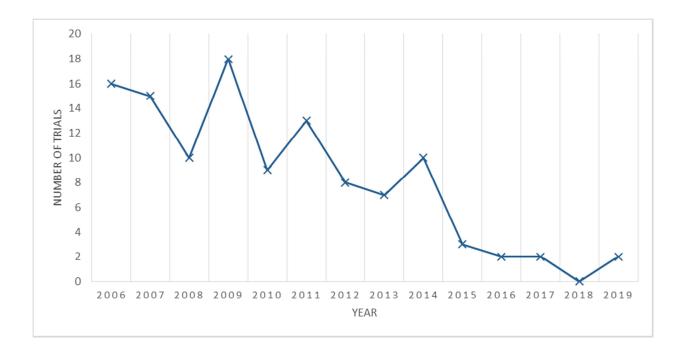
# NIMH Research Expenditures by Diseases and Conditions, 2016-2019

2016			2017			2018			2019				
			<u>% of</u>			<u>% of</u>			<u>% of</u>			<u>% of</u>	<u>% increase or</u>
			<u>total</u>			<u>total</u>			<u>total</u>			<u>total</u>	decrease in
		<u># of</u>	<u>nimh</u>		<u># of</u>	<u>nimh</u>		<u># of</u>	<u>nimh</u>		<u># of</u>	<u>nimh</u>	<u>expenditures</u>
	total spent	<u>grants</u>	<u>budget</u>	total spent	<u>grants</u>	<u>budget</u>	<u>total spent</u>	<u>grants</u>	<u>budget</u>	<u>total spent</u>	<u>grants</u>	<u>budget</u>	<u> 2016-2019</u>
schizophrenia	\$ 211,459,201.00	496	13.7%	\$ 198,998,860.00	453	12.4%	\$ 202,340,634.00	430	11.5%	\$211,347,652.00	433	11.3%	-17.5%
bipolar disorder	\$ 80,450,101.00	147	5.2%	\$ 75,278,237.00	135	4.7%	\$ 77,698,717.00	127	4.4%	\$ 73,795,785.00	121	3.9%	-25.0%
depression	\$ 247,663,710.00	590	16.0%	\$253,316,569.00	590	15.8%	\$ 272,925,562.00	596	15.6%	\$ 291,662,563.00	632	15.6%	-2.5%
autism	\$ 135,365,217.00	312	8.7%	\$ 140,746,343.00	322	8.8%	\$ 159,386,276.00	360	9.1%	\$ 161,304,037.00	344	8.6%	-1.2%
anxiety disorders	\$ 112,631,201.00	278	7.3%	\$ 115,485,584.00	282	7.2%	\$ 129,029,472.00	294	7.4%	\$ 128,316,413.00	296	6.9%	-5.5%
eating disorders	\$ 15,272,554.00	47	1.0%	\$ 18,439,750.00	55	1.2%	\$ 19,843,746.00	51	1.1%	\$ 22,588,672.00	59	1.2%	20.0%
suicide	\$ 41,041,093.00	92	2.7%	\$ 47,184,416.00	113	2.9%	\$ 76,081,797.00	148	4.3%	\$ 89,112,444.00	173	4.8%	77.6%
homelessness	\$ 2,790,045.00	10	0.2%	\$ 3,179,737.00	10	0.2%	\$ 3,017,988.00	10	0.2%	\$ 1,187,696.00	4	0.1%	-50.0%

	schizophrenia	bipolar disorder	major depressive disorder	total
2006	9	3	4	16
2007	6	5	4	15
2008	4	2	4	10
2009	9	4	5	18
2010	4	2	3	9
2011	8	3	2	13
2012	2	2	4	8
2013	4	0	3	7
2014	3	2	5	10
2015	0	0	3	3
2016	1	0	1	2
2017	0	0	2	2
2018	0	0	0	0
2019	1	0	1	2

Total Number of NIMH-funded Drug Treatment Trials for Serious Mental Illnesses, 2006-

2019



#### Online Supplement S-4: NIMH changes to 2020-2025 Strategic Plan after public comment

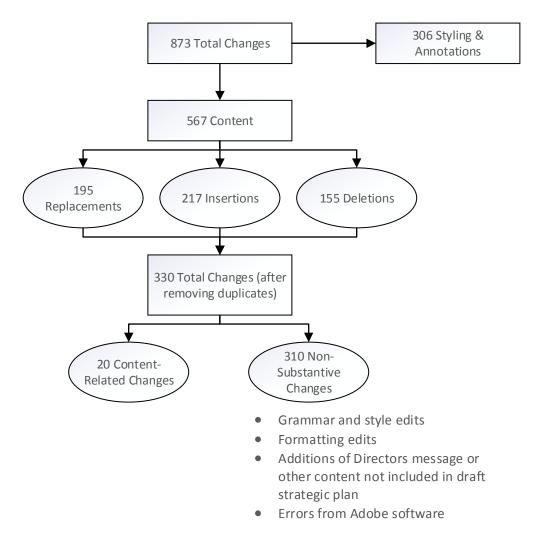
The National Institute of Mental Health (NIMH) released the draft 2020-2025 Strategic plan for public comment on December 2, 2019. This request for information lasted until January 15,2020, after being extended for two weeks due to it falling over the winter holidays. The final 2020-2025 NIMH Strategic Plan was released to the public on May 20, 2020.

According to Director Gordon's presentation at the National Advisory Mental Health Council Open Policy Session on May 19, 2020, NIMH received 6,233 comments in response to the request for information on the draft NIMH 2020-2025 Strategic Plan. This is compared to 400 comments that are typically received to requests for public comment, according to Director Gordon. Through their review process, Director Gordon suggested that only 102 of the 6,233 comments had specific actionable comments, 39 of which were said to be incorporated into the final version.

NIMH identified common themes among the responses they received, which they reported included a need to emphasize prevention, engage stakeholders in research design and clarify the role of animal models, among others. Examples of feedback that were implemented into the final version include a definition of across the lifespan, inclusion of other determinants of health, such as insurance status, and the addition of language to clarify research on pregnant and lactating women, according to Director Gordon. In his presentation, Director Gordon said that additional comments were not implemented due to them either not being in scope or already addressed in the plan.

# Analysis of actual changes made to 2020-2025 NIMH Strategic Plan

We conducted a comparative analysis of the draft and final versions of the 2020-2025 NIMH Strategic Plans to further elucidate what changes were made as a result of the more than 6,000 public comments that were received. The compare function of Adobe Acrobat was used to enumerate and analyze the total number of changes incorporated into the final version. The results of this analysis are presented in Figure 1.



The complete list of content-related changes is presented below, by section:

#### **Overview of NIMH**

• Addition of definition of lifespan "from prenatal development to late life."

# Stewardship

• Pg 7: Addition of "people with lived experience, including family members" to read "NIMH works with external stakeholders – policymakers, advocacy groups, providers, and people with lived experience, including family members – who are also committed to the prevention, treatment, recovery, and cure of mental illnesses."

# Challenges & Opportunities

Suicide prevention: [Old]: "These data contribute to the need for adoption and implementation of evidence-based screening and intervention tools to prevent suicide attempts and deaths." [New]: "NIMH continues to support research to identify how and why these screening and follow-up interventions work, and how these evidence-based tools can be scaled up for broader implementation to prevent suicide attempts and deaths."

• Mental Health equity:

[Old]: To reduce mental health disparities and promote equity, NIMH supports research that address the needs of individuals and communities across age, race, ethnicity, sex, gender identity, sexual orientation, geography, and socioeconomic status."

[New]: To achieve mental health equity, NIMH supports research that addresses the needs of individuals and communities across age, race, ethnicity, culture, language, gender identity, sexual orientation, geography, insurance status, socioeconomic status, and other social determinants of health."

• HIV:

[Old]: "including cognitive disorders and mental illnesses. Behavioral and social science research focuses on individual and interpersonal factors, peer and community-based strategies, as well as structural and psychosocial determinants that are critical in HIV prevention and treatment. NIMH encourages implementation science to explore ways to bring evidence-based interventions to the greatest number of people that may benefit, particularly those in less resourced environments, both domestically and globally. NIMH also places a high priority on research that impacts the most vulnerable"

[New]: "and to develop therapeutic strategies to treat HIV-CNS comorbidities, including cognitive disorders and mental illnesses. In addition, NIMH supports efforts focused on eradicating the virus from the CNS, a prerequisite to finding a safe, effective, and complete cure for HIV. To complement efforts in basic science, behavioral and social science research efforts examine environmental, group level, individual, and interpersonal factors; peer and community-based strategies; as well as structural and psychosocial determinants that are critical in HIV prevention and treatment. NIMH supports implementation science that can enable researchers to bring evidence-based interventions to the greatest number of people who may benefit, particularly those who may be living with HIV in less resourced environments, both domestically and globally. NIMH also places a high priority on HIV research that can impact the most marginalized"

• Genetics:

Inserted "In addition, invasive neural recording devices (e.g., deep brain stimulation with implanted electrodes) being used to treat a variety of clinical conditions in humans may enable researchers to explore neural circuity underlying complex human behavior and mental illnesses."

# **Cross-cutting research themes**

- Insertion of "geographical context"
- Global Mental Health:

[Old]: "among our geographically, socio-economically, and culturally diverse population here in the United States."

[New]: "here in the United States, especially for those from geographically, socioeconomically, and culturally diverse populations."

- Addition of "other social determinants of health" to environmental influences
- Pg 17: Changed computational psychiatry to computational approaches [Old]: "(i.e.,"
   [New]: "(e.g., data mining, machine learning,"

#### Goal 1: Define the brain mechanisms underlying complex behavior

- [Old]: "biological and other contributors"
  [New]: "mechanisms (e.g. brain, behavioral, environmental, psychosocial) that contribute"
- [Old]: "Increasing the power and reliability of association studies including whole-genome and genome, exome-, epigenome-, phenome-and other 'ome'-wide studies."
  [New]: "Conducting robust, well-powered, and unbiased genome-wide x phenome-wide association studies by leveraging large-scale genetic and phenotypic/exposure data from biobanks, health systems, and other population-scale cohorts."

#### Goal 2: Examine mental illness trajectories across the lifespan

- [Old]: "experiences"
  [New]: "experiences, social determinants,"
- [Old]: "risk"
  [New]: "risk, resilience,

### **Goal 3: Strive for Prevention and Cures**

- Addition of behavioral to types of therapeutic modalities
- Objective 3.1.B: [Old]: "populations (e.g., age, sex, illness phase, ethnicity, race, educational, and socioeconomic background)." [New]: "populations. Such measures may take into account illness phase, age, sex, race,

ethnicity, culture, education, socioeconomic background, and other factors."

• Objective 3.2.A: Insertion "cycle (including menarche, the menstrual cycle, all stages of pregnancy, and menopause),"

#### Goal 4: Strengthen the public health impact of NIMH-supported research

- Addition of "may benefit from stakeholder input" when discussing approaches for evaluating interventions
- Objective 4.2.A: Addition of "involving paraprofessionals and peer providers" to workforcerelated issues.
- Objective 4.3:

[Old] "we need innovative and sustainable service delivery models that address inequalities that stem from historical, social, and economic challenges that disproportionately affect disparate populations and people with serious mental illness..."

[New] "we need innovative and sustainable service delivery models that address disparities that stem from historical, social and economic inequities that disproportionately affect marginalized populations and people with serious mental illness..."

• 4.3.A: Addition of "language and cultural barriers" to underserved populations.

# How to use www.clinicaltrials.gov

- Click on advanced search.
- Add condition or disease, eg. Schizophrenia.
- Add lead sponsor, eg. NIMH.
- Check funder type, eg. NIH.
- Add start date, eg. 01/01/2008 to 12/31/2008.
- Click on search.