A r e w e u s i n g the best diagnoses to make progress in psychiatric research? In the current issue of *JAMA Psychiatry*, we ask whether dimensional diagnoses should replace categorical diagnoses. Yee and coauthors¹ argue in favor of such a change, and Weinberger and coauthors² argue against it. Our statistical editor, Helena Chmura Kraemer, PhD, reflects on this debate.³ These invited articles were stimulated by the decision of the National Institute of Mental Health to focus psychiatric research on the Research Domain Criteria (RDoC), a new nosology for psychiatric disorders.

There is unanimous agreement that *DSM-5* is far from perfect. But what should be done? Do we need to reboot psychiatric research with a radically different diagnostic system? Or should we make progress from within the current system?

Many critics point to the poor validity of the *DSM-5* diagnoses. They are molded with a template pioneered by Emil Kraepelin. He conjectured that 3 different validators of psychiatric diagnoses (ie, clinical features, brain pathology, and etiology) converge on diseases defined by nature. He assured researchers that they could divide the labor of discovery as they set out to conquer mental illness. In the end, nature would reveal the psychiatric diseases to us. When he introduced this paradigm in 1896, it generated considerable enthusiasm. He was able to secure a $1 million grant from the Rockefeller Foundation to build the first Psychiatric Research Institute. His optimism has fueled psychiatric research ever since.

But psychiatric research has turned out to be more complex. The validators of psychiatric diagnoses (several others have been added to the 3 proposed by Kraepelin⁴) do not converge on natural entities. What is valid for a clinician might not be valid for a brain researcher or a gene hunter. So far, nature has not revealed psychiatric diseases to us. But we can develop diagnostic constructs with increasingly greater utility in predicting future outcomes. The true value of a psychiatric diagnosis is the ability to predict course of illness, response to treatment, and, ultimately, quality of life and level of function in society. Good clinicians use diagnoses in the service of best patient care; they balance a paternalistic focus on outcomes with a respect of personal agency and encouragement for recovery.

Are dimensions better than categories in getting us to our goal? Some clinicians are at ease with diagnostic categories: the psychiatrist who needs to manage a psychiatric crisis, or the forensic expert who is asked to assess the mental state of a defendant. However, others might prefer dimensions: the clinician who aims to understand the first-person experience of mental states or the psychologist who wants to explain human behavior. Such personal preferences do not need to be mutually exclusive. Categories can be embedded in a dimensional system and dimensions can be converted into categories. In psychiatry, we do not have to carve nature at its joints. But we do need to identify transition points, the points where behavior shifts from normal to pathological, from one syndrome to another, and from one severity level to another. *DSM-5* has included several dimensional approaches to psychopathology: symptom and severity measures that cut across diagnoses; dimensions of psychosis that capture transitions between the main categories of functional psychoses; and a detailed, dimensional approach to personality.

It is not clear how the new domains of the RDoC matrix map onto the current dimensions of psychopathology. There is the strong hypothesis that the RDoC matrix is a better map for explorers of the human mind. But the details of the RDoC domains (ie, the coordinates of the new map) need to be tested. We have not reached a Copernican turn, when we replace a faulty clinical model with a correct brain-based model. In fact, the RDoC domains are conjectures, ready for stringent experimental testing. These tests need to establish reliability in multiple settings and populations, with proper correction for multiple comparisons. The experimental designs should probe causative relationships. Only then can we consider RDoC as a viable option for a new psychiatric nosology.

In the end, progress in psychiatric research will depend on our goals, not just the choice of dimensional or categorical approaches. The proponents of RDoC are correct that we need a much deeper exploration of neuroscience and genetics to advance a mechanistic understanding of mental illness. But the prediction of future outcomes will remain our North Star.

In this journal, we hope to publish experiments that test how validators improve the clinical utility of a psychiatric diagnosis. Ideally, such studies include head-to-head comparisons of categorical and dimensional approaches. Such validators (categorical or dimensional) can give rise to measures of clinical complexity and quality of care. Ultimately, we need methods that help us to capture clinical heterogeneity and move us toward more personalized psychiatric care.

Whether we define an abnormal mental state categorically as brain disease or dimensionally as neurodiversity is a matter of personal preference. We know that we have made progress when our research generates new knowledge that leads to better outcomes for persons with a psychiatric diagnosis.
An Urgent Call to Address the Deadly Consequences of Serious Mental Disorders

Shuichi Suetani, MBChB; Harvey A. Whiteford, MBBS, PhD; John J. McGrath, PhD, MD

The findings are shocking but not surprising because they are consistent with a large body of previous research. The obvious challenge arising from these findings is how to do more to prevent and treat the risk factors and diseases identified by Olfson and colleagues in individuals with schizophrenia. What do we need to do now?

Do we need more epidemiological research to convince us we have a problem? In some respects, probably not (we must avoid “circular epidemiology”). Scarce research money would be better invested in assessing how to implement proven interventions and in developing better treatments and prevention strategies. Do we need more recommendations from professional bodies and more clinical practice guidelines? Maybe not, but such reports can focus concentration and trigger behavioral change in clinicians. What is needed now is a thorough realignment of policy and funding to support action at the clinical level. Incremental fixes, such as sporadic government edicts, clinician education about the problem, promotion of practice guidelines, patient education to be more assertive “consumers,” and implementation of integrated electronic medical records, have not had the necessary effect. While governments have a restricted range of policy levers at their disposal to implement reforms, each of the available levers (eg, organization and regulation of health services, the amount of financing provided, and how the payments are targeted) needs to ensure priority is given to physical and mental health care of those with severe mental disorders. Governments can influence but not control the behavior of health care providers, so leadership by health organizations and professionals is critical and should be aligned with the right government incentives. The precise settings on the different policy levers will vary between and within nations. Consumers should have the necessary information about their physical health and clear expectations about the interventions that will be provided. Physical health outcomes need to be measured and individualized targets set for each consumer, with funders and health care providers held accountable for achieving these agreed goals. If we do not make the strategic investments to align the funding, professional responsibilities, and consumer outcomes to prioritize physical health, it is unlikely that the current patchwork of underfunded programs will affect the differential mortality gap in disorders such as schizophrenia.

The findings by Olfson and colleagues highlight the need to focus on interventions that target lifestyle risk factors such as smoking and poor diet, treat medical risk factors such as hypertension and hypercholesterolemia, and assertively manage physical comorbidities such as diabetes mellitus and cardiovascular disease. Smoking in the general population has markedly declined in the past decades, while the smoking rate of those with psychosis remains at a much higher level and is one obvious intervention target. Another important modifiable risk factor, physical activity, can help improve the health outcomes for those with psychotic illness. Research in the general population suggests that even amounts of exercise well below the recommended 150 minutes per week can lead to a significant increase in life expectancy. The body of evidence supporting the effectiveness of physical activity in individuals with mental illness has been accumulating rapidly, and the...