

MINDSCAPES

MASS GENERAL DEPARTMENT OF PSYCHIATRY NEWSLETTER FOR FRIENDS AND SUPPORTERS • SPRING 2018

Helping patients on medical and surgical units

Embedded psychiatrists and psychologists work to reduce complications and stress

It's okay to see wild animals roaming close up when you're on safari — but not when they're in your hospital room.

Yet, that's what 67-year-old Walter J experienced during a prolonged hospital stay following spine surgery for acute back pain. Over time, he became increasingly detached from hospital staff and disinterested even in his family's visits. Then he refused oral medications. The bedside nurse outwardly observed that Mr. J "seems to have just given up" — a clear sign of depression. Inwardly, the situation was far worse.

And, who would expect that treatment for restless legs would cause a medical crisis? It happened to Mary W, a 47-year-old patient with bipolar disorder and serious kidney disease who was admitted to Mass General after refusing treatment at her local hemodialysis center and exhibiting paranoid delusions directed toward the staff.

CONSULTATION LIAISONS

In cases like these — and thousands of others each year — experts from the Department of Psychiatry's Consultation Service are called to the bedside in medical or surgical wards to identify and treat patients' behavioral and neurocognitive symptoms.

By integrating specialized, deep knowledge of both psychiatry and medicine, the Consultation Service Liaisons — or CLs, as they are known — are able to resolve psychiatric complications that can challenge medical staff and interfere with the patient's medical care and mental well-being.

In Ms. W's case, the CL discovered that a recent dosage increase in her medication for restless leg syndrome (RLS) was interacting badly with her medication for bipolar disorder. Working with

the medical team, the CL recommended a different RLS medication that helped Ms. W's paranoia recede and allowed her to resume hemodialysis.

The CL called to consult on Mr. J's case learned that Mr. J had seen wild animals running through his room and was fearing for his sanity. Guided by years of training and experience, the CL realized Mr. J was exhibiting signs of delirium, a dangerous condition that warranted additional medical tests. One of these revealed a

previously undetected urinary tract infection, the treatment for which helped stop Mr. J's delirium in its tracks.

CARE AT THE BEDSIDE

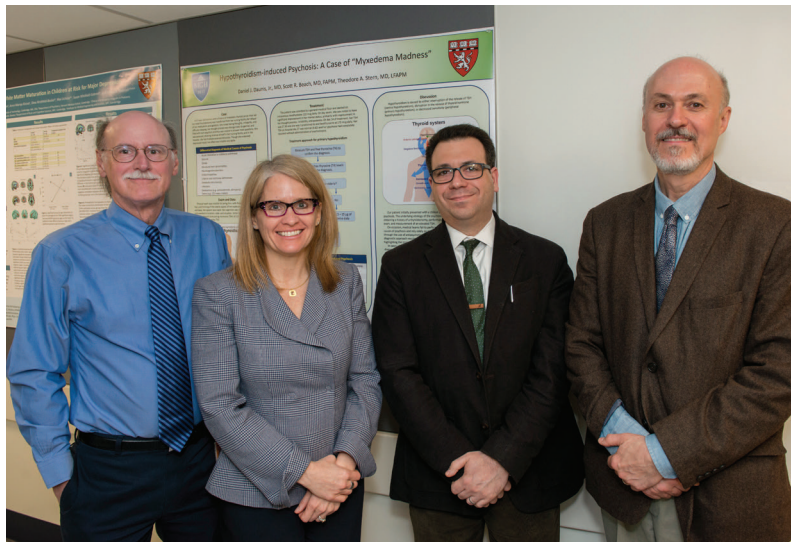
"Being hospitalized for a medical illness is stressful," observes Felicia A. Smith, MD, director of both the MGH Division of Psychiatry & Medicine and Psychiatry Consultation Services.

"Patients with a history of mental illness are certainly at elevated risk for developing psychiatric complications when they're admitted for medical reasons. But the same complications can develop with any patient

when the diagnosis of a disease or its treatment triggers emotional, behavioral or cognitive effects," Dr. Smith explains.

CLs typically do their assessments in the tight quarters of two-bedded hospital rooms amid IV poles, tray tables and the signals and alarms of medical equipment — often with patients attached to various tubes and wires. Adding to those physical challenges, medically ill patients stay in the hospital only six days on average. "Locating a pathological condition along the vast border between psychiatry and medicine, determining the root cause and treating it quickly is the fundamental task and challenge of consultation psychiatry," notes Theodore Stern, MD, chief emeritus of the Psychiatry Consultation Service and director from 1978 to 2017.

(Continued on page 7)



Theodore A. Stern, MD, Chief Emeritus, Avery D. Weisman, MD Psychiatry Consultation Service; Felicia A. Smith, MD, Chief, Avery D. Weisman, MD Psychiatry Consultation Service; Nicholas Kontos, MD, Director, Fellowship in Consultation-Liaison Psychiatry; Gregory L. Fricchione, MD, Director Emeritus, Division of Psychiatry and Medicine.

From the Chief



Our spring issue highlights the role of the department of Psychiatry in the quality of care at Mass General. About 43,000 people of all ages are admitted to our medical and surgical units each year. For more than one in six patients, a psychiatrist or psychologist serves as a member of the care team – a level of collaboration that is perhaps the highest in the nation.

These specially trained clinicians may be called upon when a patient with a pre-existing psychiatric disorder needs to be treated in a hospital ward for a serious disease, injury or illness. The stress of the hospital environment, despite the attentiveness of staff or the amenities, can trigger a worsening of behavioral and emotional symptoms.

The inverse also applies. A patient who has never had a mental health issue can suddenly develop anxiety, depression or paranoia, or become disruptive. This can happen because of the side effects of medication, the distress of a life-threatening diagnosis, or the impact of a disease or injury in the brain. Our psychiatry consultation liaisons, CLs as they are called, work at the patient's bedside to sort out the complex "chicken or egg" questions about the cause of psychiatric symptoms.

The article on gratitude also underscores our faculty's interest in the connection between mental and physical health. Depression can compromise a person's successful long term recovery from a heart attack. Observing this relationship first hand, Dr. Jeff Huffman set out to develop a clinical intervention based on positive psychology, and its encouraging results are shared.

The theme of gratitude, but of another kind, continues in this issue with a profile of donors Liz and Kent Dauten whose generosity established the Dauten Center for Bipolar Treatment Innovation. For an illness that affects three in 100 adults, research to develop more effective, better tolerated clinical remedies is urgently needed, so we are deeply appreciative of the Dautens' philanthropic commitment and of their extra gift in linking their names with this vital work.

Jerrold F. Rosenbaum, MD
Psychiatrist-in-Chief,
Massachusetts General Hospital
Stanley Cobb Professor of Psychiatry,
Harvard Medical School

Faculty News

Erin Dunn, ScD, of the Center for Genomic Medicine (CGM), and **Rakesh Karmacharya, MD, PhD**, of the Psychiatric and Neurodevelopmental Genetics Unit in the CGM, have received



Erin Dunn, ScD



Rakesh Karmacharya, MD, PhD

the National Institute of Mental Health Biobehavioral Research Award for Innovative New Scientists. Dunn will undertake the study "Childhood adversity, DNA methylation, and risk for depression," while Karmacharya's research will be "Ex vivo signature of psychosis and treatment response in patient-derived neurons."

Jacob Holzer, MD, has received the Harvard Medical School Program in Psychiatry and the Law Larry H. Strasburger, MD, Award for Outstanding Forensic Presentation. Holzer, who received the award for "Individual anti-government rhetoric, violence, and vulnerability: lone actor violence," is the lead co-editor of the textbook *Geriatric Forensic Psychiatry: Principals and Practice*, 2018, published by Oxford University Press.



Jacob Holzer, MD



Stephanie Sogg, PhD

Stephanie Sogg, PhD, psychologist in the MGH Weight Center, has been awarded the American Society for Metabolic and Bariatric Surgery's (ASMBS) 2017 Distinguished Behavioral Health Provider Award. This award recognizes an ASMBS behavioral health member who has made an extraordinary effort for promoting the values of behavioral health: clinical excellence, advocacy, research and education.

Olivia I. Okereke, MD, MS, director of Geriatric Psychiatry Research, was elected as an At-Large Board Member of the American Association of Geriatric Psychiatry. With nearly 2,000 geriatric psychiatrists and other healthcare professionals, the association promotes the mental health and well-being of older people through professional education, public advocacy and support of career development for clinicians, educators and researchers in geriatric psychiatry and mental health.



Olivia I. Okereke, MD, MS



Luana Marques, PhD

Luana Marques, PhD, director of Community Psychiatry, PRIDE (Program for Research in Implementation and Dissemination of Evidence-Based Treatments) is the President-Elect of the Anxiety and Depression Association of America. Dr. Marques has been an active member of the association — with its more than 1,800 professional members — since 2008 and has served on the board since 2016.

A Grateful Life May be a Longer Life

Recovery in Heart Disease Tied to Psychological Factors

In 63 B.C., the Roman politician and lawyer Cicero wrote, “Gratitude is not only the greatest of the virtues but the parent of all others.”

More than 2,000 years later, the understanding of gratitude has received a scientific twist, thanks in part to the MGH Cardiac Psychiatry Research Program (CPRP). Led by Jeff Huffman, MD, director of Clinical Services in the Department of Psychiatry, the program focuses on the connections between mental health and medical health in patients with heart disease and other chronic conditions.

A key component is the role of optimism and gratitude in health and how these positive psychological states may impact – and, possibly improve – outcomes for patients with chronic or acute illnesses, like a heart attack or type 2 diabetes. The study of gratitude and its impact on patients’ long-term health dates to Huffman’s early days as a psychiatrist.

“I have always been interested in this relationship,” says Huffman. “Over time, as I was seeing patients in the hospital, I began to have a good sense about who was going to recover successfully, and who was not, which was often based on psychological factors.” Some patients were temporarily depressed after a cardiac event, but still hopeful about getting better. They seemed to recover well. Other patients were not necessarily depressed, but at the same time lacked motivation, gratitude, or hope. They really struggled.

“For years, I had quietly kept this idea about the link between positivity and recovery. Then one day I happened across a book by a researcher named Sonja Lyubomirsky, PhD. She’s a major contributor to the field of ‘positive psychology’ and the scientific evidence that being happier, more hopeful, and having greater well-being can improve health outcomes. I thought: this is exactly what my patients need!”



“Gratitude is important, complex and powerful. Not all people who have a medical event experience significant gratitude – only about half of patients we’ve encountered, in fact.”

– Jeff C. Huffman, MD

Huffman and Lyubomirsky, who is professor of Psychology at the University of California, Riverside, soon decided to study the link between gratitude and recovery. “Gratitude is important, complex and powerful. Not all people who have a medical event experience significant gratitude – only about half of patients we’ve encountered, in fact,” says Huffman.

To understand the role gratitude plays in cardiac recovery, Huffman and colleagues in the MGH CPRP enrolled 164 people hospitalized for a heart attack, having them return two weeks after, where they completed a formal measure of overall gratitude and specific gratitude related to health. Six months later, they were asked to wear step counters for a week to gather additional information about their recovery. The team found that gratitude at two weeks was associated with overall greater adherence to medication, healthier diet and more exercise six

months later, as well as better health-related quality of life and lower rates of developing depression and anxiety.

The CPRP team believes a positive and grateful approach to life is teachable and has been testing this with therapeutic activities like writing a letter of gratitude, using humor, capitalizing on personal strengths, recalling past success and doing kind acts of all sizes. The results are gaining momentum on a national level. The CPRP now

has support from the National Institutes of Health and the American Diabetes Association to study these interventions in patients with heart attacks, chronic heart disease, and type 2 diabetes.

“We are excited to further this area of research in the hope that this gratitude and well-being-focused intervention really might help people get and stay healthy,” says Huffman. “And for heart attack patients, the stakes could not be higher.”

Happiness and Health Program

- Exercises
 - Week 1: Gratitude for Positive Events
 - Week 2: Personal Strengths
 - Week 3: Gratitude Letter
 - Week 4: Enjoyable and Meaningful Activities
 - Week 5: Remembering Past Success
 - Week 6: Acts of Kindness
 - Weeks 7 & 8: Participant Choice



Positive Psychology for Healthy Recovery



Happiness-promoting activities that patients with heart disease practiced in a research study conducted by the MGH Cardiac Psychiatry Research Program.

The Dauten Family Center for Bipolar

Gift from Chicago couple creates a global hub for



Kent and Liz Dauten

Nearly three of 100 adults 18 and over in the United States had bipolar disorder in the last year, and it's estimated that more than four of 100 will experience bipolar disorder at some time in their lives. For Chicago area residents Liz and Kent Dauten, these statistics are very personal. Two of their four children were diagnosed with the disorder in their mid to late teens. "After their completely normal childhoods, it was like a lightning bolt struck our entire family," said Kent Dauten.

The couple set out to learn about an illness they "had hardly heard of" and to get their children launched on the treatment journey. They also resolved to make advancing knowledge and treatment of bipolar disorder their top philanthropic priority. Inspired by the compassionate treatment of one of their children as well as the forward-thinking research of Andrew Nierenberg, MD, the Dautens made a gift in 2016 to Mass General to launch a new center that would revolutionize understanding of the disorder.

INNOVATIVE THINKING

Bipolar disorder is a lifelong mood disorder resulting in alternating episodes of mania and depression. It often recurs, even with treatment. Despite recent progress identifying genes that contribute to the development of the disorder, the biological underpinnings are not well understood. Research funding is sparse even though the disease costs patients, families and society an estimated \$210 billion a year.

"Bipolar disorder costs a lot in terms of personal suffering and the monetary cost is staggering. Even though it's so prevalent, it is grossly understudied," says center director Dr. Nierenberg. Dr. Nierenberg, Professor of Psychiatry at Harvard Medical School and the Thomas P. Hackett Chair of Psychiatry at Mass General, is among the most widely cited international experts on bipolar disorder.

"Our wildest dream is for scientists to be able to understand the genetic piece of [bipolar disorder] and develop therapies. And even beyond that, we hope to see the development of personalized therapies that might be specific to individual patients."

— Kent Dauten

The last time a drug was developed specifically to treat bipolar disorder was 70 years ago, when lithium was introduced. Lithium has a variety of side effects that drive the urgency to find new treatments.

BREAKING THE LOG JAM

The Dautens hope to break that log jam. "Our wildest dream is for scientists to be able to understand the genetic piece of it and develop therapies," Mr. Dauten says. "And even beyond

Treatment Innovation

research, education and outreach

that, we hope to see the development of personalized therapies that might be specific to individual patients.”

That’s why Dauten Center researchers are casting a wide net. They are collaborating with researchers around the globe — the University of Oxford, University of Paris, Deakin University in Australia, University of Toronto, and McLean Hospital in Belmont, Mass. — to create an epicenter of research, coordinating studies and pursuing innovative ideas.

A DISORDER OF BRAIN METABOLISM

Dr. Nierenberg points to promising evidence that bipolar disorder is a disorder of brain energy metabolism — the process by which cells convert nutrients into energy. Because bipolar disorder patients swing from periods of very high brain energy (mania) to periods of low energy (depression), a major study of the center is using imaging technology to look for abnormalities of brain metabolism in people with bipolar disorder.

To explore the development of new medications, Dr. Nierenberg and fellow clinician-researchers are testing a variety of drugs against brain cells (neurons) of people with bipolar disorder grown in laboratory conditions. They are also studying lifestyle factors such as diet, exercise and mindfulness. As part of its mission to educate the next generation of researchers, the center also hosts research fellows and visiting professors from around the world.

THE STIGMA OF BIPOLAR DISORDER

Ordinarily circumspect about their philanthropic interests, the Dautens decided to give their name to the center to help fight the stigma of mental illness that often prevents people from seeking treatment and providing funding. Before deciding to give their name to the center, they talked with their children. “Our name is their name, too,” Mr. Dauten says. “We all agreed, if we’re not willing to put our names on this, what does that say about our small part in the battle to fight that stigma?”

Dr. Nierenberg admires their decision. “Kent and Liz are really wonderful people who want to make a difference and show by example that they are willing to fight stigma and inspire others to do similarly. Their generosity and engagement have inspired others to contribute and to help guide our clinical program and promote participation in research.” The center now has a growing advisory council of patients and family members motivated to support innovation. Liz and Kent Dauten were its first members.

Adapted from an article by Kay Cabill published on giving.massgeneral.org, February 2018.

The Top 10 Reasons Why the World Needs a Center for Bipolar Treatment Innovation

- (10) There is no cure for the lifelong condition of Bipolar Disorder, only treatments which are more trial-and-error guesswork than science.
- (9) The last major drug discovery specific to treating Bipolar Disorder was in 1948 when an Australian researcher accidentally discovered that Lithium is an effective mood stabilizer. It is still considered the gold standard 70 years later despite its limitations.
- (8) Most mood stabilizing drugs for Bipolar Disorder have significant side effects like gastrointestinal distress/diarrhea, rapid and severe weight gain, rashes, and tremors; this often leads to medication non-compliance and further complicates treatment.
- (7) The manic phase of Bipolar Disorder makes patients feel so good, even euphoric, that they stop taking medications, so compliance suffers (as can their savings accounts, personal relationships and jobs).
- (6) There is no medical test to predict whether an individual will develop Bipolar Disorder, so you just have to wait for the peculiar and dangerous behavioral symptoms to present in order to diagnose it. The length of time from a person’s first Bipolar symptoms to correct diagnosis and treatment typically ranges from 3 ½ to 10 years.
- (5) The symptoms of Bipolar Disorder can range from debilitating depression to euphoric mania to extreme psychosis. To an outsider, someone with Bipolar Disorder may be incorrectly perceived as being unmotivated, apathetic and even lazy.
- (4) Bipolar Disorder episodes can cause individuals to drop out of life for months at a time due to extended hospitalization and the search for effective medication regimens, sacrificing schooling, jobs, and friendships along the way.
- (3) Although it may be improving, Bipolar Disorder is still such a stigmatized mental illness that individuals and their families are reluctant to speak about it in public (if at all), and often cope with it alone rather than with social support as is the case with other diseases.
- (2) With most other illnesses you “have” them; with Bipolar Disorder you “are” the disease. A person can *have* cancer but *is* Bipolar. Even worse, while other diseases can kill you, with Bipolar Disorder you are perceived as killing yourself, given the high risk of suicide.
- (1) Over 6 million people in the United States alone suffer from this devastating and life-altering illness—we can and need to do better!

From remarks by Kent and Liz Dauten at the opening of the Dauten Center for Bipolar Treatment Innovation, October 16, 2017.

MGH Psychiatry Out and About

The Alice and Harold Alpert Psychiatry Grand Rounds Lecture in Medical Education, January 25, 2018



Jerrold F. Rosenbaum, MD; Edward M. Hundert, MD, Alpert Grand Rounds guest speaker; Jonathan E. Alpert, MD, PhD, former associate chief of Psychiatry at MGH; Maurizio Fava, MD

Benefit for the MGH Neurotherapeutics Program, Sistina Restaurant, New York, March 19, 2018



Joan A. Camprodon, MD, PhD, MPH
Director, Division of Neuropsychiatry and Neuromodulation

Breakfast Seminar, London, England, May 3, 2018



Jerrold F. Rosenbaum, MD



Peter L. Slavin, MD

Nearly 100 guests gathered on Thursday, May 3 at Claridge's in London for a breakfast seminar, *Advances and Innovations in Mental Health Care*. The event featured presentations by Drs. Jerry Rosenbaum, Maurizio Fava and Janet Wozniak, followed by a panel discussion moderated by Mass General President, Dr. Peter Slavin.



Janet R. Wozniak, MD



Maurizio Fava, MD



Malik Dahlan, MGH President's Council Member, with Leadership Council for Psychiatry Members, Donna Stearns and Dale Sinesi



Claridge's



Britain W. Nicholson, MD
Senior Vice President and Chief Development Officer

(Continued from page 1)

HIGHLY SPECIALIZED, EXPERT TEAM

The impact of the CLs in the quality of inpatient care at Mass General is considerable, with medical and surgical teams requesting consultations for nearly 7,000 of the 43,000 patients admitted annually, making it one of the busiest and largest psychiatry consultation services in the country. The Psychiatry Consultation Service was opened in 1956 and later named for its founder, iconic psychiatrist Avery Weisman, MD.

“Locating a pathological condition along the vast border between psychiatry and medicine, determining the root cause and treating it quickly is the fundamental task and challenge of consultation psychiatry.”

— Theodore A. Stern, MD

The program’s current faculty includes 10 full-time-equivalent consulting psychiatrists augmented by a core group of third-year psychiatry residents. Further support is provided by three fellows

chosen each year to participate in the MGH Fellowship in Psychosomatic Medicine, which is the oldest consultation psychiatry training program in the country, according to Fellowship Director Nick Kontos, MD.

The team’s psychiatrists and psychologists have expertise in specific medical disciplines, such as cardiology, oncology and neurology. Some of them are expert in the special needs of heart, liver, kidney and lung transplant recipients; victims of burns, opiate overdoses and other traumas; and patients with HIV/AIDS and other infectious diseases. A separate Pediatric Psychiatry Consultation Program is devoted to supporting medically ill children and adolescents.

CARE IN OUTPATIENT SETTINGS

“The close partnership of CLs with their medical and surgical colleagues has helped shape a culture of mutual respect with the Department of Medicine and the rest of the hospital,” notes Dr. Stern. It also increases accuracy and efficiency in a difficult, acute care environment. Neuropsychiatric symptoms can produce unpredictable and sometimes violent behaviors that are life-threatening to the patient, and dangerous for medical staff. “The rapid response by CLs to diagnose and treat through behavior or chemical intervention often makes a huge difference in very serious situations,” says Nadia Quijije, MD, director of the Burns and Trauma Consultation team.

Caring for Children and Teens

Attending to an adult medical patient

who is unwilling or unable to talk can be difficult, but working with children and adolescents — who often don’t have the language skills or vocabulary to describe what’s wrong or how they feel — can be even harder.

This is the daily challenge that the Pediatric Psychiatry Consultation Service team addresses within the inpatient units and outpatient clinics of MassGeneral Hospital for Children (MGHfC). Led by Eric Hazen, MD, and Elizabeth Pinsky, MD, the team includes five part-time child and adolescent psychiatrists and two part-time child psychologists.

The group also works with severe burn victims at nearby Shriners Hospital for Children in Boston.

All are specially trained in the developmental needs of patients ranging in age from toddlers to late adolescents and sometimes young adults. Most of them are dealing with a range of illnesses — from injuries and other physical trauma, to the medical complications of eating disorders or attempted suicides, to the impact of chronic conditions like epilepsy and asthma, to potentially life-threatening illnesses like cancer and cystic fibrosis.

“We help patients and their families cope with the symptoms that these conditions and diseases trigger and with the side effects of various treatments — including depression, anxiety, acting out and not cooperating with their care,” notes Dr. Hazen. “A primary goal is to help everybody involved understand the child’s experience, to allow the child to feel safe again.”

The team also plays a critical role in being quarterbacks for their care, adds Dr. Hazen. “We get all the information, put it together, and make sure everyone involved — the patient, family, medical providers, and sometimes others outside the hospital — knows the treatment plan.”

Each year the team collaborates with medical and surgical colleagues in caring for upwards of 500 young patients in the hospital and some 250 others in MGHfC’s outpatient pediatric specialty practices, according to Dr. Hazen.



Elizabeth G. Pinsky, MD, and Eric P. Hazen, MD



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MINDSCAPES • SPRING 2018

Save These Dates

Psychiatry Academy Patient and Family Education Series

Saturday, June 23, 2018

Bipolar Education Day

Directed by Andrew A. Nierenberg, MD

Sponsored by the Dauten Family Center for Bipolar Treatment Innovation

Saturday, September 22, 2018

Substance Use Disorders

Directed by John F. Kelly, PhD

Sponsored by the Recovery Research Institute

Tuesday, October 2, 2018

Behavioral Health and the Launch from Adolescence to Young Adulthood

Directed by Timothy E. Wilens, MD

Sponsored by the Joan and Leonard Engle Family Foundation

Saturday, November 10, 2018

16th Annual Schizophrenia Education Day

Directed by Oliver Freudenreich, MD, and Daphne J. Holt, MD, PhD

Sponsored by an Anonymous Donor

All sessions are held at the Starr Center, Richard Simches Building,
185 Cambridge Street, Charles River Plaza, Boston, EXCEPT
the October 2 event, which takes place in the O'Keefe Auditorium at 5 pm.

For more information and to register for all sessions please visit:
www.massgeneral.org/psychiatry/about/patient-education



MINDSCAPES

Spring 2018 Vol. 11, No.1

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Mindscapes is published for
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Department of Psychiatry.

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