NATIONAL INSTITUTE OF MENTAL HEALTH
ALLIANCE FOR RESEARCH PROGRESS
JULY 14, 2006 — BETHESDA, MD

Introduction

The National Institute of Mental Health (NIMH) held its Summer Alliance for Research Progress (The Alliance) Meeting Friday, July 14, 2006 at the Montgomery County Conference Center in Bethesda, Maryland. The theme of this fifth meeting of the Alliance was *Developing Research Partnerships to Transform Mental Health Services*.

NIMH Director, Thomas R. Insel, M.D., opened the meeting with a discussion of the "State of NIMH." The morning presentations concentrated on research partnerships as a vehicle for transforming mental health services. During the working lunch, Richard McKeon, Ph.D., Co-chair of the Federal Suicide Prevention Workgroup, led a dialogue on Federal and community partnerships for transformation. A discussion of lessons learned from suicide prevention activities took place in the afternoon.

Speakers

Thomas R. Insel, M.D., "Welcome and State of NIMH"

Morning Speakers: (from left) Dr. Chambers, Ms. Henry, Dr. Insel, and Dr. Reaman

Dr. Insel shared his research vision for mental health with Alliance members, which entails understanding the pathophysiology of mental illnesses through the use of incredible new tools. The knowledge acquired will enable the development of more effective interventions with the ultimate goal of delivering personalized care through strategic prevention. Dr. Insel described key challenges and opportunities in mental illness research.

"We know a lot about evidence-based treatments, but we need to be able to answer the question: for any given person and their

situation, what is the optimal treatment?" said Dr. Insel. Ensuring access, coordinating care in the community, and community engagement are equally important to NIMH. The goal is to address these issues through such mechanisms as the large scale Practical Trials conducted by NIMH. "We learned that medications are helpful but not sufficient for treating mental illnesses. Clinical research needs to move into real-world settings to gain a better understanding of what works and what does not work in a way that is easily translated to the public."

Dr. Insel continued, "We need to train a whole new generation of people who have competence in **both** neuroscience and in developmental and behavioral issues. We also need to develop partnerships for recovery. These partnerships must include patients and their families, clinicians, and scientists and must be coordinated so that access to treatment is increased and care is optimized."

"Unlike treatment for many other illnesses such as cancer, in the mental health field we still diagnose by symptoms and treat by episode," said Dr. Insel. He described the present as an exciting era of opportunity for NIMH supported investigators to learn more about the fundamentals of mental illnesses in order to be able to develop treatments that target the underlying pathophysiology (the mechanisms underlying the disorder) of mental illnesses. Revolutionary advances (such as imaging, proteomics, genetics) now exist and are being applied to the mental health field to achieve breakthroughs.

Dr. Insel gave Alliance members a brief update on recent events of interest.

- The U.S. House of Representatives' Committee on Energy and Commerce's Subcommittee on Health held a hearing titled "Mental Illness and Brain Disease: Dispelling Myths and Promoting Recovery through Awareness and Treatment" on June 28, 2006. The archived webcast, including Dr. Insel's testimony, is available electronically on the Committee's website.
- The September 15, 2006 National Mental Health Advisory Council (NAMHC) meeting would be dedicated to a discussion of outcomes from NIMH's large scale practical trials.

Renata J. Henry, "The Road Ahead: A Report by the National Advisory Mental Health Council's Workgroup on Services and Clinical Epidemiology"

Renata J. Henry, Director of the Division of Mental Health Services for the State of Delaware and President of the National Association of State Mental Health Program Directors, spoke about the work of a subgroup of the NAMHC, the Services and Clinical Epidemiology Workgroup. The workgroup wrote a report, titled *The Road Ahead: Research Partnerships to Transform Services*.

Ms. Henry began by sharing the questions that the Council workgroup was charged with answering: (1) What services and clinical epidemiology research does NIMH currently support? (2) What areas should be developed further? (3) What opportunities exist to

affect policy and clinical care, and ultimately, reduce the burden of mental illness? (4) Where does traction exist to make a difference through research, including opportunities to partner with other communities and agencies?

The workgroup held face-to-face meetings in December 2005 and in February of 2006. Six cross-cutting issues emerged during the discussions: partnerships in research, quality, fairness, recovery, communication, and on-going evaluation. Strategies for addressing these issues presented themselves in three domains: enhancing the impact of mental health services research, capacity building, and knowledge exchange.

"Partners help researchers to identify the most representative participants, the most accessible settings, and ultimately ensure that the interventions are sustainable in the real world," said Ms. Henry. "Developing interventions that are compatible with the places where they will be delivered is critical." She described a research team of the future, "the dream team," which would consist of practitioners, consumers, administrators, policymakers, payers, insurers, community leaders, and patient and family advocacy groups. "I want to emphasize that the payers and insurers are vital members of this dream team. If we cannot get the interventions and evidence-based practices paid for by the insurers, then implementation of evidence-based practices will be stymied," said Ms. Henry. She said that this dream team must work together to set priorities and help with the cultural sensitivity and eventual 'uptake' of the interventions.

Ms. Henry suggested that NIMH needs to tailor the release of research findings and public health communications to various stakeholder audiences. "If research findings are published in journals, and those journals sit on the shelf and gather dust, how can research impact the lives of individuals? We need to do a better job in knowledge exchange. There are too many people in the mental health field that just do not get the information they need. I think the question we all need to ask ourselves is: What do your organizations need to be partners in research?" she concluded.

David Chambers, Ph.D., "NIMH Activities in Response to the Workgroup Recommendations"

Dr. David Chambers, Associate Director for Dissemination and Implementation Research in the Division of Services and Interventions Research at NIMH, described NIMH's recent steps to develop research partnerships to transform mental health services.

In response to the workgroup report, NIMH is developing recommendations that fall into the following five general areas: (1) dissemination of research, (2) forums to identify research needs, (3) partnerships, (4) implementation research, and (5) building capacity within NIMH. "We see partnership for research as the means to an end," said Dr. Chambers. "We want to maximize opportunities for researchers to learn directly from communities," he continued. More collaboration between science and service would help to accomplish this goal. Research partnerships with the community will allow for more relevant research questions, more representative research participants, and better communication between NIMH and the public.

Dr. Chambers continued that NIMH is trying to develop the knowledge base to facilitate utilization of evidence-based interventions by real-world service agencies. NIMH is working with Federal agencies [e.g. Substance Abuse and Mental Health Services Administration (SAMHSA), Centers for Medicare and Medicaid Services] to enable research partnerships to inform the use of public funds for mental health services. In the private insurance sector, NIMH is working with the National Business Group on Health to try to better connect research efforts with the needs of large employers. In another effort, NIMH is working with the National Institutes of Health's Office of Behavior and Social Science Research to form a community of researchers with knowledge about how to integrate interventions into service settings. NIMH issued a program announcement that focuses on how to build infrastructure for collaborative research in the community to develop a research agenda that benefits both the researchers and the practice partners.

Dr. Chambers continued with a brief discussion about an opportunity that NIMH has to work with other components of NIH to create a web portal called "Planet for Health." This portal would connect researchers with relevant local community programs and could be modeled on the current Cancer Control Planet website.

Gregory H. Reaman, M.D., "The National Cancer Institute (NCI)-Sponsored Cooperative Group Experience in Pediatric Cancer: A Model for Multi-Center Cooperation"

Dr. Gregory Reaman, Chair of the Children's Oncology Group and Professor of Pediatrics at George Washington School of Medicine and Health Sciences, Children's National Medical Center, spoke about the NCI-sponsored cooperative Group experience in pediatric cancer. He specifically focused on the structure and function of the Children's Oncology Group and provided ideas for developing collaborative research partnerships.

The Children's Oncology Group encompasses over 230 pediatric cancer programs throughout all of North American, Australia, and New Zealand (with sites in Switzerland and the Netherlands). The group, in partnership with the National Childhood Cancer Foundation, comprises an organization called CureSearch (http://www.curesearch.org/), the world's largest childhood cancer research organization. CureSearch's mission is to cure and prevent childhood and adolescent cancer through scientific discovery and compassionate care.

According to Dr. Reaman, there has been significant progress in pediatric oncology over the past 50 years. The mortality of childhood cancer has decreased by more than 50 percent in the 20 years from 1975 to 1995.[1] "We cure nearly 80 percent of children with cancer," continued Dr. Reaman. This progress results from a strong collaboration — with patients and family advocates, pediatric cancer investigators (clinical and laboratory), pediatric surgeons, radiotherapists, nurses, and increasingly behavioral scientists.

Dr. Reaman said that his group's accomplishments result from the systematic application of the principles of evidence-based medicine to a national clinical trials infrastructure.

The small patient population for clinical research requires national and international multi-center clinical trials — and a translational research network. They have demonstrated a virtually seamless continuum of discovery: discovery of new drugs; application of those new drugs to existing conditions; development of treatment paradigms; and delivery of those paradigms as practice standards in pediatric cancer. Much of their work is funded by the NCI, creating a strong governmental/academic partnership.

"Families and patients have learned that there are real benefits to participating in clinical trials," said Dr. Reaman. He said that approximately 98 percent of children in the U.S. up to the age of 5 who develop cancer are in NCI clinical trials, as are 90 percent of children between ages of 5 to 10. They enroll between 7,000 and 8,000 patients in trials per year, and are able to follow patients and their families indefinitely.

Future needs and progress will come from translating recent biologic discoveries into clinical opportunities – specifically in the areas of genomics and proteomics – and in identifying molecular targets for drug discovery. Dr. Reaman's group is setting up a national childhood cancer registry that will allow the investigation of genetic linkages and hopefully identify molecular genetic risks for developing childhood cancers. "We are uniquely positioned to identify disparities and not only advocate, but also implement policy change," concluded Dr. Reaman.

Dr. Insel thanked him and said, "We thought it would be useful for this group to hear about childhood cancers on a national level in developing a cooperative network. In the pediatric cancer field, almost every child who develops cancer in the United States becomes part of a clinical trial network. It is a model that we can begin to think about."

Richard McKeon, Ph.D., "Federal and Community Partnerships for Transformation"

Lt. Col. Pfantz, Dr. Insel, Dr. Brown, Dr. McKeon (from left)

Dr. Richard McKeon from the Substance Abuse and Mental Health Services Administration spoke about the Federal and community partnerships involved in implementing the National Strategy for Suicide Prevention. Dr. McKeon is co-chair of the Federal Suicide Prevention Workgroup and has been charged with implementing the Garrett Lee Smith Memorial bill.[2]

The Suicide Prevention Workgroup that he co-chairs with Lt. Col. Steven Pflanz works to promote collaborations and partnerships in support of suicide prevention throughout the executive branch of government. The workgroup includes representation from the Department of Justice, the Department of

Energy, the Department of Defense, the Veterans Administration, and the Department of Health and Human Services.

The Workgroup's most important charge is to launch a National Action Alliance for Suicide Prevention. This public private-partnership will oversee full implementation of The National Strategy for Suicide Prevention, which has 11 goals and 68 objectives and is used as the basis for many state suicide prevention plans. Several non-Federal partners helped to develop the National Strategy, such as the National Council for Suicide Prevention (http://www.ncsp.org/), the Jed Foundation (http://www.jedfoundation.org/), and the Suicide Prevention Action Network (http://www.spanusa.org/). Many Federal agencies were also involved, including NIMH.

The first goal of the National Strategy is to promote awareness that suicide is a public health problem that is preventable. Some survey data suggest that many people do not believe that suicide is preventable. "For us to prevent suicide, an incredibly important component is getting treatment to those who need it," said Dr. McKeon.

Dr. McKeon discussed SAMHSA's community-based suicide prevention programs. In the past two years, suicide prevention grants have grown from 2 community-based suicide prevention programs to 98 suicide prevention grants (36 state and tribal awards), and 50 college campuses are engaged in suicide-prevention activities. SAMHSA also developed the Garrett Lee Smith Memorial Program, which provides funding for community-based suicide prevention programs for youth. Lastly, SAMHSA funds the Suicide Prevention Resource Center. The SAMHSA website has information on all of these programs.

"Stigma and public education are key issues," said Dr. McKeon. He told attendees that next year SAMHSA plans on having a public education campaign on suicide prevention that would include television, radio, and print advertisements.

Gregory K. Brown, Ph.D., "Suicide Prevention in the Community: Lessons Learned"

Dr. Gregory K. Brown, Research Associate Professor of Clinical Psychology and Psychiatry and Associate Director for the Center for the Treatment and Prevention of Suicide at the University of Pennsylvania (http://www.med.upenn.edu/suicide/), shared lessons learned from suicide prevention research in the community. "I will present some of the behind-the-scenes struggles that we had in doing suicide prevention research so that you can see some of the complexities involved in this type of research," said Dr. Brown.

"We take a public health approach to suicide prevention," explained Dr. Brown. "There are approximately 30,000 suicides per year in the United States." Suicide attempts are a major risk factor for suicide. Past research indicates that if somebody attempts suicide, they are more likely to complete suicide. "We need to develop a national registry of suicide attempts to better understand the pervasiveness of this problem," said Dr. Brown.

Dr. Brown described the philosophy of treatment underlying his research studies. “We view suicide as a problematic coping behavior — people turn to suicide as a way to solve their problems. We view suicide behavior as its own disorder, and we believe that treatment needs to target this behavior.” Dr. Brown and Dr. Aaron T. Beck have studied the efficacy and effectiveness of a brief focused cognitive therapy intervention for individuals who attempted suicide. The goal of the intervention was to reduce the rate of repeat suicide attempts as well as other risk factors such as hopelessness and depression.

In the first study, there were low attendance rates at therapy sessions (about one third did not attend). The research team concluded that the standard model of outpatient psychotherapy (i.e., a therapist is available to see a motivated patient and engage in treatment at a scheduled time every week) was not sufficient or successful in engaging the majority of these patients (unpublished data). “We realized that we needed to do outreach to maintain contact with patients and to let them know that someone cared about their situation,” said Dr. Brown. In the second study, they adopted a more active and directive role in managing patients, which resulted in a better retention rate. They used flexible schedules, saw patients for assessments within several days after being evaluated, conducted phone sessions, sent follow-up letters, and tracked patients more consistently through regular contact with the patient’s friends or family members.

In the second study, each participant was randomly assigned to one of two conditions: Cognitive therapy or usual care services available in the community. Those in the cognitive group were scheduled to receive 10 outpatient weekly or biweekly cognitive therapy sessions specifically developed for preventing suicide attempts. The results of this randomized controlled trial indicated that recent suicide attempters treated with cognitive therapy were 50 percent less likely to try to kill themselves again within 18 months than those who did not receive the therapy.[3]

In describing the "active ingredients" of the treatment, Dr. Brown explained how therapists helped patients develop their own safety plans. This plan consists of a list of coping strategies that patients can use during a suicidal crisis. The key part of this treatment is for patients to identify the warning signs that indicate that they are in a ‘suicidal mode’ and then use coping strategies that were developed in therapy to deal with the crisis.

Dr. Brown’s study encourages patients to develop a hope box, which could be a shoebox, a folder, or a scrapbook where the patient includes pictures, letters, poetry, prayer cards, coping cards, or other things that give them meaning in their life. “The hope box becomes a safe place for them to go to help them break the suicide crisis,” continued Dr. Brown. “We also teach them to follow their coping card, do a relaxation exercise, or call a friend.”

The cognitive therapy intervention helped patients find a more effective way of looking at their problems by learning new ways to handle negative thoughts and feelings of hopelessness. In a relapse prevention task near the end of their therapy, patients were asked to focus directly on the events, thoughts, feelings and behaviors that led to their previous suicide attempts and explain how they would respond in a more adaptive way. If

they passed this task successfully, their cognitive therapy ended; if they were unsuccessful, additional sessions were provided.

The next big question is how to increase the adoption of this cognitive therapy intervention in the community. Drs. Brown and Beck are currently testing the effectiveness of this brief cognitive therapy intervention in community mental health centers, using newly-trained community-based therapists. However, retaining therapists in the study who have received this intensive training is a major roadblock. Other important questions that need to be answered include: How to ensure that therapists will continue to use the intervention once they are trained? What are the individual and organizational factors that will influence therapists' willingness and ability to use this treatment in their everyday practice?

Steven E. Pflanz, Lt. Col., USAF, MC.,"Suicide Prevention in the Air Force"

Lt. Col. Steven Pflanz, Senior Psychiatry Policy Analyst for the Air Force Medical Operations Agency, spoke with Alliance members about the Air Force Suicide Prevention Program (Air Force Pamphlet 44-160 describes the program).

"Our program has resulted in nearly a one third reduction in our suicide rate since the program began in 1996," Lt. Col. Pflanz said, "This is the equivalent of about 10,000 lives saved per year if translated into numbers comparable to the American population." "For those of you interested in learning more about other evidence based strategies for suicide prevention, I recommend a recent article from the *Journal of the American Medical Association*[4]," said Lt. Col. Pflanz.

Lt. Col. Pflanz said that within the Air Force mental health problems are not uncommon. For example, research data suggests that between 10 and 20 percent of military populations suffer from one or more mental health problems. Suicide is still the number two killer of Airmen (accidental deaths are number one).

Pflanz shared the key ingredients of this program with Alliance members. "We are trying to change the social norms of our organization through policy and educational initiatives that address the issue of stigma related to mental healthcare and the stigma about help-seeking behavior. Our program targets the knowledge, values, beliefs, and attitudes that Airmen of all ranks have about human distress, about help seeking behavior, and about suicide.". He spoke about the atmosphere of responsibility and accountability created by the Air Force Suicide Prevention Program. "We expect Airmen to intervene when they identify someone who might be at risk for suicide."

One major theme for the program is that suicide prevention is a community responsibility The Air Force program focuses on prevention through the identification and intervention with those at risk for suicide. This requires widespread community skills on what a suicidal person or distressed person looks like and how you can help them. "We train all Airmen on suicide prevention risk factors." continued Lt. Col. Pflanz. "Most folks don't have much experience talking to someone in distress. Our hope is that within both the Air Force and the American community at large, we can saturate the community with

knowledge about basic suicide prevention concepts so that every level of society – from a citizen on the street; to policeman and firefighters; to mental health professionals in a clinic – will know the right thing to do to prevent suicide and will actually do it," stressed Lt. Col. Pflanz.

The Air Force actively affirms and encourages help-seeking behavior; normalizes the experience of distress; combats the stigma of getting help; and promotes the message that psychiatric care is not going to harm careers. "We have found over and over again that adverse career outcomes in the Air Force after receiving psychiatric care are rare," explained Lt. Col. Pflanz. NIMH currently funds the University of Rochester to study the program. Dr. Kerry Knox, the principle investigator, is working to see if the findings can be replicated in new settings such as the Veterans Administration and in university settings.

The Air Force has reduced suicide rates in a population of 350,000 people spread across approximately 100 installations on five continents. "Our programs and policies set expectations for behavior. Airmen understand they are expected to take action to prevent suicide, said Lt. Col. Pflanz. "Our program reveals an opportunity all across America to capitalize on the existing infrastructure of organizations to help reduce suicide risk." . Organizations that adopt an integrated network of suicide prevention policy and education can reduce suicides among their employee and customer populations.

Discussion Periods

Throughout the day there were lively discussion periods involving virtually all Alliance participants. Dr. Insel wanted to assure that all Alliance members had ample opportunity to direct comments and questions to him, and to engage the presenters in discussions on the challenges and opportunities in mental health research. Just a small sampling of some of the comments follows.

Dr. Insel raised the issue of disseminating research findings to the public. "In his presentation, Dr. Gregory Brown shared with us the profound effect of cognitive therapy on preventing suicide. Now the question is, how do we get this treatment out to the broader public" asked Dr. Insel. "We need help to answer that question. We need people experienced in dissemination research and we need more community-based research to help us get this treatment out to the masses," responded Dr. Brown.

Ms. Susan Stone, M.S.W., L.C.S.W., President of Postpartum Support International, responded to Colonel Pflanz's presentation. "The model for a suicide prevention program that you presented here today shows the value and importance of compliance," said Ms. Stone. "Within the closed system of the army you can insist upon these things," she continued. "We have effective treatments that are available to help people with mental illnesses but we have no 'body' that is looking at compliance within our mental health programs or even within our professional organizations. So, I just want to make the point that we need a JCAHO (Joint Commission on Accreditation of Healthcare Organizations) for mental health," concluded Ms. Stone.

Mr. Phillip Satow, President of the Jed Foundation, told Alliance members about a new initiative at the Jed Foundation, a website called Ulifeline (http://www.jedfoundation.org/programs_students_ulifeline.php). It is available on 600 college campuses throughout the United States. Educational information on different emotion disorders and a screening program for eight DSM categories (such as eating disorders and attention deficit disorder) are included. “One key objective of this Web site is to get kids who may be suicidal into counseling,” explained Mr. Sadow.

Mr. Jerry Reed, M.S.W., Executive Director of the Suicide Prevention Action Network (SPAN USA), reminded Alliance members about a major accomplishment in suicide prevention: Congress authorized $82 million for youth suicide prevention and early intervention in college campus funding under the Garrett Lee Smith Act.

“This happened because we started to speak with one voice by engaging survivors, advocates, and family members,” asserted Mr. Reed. “The more we can find ways to speak with one voice, I truly believe we will capitalize on what I think is a tipping point. The more we unite, the more effective we will be,” concluded Mr. Reed.

Dr. Insel suggested to Alliance members that the issue of suicide cuts across all NIMH constituency groups. “It is only through developing research partnerships that we will be able to address the key challenges and opportunities in the mental health field. Today we heard strategies for developing collaborative research partnerships and we need your help. Partnerships will allow us to identify and keep pushing forth the most relevant research questions. With your help we can bridge the gap between research and real world service agencies and increase the representation of our participants in research. We want to maximize opportunities to learn from you (Alliance members) what is happening in local communities that we as a National institute may not have close ties with. We also need your help to figure out how to best get information that we are producing out to the nation,” concluded Dr. Insel.

Attendees

[1] Cancer Incidence and Survival Among Children and Adolescents: United States SEER (Surveillance, Epidemiology, and End Results) Program 1975-1995.
[2] The Garrett Lee Smith Memorial Act, signed into law in October 2004, created a program with SAMHSA to enhance suicide preventions efforts at the state and local level and on college campuses. The bill authorized $82 million in funding in 3 years.
[3] Center for the Treatment and Prevention of Suicide, http://www.med.upenn.edu/suicide/Research.htm/.
[4] Mann JJ, Apter A, Bertolote J, Beautrais A, Currier D, Haas A, Hegerl U, Lonnqvist J, Malone K, Marusic A, Mehlum L, Patton G, Phillips M, Rutz W, Rihmer Z, Schmidtke A, Shaffer D, Silverman M, Takahashi Y, Varnik A, Wasserman D, Yip P, Hendin H. Suicide prevention strategies: a systematic review. JAMA. 2005 Oct 26;294(16):2064-74. Review. PMID: 16249421.