Adapting the Electronic Record for Psychiatry

From its inception, Stony Brook University Hospital has aspired to be paperless. When the hospital opened in 1980, it featured one of the most advanced electronic information systems in the world. IBM computers running custom-designed software connected nursing stations and clinics to the laboratories and pharmacy. But so long as the paper medical record remained the official repository of clinical information, the vision of a paperless hospital was more a dream than reality.

Recently, however, the medical center has taken steps to implement a completely electronic record using Cerner Millennium®. This initiative puts Stony Brook in line with, and perhaps a step ahead of, the country as a whole. Spurred by a $30 billion federal incentive, hospitals and healthcare practitioners across the United States are hurrying to build electronic record-keeping systems.

Nationwide, psychiatry lags behind other specialties in adopting an electronic record. But at Stony Brook, psychiatry is pushing ahead, due in large part to the leadership of Professor Laura Fochtmann, MD, MBI. She spearheaded the effort to introduce the crucial physician components of the electronic record in Stony Brook’s psychiatric services. The physician notes went live in the hospital in December and are scheduled for the outpatient services in June. “We could not have done this without Dr. Fochtmann,” said Seoungju Won, RN, the hospital systems analyst who worked with her on the project. “She was the motivator and the navigator. Without her we would still be on paper.”

Dr. Fochtmann is uniquely situated to take on such a task. Before entering medical school she earned a bachelor’s degree in electrical engineering. After almost 20 years of psychiatric practice, she completed a master’s program in Biomedical Informatics and became one of only 455 doctors in the country who are board certified in Clinical Informatics. “I think like an engineer,” she said. “Troubleshooting is intuitive for me. I know the languages of medicine and computer science, and can translate between them.”

Dr. Fochtmann is the Medical Editor of the American Psychiatric Association’s (APA) Practice Guidelines and a consultant to the APA Committee on Electronic Health Records. She is also a member of the team guiding the hospital-wide implementation of the electronic record. Her principal goal in these roles is to improve the quality and safety of medical care by bringing information to caregivers in ways that are useful and easy to access. The capstone proj-

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In this issue of Headlines we highlight the achievements of Dr. Laura Fochtmann who recently completed her master’s degree in Biomedical Informatics and became one of the first physicians in the country to achieve board certification in Clinical Informatics. For more than a decade she has helped the American Psychiatric Association shape its electronic health record initiatives and this year led our department through the implementation of a fully computerized medical record. We are grateful for her unfaltering leadership and meticulous craftsmanship.

The tragic derailment of a Metro North train in the Bronx last December called attention the often-neglected implications of fatigue for human health and safety. Dr. Fred Friedberg, one of the country’s leading experts in fatigue and the founding editor of the first scientific journal devoted exclusively to the topic, walks us through some of the key issues of this emerging science.

We are pleased to announce the receipt of two grants — one for $254,000 from the Robert and Olga Von Tauber Foundation to establish a perpetual educational endowment and the other a $30,000 annual grant from the Weyerhaeuser Family Foundation to launch a program to help children make the transition from our inpatient unit to home and school. Our thanks to the generous donors who made these gifts possible.

We bid farewell to two key members of our research team — Drs. Arthur Stone and Joan Broderick. They are going to the Center for Economic and Social Research at the University of Southern California where they will have an opportunity to apply social sciences research to issues of public policy. We wish them all the best.

We congratulate Dr. Kristie Golden on her promotion to the position of Associate Director of Operations for the Neurosciences Service Line in the hospital. In less than a year as Administrator she has set our department on a new course toward greater integration with other departments and has forged new links with the larger community. In her new role, she will continue to point the way not only for our department, but for all the neurosciences.

You may have noticed a new masthead for our publication, which more felicitously reflects the University’s identity. We are grateful to Rachel Velocci and the communications team for designing it.
A wide variety of initiatives are underway in the Department of Psychiatry: a broad-ranging research program, advanced clinical care, the introduction of new models of treatment, training residents and giving medical students their first exposure to brain disorders. Our renowned faculty has knowledge so deep they give interviews to National Public Radio. Chairman Ramin Parsey sees all aspects of this work as important pieces of the big picture. “Mental health and psychiatric disorders are often overlooked or swept under the rug,” he said. “That has to change. At Stony Brook, we want to provide better care, to more patients. It’s very simple.”

The department takes a complex and multi-layered approach to this simple goal. To offer better care, it is necessary to develop a better understanding of psychiatric diseases and their treatment by conducting research. It is also necessary to provide future mental health professionals with the knowledge and training they need to deliver the best care possible. This is where research and education intersect. A recent bequest from Drs. Robert and Olga Von Tauber will support new discoveries in psychiatry by creating educational opportunities for fourth year residents and fellows. The bequest of $254,000 will be used to establish a perpetual endowment enabling these trainees to attend conferences and make presentations at professional organizations. “Residents and fellows who have completed significant projects will be able to present their work at national meetings,” Department Chair Ramin Parsey, MD, PhD said. “We are grateful to the Von Taubers for encouraging research and innovation in psychiatry — especially among young professionals who are poised to make important decisions about their careers. Presenting on a national stage can be a life-changing experience.”

If research is the first step to providing better care, reaching more patients can require creative strategies. Children are especially underserved when it comes to their mental health – The National Adolescent Health Information Center estimates only about one third of kids who need treatment get the care they need. With a $30,000 grant from the Weyerhaeuser Family Foundation, the Child and Adolescent Psychiatry Division at Stony Brook Medicine has developed a mobile bridge therapy program that will help children make the transition from inpatient care to their home environment. “The weeks immediately following discharge are crucial for a child’s success,” said Angela Denton, CSW, the 12 North social worker. “This program will extend our treatment and provide continuity between the hospital and community.”

One of the Weyerhaeuser family’s primary interests is promoting stability and resiliency for children who have been exposed to domestic violence. This bridge care program is currently being developed as a pilot project, but hopefully will grow to become a standard offering for all child psychiatry inpatients, because once again it comes down to a very straightforward goal: protecting kids from falling through the cracks and supporting them so they can thrive.
The derailment of a Metro-North train in the Bronx that left four people dead brought the topic of fatigue to public attention. We asked our local expert, Fred Friedberg, PhD to brief us on the state of scientific knowledge about fatigue. Dr. Friedberg is the founding editor of the journal Fatigue: Biomedicine, Health and Behavior and President of the International Association for Chronic Fatigue Syndrome/Myalgic Encephalomyelitis.

Headlines: What is fatigue and why is it important?

Dr. Friedberg: Fatigue is a common experience in everyday life as well as a symptom of many medical and psychiatric conditions. As a subjective sensation it is a feeling of tiredness. Ordinary fatigue — the kind that comes with stress, boredom or lack of sleep — is generally not viewed as a health issue unless it has a serious impact on functioning. The Metro-North train accident is certainly an example of this. However, pathological fatigue — the kind that interferes with activities of daily life — is an important symptom that requires evaluation and management.

Headlines: You recently founded a journal devoted to fatigue. Does this signal a growing interest in the topic?

Dr. Friedberg: There is a revival of interest in fatigue. The number of articles published about fatigue almost doubled between 2002 and 2011. This led us to believe that the time is right to publish a journal about fatigue in all its aspects.

Headlines: What do you mean by “all its aspects”?

Dr. Friedberg: Fatigue has many facets. In addition to being a symptom of disease, fatigue is related to sleep quality, the aging process, and exercise. Researchers study the impact of fatigue on occupational performance and safety. Fatigue is a noteworthy issue in sports medicine and athletic performance. Our journal includes articles about the science of fatigue as well as the clinical aspects of its evaluation and treatment.

Headlines: Does this mean that fatigue has arrived as a full-fledged area of study and clinical practice?

Dr. Friedberg: Almost, but not quite. For every article published about fatigue, more than five are published about pain. Healthcare practitioners now recognize pain as a symptom of disease, but fatigue is not taken as seriously by health professionals, with some notable exceptions. We have not yet developed an integrated theory of fatigue in illness and health. There are no textbooks on fatigue, no accreditation programs, very few conferences and surprisingly little support for fatigue research, given its economic and human costs. We have nothing comparable to pain relief medications, and no particular drugs we can prescribe to relieve fatigue. You might say that fatigue science and clinical practice are still in their formative stages.

Headlines: You are the President of the International Association for Chronic Fatigue Syndrome/Myalgic Encephalomyelitis (IACFS/ME). That is quite a mouthful.

Dr. Friedberg: The name is perhaps unfortunate, but the syndrome is real. The term Myalgic Encephalomyelitis (ME) was coined in 1956 to describe an outbreak of fatiguing illness in London. In the United States the term Chronic Fatigue Syndrome (CFS) was used to describe a similar condition. Because we are an international organization, we incorporated both names. For convenience, I often refer to the illness as CFS/ME.

Headlines: What is CFS/ME?

Dr. Friedberg: CFS/ME is a complex illness characterized by debilitating fatigue, pain, sleep disturbances and other symptoms. It affects people of all ages, races and socioeconomic groups, although it often begins between the ages of 30 and 50 years and women are about twice as likely to have the disease than men. About 800,000 people
in the United States have the disease. About a fourth of them are bed-ridden, housebound or wheelchair-dependent.

**Headlines: How is CFS/ME diagnosed?**

**Dr. Friedberg:** There is no objective test to diagnose CFS/ME, so health care practitioners rely on patient histories to identify symptom patterns and impairments. To be diagnosed with CFS/ME a person must experience significant fatigue for at least six months that cannot be explained by other identifiable medical or psychiatric conditions. In addition, they must have at least four other symptoms, such as symptom flare-ups after exertion, sore throat, headaches, and muscle discomfort.

**Headlines: It sounds unpleasant.**

**Dr. Friedberg:** It is. We are not talking about the ordinary fatigue a person might feel after a stressful day of work or a period of intense concentration. People with disabling CFS-type fatigue experience different clusters of symptoms. They may feel “tired and wired” — constantly fatigued but unable to sleep — or a “fog-like mental fatigue,” or “molasses fatigue”, as if dead heavy weights were attached to their legs. For some, CFS/ME feels like a persistent flu. Another aspect to consider is how fatigue interferes with daily life. Many people with CFS/ME find it difficult to work and, if they do, find themselves exhausted and unable to recover to normal energy levels.

**Headlines: You mentioned that fatigue is a prominent symptom of many other diseases. What were you referring to?**

**Dr. Friedberg:** Fatigue is one of the most distressing side-effects of cancer and its treatment. More than 70% of patients receiving treatment for cancer experience fatigue, which can linger even after the cancer is cured and treatments stopped. Fatigue is a common symptom of multiple sclerosis, occurring in about 80% of people with the disease. Fatigue can be a symptom of a vast array of diseases including metabolic disorders, depression and thyroid disease.

**Headlines: Can fatigue be treated?**

**Dr. Friedberg:** To the extent that fatigue is the result of an underlying disease, and the disease can be treated, yes, but we have no medications or treatments that address fatigue directly. The most helpful approach to relieving fatigue is a change in lifestyle that includes stress reduction, pacing of activities, low level exercise, and attending to the signals of impending fatigue. We are developing a brief self-management program to help people achieve these goals.

**Headlines: Where is the field of fatigue headed?**

**Dr. Friedberg:** I hope our new journal will stimulate interest in fatigue research and heighten awareness of its importance in clinical settings. One key to the advancement of the field is the development of an integrated model of fatigue that includes biological and psychosocial dimensions. I anticipate that the field will advance in step with advances in biomedical research, including new techniques for measuring fatigue and its biology in the laboratory and home environment. Targeted funding from the National Institutes of Health could lead to advances in our efforts to ease the fatigue-related burden of diseases like cancer and MS. All in all, I am optimistic that fatigue is beginning to receive the recognition it deserves.
In January Distinguished Professor Arthur Stone, PhD and Associate Professor Joan Broderick, PhD left Stony Brook for the University of Southern California. Dr. Stone was the Director of the Applied Behavioral Medicine Research Institute and Dr. Broderick was Program Director. Dr. Stone served as Vice-Chair of the department for 15 years. Citing their contributions to behavioral medicine, department Chair Ramin Parsey, MD, PhD characterized the move as “a wonderful opportunity for them, but a great loss for us.”

Dr. Stone joined the staff of the department soon after receiving his doctorate in Clinical Psychology in 1978. He began his career studying the impact of psychological stress on physical health. When he became skeptical about the accuracy of standard survey instruments, which asked patients to recall stressful events over long periods of time, he developed a questionnaire to assess stressful experiences at the end of each day — the first of its kind. Soon after, he developed a daily coping inventory. Both have become standard tools in psychology and behavioral medicine.

Using his newly designed instruments in prospective studies, Dr. Stone demonstrated that increased levels of stress and changes in mood increased the probability of a respiratory illness a few days later. Closer scrutiny revealed that changes in secretory immunity and cortisol levels acted as mediators. Having identified two of the key mechanisms that link stress and disease, Dr. Stone looked to develop techniques to mitigate the negative effects of stress. He found that writing about traumatic and stress-inducing experiences in an emotionally expressive way helped to relieve symptoms of patients with chronic diseases. These activities lead to his appointment as editor-in-chief of the field’s prominent journals: Health Psychology and the Annals of Behavioral Medicine.

About 10 years ago, Dr. Stone returned to his quest to increase the “resolution” and accuracy of self-reported data. With colleagues he developed a technique called ecological momentary assessment which involves sampling of subjects’ current experiences in real time, using diaries, communication devices and physiological sensors. Dr. Stone used these techniques — which have become a gold standard for collection of subjective data — to develop more sophisticated measures of pain and fatigue. With project director Dr. Joseph Schwartz, also of the Department of Psychiatry, he used these methods to study ambulatory blood pressure.

Because of his expertise, the National Institutes of Health tapped him to participate in an effort to develop and validate measures for its Patient Reported Outcome Measurement and Instrument System (PROMIS).

In recent years, Dr. Stone has turned his attention to subjective wellbeing. Working as the director of the National Institute on Aging’s Roybal Center at Princeton University, he has examined wellbeing in data sets collected by the Gallup Organization. The National Academy of Science
appointed him to chair an international panel to make recommendations about the use of measures of subjective wellbeing in shaping public policy. In December, the National Research Council released a report from the panel titled “Subjective Well Being: Measuring Happiness, Suffering, and Other Dimensions of Experience.”

The career of Dr. Joan Broderick took a slightly different course. After earning her doctorate in Clinical Psychology, she served for two years as the Director of the University Marital Clinic and opened a successful private practice. She returned to Stony Brook in 1997 at the invitation of then-CEO Dr. Michael Maffetone to help establish a program in Complementary and Alternative Medicine. Two years later, former Chairman of Psychiatry Mark Sedler, MD, MPH asked her to join the department’s faculty as a clinic administrator.

In her role as the Program Director of the Applied Behavioral Medicine Research Institute, Dr. Broderick participated in several of the Institute’s most important projects, including studies of written emotional expression, masked hypertension and the collection of self-reported data. Her collaborations at Stony Brook included faculty from the Departments of Pulmonology and Preventive Medicine and the Schools of Nursing and Journalism. She directed studies of sleep disorders and of psychogenic illness, but her most significant contributions to behavioral medicine came through her studies of coping skills training for patients with osteoarthritis.

Her work in psychosomatic medicine earned her a seat on the World Health Organization’s Expert Working Group on Somatic Distress and Dissociative Disorders, and her expertise in expressive writing led to an invitation to join an advisory panel for Operation Homecoming, an expressive writing program sponsored by the National Endowment for the Arts and the Department of Defense to help military service members deal with traumatic brain injuries and post traumatic stress disorder.

For the past 14 years, Dr. Broderick has been a volunteer for the American Red Cross. Her work with the National Disaster Response Network took her to the sites of the most devastating disasters of recent years, including the attack on the World Trade Center, Hurricane Katrina and Superstorm Sandy. Until recently she was the Coordinator of Disaster Mental Health Services for Suffolk County and a member of the development team of the American Red Cross’s psychological triage system. For the past 5 years, she has been a volunteer for the Guide Dog Foundation for the Blind. More recently, she has worked with a group in Mexico that sets up dental clinics and builds schools in rural villages.

In January the husband and wife team joined the Center for Economic and Social Research at the University of Southern California where they will open a research institute on the measurement of self-reported experiences and wellbeing. “USC was attractive to us,” Dr. Broderick said, “because we will be part of a multidisciplinary team that includes experts in the economic and political sciences whose research directly improves people’s lives.”

“This appointment presents a fantastic opportunity for us to contribute to advances in the behavioral sciences while helping to solve real-world problems,” Dr. Stone said. “We will collaborate with some of the leading behavioral scientists in the world, in a center that combines the best of basic and translational research to understand human behavior in social and economic contexts.”

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Joan Broderick, PhD
new role

Department Administrator Kristie Golden, PhD has been promoted to Associate Director of Operations for the Neurosciences Service Line. In her new position, Dr. Golden will be responsible for overseeing operational aspects of the neurosciences at Stony Brook which include the Departments of Psychiatry, Neurology and Neurosurgery.

The position is designed to foster collaboration between the inpatient services and physician practices while breaking down historical silos. Dr. Golden will report to the hospital’s Chief Operating Officer, Carol Gomes. As a member of the hospital’s Executive Staff she will play a key role in shaping hospital policy, strategic and operating plans, and budgets.

The Department of Psychiatry will recruit an administrator to take Dr. Golden’s place, although responsibility for strategic and business planning, financial oversight, program development and quality improvement will remain within her purview. “I am not leaving the Department of Psychiatry, but broadening the scope of my responsibilities to include related departments,” Dr. Golden said. “I hope to continue to have a positive impact on the department’s development, especially our initiatives to integrate behavioral health services with other medical specialties and to help shape the future of behavioral health services in the region.”

Department Chair, Ramin Parsey, MD, PhD said, “Though we are sad that we will not have Dr. Golden’s undivided attention, I am confident we will continue to benefit from her expertise, experience, and enthusiasm.”