AG, health department, approve Landmark acquisition by Prime

LANDMARK

Landmark Medical Center in Woonsocket will become Rhode Island's first for-profit hospital once the acquisition by Prime Healthcare Services, Inc., of California is completed, expected by the end of the year at the latest.

PROVIDENCE – On Monday, Oct. 28, Attorney General Peter F. Kilmartin announced that he has approved, with conditions, the proposed sale of Landmark Medical Center and Rehabilitation Hospital of Rhode Island (Landmark) to Prime Healthcare Services, Inc., and affiliated entities (Prime), pursuant to the Hospital Conversions Act (HCA).

"Cleary, a five-year special mastership for any business is not an ideal situation," Kilmartin said.

Prime will be Rhode Island's first for-profit hospital corporation. The California hospital management company, founded in 2001 by cardiologist **PREM REDDY, MD**, owns and/or operates 23 acute care hospitals/medical centers in California, Kansas, Nevada, Texas and Pennsylvania.

PRIME HEALTHCARE SERVICES

Dr. Prem Reddy, founder, chairman, and CEO of Prime Healthcare Services, completed his residency training in internal medicine and cardiovascular disease at Down State Medical Center in Brooklyn, New York.

The conditions laid out in the decision include, but are not limited to, that Prime transfer certain charitable assets to the Rhode Island Foundation or a similar entity for disbursement, provide information about any actions taken against Prime or any final resolution to the investigation currently being conducted by the Department of Justice and Office of Inspector General regarding coding at Prime's hospitals, and that Prime inform the Attorney General of any actions taken against it or any of its hospitals or affiliates by any governmental entities.

On October 25, Rhode Island Health Dept. Director Dr. Michael Fine announced the department's approval of both the change in effective control application, which was recommended for approval by the Health Services Council, and the hospital conversions application. It approved both applications with a set of conditions.

"We did our due diligence in reviewing these applications, and found that Prime met the criteria for approval," said Dr. Fine. "We are very pleased to welcome Prime to Rhode Island."

In the approval documents, the health department found that the acquisition by Prime was in the public interest, albeit taking into consideration "written comment from at least two sources expressing concern about the number of excess hospital beds in Rhode Island…Still, the alternative to the acquisition of Landmark by Prime is an expected closure of the hospital, and considerable adverse economic impact on the Hospital's catchment area. Given this reality, and the consequent likely adverse impact of economic hardship on the health of the people who live in the Hospital's catchment area, the Department accepts the contention that, taken as a whole, this acquisition is in the public interest."

In a statement issued after Dr. Fine's decision, Landmark President and CEO Richard Charest said Landmark views the initial approval as "welcome news for our employees and the Greater Woonsocket community. It has been a long and winding road these past five years, and we are now starting to see some light at the end of the tunnel," he said.

The 214-bed acute care hospital will remain as such for the next several years.

OVERVIEW

Key components of the Prime-Landmark asset purchase agreement include the following:

- In the first five years, Prime will make investments in technology and capital improvements, and expand services in an amount equal to $30 million.
- For no less than five years after the closing, Prime will provide no less than $4.5 million in funding for the recruitment of physicians.
- Prime will provide funding of no less than $15 million for routine replacements at the hospital.

Prime's planned improvements

At a Health Services Council public meeting on July 9, 2013, Prime summarized its planned improvements at Landmark as follows:

Pre-conversion

- Renovate/update four nursing units, main lobby, diagnostic services, and the emergency department waiting room
- Replace existing cardiac telemetry monitoring system throughout the hospital
- Add a new telemetry system to the nursing unit currently without telemetry

Post-conversion

- IT System Conversion – electronic medical record ($10 million)
- Replace major imaging equipment as follows:
- Radiology/Fluoroscopy equipment ($363,000)
- Nuclear Medicine Cameras ($250,000)
- Magnetic Resonance Imaging (MRI) ($1 million)
- Vascular imaging equipment
- Replace a cardiac catheterization lab ($900,000)
- Replace all furniture and fixtures
- Total investment in first five years: $30.56 million

Other commitments

Additionally, Prime has made the following commitments:

- Establish a local governing board with representation from the Landmark service areas
- Assume substantially all physician contracts and strengthen physician relationships
- Retain substantially all employees
- Maintain positive relationship with labor unions
- Improve patient care quality metrics

Following the completion of the transaction, subject to agreement by state-appointed special master, Jonathan N. Savage, Landmark will become a wholly owned subsidiary of Prime. ❖

HealthSource RI releases metrics through October 26

1,110 have completed applications for health benefits exchange

PROVIDENCE – HealthSource RI, Rhode Island's health benefits exchange, has released certain metrics from its fourth week of operation, Sunday, October 20, through Saturday, October 26:

- Contact Center calls: 3,301
- Contact Center walk-ins: 437
- Unique Website visits: 19,745
- Total Website visits: 23,134
- Accounts Created: 2,206
- Completed and processed applications: 1,110

An "account created" is defined as an individual who has created a username and password.

A "completed and processed application" is defined as an individual who has supplied all of the necessary information, had that information verified, and has selected a plan. Payment was either made or is pending.

Coverage for all plans begins on January 1, 2014.

Since open enrollment began on October 1, HealthSource RI has reported:

- Contact Center calls: 15,469
- Contact Center walk-ins: 1,240
- Unique Website visits: 89,310
- Total Website visits: 105,574
- Accounts Created: 9,687
- Completed and Processed Applications: 3,762

Monthly enrollment data reporting will begin in November.

Brown event assembles network of healthcare leaders, innovators

BY MARY KORR
RIMJ MANAGING EDITOR

PROVIDENCE – At the recent Rhode Island Healthcare Showcase, Gov. Lincoln Chafee noted the Alpert Medical School on Richmond Street was once "a jewelry building where foot-press machine operators worked."

The Jewelry District is now the Knowledge District which, like its predecessor, also fuels the state's economy, he told the audience of innovators, entrepreneurs, healthcare and business leaders.

Brown University Provost **MARK SCHLISSEL, MD, PhD**, echoed Gov. Chafee with a timely announcement – that a trio of university scientists, **JOHN DONOGHUE**, **ARTO NURMIKKO** and **LEIGH HOCHBERG**, had just been awarded Israel's inaugural B.R.A.I.N. (Breakthrough Research And Innovation in Neurotechnology) prize of $1 million for their BrainGate system. *(See sidebar next page.)*

Gov. Lincoln Chafee and Brown University Provost Mark Schlissel, MD, PhD, introduced the Healthcare Showcase held recently at the Alpert Medical School.

PHOTOS BY MARY KORR

Keynote speaker John Brooks III, president and CEO of Joslin Diabetes Center in Boston.

"What begins as basic medical research can end up not just driving the local and national economy but taking that knowledge and using it for the purposes of innovation for the benefit of society," Dr. Schlissel said. "That's the real sweet spot."

He said the prize will be used to further develop BrainGate to make it viable for commercialization, "which is part of our motivation here today. Academic institutions are drivers," he said, but "the private sector is important to this pipeline. The federal government and even disease foundations have limited capacity to help institutions take advantage of decades of progress in biomedical research and help it bear fruit for patients."

Keynote speaker

Dr. Schlissel introduced the keynote speaker, entrepreneur and venture capitalist **JOHN L. BROOKS III**, the president and CEO of the Joslin Diabetes Center. Brooks spoke on macro trends, innovations, and forces shaping healthcare, not just in the future but "now playing out in prime time."

The following are highlights of his presentation.

On Personalized Medicine/ Genomic profiles

Brooks said today people diagnosed with cancer get a full genetic analysis to tailor treatment protocols and that this is spreading into other areas of medicines. "How do we start harnessing the power of the genomic profile?" he asked, and noted healthcare providers

CHEN GALILI

Arto Nurmikko, left, and John Donoghue accepted the B.R.A.I.N. Prize, the first to be awarded, from Israeli President Shimon Peres at the BrainTech 2013 Conference held in Tel Aviv, Israel, in October.

BrainGate team wins $1M prize in Israel

PROVIDENCE — The team that created the investigational BrainGate brain-computer interface has won a major international award, the $1-million Moshe Mirilashvili Memorial Fund B.R.A.I.N. Prize, at a brain science technology conference in Israel Oct. 15, 2013.

Israeli President Shimon Peres presented the prize, including a bronze brain statue, to John Donoghue and Arto Nurmikko, two Brown University researchers who represented the BrainGate collaboration in the competition for the prize.

"We are deeply honored to receive this award," said Donoghue, co-director of the BrainGate team, a researcher at the Providence V.A. Medical Center and the Henry Merritt Wriston Professor at Brown, where he directs the Brown Institute for Brain Science. "It will support our continued research to help people with paralysis, some of whom cannot speak, to restore their connection to the world around them."

The prize is awarded "for a recent breakthrough in the field of brain technology for the betterment of humanity," according to a statement by Israel Brain Technologies (IBT), a nonprofit organization inspired by Peres that grants the award. The contest's panel of judges — experts in neuroscience and technology, including two Nobel laureates — considered presentations from 10 finalists before selecting BrainGate.

Clinical trials

The investigational BrainGate system, initially developed at Brown and now being studied in clinical trials with partners including Massachusetts General Hospital, Stanford University and Case Western Reserve University, employs a baby aspirin-size device with a grid of 96 tiny electrodes that is implanted in the motor cortex. The electrodes are close enough to individual neurons to record the neural activity associated with intended movement. An external computer translates the pattern of impulses across a population of neurons into commands to operate assistive devices, including robotic arms.

More recently the team has advanced the work by developing and testing a novel broadband wireless, rechargeable, fully implantable version of the brain sensor. The prototype system, which has been tested in animal models, is designed to allow greater freedom for users of the BrainGate system, who currently must be connected to the system's computers via a cable. Nurmikko, a neuroengineer, has led the effort to develop the wireless implant.

The co-leader of the BrainGate team, Dr. Leigh Hochberg, was not able to join Donohgue and Nurmikko in Israel, as he was in New Orleans to deliver a Presidential Symposium Lecture at the American Neurological Association. He said he shared the team's excitement in winning the prize.

"All of us on the BrainGate research team are deeply honored to receive this award," said Hochberg, associate professor of engineering at Brown, a neurologist at Massachusetts General Hospital, and a researcher at the Providence V.A. Medical Center's Center of Excellence for Neurorestoration and Neurotechnology. "Our team of clinicians, scientists, engineers, and the extraordinary participants in our ongoing pilot clinical trial, continue to work every day toward developing a technology that will restore communication, mobility, and independence for people with neurologic disease or injury." ❖

and payers are saying: 'Let's match treatments that are going to be effective for the individual.'

He said the traditional pharmaceutical model of one drug or one-way fits all patients is "no longer the way we ought to be thinking."

Shortage of physicians/ role of healthcare extenders

Brooks addressed the issue of physician shortage worldwide, exacerbated by the macro trends of a rapidly aging population, obesity, and people living longer with chronic diseases.

> **'…Retailers are putting themselves in a position to become primary healthcare sites – going from just offering flu shots to becoming a healthcare destination.'**

"Major retailers are putting themselves in a position to become primary healthcare sites – going from just offering flu shots to becoming a healthcare destination. It's one-stop shopping – you'll get your healthcare, prescriptions, food, and think about your health and wellness in the big box stores. Healthcare extenders, not MDs, are delivering this care a lot more. That phenomenon is fast upon us and again it creates some interesting opportunities. How do traditional providers respond to that?"

Data meets healthcare

"We're also seeing the impact of big data," he said. "There are opportunities around analytics and interest in doing deep dives in electronic medical records and finding outliers and identifying anomalies.

"Where do we see problems with patients or patient cohorts or providers that may be not be following the best practices? Where are the opportunities for improvement?

"We think a lot about risk strat-

ification – again the concept of no-one approach fits all. A lot of companies large and small are starting to help drill into EMRs. There is a lot of power in information; insights can be gleaned."

Connectivity: Apps, portals, cell phones

"How do we use the power of cell phones, connectivity, apps, to basically try for efficiency and give patients more connectivity around their health and wellness?" he asked and then used the example of a program at Joslin geared to college students with diabetes, which uses virtual visits to keep them connected to their healthcare team and endocrinologists.

He said patients (and their families) are now able to fully connect to their healthcare teams through protected email exchanges and secure portals to access their electronic medical records.

He saw innovative needs in building enhanced artificial intelligence into devices people use, such as glucose meters, to better manage their care with the hope of keeping them healthy at home, and avoiding expensive ED visits and re-visits, "which are no longer covered by many healthcare plans."

Clinical decision making is absolutely critical, he said, but the challenge is to take the "ton of information" that is coming off diabetes monitors, pumps, Fitbits, and turn it into something actionable, clinically relevant, giving more tools to primary care physicians to drive that. Lots of start-up companies are working on this, he said.

Economic forces

"We're seeing a lot of risk-based, capitated, global and bundled payments – putting economic constraints around care," he said.

He said payment to providers is going to be based on how well they actually deliver value and this is extending to device companies and pharmaceutical firms. "They are no longer going to be paid for just selling a product. They need to be part of the ecosytem that says my products, along with the other services, collectively are going to take costs out of the equation."

Brooks also spoke of increasingly high deductibles employees are choosing to keep down their health plan payments. "We're seeing a lot of tiered healthcare. In Massachusetts, for instance, some of the big teaching hospitals are basically in Tier 3, which means that patients who want to go to those hospitals are going to have to pay a lot more money out of their own pocket if they want to continue to go to those providers, since their deductibles are so much higher today."

And, he added, medical tourism continues, where "employers are packing up their workers and spouses and putting them on planes to India or China for ortho or cardiac procedures because it's cheaper." ❖

NIH awards Cardiovascular Research Center at RIH $7.3M

Will support research into prevention of sudden cardiac arrest

PROVIDENCE – Rhode Island Hospital's Cardiovascular Research Center (CVRC) has been awarded a $7.36 million research project grant (R01) from the National Heart, Lung and Blood Institute of the National Institutes of Health to study sudden cardiac arrest. The research will be focused on mechanisms to develop new therapies and strategies to prevent sudden cardiac arrest and to measure the impact of genetic and environmental factors on risk for sudden cardiac death. The grant will be paid out over five years and is the largest grant of its kind to be paid to a Lifespan partner hospital.

The grant will be approximately $1.5 million per year, and is specific to the research project, A Multi-Scale Approach to Cardiac Arrhythmia: from the Molecule to the Organ.

"R01 grants from the National Institutes of Health are incredibly difficult to come by and are highly competitive," said **GIDEON KOREN, MD**, director of the center, who was recruited in 2005 to launch it.

The CVRC is home for 43 investigators including undergraduate students, graduate students, post-doctoral fellows, research associates and faculty, and receives over $3.8 million in direct costs from the federal government. It will work in collaboration with researchers at Brown University, Northeastern University, Pennsylvania State University, and the University of California, Los Angeles.

"This award from the NIH is a remarkable achievement," said **PETER SNYDER, PhD**, senior vice president and chief research officer for Lifespan. "It underscores the quality of the research at Rhode Island Hospital and provides our researchers with the means to continue to explore new treatments and preventative measures of an illness that takes thousands of lives each year in the U.S." ❖

RHODE ISLAND HOSPITAL

Gideon Koren, MD, director of the Cardiovascular Research Center at Rhode Island Hospital with Gov. Lincoln Chafee at a press conference held to announce the $7.36 million grant.

Health Dept. reports illicit drug overdose deaths doubles in 4 years

About four overdose deaths per week investigated by the medical examiners

PROVIDENCE – The Office of the State Medical Examiners has preliminary data that show accidental deaths caused by illicit drug overdoses nearly doubled in Rhode Islanders between 2009 and 2012. Illicit drug overdose deaths involving street drugs like heroin and cocaine increased from 53 in 2009 to 97 in 2012, according to preliminary data from the State Medical Examiners' Office.

All overdose deaths, whether caused by illicit or prescription drugs, remain a leading cause of accidental death in Rhode Island, with about four overdose deaths per week investigated by the medical examiners.

People ages 40 through 60 accounted for most of the drug overdose deaths overall.

Data collected in 2013 show a reduction of accidental deaths involving prescription medications, such as Vicodin and Oxycodone. Also, alcohol was found to be a common contributing factor when combined with either illicit drugs or prescription medication. Complete data is available to view at health.ri.gov/data/death/drugoverdoses.

"These data give us a better understanding of how this epidemic is affecting Rhode Islanders and who is most at risk," said Michael Fine, MD, director of the Department of Health (HEALTH). "The upward trend in illicit drug overdose deaths is especially of concern because we know that IV drugs pose other health risks, such as HIV and Hepatitis C. Thankfully, through key partnerships and effective strategies, we are making some progress in preventing prescription overdose deaths. However we still have a big drug problem in Rhode Island."

On Oct. 9, HEALTH and the Department of Behavioral Healthcare, Developmental Disabilities and Hospitals (BHDDH) held a press conference to announce the findings and to raise public awareness about prevention and treatment strategies in place. They were joined by the Rhode Island State Police and other addiction recovery advocates.

The State Medical Examiners' data show that contrary to common assumptions, Rhode Island's drug overdose epidemic is not limited to younger adult males. While men accounted for twice as many accidental drug overdose deaths from 2009-2012, people ages 40 through 60 accounted for most of the drug overdose deaths overall.

"These data are of great concern to our department," said Craig Stenning, Director of BHDDH. "We are committed to continuing to develop effective prevention strategies and increasing access to treatment and recovery support services in an effort to help improve these statistics."

In Rhode Island, three key intervention strategies have been implemented over the last year in a concerted effort to address medication addiction, illicit prescription diversion, and accidental drug overdose deaths:

- Naloxone, a medication that reverses an overdose from opioids (e.g. heroin, morphine, oxycodone) is now available without a prescription so that a layperson can help reverse a drug overdose of a friend or loved one. Emergency medical professionals have used this safe and effective antidote for decades. In 2013, Walgreens became the first and only pharmacy chain to make Naloxone available without a prescription.
- Rhode Island expanded its Good Samaritan Law. Callers to 911 now have immunity from prosecution if illicit drugs are involved in the emergency.
- HEALTH launched its Prescription Monitoring Program (PMP) in September of 2012. The PMP enables doctors, other prescribers, and pharmacists to monitor and protect patients from dangerous drug combinations and quantities, and helps reduce the amount of prescription drugs that can get into the hands of people without a prescription. ❖

More information for prescribers: Safe Opioid Prescribing health.ri.gov/saferx

MIRIAM HOSPITAL

Ikenna Okereke, MD

Miriam surgeon performs state's first robotic thoracic surgical procedure

PROVIDENCE – **IKENNA OKEREKE, MD**, chief of thoracic surgery at Rhode Island Hospital and The Miriam Hospital, has become the first surgeon in Rhode Island to perform a thoracic (chest) surgical procedure using minimally invasive robotic technology.

The technology allowed Dr. Okereke to remove and biopsy what turned out to be a benign tumor in the patient's mediastinum.

"The surgical robot gives us access inside the chest cavity and mediastinal tissues through tiny incisions, providing better, three-dimensional visualization and improved dexterity and manipulation," he said, adding that the procedure has been shown to result in significantly less post-operative pain, less blood loss, less scarring and shorter recovery times than traditional open mediastinal surgery.

The use of robotic thoracic surgery, currently offered by Dr. Okereke and fellow thoracic surgeon Thomas Ng, MD, is evaluated on a case-by-case basis. Both are members of University Surgical Associates. ❖

Brown adopts strategic plan

PROVIDENCE – At its first formal meeting of the 2013–14 academic year, the Corporation of Brown University unanimously adopted Building on Distinction: A New Plan for Brown, a strategic plan presented by President Christina H. Paxson.

In the medical and healthcare area, the following programs, appointments and initiatives were announced:

Approval of a new doctoral program – The Board of Fellows approved the recommendation of the faculty to establish a PhD Program in Behavioral and Social Health Sciences. The program will focus on developing and evaluating health behavior interventions, research on behavior and health outcomes, and collaboration both across academic disciplines and between researchers and communities.

Funding for neuroscience professorship – From the estate of Grace Kennison Alpert, a 1951 graduate, a gift of $3 million to fund a professorship at the Warren Alpert Medical School of Brown University for a faculty member in the clinical neurosciences

Professorship in public health – From Matthew I. Sirovich, a 1987 graduate, and Meredith A. Elson, a 1991 graduate, a gift to provide current-use support for the School of Public Health and an additional gift to establish the Carole and Lawrence Sirovich Professorship for Public Health.

New track in Primary Care and Population Health for students in the Warren Alpert Medical School. Already under development, the new program has attracted national attention for its goal of providing a cadre of physicians with the understanding of medicine and population health needed to be effective leaders in our evolving health care environment.

Expanding clinical relationships and community partnerships – With an expanded medical school class and the development of innovative teaching modalities, it is necessary to expand relationships with Lifespan and Care New England, our current partners, and to develop new relationships with physician practices and other hospital partners. We will strengthen collaborations with organizations and clinics that provide care to the underserved and enhance our partnerships with Rhode Island health professional schools.

Brown's hospital partners – Lifespan and Care New England, as well as the V.A. Medical Center – are integral to the success of our medical school and biomedical research. In the last five years, Brown has also developed a range of partnerships with international universities. In the coming decade, we will devote increased attention to the cultivation and stewardship of partnerships as well as the careful assessment of the quality of prospective partners.

Brown's role in the Jewelry District is to be a partner in the development of a vibrant mixed-use environment with medical education, scientific research, administrative offices, residential space for graduate and medical students, and retail space.

Deciphering Disease and Improving Population Health – Improving human health requires an integrated approach to understanding the causes of disease and translating that knowledge into new modes of diagnosis, treatment, and ultimately prevention – from bench to bedside to population. This theme will rely upon the close alignment of Brown's Alpert Medical School and School of Public Health and synergies with faculty across the campus to create the knowledge on which population health can be improved, and educate skilled professionals to use this knowledge for the benefit of people in Rhode Island and around the world.

Appointment of faculty to named chairs:

SAMUEL DUDLEY, MD, the Ruth and Paul Levinger Professor of Cardiology, effective July 1, 2013

MAUREEN PHIPPS, MD, the Chace-Joukowsky Professor of Obstetrics and Gynecology, effective Sept. 1, 2013

JACK ELIAS, MD, the Frank L. Day Professor of Biology, effective Sept. 1, 2013