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**Quality. Service. Access. You've heard me use these words more than a few times, and I am typically talking about the work we are all doing to continue to improve our clinical and business operations. Today, I want to highlight how research at Care New England (CNE), in partnership with Brown University's Warren Alpert Medical School, is also embedded in these principles.**

The truth is that, for the most part, the practice of medicine is based on the findings of research. What's also true about the research being done at CNE is that it is on the leading edge of how health care is evolving and how medical care is provided. As you read through the highlights below—and these are just the tip of the iceberg on all the research occurring across our system—you'll understand how the research investigators based at Butler, Kent, and Women & Infants hospitals are exploring ways to the break boundaries of what it means to deliver quality, service, and access.

- **Healthy, first-time mothers whose labor was induced in the 39<sup>th</sup> week of pregnancy were less likely to deliver by cesarean, compared to those who waited for labor to begin naturally.** This finding from the National Institute for Child Health and Human Development (NICHD) [ARRIVE study](#), in which Women & Infants' had the largest number of enrolled participants thanks to the exceptional recruitment efforts of the ob/gyn community, is already influencing the discussion around processes and procedures at Women & Infants for induction. Research leads are principal investigator Dwight Rouse, MD, and research supervisor Donna Allard.
- **Data strongly suggests significant long-term maternal and child health consequences after pregnancies complicated by preeclampsia, diabetes, and preterm birth.** This trend is highlighted in the work of Women & Infants' Center of Biomedical Research Excellence (COBRE) for Reproductive Health, the only COBRE to focus on women's health. This past April [the team was awarded \\$12.2 million](#) to boost their interdisciplinary research to better understand how complications suffered by a woman during pregnancy provide insight into other future adverse health outcomes. Principal investigator for the study is Surendra Sharma, MD, PhD, with four investigators Lynae Brayboy, MD; Shibin Cheng, MD, PhD; Beatrice Lechner, MD; and Jessica S. Schuster, PhD.

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In related work, [a nearly \\$5 million grant from NIH supports a study](#) being conducted by Institutional Development Award (IDeA) Center of Biomedical Research Excellence (COBRE) for Perinatal Biology at Women & Infants. This work is identifying novel new insights into the pregnancy disorder, preeclampsia, and pregnancy-induced hypertension plus investigating the similarities between preeclampsia and Alzheimer's disease and whether preeclampsia may be a risk factor for later development of Alzheimer's. Lead investigators are James F. Padbury, MD, and Surendra Sharma, MBBS, PhD.

- **Each year, approximately 1.8 million women will have a cesarean delivery or hysterectomy. While opioids are the mainstay treatment for acute pain after these surgeries, most women use only a fraction of the opioids prescribed and do not properly dispose of the unused drugs.** Finding the balance between medication use and patient pain control is critical given our country's current opioid overdose epidemic, and a team of researchers at Women & Infants are engaged in addressing this issue. [Brown University's 2018 Seed Award of \\$95,000](#) will support the team's development of two web-based interventions—one for prescribers encouraging right-sized opioid prescribing, and one for patients to educate on appropriate use and disposal of excess medications. Co-principal investigators are Patricia Risica, DrPH, and Kristen A. Matteson, MD, MPH.
- **Although opioids are used to treat neonatal abstinence syndrome (NAS)—a baby's withdrawal from drugs exposed to in the womb—the best pharmacologic treatment has not been established.** The limited data for an evidence-based practice to treat NAS led the researchers at Women & Infants to conduct a randomized clinical trial to compare treatment outcomes of Methadone versus morphine. [The team reported this month in the JAMA Journal](#) that Methadone is more effective than morphine for infants needing medication to manage withdrawal. But their work is not done, as they are continuing to assess the longer term outcomes of this finding. One of 11 institutions involved in the study, W&I lead investigators Barry Lester, PhD, and Adam Czysnki, DO, were among the authors of the article.
- **Rates of depression in adolescents are increasing, particularly among girls, and with warnings of increased suicidal risk for those taking popular anti-depressant medications (SSRIs), parents are reluctant for teens to be on pharmacotherapy.** This triggered researchers at Butler Hospital to examine alternative treatments for adolescent depression. Next month they embark on a [three year, three phase study](#) that will compare the outcomes of two non-medication treatments for depression in teens: yoga and Cognitive Behavioral Therapy (CBT). The study is made possible through a \$735,000 grant from National Center for Complementary and Integrative Health. Principal investigators are Lisa Uebelacker, PhD, and Shirley Yen, PhD.
- **Patients' nonadherence to medications and psychosocial treatments for schizophrenia and schizoaffective disorder undermine the long-term management of these illnesses, make it difficult to improve quality of life and recovery rates, and result in high societal costs related to treatment, disability, and morbidity/mortality.** Enter technology as a way to support self-coping, medication and appointment adherence, and improved transitions of care post hospitalization. Through [a \\$704,000 three-year National Institute of Mental Health \(NIMH\) grant](#), investigators at Butler and Brown will test a mobile device app, called Mobile After-Care Support (MACS), that is based on empirically-supported cognitive-behavioral strategies. Importantly, this study is building on previously funded work with the long-term goal of creating safer, more efficient transitions to outpatient services for people with psychotic disorders. Principal investigator and project lead is Brandon Gaudiano, PhD.
- **Every 11.68 minutes someone dies by suicide, making it the tenth leading cause of death (and likely higher given many suicides go unreported due to stigma); and every minute, someone is admitted to the hospital for suicidality—that's more than 500,000 people per year.** These figures are staggering and frightening, which is why we are lucky to have the largest single-site, suicide-focused research team in the country based at Butler Hospital to study how to identify and treat suicidal ideation. And they are busy. [Last year a study reported in JAMA Journal](#) found that a multifaceted intervention during and post an emergency department visit can reduce future suicidal behavior by as much as 30 percent over a 52-week follow-up period. Ivan W. Miller, PhD, is an author of the article and Drs. Brandon Gaudiano, Lisa Uebelacker, and Lauren Weinstock made scientific contributions to the study.

This past May, Butler launched the [Zero Suicide Initiative](#), a national effort to adopt the aspirational goal of creating a patient care safety net to reduce the number of suicide deaths. At Butler this means research and clinical teams are working together. Research is providing education to staff on the most current evidence based practices in treating suicide thoughts and behaviors, and the clinical teams are implementing these practices with our patients. Additionally, they are actively seeking and using input from community members to help inform our practice. They will be testing promising new practices as they become available. The research and clinical leads for the initiative are Drs. Michael Armev, Ivan Miller, Lisa Uebelacker, Brandon Gaudiano, Lauren Weinstock, and Diane Block.

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- **Post traumatic stress disorder (PTSD) is commonly found with major depressive disorder (MDD), and while repetitive transcranial magnetic stimulation (rTMS) has been shown to alleviate PTSD symptoms in preliminary studies, ideal parameters remain unclear.** Did you know we have one of the world's leading TMS research teams based at Butler Hospital? We do, and this month the [Journal of Affective Disorders published findings](#) that showed rTMS treatment provided significant and clinically meaningful reductions of PTSD and MDD symptoms. Investigators who participated in authoring the article are Drs. Linda Carpenter, Audrey Tyrka, Benjamin Greenberg, and Lawrence Price.
- **Hospice and palliative care patients who listen to live music in their rooms as part of their treatment feel better both emotionally and physically, and request fewer opioid-based medications.** These were the findings reported in July from a [study conducted at Kent and Women & Infants hospitals](#). Previous studies have shown that patients who engage with visual arts, creative writing, and other expressive activities report improved emotional and psychological well-being. The investigators at Kent and W&I demonstrated that, like other art-based therapies, music helps contend with symptoms like pain and stress, and improve patients' moods, but music doesn't require the patient to do anything but listen to benefit. Co-authors on the study are Kate M. Lally, MD, and Kelly Baxter, MS, APRN, ACHPN.

As many of you know, I am a sports fan, and I love when my team is winning. Clearly, the CNE research team is champions, representing all of us very well and leading us toward winning big when it comes to quality, access, and service. But even more importantly, they are in the game to win for our patients here in Rhode Island, and in fact around the world. Be sure to high-five a researcher today!

Sincerely,



James E. Fanale, MD  
President and Chief Executive Officer



CARE NEW ENGLAND

## Brigham and Women's Cardiovascular Associates at Care New England to hold ICD support group



Rhode Island patients with implantable cardioverter defibrillators (ICDs) and their caregivers are welcome to attend this biannual support group dedicated to educating patients with ICDs and their family members on coping with these devices.

The support group will be held on **Thursday, September 13 from 6 to 8 p.m.** in the Kent Hospital Doctors' Auditorium.

Bruce A. Koplan, MD, MPH, FACC, director of cardiac arrhythmia service at Kent Hospital and a member of Brigham and Women's Cardiovascular Associates at CNE, will speak at this meeting along with guest speaker Kathy Shilko, RD, LDN, CDOE, CDE, clinical nutrition counselor at the Care New England Wellness Center.

Topics will include:

- Living with your device
- Managing your health
- What to expect from your device
- Maintaining a dialogue with your care team
- Exercise

Dinner will be served at no cost to attendees. Advanced registration is encouraged. For more information or to register, please contact the cardiology team at (401) 737-7010, ext. 32880 or by email to [ktedeschi@kentri.org](mailto:ktedeschi@kentri.org).

## Care New England Pediatric Rehabilitation hosts monthly Parent & Program Networking Group

Care New England Pediatric Outpatient Rehabilitation invites parents to join in at their monthly networking group. Parents will have the opportunity to meet and chat with the program's speech language pathologists and occupational therapists, learn about the pediatric services available, connect with other parents, and hear from guest speakers.

Care New England Pediatric Rehabilitation services are designed for children ages newborn to teen. Experienced therapists provide hands-on treatment, working closely with the child's parent and primary care physician to make a complete assessment and create a treatment program to help each child reach their full potential.



We help children who have:

- Autism
- ADD/ADHD
- Developmental delay
- Down syndrome
- Prematurity
- Cleft palate
- Developmental apraxia/dyspraxia
- Communication delay
- Cerebral palsy
- Brachial plexus injury
- Torticollis
- Deformational plagiocephaly
- Sensory processing disorder
- Ordination disorder
- Toe walking
- Auditory processing disorders
- Neurological and orthopedic conditions
- Trouble learning

The Parent & Program Networking Group is held the **last Thursday of every month from 6 to 7 p.m.** at:

Care New England Pediatric Rehabilitation | Pawtucket  
Care New England Medical Group Primary Care and Specialty Services  
*A Kent Hospital Facility*  
111 Brewster Street  
Pawtucket, RI 02860

For more information or to RSVP call (401) 729-2004.

## Wellness Resources



Recently, Stacie McCarthy, MS, exercise physiologist at the Care New England Wellness Center presented at The Center for Surgical Weight Loss at Care New England's monthly support group regarding the importance of regular exercise and meditation. She closed her presentation with a few recommendations on quality fitness apps and meditations resources that allow anyone to continue healthy habits in their own home and on their own schedule. See her recommended resources below.

### *Fitness Apps*

- STRAVA
- My Fitness Pal
- C25K
- Fit Radio
- Lose It!

### *Meditation resources*

- Deepak Chopra (21-day guided meditation)
- Dr. Wayne Dyer
- Marianne Williamson
- Brene Brown
- Headspace (phone app)
- Calm (phone app)

### *Websites and YouTube fitness and relaxation resources*

- [aaptiv.com](http://aaptiv.com)
- [healthline.com](http://healthline.com)
- YouTube, "New Beginning and Habit Change"
- YouTube, "Unlock Your Life"
- YouTube, "Breaking Unhelpful Habits" 