Leading Alzheimer's experts release appropriate use recommendations for new Alzheimer's drug, Aduhelm

LAS VEGAS – JULY 27, 2021 – A group of six leading Alzheimer's experts has presented the first recommendations for the appropriate use of aducanumab (Aduhelm, Biogen/Eisai), a newly approved treatment for early Alzheimer's disease (AD). The recommendations will help provide clinicians with greater clarity and more specific use of the new treatment, which was granted accelerated approval by the U.S. Food and Drug Administration (FDA) in June.

The recommendations were presented last week at the annual Alzheimer's Association International Conference (AAIC) and were simultaneously published in a special article of The Journal of Prevention of Alzheimer's Disease (JPAD) and in Alzheimer's & Dementia®: The Journal of The Alzheimer's Association. **STEPHEN SALLOWAY, MD, MS**, director of Neurology and the Memory and Aging Program at Butler Hospital, the Martin M. Zucker professor of Psychiatry and Human Behavior and professor of Neurology at the Warren Alpert Medical School of Brown University, and associate director of Brown University's Center for Alzheimer's Research, was among the panel of experts and co-authored the JPAD article.

University of Nevada, Las Vegas neuroscientist **DR. JEFFREY CUMMINGS** co-chaired the expert panel presentation at AAIC along with Alzheimer's Association Chief Science Officer **MARIA C. CARRILLO, PhD**, and co-authored the JPAD article along with Dr. Salloway.

"Many details of the clinical use of this new agent are not in the FDA's prescribing information," Cummings said. "These recommendations fill the gap between the prescribing information and the real-world implementation of this treatment."

"The recommendations made by this expert panel today and in the JPAD article mirror the guidelines used during the clinical trial of aducanumab," Dr. Salloway said. "Our goal is to guide clinicians on the selection of patients most likely to benefit from treatment with recommendations on how to carefully monitor for safety. The evidence we have is that patients with early Alzheimer's disease, mild cognitive impairment and mild dementia, are most likely to benefit and we will need close collaboration between primary care and specialty providers to identify these patients."

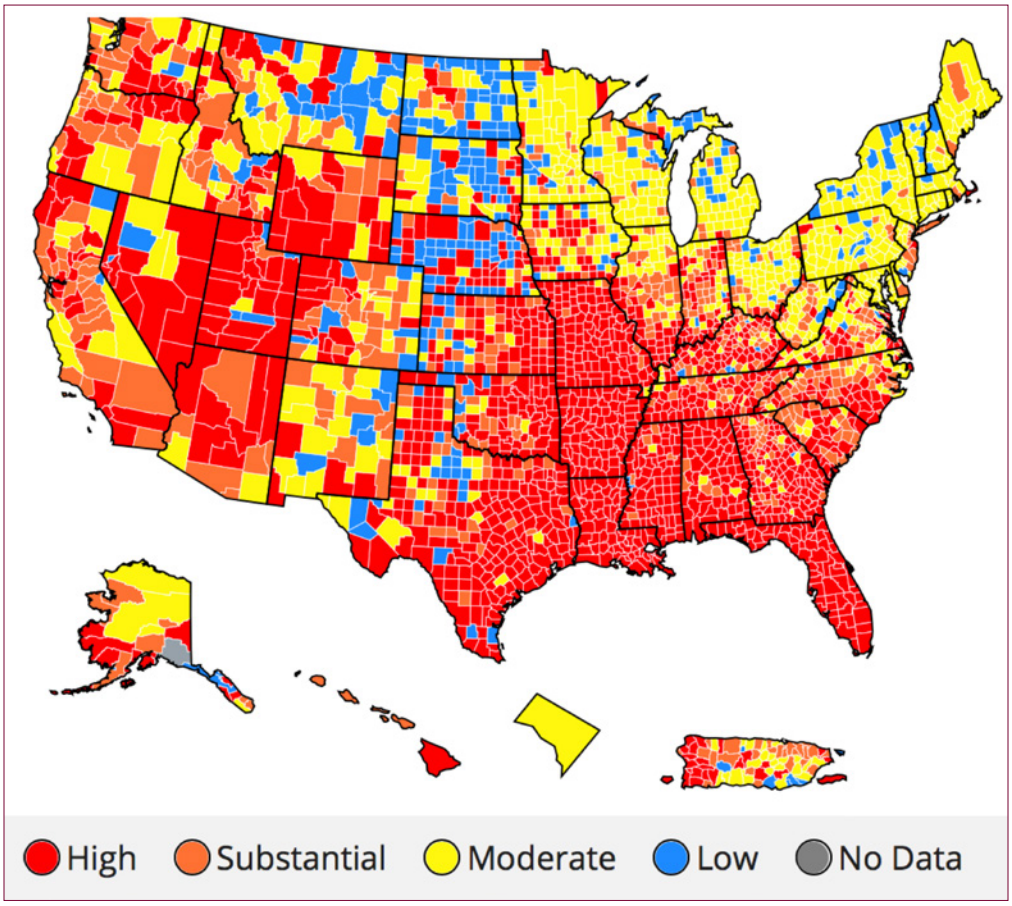
The appropriate use recommendations made by the panel include a list of 11 factors that they say should be satisfied for a patient to be considered eligible for treatment with Aduhelm. Those factors include, in part: a clinical diagnosis of mild cognitive impairment (MCI) due to AD or mild stage AD dementia after a comprehensive evaluation; the presence of amyloid plaques in the brain as demonstrated on PET imaging or by AD signature pattern on cerebrospinal fluid (CSF) testing; the attainment of certain specific cognitive assessment scores; stable psychiatric and medical conditions including stable cardiovascular and cardiopulmonary health, no organ failure or active cancer, no evidence of neurological disorders other than AD, and a baseline MRI with no evidence of acute or subacute hemorrhage, among other factors. The article containing the complete list of appropriate use criteria is available on the JPAD website at jpreventionalzheimer.com. The summary article from Alzheimer's & Dementia® is also available at alz-journals.onlinelibrary.wiley.com.

In addition to Drs. Cummings and Salloway, the expert panel included: **PAUL AISEN, MD**, Alzheimer's Treatment Research Institute, University of Southern California, San Diego, CA; **LIANA APOSTOLOVA, MD, FAAN**, Departments of Neurology, Radiology, Medical and Molecular Genetics, Indiana University School of Medicine, Indianapolis, IN; **ALIREZA ATRI, MD, PhD**, Banner Sun Health Research Institute, Banner Health, Sun City, AZ; Center for Brain/Mind Medicine, Harvard Medical School, Boston, MA; and **MICHAEL WEINER, MD**, Departments of Radiology and Biomedical Imaging, Medicine, Psychiatry and Neurology, University of California San Francisco, San Francisco, CA. ❖

CDC summary of recent changes in COVID-19 recommendations

The following updates were released by the Centers for Diseases Control (CDC) on July 27th for fully vaccinated people given new evidence on the B.1.617.2 (Delta) variant currently circulating in the United States:

- Added a recommendation for fully vaccinated people to wear a mask in public indoor settings in areas of substantial or high transmission.
- Added information that fully vaccinated people might choose to wear a mask regardless of the level of transmission, particularly if they are immunocompromised or at increased risk for severe disease from COVID-19, or if they have someone in their household who is immunocompromised, at increased risk of severe disease or not fully vaccinated.
- Added a recommendation for fully vaccinated people who have a known exposure to someone with suspected or confirmed COVID-19 to be tested 3–5 days after exposure, and to wear a mask in public indoor settings for 14 days or until they receive a negative test result.
- CDC recommends universal indoor masking for all teachers, staff, students, and visitors to schools, regardless of vaccination status



CDC transmission map as of July 27. https://covid.cdc.gov/covid-data-tracker/#county-view

View all guidelines and charts of areas of high transmission at: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/fully-vaccinated-guidance.html

Legionnaire's Disease cases on the upswing

The Rhode Island Department of Health (RIDOH) has observed an increase in the number of reported cases of Legionnaires' disease (LD). Between 2014 and 2020, there was an average of 10 cases during the months of June and July each year, ranging from 0–11 cases in a single month. From June 2, 2021 to July 26, 2021 there have been 30 cases of Legionnaire's disease, 29 of which have illness onset dates between June 17 and July 21. Twenty-eight of the 30 people have been hospitalized. No common source of exposure has been identified, although an investigation is ongoing.

"This is another example that underscores the value of RIDOH's routine monitoring for communicable diseases," said Director of Health **NICOLE ALEXANDER-SCOTT, MD, MPH**. "We know that Legionella bacteria grow best in complex water systems that are not well maintained. When this water becomes aerosolized in small droplets, such as in a cooling tower, shower, or decorative fountain, people can accidentally breathe in the contaminated water. This is of particular concern now as some buildings' water systems have been offline for a prolonged period due to the COVID-19 pandemic and are just now returning to service."

Legionella is especially a concern in buildings that primarily house people older than 65, buildings with multiple housing units and a centralized hot water system (like hotels or high-rise apartment complexes), and buildings higher than 10 stories. ❖

CNE, Lifespan to require COVID-19 vaccination for employees

PROVIDENCE – Care New England announced on July 27th that they are moving toward a mandatory vaccination program for all staff across all operating units. CNE has required COVID-19 vaccination of students, volunteers, and new hires since July 1st, 2021. The next step is to require all managers to begin the vaccination series prior to Labor Day.

"It is our responsibility to keep our patients, and our staff, safe. This program will be based on the best evidence that we have to date about preventing transmission of COVID-19," said **JAMES E. FANALE, MD**, President and CEO, Care New England.

Complete details of the program, and its implementation for all staff across the system, will be released in the next 7–10 days.

Shortly after Care New England's statement, Lifespan said it will require all employees to be vaccinated. It said the requirement would go into effect September 1 and that "our goal is for all employees to show proof of immunization within 60 days."

The organization cited the transmission rates and contagiousness of the Delta variant, recommendations from leading healthcare organizations, and the well-being of its patients as reasons for the mandate.

"This change is being made only after extensive and thoughtful review, and with our employees and patients' safety as our top priority. We value and appreciate every member of our Lifespan team who contributes to our mission to deliver health with care," the statement read. ❖

HHS, DOJ issue guidance on 'Long COVID' and disability rights under the ADA

WASHINGTON, D.C. – At the recent commemoration of the 31st anniversary of the Americans with Disabilities Act (ADA), the U.S. Department of Health and Human Services (HHS) and the U.S. Department of Justice (DOJ) jointly published guidance on how "long COVID" can be a disability under the ADA, Section 504 of the Rehabilitation Act, and Section 1557 of the Affordable Care Act. The guidance is on the HHS website at https://www.hhs.gov/civil-rights/for-providers/civil-rights-covid19/index.html and on the DOJ web-site at https://www.ada.gov/long_covid_joint_guidance.pdf [PDF].

"It's critical that we ensure people who have disabilities as a result of long COVID are aware of their rights under federal nondiscrimination laws," said **ALISON BARKOF**f, Acting Administrator and Assistant Secretary for Aging at the Administration for Community Living at HHS. "It also is crucial that they know how to connect to services and supports available if they now need assistance to live in their own homes, go to school or work, or participate in their communities."

The ACL directory of resources for those with long COVID may be found at https://acl.gov/sites/default/files/COVID19/ACL_LongCOVID.pdf [PDF].

In February HHS launched a new initiative to study long COVID. Led by NIH, the goal of the initiative is to learn more about how COVID-19 may lead to widespread and lasting symptoms, and to develop ways to treat or prevent these symptoms. ❖

VA mandates COVID-19 vaccines among its medical employees, including VHA facilities staff

WASHINGTON – On July 26, the Department of Veterans Affairs Secretary **DENIS McDONOUGH** announced he will make COVID-19 vaccines mandatory for Title 38 VA health care personnel – including physicians, dentists, podiatrists, optometrists, registered nurses, physician assistants, expanded-function dental auxiliaries and chiropractors – who work in Veterans Health Administration facilities, visit VHA facilities or provide direct care to those VA serves.

VA is taking this necessary step to keep the Veterans it serves safe.

Each employee will have eight weeks to be fully vaccinated.

"We're mandating vaccines for Title 38 employees because it's the best way to keep Veterans safe, especially as the Delta variant spreads across the country," McDonough said. "Whenever a Veteran or VA employee sets foot in a VA facility, they deserve to know that we have done everything in our power to protect them from COVID-19. With this mandate, we can once again make – and keep – that fundamental promise."

The department's decision is supported by numerous medical organizations including the American Hospital Association, America's Essential Hospitals and a Multisociety group of the leading Infectious Disease Societies. The American Medical Association, American Nurses Association, American College of Physicians, American Academy of Pediatrics, Association of American Medical Colleges, and National Association for Home Care and Hospice also endorsed mandating COVID-19 vaccination for health care workers.

In recent weeks, VA has lost four employees to COVID-19 – all of whom were unvaccinated. At least three of those employees died because of the increasingly prevalent Delta variant. There has also been an outbreak among unvaccinated employees and trainees at a VA Law Enforcement Training Center, the third such outbreak during the pandemic. ❖

RI first in nation to pilot harm reduction centers to prevent drug ODs

PROVIDENCE – Gov. **DAN MCKEE** signed legislation in July that authorizes a two-year pilot program to prevent drug overdoses through the establishment of harm reduction centers, a community-based resource for health screening, disease prevention and recovery assistance where persons may safely consume pre-obtained substances.

The law (2021-H 5245A, 2021-S 0016B), effective March 1, 2022, authorizes facilities where people may safely consume those substances under the supervision of health care professionals. It requires the approval of the city or Town Council of any municipality where the center would operate.

While 10 countries sanction the operation of harm reduction centers, this legislation makes Rhode Island the first in the United States to authorize such a pilot program.

Advisory committee

The law also creates an advisory committee to make recommendations to the Department of Health on ways to maximize the potential public health and safety benefits of harm reduction centers, as well as the proper disposal of hypodermic needles and syringes, the recovery of people utilizing the centers, and ways to adhere to federal, state and local laws impacting the creation and operation of the centers.

"Rhode Island's teamwork and trust in evidence-based medical decision making and strong public health policy led the nation in tackling COVID-19, and with that same spirit we are expanding our fight against substance use disorders and drug overdose deaths," said **CATHERINE CUMMINGS, MD**, Rhode Island Medical Society President.

Studies of supervised injection facilities in other countries have demonstrated that they reduce overdose deaths and transmission rates for infectious disease, and increase the number of individuals who seek addiction treatment, without increasing drug trafficking or crime in the areas where they are located, according the American Medical Association.

"By enacting the nation's first law in support of a pilot harm reduction center, Rhode Island is taking an important step to save lives from drug-related overdose and death," said AMA Opioid Task Force Chair **BOBBY MUKKAMALA, MD**. "The AMA strongly supports the development and implementation of harm reduction centers in the United States. These facilities are designed, monitored, and evaluated to generate data to inform policymakers on the feasibility, effectiveness, and legal aspects of reducing harms and health care costs related to injection drug use." ❖

Anchor Recovery Community Center makes naloxone boxes accessible on Block Island

PROVIDENCE – The Providence Center's Anchor Recovery Community Center, along with local businesses, their employees, and residents of Block Island, recently partnered to make life-saving resources for people with substance use issues available on the island.

During their recent trip, certified peer recovery specialists provided Ballard's Beach Resort and New Shoreham's Island Free Library with Naloxboxes, 2 dozen naloxone kits, as well as opioid overdose prevention and rescue training. The effort is part of the Governor's Overdose Prevention and Intervention Task Force, which launched Rhode Island's 10,000 Chances Project, an initiative to reduce overdose deaths and save lives.

"We are very excited that the Anchor MORE (Mobile Outreach Recovery Efforts) team has been able to expand its outreach across the state. We are also grateful to have been awarded funding through the RI DOH's Drug Overdose Prevention Program, the 10K chances grant. This funding has allowed us to expand our services to include meeting with local businesses to provide them with education, training and naloxone kits which can be used to save the lives of patrons in crisis. The response from the local community leaders has been quite remarkable, and we are thankful," said **HOLLY FITTING**, VP of Addiction, Recovery, Residential Services, and Grants Administration, Anchor Recovery Community Center. ❖

New suicide prevention law requires training/awareness for school personnel

STATE HOUSE – A new law signed in July will require all public school districts to adopt suicide prevention policies and train all personnel in suicide awareness and prevention annually.

The Nathan Bruno and Jason Flatt Act (2021-H 5353, 2021-S 0031) will require all school personnel – including teachers, administration, custodians, lunch personnel, substitutes, nurses, coaches, and coaching staff, even if volunteers – to be trained in suicide prevention and awareness. The state Department of Education would establish the guidelines for the training curriculum.

The bill is named for Nathan Bruno, a 15-year-old Portsmouth High School student who took his life in 2018. Part of the bill is modeled after a state law passed in Tennessee and 19 other states, which was named after Jason Flatt, a 16-year-old from Nashville who died by suicide.

According to the Department of Health, suicide is the second leading cause of death for Rhode Islanders between the ages of 15 and 34. In 2017, 15.9% of surveyed Rhode Island high school students they had considered suicide and 10.5% said they had attempted suicide. One in nine middle school students surveyed in Rhode Island that year reported having made a suicide plan. ❖

AMA adopts policy to address increases in youth suicide

CHICAGO – With an alarming increase in suicide and suicide risk in youth and young adults across the US, the American Medical Association (AMA) adopted policy during the Special Meeting of its House of Delegates aimed at preventing suicide in young people.

The adopted policy report outlines risk factors for youth suicide, including the role of mental health, substance use disorder, adverse childhood experiences, increased use of digital devices, bullying and cyberbullying, and the impact of the COVID-19 pandemic. The report also identifies evidence-based interventions, protective factors, as well as resources to enhance resiliency aimed at mitigating youth suicide risk.

According to a recent Centers for Disease Control and Prevention (CDC) study, there was a 31% increase in the proportion of mental health–related emergency department visits for youth aged 12–17 years during 2020 as compared to 2019. Particularly concerning, CDC data also showed increased rates of suicide ideation and suicide attempts in 2020 during the COVID-19 pandemic as compared with 2019 rates.

"We were deeply concerned by the dramatic increases we were seeing in youth suicide and suicide risk even before the mitigation measures and disruptions caused by the COVID-19 pandemic. As a nation we must do everything we can to prioritize children's mental, emotional and behavioral health and step up our efforts to prevent suicide and mitigate suicide risk among our nation's youth," said AMA Board Member **WILLIE UNDERWOOD III, MD, MSc, MPH**. "Physicians play a vital role and we must ensure that all physicians who see youth patients, not solely pediatric psychiatrists and addiction medicine physicians, have the ability, capacity, and access to the tools needed to identify when a young person is experiencing a period of imminent risk and help prevent suicide attempts."

Under the new policy, the AMA will:

- Encourage the development and dissemination of educational resources and tools for physicians, especially those more likely to encounter youth or young adult patients, that address effective suicide prevention. This includes screening tools, methods to identify risk factors and acuity, safety planning, and appropriate follow-up care – including treatment and linkages to appropriate counseling resources;
- Support collaboration with federal agencies, relevant state and specialty medical societies, schools, public health agencies, community organizations, and other stakeholders to enhance awareness of the increase in youth and young adult suicide and to promote protective factors, raise awareness of risk factors, support evidence-based prevention strategies and interventions, encourage awareness of community mental health resources, and improve care for youth and young adults at risk of suicide;
- Encourage efforts to provide youth and young adults better and more equitable access to treatment and care for depression, substance use disorder, and other disorders that contribute to suicide risk;
- Encourage continued research to better understand suicide risk and effective prevention efforts in youth and young adults, especially in higher risk sub-populations such as Black, LGBTQ+, Hispanic/Latinx, and Indigenous/Native Alaskan youth and young adult populations, and among youth and young adults with disabilities;
- Support the development of novel technologies and therapeutics, along with improved utilization of existing medications to address acute suicidality and underlying risk factors in youth and young adults;
- Support research to identify evidence-based universal and targeted suicide prevention programs for implementation in middle schools and high schools;
- Advocate at the state and national level for policies to prioritize children's mental, emotional and behavioral health;
- Advocate for a comprehensive system of care including prevention, management and crisis care to address mental and behavioral health needs for infants, children and adolescents;
- Support increased screening for Adverse Childhood Experiences (ACEs) in medical settings, in recognition of the intersectionality of ACEs with significant increased risk of suicide, negative substance-use related outcomes including overdose, and a multitude of downstream negative health outcomes;
- Support the inclusion of ACEs and trauma-informed care into undergraduate and graduate medical education curricula. ❖

Applications for BCBSRI's LGBTQ Safe Zone Program due August 16th

PROVIDENCE – Blue Cross & Blue Shield of Rhode Island (BCBSRI) is accepting applications from Rhode Island-based healthcare providers – including all practices, facilities and services - for its latest round of LGBTQ Safe Zone practice certification. This new cohort will join more than 30 sites statewide that are providing safe, affirming and inclusive care to the LGBTQ community. Applications are due Aug. 16, 2021.

"Health equity is a top priority for our company," said **MATTHEW COLLINS, MD, MBA**, BCBSRI executive vice president and chief medical officer. "Everyone deserves the right to culturally competent, inclusive and affirming healthcare. This can be a challenge for members of the LGBTQ community who, like other underserved groups, are often alienated due to experiencing discrimination when seeking care."

Certification requirements for BCBSRI LGBTQ Safe Zones include staff training specific to the care of LGBTQ patients, protection for patients and staff from discrimination based on gender identity or expression, gender neutral bathrooms, inclusive forms and procedures, and a public commitment to connecting with, and serving, the LGBTQ community.

BCBSRI launched its LGBTQ Safe Zone program in 2016. The program has now certified more than 30 Safe Zone providers in towns and cities across Rhode Island representing a number of specialties, including dental and mental health practices, substance abuse and sexual trauma centers, and even assisted living facilities for older adults. View the full list of providers at bcbsri.com/safezones.

To qualify as an LGBTQ Safe Zone, providers must meet certification requirements. Upon certification, practices are provided with a window cling and plaque so that patients visiting the practice site will recognize it as a place where safe and affirming care is offered to the LGBTQ community. Learn more and apply online at bcbsri.com/providers/safezone-program. Applications are due by 5 p.m. on August 16, 2021 and those who have been approved for certification will be notified in October 2021. ❖

High screen time linked to cognitive, behavioral problems in children born extreme preterm, NIH-funded study finds

PROVIDENCE – **BETTY R. VOHR, MD**, Medical Director of the Follow-up Clinic Program, Department of Pediatrics at Women & Infants Hospital, is the lead author of a manuscript published in JAMA Pediatrics titled: "Association of High Screen-Time Use With School-age Cognitive, Executive Function, and Behavior Outcomes in Extremely Preterm Children."


Betty R Vohr, MD

According to Dr. Vohr's research, among 6- and 7-year-olds who were born extremely preterm – before the 28th week of pregnancy– those who had more than two hours of screen time a day were more likely to have deficits in overall I.Q., executive functioning (problem solving skills), difficulty with impulse control and difficulty paying attention, according to a National Institutes of Health funded study. Similarly, those who had a television or computer in their bedroom were more likely to have problems with impulse control and paying attention. The findings suggest that high amounts of screen time may exacerbate the cognitive deficits and behavioral problems common to children born extremely preterm.

The researchers analyzed data from a follow-up study of children born at 28 weeks or earlier. Of 414 children, 238 had more than two hours of screen time per day and 266 had a television or computer in their bedroom. Compared to children with less screen time per day, in adjusted analyses, those with high screen time scored an average of nearly 8 points higher on global executive function percentile scores, roughly .8 points lower on impulse control (inhibition) and more than 3 points higher on inattention, all reflecting increased risk of greater deficits. Children with a television or computer in their bedroom also had increased risk of inhibition, hyperactivity, and impulsivity problems.

The authors concluded that the findings support the need for physicians to discuss the potential effects of screen time with families of children born extremely preterm.

ELISABETH McGOWAN, MD, is a coauthor, and other healthcare experts at Women & Infants Hospital contributed.

Funding for the study was provided by NIH's Eunice Kennedy Shriver National Institute of Child Health and Human Development, National Heart, Lung, and Blood Institute and National Center for Research Resources (now part of the National Center for Advancing Translational Sciences). ❖

Hasbro to participate in Accelerating Child Health Care Transformation

PROVIDENCE – Hasbro Children's Hospital was competitively selected to participate in Accelerating Child Health Care Transformation, a national initiative funded by the Robert Wood Johnson Foundation to transform child health care delivery. Hasbro Children's Hospital is one of 12 leading pediatric practices across the country that will work with the Center for Health Care Strategies (CHCS) to develop strategies for making child health care more equitable and family focused.

"Hasbro Children's Hospital plays an essential role in our community. Hasbro Children's exists to serve our neighbors and community, including and especially the most vulnerable among us. Being selected to work together in this partnership will allow us to continue to fulfill that commitment to the individuals and the communities we serve," said **SAUL N. WEINGART, MD**, president of Rhode Island Hospital and its Hasbro Children's Hospital.

"As an academic medical center, we have opportunities to be at the cutting edge of medicine for children through research and through some of our collaborations, such as the Accelerating Child Health Care Transformation. These important partnerships enable us to do what's best for kids, which means not only treating the child, but advocating for the child," said **PHYLLIS DENNERY, MD**, pediatrician-in-chief and medical director of Hasbro Children's Hospital.

Over nine months, the learning community participants will collaborate on three key goals: (1) adopting anti-racist practices to advance health equity; (2) co-creating equitable partnerships with families and providers; and (3) identifying family strengths and health-related social needs to promote resilience. **OLUTOSIN OJUGBELE, MD**, led Hasbro Children's application process for the joint initiative.

"Our team is extremely proud to have been chosen to participate in this important effort. The health and well-being of children is our top priority, and working collaboratively with other select organizations on this initiative will only strengthen our efforts to provide a high-quality family- and patient-centered medical home for children and youth," said **CAROL LEWIS, MD**, medical director, Hasbro Children's Hospital Pediatric Primary Care and director, Refugee Health Program. ❖

New law protects hospital employees from violence, harassment on the job

STATE HOUSE – A new law passed the by General Assembly will help protect hospital staff from violence and harassment at work.

The legislation (2021-S 0055A, 2021-H 6018A), which was passed by the Assembly July 1 and was recently signed into law by the governor, establishes procedures for hospital employees to file complaints with the hospital or the Department of Health for any assaultive behavior or other violation of law occurring on hospital grounds, and requires hospitals to develop plans to protect and respond to violence and employee safety issues and institute safety training for employees.

The new law, which takes effect January 15, 2022, will require that every hospital in Rhode Island create a workplace safety committee that shall conduct periodic security and safety assessments to identify existing or potential hazards for assaults committed against employees. It directs hospitals to develop and implement an assault prevention and protection program for employees, and provide assault prevention and protection training on a regular basis for employees.

It also ensures that any hospital employee may report any violation of law or safety or health violation to either their hospital or the Department of Health, may maintain anonymity if they want, and shall be protected from retaliation. The bill lays out the procedures for how such complaints should be investigated and addressed.

During testimony for the bill the United Nurses and Allied Professionals (UNAP), which represents nurses, technologists, therapists, pharmacists, mental health workers and support staff, reported that there has been a dramatic increase of instances in which frontline health workers are on the receiving end of violent and often traumatic instances of physical and mental abuse from patients, their families and visitors, and that more often than not, it goes unreported and undocumented.

A UNAP survey of its members working in hospitals found that 42% said their unit had experienced a violent or near miss violent episode requiring intervention by the local police; 67.8% said they had personally experienced workplace violence on the job; and 63.7% said they have at times felt unsafe working in their unit. ❖

RIH study shows smartphone photos can screen for anemia

PROVIDENCE – A picture of a person's inner eyelid taken with a standard smartphone camera can be used to screen for anemia, according to a new study published recently in PLOS ONE by authors, including **SELIM SUNER, MD**, **JAMES RAYNER, MD, MEng**, and **GREGORY JAY, MD, PhD**, all emergency physicians at Rhode Island Hospital and The Miriam Hospital, and faculty at The Warren Alpert Medical School of Brown University;

In the new study, researchers obtained smartphone images of the palpebral conjunctiva from 142 patients with a wide range of hemoglobin levels. They zoomed into a small region of the conjunctiva in each photo and developed a new algorithm optimizing color resolution as well as a prediction model linking conjunctiva color, compared to the surrounding skin and whites of the eyes, to hemoglobin levels. Then, the team tested the new algorithms on photos collected from 202 new patients.

When analyzing the new set of photographs, the model was 72.6% accurate (CI 71.4–73.8), 72.8% sensitive (71–74.6), and 72.5% specific (70.8–74.1) at predicting anemia. Accuracy for transfusion thresholds was higher, at 94.4% accurate (93.7–95.0) for a low transfusion threshold and 86% accurate (85.0–86.9) for a higher threshold. Skin tone did not change results, but image quality had some effect. The results suggest that a smartphone app could be used to screen for anemia in a telehealth or remote setting where the infrastructure for blood tests is not available.

"Others have used photos of the creases in the palms, fingernail beds, and other parts to devise algorithms to predict anemia," said Dr. Suner. "Because those areas can be affected more readily by temperature changes or other conditions affecting blood flow, the eyelid gives us a more reliable way to make this prediction."

Dr. Suner added that the next iteration of an app designed for this purpose will allow novice users to take the photo with sufficient quality for accuracy, honing focus and lighting to minimize error. That app will be validated with a new cohort of patients. ❖

RIDOH announces new Health Equity Zones

PROVIDENCE – The Rhode Island Department of Health (RIDOH) announced that it is expanding support and funding to establish four new Health Equity Zones (HEZs). Warwick, Warren, Blackstone Valley (including Cumberland, North Smithfield, and Lincoln), and the 02905 ZIP code (including lower South Providence and nearby neighborhoods) were chosen through a competitive process that drew applicants from communities across the State.

The ongoing expansion of RIDOH's HEZ initiative has been made possible in part through support from a pilot investment in place-based transformation in Rhode Island by Blue Meridian Partners and in partnership with ONE Neighborhood Builders (ONE|NB). Blue Meridian Partners is a national philanthropic organization that finds and funds scalable solutions to the problems that limit economic mobility and trap America's young people and families in poverty. ONE|NB is the backbone, or convening entity, of the pilot initiative, known as Central Providence Opportunities. The goal of Central Providence Opportunities is to improve economic opportunity in the 02908 and 02909 ZIP codes of Providence through affordable housing development, wage growth, local business development, and early education supports. The aim is to scale this pilot effort to other communities in Rhode Island by working with residents, community partners, and State agencies.

The investment to expand Rhode Island's HEZ initiative will be managed by the Rhode Island Foundation in partnership with the Rhode Island Executive Office of Health and Human Services (EOHHS) and RIDOH, and the funding will be leveraged to expand the impact of the HEZ model into additional communities.

Like the 11 existing HEZs, the four new HEZs will annually receive $150,000 in core funding and support to ensure that these communities ground their work in public health principles and best practices, so that measurable outcomes are reached and evaluated. ❖