Helping others. It’s a natural calling for those who work at UT Southwestern. Last year, faculty, staff, and students reached out more than ever, giving back their time and expertise in a variety of ways. From Hurricane Harvey aid to working with students to combat mental health issues, UTSW employees positively impacted the community.
A force of nature

UTSW community unites in hurricane relief effort

Editor’s note: Hurricane Harvey relief efforts concluded in September 2017, falling into the 2017-18 fiscal year and Annual Review cycle.

When a massive hurricane comes barreling toward the Texas coast, it’s a natural response for members of the UT Southwestern community to band together and help. The need for aid is real – and just as big as the hearts of those dedicated to providing exceptional patient care.

Even before news reports confirmed that Hurricane Harvey would leave thousands of South Texans homeless and others injured, the UTSW community mobilized.

In Dallas, more than two dozen UT Southwestern physicians, fellows, students, and others volunteered for the medical response at the Kay Bailey Hutchison Convention Center Mega-Shelter, serving evacuees who had relocated from Houston and South Texas, areas devastated by the 2017 hurricane’s flooding. The effort included pediatricians, psychiatrists, infectious disease specialists, and emergency medicine personnel.
Other UT Southwestern employees quickly headed to Houston. More than 40 UTSW nurses spent two weeks helping at the MD Anderson Cancer Center there.

Dr. Raymond Fowler, Chief of the Division of Emergency Medical Services at UTSW, said the magnitude of the response impressed him.

“The thing that really warms my heart is that the Dallas area – the citizens and the medical community – has a way of coming together when it’s important, and this is an example of that,” he said.

Dr. Fowler, who holds the James M. Atkins, M.D. Professorship in Emergency Medical Services, served as Chief Medical Officer at the Convention Center operation. There, UT Southwestern physicians and fellows managed medical supplies and set up a plan for triaging patients.

“This is what we are experienced in and train for daily to ensure we’re ready when needed,” said Dr. Raymond Swienton, Professor of Emergency Medicine, Division Chief for Emergency and Disaster Global Health, and Co-Director of the CDC Exemplar Center for Public Health Emergency Preparedness.

“We are fortunate to have some of the most experienced people in disaster medicine on the UTSW faculty.”

UT Southwestern students also heeded the call, volunteering as staff at the Convention Center. UT Southwestern President Dr. Daniel K. Podolsky (center) meets with Dr. Raymond Fowler (left), Chief of UTSW’s Division of Emergency Medical Services, and Dr. S. Isaacs, a Professor of Emergency Medicine and Medical Director for the Dallas Fire-Rescue Department, as they prepare for Hurricane Harvey refugees at Dallas’ Kay Bailey Hutchison Convention Center Mega-Shelter.
“We provided services as long as they were needed,” said Dr. Maeve Sheehan, Professor of Pediatrics, who oversaw the shelter’s pediatric care with Dr. Halim Hennes, Professor of Pediatrics and Emergency Medicine.

Earlier, UT Southwestern’s pediatric neonatologists had assisted in evacuating neonatal infant patients as the flooding began, and its pediatric nephrologists provided dialysis to several displaced children.

“Large numbers of people were stranded for days in this unprecedented disaster,” summed up Dr. Swienton, a long-standing senior adviser to the state of Texas. “We stood ready to provide shelter and medical care to our fellow Texans who arrived in Dallas.”

“They would provide two weeks of welcome relief to a Houston nursing staff facing their own challenges related to the hurricane – from water-soaked homes to difficulty driving into work.”

More than 40 nurses from UT Southwestern clinics and its two hospitals, Zale Lipshy Jr. University Hospitals, answered the call for help from MD Anderson Cancer Center after Houston’s Hurricane Harvey flooding in 2017.

Within hours of receiving the request from their sister UT hospital, UT Southwestern nurses were on the way.
Dr. Madhukar Trivedi, founding Director of the Center for Depression Research and Clinical Care, describes the app he developed that physicians can use to screen patients for mood disorders, such as depression.

**Taking a stand against teen suicide with school outreach**

Suicide rates among 10- to 14-year-old girls tripled from 1999 to 2014, according to a 2016 study. In 2014, more than 1 in 10 U.S. adolescents reported they had experienced a major depressive episode within the previous year – up 37 percent from 2005.
The VitalSign® app was developed by Dr. Madhukar Trivedi as a tool for mental health screening.

Dr. Jennifer Hughes, an Assistant Professor of Psychiatry, leads a program implemented in schools across North Texas to help deal with the surge in suicide rates among adolescents.

Mental health specialists at UT Southwestern are moving into classrooms and pediatricians’ offices to confront this problem head-on.

“For every teen who commits suicide, there are so many who are suffering equally,” said Dr. Madhukar Trivedi, founding Director of UT Southwestern’s Center for Depression Research and Clinical Care, a cornerstone of the Peter O’Donnell Jr. Brain Institute. “The earlier we can screen and identify the kids who need help, the better chance they have in the long term.”

UT Southwestern’s Risk and Resilience Network, a partnership between the Center and child-focused organizations such as schools that puts on a series of education and research programs tackling this issue and is now in its third year, has been implemented in schools across North Texas and continues to expand. Support for the Network has come from the Jordan Elizabeth Harris Foundation, The Rees-Jones Foundation, and the W.W. Caruth, Jr. Foundation.

Participating schools have access to several education and research programs. In addition, a team of UT Southwestern facilitators supervised by a psychologist goes into classrooms to talk about mental health and suicide prevention. Voluntary depression-screening questionnaires are given to students before as well as after the program. Results are then entered into a database for analysis.

Dr. Trivedi, a Professor of Psychiatry who holds the Betty Jo Hay Distinguished Chair in Mental Health and the Julie K. Hersh Chair for Depression Research and Clinical Care, hopes research and analysis of this data will enable his team to predict risk and resilience among teens.

The Network is also helping pediatricians adhere to national guidelines that call for all teenagers to be screened for depression by providing access to the VitalSign® mental health-screening tool app that Dr. Trivedi developed.

Some students have clearly been helped. Dr. Jennifer Hughes, an Assistant Professor of Psychiatry at UT Southwestern who leads the school initiative and is an alumna of the UT Southwestern Graduate School of Biomedical Sciences, recalls one girl who said stress was affecting her well-being. Dr. Hughes suggested the girl talk with a school counselor. The following week, she thanked Dr. Hughes, describing how that initial meeting led her to much-needed therapy.

“That was an example of the program doing exactly what it was intended to do – getting students to talk about these things and seek out possible solutions,” Dr. Hughes said.
About 40 percent of the students at Paul Quinn College, a historically African-American, liberal arts institution in Dallas, come from urban, poverty-stricken areas around the country. UT Southwestern has stepped up to help the school deal with some of the problems these students face.

“The first year that we recruited students out of Chicago, I went to Chicago myself,” said Dr. Michael Sorrell, President of Paul Quinn. “I know how many of those students were in schools where classmates were shot that year, and it was a staggering number. So, our students were hurting. It affected the student body. It affected the staff, and there was a very real need to meet this problem head-on.”

Dr. Sorrell reached out to UT Southwestern for help, leading to establishment of the first mental health services program in the college’s history.

“I am proud that the program has more than met all of our expectations,” said Dr. Charles Ginsburg, Professor of Pediatrics, Vice Provost, and Senior Associate Dean for Education at UT Southwestern, who holds the Marilyn R. Corrigan Distinguished Chair in Pediatric Research.

In the clinic at Paul Quinn, UT Southwestern Psychiatry residents offer students medication management and individual counseling services four hours per week, treating everything from anxiety and depression to substance abuse and trauma as part of their clinical rotation overseen by Psychiatry faculty members.

Future plans include additional clinic hours, group therapy options, and expansion of holistic services such as yoga and stress management tools.

Dr. Jessica Moore had led the program since her own Psychiatry residency. Now, as a child and adolescent psychiatry fellow, she focuses on student and faculty engagement programming.

Dr. Moore said the impact of the program on everyone involved has been remarkable. Dr. Timothy Wolff, Professor of Psychiatry and a UTSW Medical School alumnus, currently leads clinical services related to the Paul Quinn program.

“In addition to meeting their health needs, part of our job is reducing the stigma and encouraging people to realize how successful they can be if they get whatever mental health challenges they’re facing addressed,” Dr. Moore said.
UT Southwestern brings the excitement of science to the community

Dallas-area residents got a rare, inside peek into some of the cutting-edge research taking place at UT Southwestern this past year thanks to new collaborations with local organizations.

Last spring, the University opened its labs for the first day of Science in the City, a new science outreach project in collaboration with The Dallas Morning News. The partnership drew 125 guests to the campus for what was cleverly called "a tour of our brain."

At the C. Kern Wildenthal Research Building, participants gathered for a morning of hands-on science demonstrations, mini-lectures by researchers, and brainteasers. Topics included concussion awareness, brain imaging, and Alzheimer’s research. Dr. Mark Goldberg, Chair of Neurology and Neurotherapeutics and Associate Vice President, Institutional Advancement, welcomed the group of science aficionados. Science in the City will continue as an annual event, and Dr. Goldberg is developing additional community partnerships to expand science awareness.

“Science outreach is about sharing excitement for science knowledge and education,” said Dr. Goldberg. “Our open lab tours additionally provide guests a chance to learn firsthand about the pioneering research that happens here at the Peter O’Donnell Jr. Brain Institute.”

Also last year, UTSW collaborated with the Perot Museum of Nature and Science’s reboot of its Being Human Hall. Exhibits that the University contributed included a human brain with the spinal cord attached, an activity that allows visitors to try out a prosthetic limb, and a video explaining how gene editing is being used to explore new treatments for muscular dystrophy.

Dr. Helen Hobbs, Director of the Eugene McDermott Center for Human Growth and Development, was a guest speaker for the revamped exhibit hall’s opening. Dr. Hobbs talked about what led her to become a scientist and encouraged the children in attendance – especially the girls – to consider a career in science. Dr. Hobbs holds the Eugene McDermott Distinguished Chair for the Study of Human Growth and Development, the Philip O’Bryan Montgomery, Jr., M.D. Distinguished Chair in Developmental Biology, and the 1995 Dallas Heart Ball Chair in Cardiology Research.

Dr. Hobbs, also a Howard Hughes Medical Institute Investigator, has won many prizes for her research, including the 2016 Breakthrough Prize in Life Sciences, which is on display at the Being Human Hall alongside the Nobel Prizes and other awards of several UTSW Nobel Laureates.
Dr. Bert Vargas, who directs the Sports Neurology and Concussion Program at UT Southwestern’s Peter O’Donnell Jr. Brain Institute, worked with Rivercrest High School in Bogata, Texas – population 1,077 – to place a 4-foot-tall mobile robot on its campus and arrange for an area neurologist to provide remote consultations.

Dr. Vargas developed the project after working with Mayo Clinic researchers on a study that compared how a remote neurologist assessed possible concussions at Northern Arizona University football games using a robot versus face-to-face assessments by team physicians and athletic trainers. Using diagnostic tools that measure cognition, balance, and other factors, the remote neurologist assessed 11 cases. When those assessments were compared with assessments made by on-site medical personnel, the results matched every time.

“We aim to mitigate the disparity in access to concussion expertise,” said Dr. Vargas, an Associate Professor of Neurology and Neurotherapeutics at UT Southwestern and the Arizona study’s lead author.

He hopes to roll out more robots at Texas schools as the program grows. Having someone on hand to quickly identify and remove concussed players from games is important to protect against long-term injuries, Dr. Vargas said.

Medical robot could help solve sports concussion dilemma in rural America

Concussion awareness has moved to the mainstream of national dialogue in recent years, fueled by revelations that former NFL players have suffered permanent brain damage due to repeated head impacts.

A UT Southwestern-led project is trying out a “doctor” robot as a way to bring a remote concussion specialist to high school athletes.

But across America, as high school students play football and other impact sports, more than 60 percent of schools lack an athletic trainer.

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A "doctor" robot stands on the sidelines at a football game, with a remote health care specialist ready to evaluate injured players.