



A MODEL FOR COLLABORATIVE COMMUNITY HEALTH CARE

ADVANCING HEART HEALTH ALONG THE TEXAS BORDER

Medical school is the time when students explore different futures in medicine to find their niche. For Susan T. Laing, MD, Professor in the Division of Cardiovascular Medicine and John Edward Tyson Distinguished Professor, it is when she fell in love with the heart.

"As a medical student, I found the heart to be an amazing organ—incredibly designed and amazingly efficient in providing the needs of the human body," says Laing. "And when I started seeing patients, I realized that cardiology is one field wherein we can truly provide not only definitive treatment but effective preventive care of diseases."

When Laing joined UTHealth as a faculty member, she found herself in the company of like-minded individuals—both in McGovern Medical School and UTHealth School of Public Health in Brownsville. It is this shared passion and the vision of reducing health disparities that is leading to an improved quality of life for residents in Brownsville, Texas.

Located on the border, Brownsville is home to many low-income and uninsured or underinsured residents who are predominantly Hispanic. This population bears a disproportionate burden of risk factors associated with heart disease. >>>

UTHealth faculty extend their reach across Texas to care for underserved people in Brownsville.



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"For Hispanics, and probably all ethnic minority groups, we first have to understand the disease patterns before we can tailor effective approaches to heart disease treatment and prevention," says Laing.

To identify disease patterns in the Rio Grande Valley, Joseph B. McCormick, MD, Regional Dean of UTHealth School of Public Health in Brownsville and James H. Steele, DVM Professor, spearheaded the data collection and analysis of residents in the region. He discovered that more than 50 percent of the adult population is obese (another 30 percent is overweight), 28 percent has type 2 diabetes, and more than 33 percent has hypertension. While each of these is its own medical problem, they all contribute to heart disease. All this is further compounded by the fact that almost 70 percent of the population is uninsured.

"Heart disease is truly preventable," says Laing. "If we want to make an impact on cardiovascular disease morbidity and mortality, the most cost-efficient approach is to focus on prevention." And the most effective way to prevent heart disease is to prevent the development of risk factors in the first place. "We need innovative strategies to reach the community, including children and young healthy adults, women, and minority groups."

Recognizing this gap, UTHealth created the Mobile Health Clinic to provide free services aimed to address acute illnesses and provide preventive health services such as immunizations. Now, the clinic treats chronic illnesses such as heart disease.

Laing visits Brownsville three to four times a year and is in constant communication with collaborators at UTHealth School of Public Health in Brownsville as well



as faculty at The University of Texas Rio Grande Valley.

"The mobile van clinic provides an invaluable service to this population," says Laing.
"My contribution entails providing cardiology expertise to the health care providers of this mobile van clinic, providing cardiology consultation by telemedicine, and reading all the echocardiograms performed from this outreach clinic."

Laing compounds her impact in the community by simultaneously providing patient care and conducting research through the Cameron County Hispanic Cohort (CCHC) project. Her research showed that cardiometabolic risk factors—such as blood pressure, cholesterol

levels, and abdominal obesity—may play a more significant role in the development of heart disease and stroke than weight alone; controlling these risk factors are more important than just maintaining a healthy weight.

The basis of the Mobile Health Clinic and the CCHC project is interdisciplinary collaboration that integrates research, education, and community outreach. Through these initiatives, we are seeing overall improvement in the health of the community. Critical in these efforts is the partnership of UTHealth School of Public Health, McGovern Medical School, and the community. >>>

HEART HEALTH FACT

Regular exercise is the single most important key to heart health.



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Though localized to the Rio Grande Valley, the impact reaches across the state of Texas. This model for translating research into community impact has implications for population health statewide in an effort to create a healthier future for generations to come.

"I hope that when my daughter becomes an adult, we have better answers to the epidemic of obesity and cardiometabolic risk that is plaguing our country," says Laing. "And that health disparities seen with heart disease becomes a relic of the past."

MOBILE HEALTH CLINIC

The mobile clinic, outfitted with a small exam room and sitting area, parks at five different locations throughout the Rio Grande Valley for two months at a time. Regardless of ability to pay, the Mobile Health Clinic is a sanctuary for those in need of acute care for minor illnesses and injuries, immunizations, blood tests, well women exams, physicals, and management of chronic illnesses such as obesity, diabetes, and heart disease. For cases that require further expertise, the clinic works with local hospitals and specialists in Houston via telemedicine.