

Texas Children's Hospital upWORDS:Baby More Than Just Words

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Background

Social determinants of health are influenced by income distribution, education, access to healthcare, early childhood development, the built environment, and social support networks.¹

Responsive and nurturing caregiving in safe and supportive environments are critical for early childhood development.²

Brain development during the first few years of life is foundational for the child's physical and mental health.²

Opportunity for early intervention in the Greater Houston area:

- Over 97,000 births annually³
- 22% of children live in households at or below the federal poverty level⁴
- >50% of 3rd grade students failed standardized reading tests⁴

upWORDS:Baby Levels of Engagement

upWORDS:Baby has secured future funding to educate communities and directly reach 600 families through community engagement activities and LENA Start curriculum over the next 2 years with expansion to locations in central, southeast, and northern areas of Houston and the surrounding communities.

Population:

- Distribution of Welcome Baby Kits in Partnership with the Children's Museum of Houston funded by Herman H. Fleishman Foundation and Barbara Bush Foundation for Family Literacy
- Website & Blog Posts
- Public Education Campaigns

Community:

- Provide early language education to:
- Community Health Workers
 - WIC Staff
 - Early Childhood Providers
 - Preschool Educators
 - NICU Nurses

Individual:

- Implementation of upWORDS program using LENA Start Curriculum & LENA Devices
- Foster increased knowledge of developmental milestones and connection to support through guest speakers and class engagement
- Facilitate access to community resources

Parent Voices on upWORDS:Baby Classes

- "It has helped me tremendously as a first time mom."
- "I didn't know that I should read to him."
- "I used to have her on the phone all the time when I was busy."
- "Without the classes, I would have been lost."
- "I wish I could keep coming. I felt so supported!"
- "It helped a little with my postpartum depression being able to have something to go to with other moms."
- Other comments include: increased confidence as a parent and knowing how to play and talk with their child.



Overview of TCH Healthcare System

Texas Children's is consistently ranked among one of the top children's hospitals in the nation.

- 3 Hospitals: 3.5 million patient encounters annually
- Pavilion for Women: 6,000 births annually
- 53 pediatric practices: 260 pediatricians, largest pediatric primary care network in the nation
- Medicaid Health Plan: 400,000 members

Section of Public Health Pediatrics

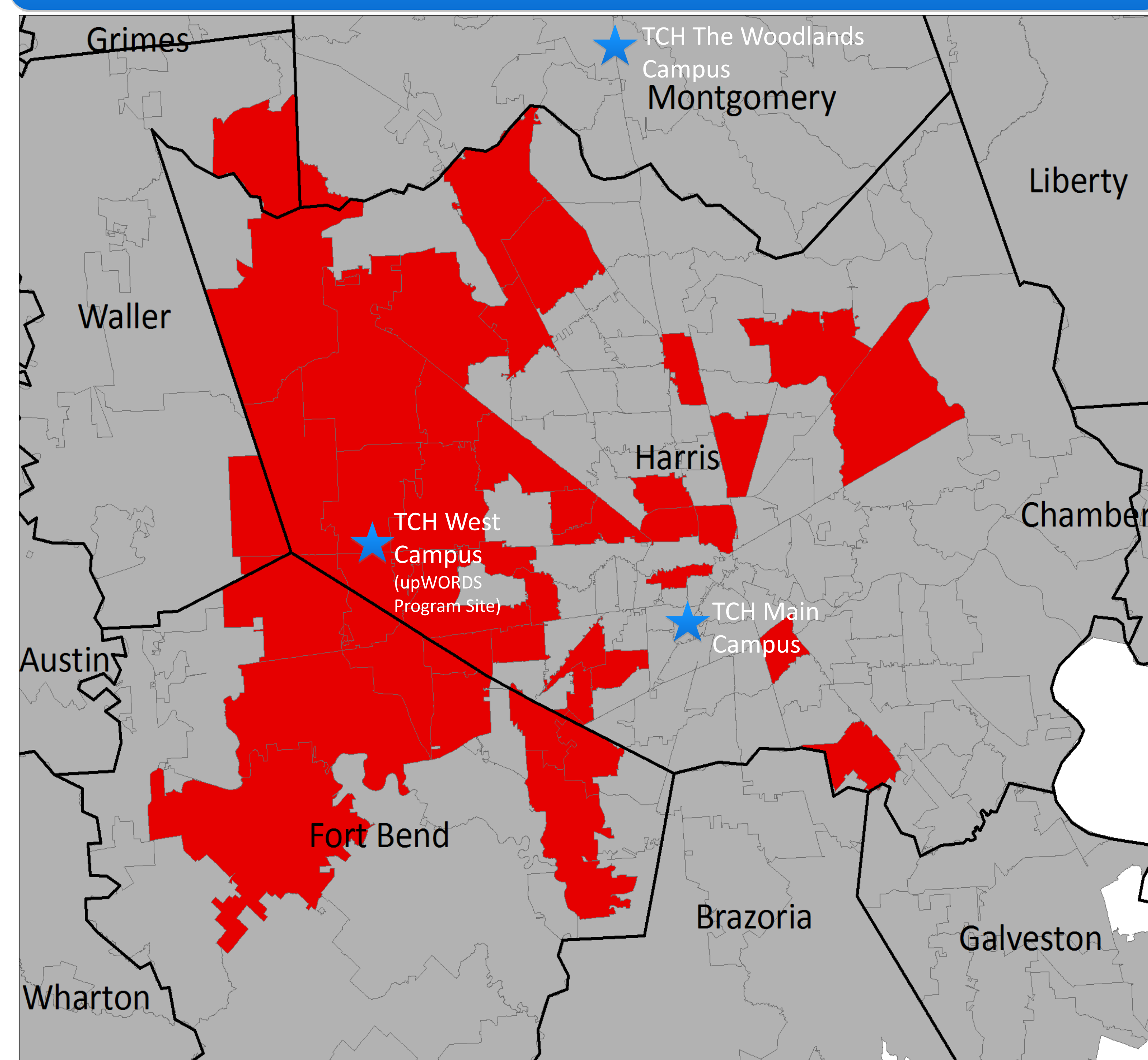
Innovation of improving child population health embedded within the hospital system

Mission:

To create a healthier future for Texas' children and families by leading in patient care, education, and research that seeks to mitigate childhood adversities and to accentuate individual, family and community resilience.

Current initiatives address postpartum depression, intimate partner violence, food insecurity, parenting stress, and early language development.

upWORDS:Baby Participant Map



■ upWORDS Participant(s) Zip Code

Parent Questionnaire Pilot Data

LENA Start Parent Survey Data (n=41)
Significant Increases (p<0.05):

- Reading to child
- Including child in daily routines
- Talking to child
- Confidence in parenting skills
- Confidence in child's future school performance
- Knowledge of child development
- Calming the child
- Talking to other parents
- Seeking advice from other parents

upWORDS:Baby Pilot Data

- Initial upWORDS pilot was for 190 families; 109 families have been enrolled to date
- 79.6% of Families who attended the first class have graduated from the program.
- Repeated Measures ANOVA (Mixed Linear Model)
 - Adult word count significantly increased over time (p<0.05)
 - Conversational turns did not significantly increase over time (p=0.231)
 - Reading minutes significantly increased over time (p<0.05)
 - Developmental snapshot standard scores significantly increased over time (p<0.05)

References

1. World Health Organization. Social determinants of health. http://www.who.int/social_determinants/en/. Published 2017.
2. World Health Organization. 10 facts about early child development as a social determinant of health. http://www.who.int/maternal_child_adolescent/topics/child/development/10facts/en/. Published 2014.
3. Texas Health and Human Services Center for Health Statistics. Texas health data. <http://healthdata.dshs.texas.gov/Home>. Published 2017.
4. Annie E. Casey Foundation. Kids Count Data Center. <http://datacenter.kidscount.org/>. Published 2017.