Public Health on the Texas Mexico Border

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The University of Texas School of Public Health, Brownsville Campus
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Professor of Medicine, UTHealth Houston McGovern School of Medicine
Professor, School of Biomedical Informatics, UTHealth Houston
<table>
<thead>
<tr>
<th>County</th>
<th>Total n</th>
<th>Below poverty level</th>
<th>Hispanic (all races)</th>
<th>Mexican American</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron</td>
<td>406,220</td>
<td>31.2</td>
<td>88.1</td>
<td>80.5</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>774,769</td>
<td>31.8</td>
<td>90.6</td>
<td>85.3</td>
</tr>
<tr>
<td>Willacy</td>
<td>21,839</td>
<td>35.6</td>
<td>87.2</td>
<td>69.1</td>
</tr>
<tr>
<td>Starr</td>
<td>60,968</td>
<td>35.0</td>
<td>95.7</td>
<td>92.3</td>
</tr>
<tr>
<td>Jim Hogg</td>
<td>5,300</td>
<td>26.0</td>
<td>92.6</td>
<td>81.3</td>
</tr>
<tr>
<td>Zapata</td>
<td>14,018</td>
<td>34.1</td>
<td>93.3</td>
<td>88.1</td>
</tr>
<tr>
<td>Webb</td>
<td>250,304</td>
<td>31.5</td>
<td>95.7</td>
<td>87.1</td>
</tr>
<tr>
<td>TOTAL MEAN</td>
<td>1,450,655</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>31.4</td>
<td>90.9</td>
<td>83.3</td>
</tr>
</tbody>
</table>
## Leading Causes of Death in Texas and the Border Area

### Texas

<table>
<thead>
<tr>
<th>Rank</th>
<th>Causes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of the Heart</td>
<td>41,293</td>
</tr>
<tr>
<td>2</td>
<td>Malignant Neoplasms</td>
<td>38,727</td>
</tr>
<tr>
<td>3</td>
<td>Cerebrovascular Diseases</td>
<td>9,852</td>
</tr>
<tr>
<td>4</td>
<td>Chronic Lower Respiratory Diseases</td>
<td>9,642</td>
</tr>
<tr>
<td>5</td>
<td>Accidents</td>
<td>9,598</td>
</tr>
<tr>
<td>6</td>
<td>Alzheimer's Disease</td>
<td>6,755</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes Mellitus</td>
<td>5,327</td>
</tr>
<tr>
<td>8</td>
<td>Septicemia</td>
<td>4,102</td>
</tr>
<tr>
<td>9</td>
<td>Nephritis, Nephrotic Syndrome and Nephrosis</td>
<td>3,997</td>
</tr>
<tr>
<td>10</td>
<td>Chronic Liver Disease /Cirrhosis</td>
<td>3,663</td>
</tr>
<tr>
<td></td>
<td>All Other Causes</td>
<td>50,347</td>
</tr>
</tbody>
</table>

### Border Area (4 counties)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Causes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of the Heart</td>
<td>1,693</td>
</tr>
<tr>
<td>2</td>
<td>Malignant neoplasms</td>
<td>1,423</td>
</tr>
<tr>
<td>3</td>
<td>Cerebrovascular diseases</td>
<td>320</td>
</tr>
<tr>
<td>4</td>
<td>Diabetes mellitus</td>
<td>299</td>
</tr>
<tr>
<td>5</td>
<td>Findings not elsewhere classified (excluding SIDS)</td>
<td>283</td>
</tr>
<tr>
<td>6</td>
<td>Chronic liver disease/cirrhosis</td>
<td>282</td>
</tr>
<tr>
<td>7</td>
<td>Total accident</td>
<td>276</td>
</tr>
<tr>
<td>8</td>
<td>Alzheimer's disease</td>
<td>261</td>
</tr>
<tr>
<td>9</td>
<td>Chronic lower respiratory diseases</td>
<td>238</td>
</tr>
<tr>
<td>10</td>
<td>Influenza and pneumonia</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>All Other Causes</td>
<td>2,037</td>
</tr>
</tbody>
</table>
The Cameron County Hispanic Cohort

Created to Measure:

- The Burden of obesity and diabetes
- Risk factors for obesity and diabetes
- Access to health services
- Complications related to obesity and diabetes (CVD, liver and renal disease, bone health, etc.)
- Create a platform for nested and other studies including cancer
- Provide science base for intervention and prevention

Dr. Susan Fisher-Hoch
Professor and Director
CCHC
Cameron County Hispanic Cohort (CCHC)
A ‘Framingham-like’ cohort

Current activity
- Extensive phenotyping
- Ongoing recruitment
- Pediatric cohort 5/10 year follow up
- Diabetes Risk Study
- Cardiovascular disease
- Liver disease
- Cancers (liver/cervical/breast)
- Mental Health
- Intervention studies
- Genetics
- Immunology
- Imaging
- Clinical trials
- Economics

Now expanded to Harlingen and Laredo
Clinical Research Units
with plans for Hidalgo
Participants are recruited from randomly selected households by outreach research assistants. They are then invited to visit our Clinical Research Unit located in facilities kindly provided by Valley Baptist Medical Center, Brownsville.
## CAMERON COUNTY HISPANIC COHORT

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Baseline</th>
<th>5 yr</th>
<th>10 yr</th>
<th>15 yr</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Participants recruited</td>
<td>4833</td>
<td>1317</td>
<td>421</td>
<td>44</td>
</tr>
<tr>
<td>Pediatrics (2 year follow up)</td>
<td>388</td>
<td></td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>Imaging</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>3680</td>
<td></td>
<td>129</td>
<td></td>
</tr>
<tr>
<td>Liver</td>
<td>1863</td>
<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Skeletal/fat/bone (DXA)</td>
<td>1278</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retinal pictures</td>
<td>436</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retinal OCT</td>
<td>145</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatrics Carotid ultrasounds</td>
<td>296</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>336</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
General characteristics of the cohort adults

<table>
<thead>
<tr>
<th>Mean (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age in years*</td>
</tr>
<tr>
<td>45.3 (0.8)</td>
</tr>
<tr>
<td>Annual income</td>
</tr>
<tr>
<td>$18,598 ($1,014)</td>
</tr>
<tr>
<td>Years education</td>
</tr>
<tr>
<td>10 (0.13)</td>
</tr>
</tbody>
</table>

The population remains **young, low income and limited education**.

66.5% of the participants were born in Mexico.

*Fisher-Hoch, Rentfro, McCormick, Hanis, Reininger et al. 2010 Preventing Chronic Disease*
Ancestral Proportions
The Amerindian ancestral component is positively associated with elevated HOMA-IR levels: $\beta = 0.124$, $P = 1.64 \times 10^{-7}$. 

*Qu, et al. Diabetes Care 2012*
Preventive Health Behaviors in CCHC (% meeting CDC guidelines*)

Smoking 16.5%

*Physical activity (150 minutes of moderate activity/week) 33%

*Fruit and Vegetable consumption (5 portions per day) 14.4%

Heavy use of alcohol 4.7%

Reininger et al  BMC Public Health 2015
## Distribution of health insurance types among CCHC participants by sex and age

<table>
<thead>
<tr>
<th>Category</th>
<th>All types insurance %</th>
<th>Private insurance %</th>
<th>Medicaid %</th>
<th>Medicare %</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Participants</td>
<td>31.4</td>
<td>11.9</td>
<td>8.3</td>
<td>11.0</td>
</tr>
<tr>
<td>Males (n=657)</td>
<td>36.0</td>
<td>14.4</td>
<td>8.5</td>
<td>13.0</td>
</tr>
<tr>
<td>Females (n=1343)</td>
<td>27.7</td>
<td>9.9</td>
<td>8.2</td>
<td>9.4</td>
</tr>
<tr>
<td>18-64 years (n=1788)</td>
<td>20.4</td>
<td>13.8</td>
<td>4.6</td>
<td>1.8</td>
</tr>
<tr>
<td>≥65 years (n=212)</td>
<td>87.8</td>
<td>2.0</td>
<td>27.4</td>
<td>58.4</td>
</tr>
<tr>
<td>2015-1018</td>
<td>39</td>
<td>21*</td>
<td>11</td>
<td>39</td>
</tr>
</tbody>
</table>

* Increase appears to be from Affordable Care Act

Cameron County Hispanic Cohort

Obesity
## Prevalence of Obesity in the CCHC

<table>
<thead>
<tr>
<th>Chronic Condition</th>
<th>Prevalence BH</th>
<th>Prevalence L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity (BH)</td>
<td>40.7%</td>
<td>42.4%</td>
</tr>
<tr>
<td>Morbid Obesity (BH)</td>
<td>9.6%</td>
<td>12.3%</td>
</tr>
<tr>
<td>Total Obese (BH)</td>
<td>50.3%</td>
<td>54.7%</td>
</tr>
<tr>
<td>Overweight (BH)</td>
<td>34.0%</td>
<td>31.7%</td>
</tr>
<tr>
<td>Obese &amp; Overweight (BH)</td>
<td>84.3%</td>
<td>86.4%</td>
</tr>
</tbody>
</table>

*Fisher-Hoch, Vatcheva, Hanis, McCormick et al 2012 PCD*
*Fisher-Hoch, Vatcheva, Rahbar, McCormick 2015, PlosOne*
*Jiao, Beretta, Fisher-Hoch, McCormick, Fallon et al, 2016 Plos One*
Prevalence of Obesity by Age and Sex
Cameron County Hispanic Cohort

Age in years

Percent

18-29  30-39  40-49  50-59  60-69  70+

Male
Cameron County Hispanic Cohort
Diabetes and Metabolic Diseases
# Prevalence of Obesity in the CCHC

<table>
<thead>
<tr>
<th>Chronic Condition</th>
<th>Prevalence (BH)</th>
<th>Prevalence (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>27.6%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Prediabetes</td>
<td>36.6%</td>
<td>39.3%</td>
</tr>
<tr>
<td>All Abnormal Glucose</td>
<td>64.2%</td>
<td>65.1%</td>
</tr>
</tbody>
</table>

*Fisher-Hoch, Vatcheva, Hanis, McCormick et al 2012 PCD*  
*Fisher-Hoch, Vatcheva, Rahbar, McCormick 2015, PlosOne*  
*Jiao, Beretta, Fisher-Hoch, McCormick, Fallon et al, 2016 Plos One*
Prevalence of DM, by Metabolic Health Category

MHNO  Metabolically Healthy, Non-Obese
MHO   Metabolically Healthy, Obese
MUHNO Metabolically Unhealthy, Non-Obese
MUHO  Metabolically Unhealthy, Obese

PR = 7.09*
PR = 3.85*
PR = 0.85
### Prevalence of Diabetes (%) by Sex and Age CCHC

<table>
<thead>
<tr>
<th>Age</th>
<th>All (N=4207)</th>
<th>Females (N=2720)</th>
<th>Males (N=1486)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>27.6</td>
<td>27.2</td>
<td>28.4</td>
</tr>
<tr>
<td>18-39</td>
<td>11.3</td>
<td>10.7</td>
<td>12.3</td>
</tr>
<tr>
<td>40-59</td>
<td>33.3</td>
<td>32.6</td>
<td>34.8</td>
</tr>
<tr>
<td>&gt;=60</td>
<td>48.0</td>
<td>47.4</td>
<td>49.0</td>
</tr>
</tbody>
</table>

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### Prevalence of diabetes (%) by Age Group and Sex

![Bar chart showing the prevalence of diabetes by age group and sex]
Trends in Diabetes Prevalence by 3 year periods CCHC

% of Population

0 5 10 15 20 25 30 35


All | Women | Men

3 Year Periods 2004-2018
The health of our Mexican American men is particularly precarious

- Before age 35, 16.9% of men already have Type-II Diabetes
- Young men have a 70.2% prevalence of elevated liver function tests
- 35.4% of young men are current smokers; this is higher than all other age groups.

Watt et al 2016
Cameron County Hispanic Cohort

Cardiovascular disease
There is a high prevalence of Stage B heart failure among Mexican Americans with 39% showing LVDD and/or LVH.

This study presents evidence of independent differential relationships of diabetes, abdominal adiposity, dyslipidemia, and hypertension on LVH and LVDD in this asymptomatic Mexican American cohort.
Ischemic Heart Disease is associated with many components of diabetes and the metabolic syndrome

<table>
<thead>
<tr>
<th></th>
<th>% with Ischaemic EKG</th>
<th>n (%) with Ischemic EKG (n=163)</th>
<th>n (%) without Ischemic EKG (n=1,117)</th>
<th>OR (95%CI) of ischemic EKG in each group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>12.0</td>
<td>50 (31.3)</td>
<td>365 (32.7)</td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td>13.1</td>
<td>113 (68.7)</td>
<td>752 (67.3)</td>
<td>1.10 (0.75, 1.57)</td>
</tr>
<tr>
<td>Diabetes</td>
<td>18.5</td>
<td>68 (41.7)</td>
<td>300 (26.9)</td>
<td>1.95 (1.39, 2.73)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>23.4</td>
<td>70 (42.9)</td>
<td>229 (20.5)</td>
<td>2.92 (2.07, 4.11)</td>
</tr>
<tr>
<td>Metabolic Syndrome</td>
<td>17.9</td>
<td>99 (60.7)</td>
<td>453 (40.9)</td>
<td>2.24 (1.60, 3.13)</td>
</tr>
<tr>
<td>Obese (BMI≥30)</td>
<td>15.1</td>
<td>98 (60.1)</td>
<td>551 (49.3)</td>
<td>1.55 (1.11, 2.16)</td>
</tr>
<tr>
<td>Smoker</td>
<td>14.2</td>
<td>50 (30.7)</td>
<td>302 (27.0)</td>
<td>1.19 (0.84, 1.71)</td>
</tr>
</tbody>
</table>

Metabolic syndrome, obesity and diabetes are stronger risk factors for ischemic heart disease than smoking

Comparison of carotid intimal thickness and Abnormal Carotid Study across 4 categories *

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Metabolically Healthy</th>
<th>Metabolically Unhealthy</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Healthy Non-Obese</td>
<td>Healthy Obese</td>
<td>Unhealthy Non-Obese</td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>n=503</td>
<td>n=79</td>
<td>n=25</td>
</tr>
</tbody>
</table>

Categorical, n (%) F approximation of Rao–Scott design-adjusted chi-square test

| Abnormal carotid study > 75%cIMT &/or plaque + | 156 (31.8) | 11 (15.59) | 6 (22.72) | 50 (33.79) | 89 (37.4) | 0.0241 |

Continuous variables, mean±SE T-Test for means

| Mean cIMT, mm | 0.67±0.01 | 0.60±0.02 | 0.61±0.02 | 0.68±0.02 | 0.68±0.02 | 0.0001 |

* Laing, Susan et al, JAHA, Feb 2015
Leg Amputations per 1,000 Medicare Beneficiaries with Diabetes & PAD, 2007-2011

Metabolic factors associated with Diabetes

- 6.5% of those with pre-diabetes transition to diabetes each year.
- Each unit increase in BMI increased risk of diabetes by 8%
- Each acquisition of another metabolic condition increase risk by 80%
THE TEXAS/MEXICO BORDER HAS THE HIGHEST RATES OF LIVER CANCER IN THE COUNTRY

Liver Cancer: Age adjusted rates/100,000 (Texas Cancer Registry)

<table>
<thead>
<tr>
<th>Site</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cameron</td>
<td>13.4</td>
</tr>
<tr>
<td>Hidalgo</td>
<td>11.6</td>
</tr>
<tr>
<td>Webb</td>
<td>14.4</td>
</tr>
<tr>
<td>Texas</td>
<td>10.3</td>
</tr>
<tr>
<td>United States</td>
<td>8.4</td>
</tr>
</tbody>
</table>
CCHC Cirrhosis Prevalence Estimates by age (APRI>2)

<table>
<thead>
<tr>
<th>Variables in APRI≥2</th>
<th>OR</th>
<th>95% CI</th>
<th>P</th>
<th>PAF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis C</td>
<td>23.47</td>
<td>3.14-175.41</td>
<td>0.0021</td>
<td>13.6%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>6.19</td>
<td>0.96-39.85</td>
<td>0.055</td>
<td>35.4%</td>
</tr>
<tr>
<td>Excess alcohol</td>
<td>3.98</td>
<td>0.95-16.64</td>
<td>0.0584</td>
<td>8.5%</td>
</tr>
<tr>
<td>Central obesity</td>
<td>4.18</td>
<td>0.43-40.59</td>
<td>0.2167</td>
<td>52.5%</td>
</tr>
</tbody>
</table>

Jiao, JJ Plos One 2016
Complications of Obesity and Diabetes (CCHC)
All associated with metabolic abnormalities.

• 39% of adults in the CCHC have evidence of early heart failure
• 32% of participants (1338) have a cholesterol over 200, (80% unaware) (3% on statins)
• 23% of CCHC adults elevated blood pressure (21% women, 27% men), 59% unaware. Only 65% of those diagnosed are on treatment.
• Poor blood flow in peripheral arteries (legs) is 10.4%; risking ulcers and amputation
• 15% have fibrosis of the liver; risking cirrhosis and liver cancer
• About 1/3 of those with diabetes have retinopathy
34% of cohort participants with diabetes are newly diagnosed

People who KNOW they have diabetes are highly likely to be depressed.

Depression is highly correlated with poor diabetes control;

Not attending to depression appears to significantly affect the quality of control of diabetes in the cohort.

Olvera, R et al. Plos One 2015
Olvera, R et al J Clin Psychiatry 2015
Obesity in the RGV and Economics

- RGV Population over 18 years in 5 counties is 1,112,462 and so 559,568 are obese.
- National medical cost of obesity is $1723 excess per person so in RGV would be $964,136,062.
- The productivity cost per obese person is $115 per year so cost in RGV would be $73,863,007.
- The total cost of obesity (not including overweight) based on national data $1,037,999,069.
- Cost per capita in RGV is $631 or 4% of per capita income, but less than 1% nationally.
Diabetes in the RGV and Economics

- RGV Population over 18 years in 5 counties is 1,112,462 and so 307,039 have diabetes
- National medical cost of diabetes in Hispanics is $8050 excess per person RGV would be $2,471,667,387
- The productivity cost per person with diabetes is $2297 per year so cost in RGV would be $705,269,564
- The total cost of diabetes (not including pre-diabetes) based on national data $3,176,936,952
- Cost per capita in RGV is $1931 or 12.7% of per capita income
- Cost per capita in US is $1004 or 3% of per capita income
Science and the Culture of Health

- Transforming physical activity into reality
- Changing the culture of food and diet
- Changing the habits of tobacco
- Making Health a daily part of life through
- Environmental and cultural changes
Impact of Physical Activity in the CCHC

- Participants who met physical activity guidelines of reduced their risk for metabolic syndrome by 36%.
- Participants who met physical activity guidelines reduced their risk for cancer by 83%.
- Metabolic Health has a greater impact on diabetes and cardiovascular disease than simple obesity, but being obese exacerbates disease.

Wu et al PLoS One. 2016 Apr 7;11(4)
Consumption of recommended levels of fruits and vegetables and mental health (CCHC)

Participants who met recommendations of 5 or more servings of fruits and vegetables per day were significantly less likely** to have:

- anxiety
- cognitive impairment
- increased risk of dementia

Every portion increment of total fruit and vegetable intake was significantly associated with:

- reduced risk of mental disorders by 11%
- reduced risk of cognitive impairment by 32%

Wu, et al 2018
Cameron County Hispanic Cohort (CCHC)

PIs  
Susan Fisher-Hoch, Joseph McCormick

Collaborators 2016/2018

UTHealth  
Belinda Reininger, David McPherson, Susan Laing, Mike Fallon, JJ Pan, Bev Smulevitz, Nahid Rianon, Yutao Xi, Anna Wilkinson, Hossein Rahbar, Kristina Vatcheva, Sahiti Myneni, Minjae Lee, Gordon Watt

MDAnderson  
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UCSD  
Rohit Loomba, Ariel Feldstein

UA  
Mike Fallon, JJ Pan

UTHSCSA  
Rene Olvera, Anand Prasad, Shenghui Wu

BCM  
Joseph Petrosino, Richard Gibbs, Ashok Balasubramanyam

STDOI-UTRGV  
Sarah Williams Blangero, John Blangero, Michael Mahaney, Matt Johnson, Joanne Curran

UT Austin  
Leanne Fields, Alan Lambowitz,

U of Washington  
Christine Hampe

UCLA  
Sanjeet Patel

Vanderbilt U.  
Piper Below
Thoughts for Solutions

• We have very high rates of obesity and diabetes.

• The costs are 4 X the national cost per capita because of high rates and low incomes.

• Every condition we have listed is preventable by good diet and moderate physical activity.

• Creating a culture of HEALTH includes the expectation that people will want to be healthy.

• Creating a culture of HEALTH includes an environment where people have access to health food and safe and pleasant physical activities such as walking and biking.

• We as community leaders have to help create such a culture because it is an economic and social investment with very high social and economic return, but it is the right thing to do.
Creating a Culture of Health and Wellness Through Partnerships, Programs, Policies
CAB First Meeting September 2003

- Businesses
  - HEB
  - United Healthcare
- Local Government
- Cameron County Health Department
- City of Brownsville
- Universities and School Districts
  - UT Health
  - University of Texas Brownsville Faculty
  - UTPA Faculty
  - Brownsville ISD
  - Harlingen CISD

Clinics, Hospitals, and Physicians
- Brownsville Community Health Center
- Nuestra Clinica del Valley
- Su Clinica Familiar
- Hope Family Health Center
- Valley Baptist
- South Texas Cancer Center
- El Milagro Clinic

Community Organizations
- Projecto Juan Diego
- Infant and Family Nutrition Agency
- Migrant Health Promotion
- United Way
- Mano a Mano
Community Wide Campaign
Lisa Mitchell-Bennett, MA, MPH
Description of the Media Campaign

- **Mass media TV**: Channel 7 Vallevisión  Every Thursday morning featuring role models, experts, cooking & exercise demonstrations. Reaches audience of over 20,000.
Community Gardens

- Grant awarded from Texas Department of Agriculture to the Brownsville Farmers' Market in Partnership with the City
- Now established six fully subscribed community gardens
City of Brownsville Award Winning Master Hike & Bike Plan

ULTIMATE PROXIMITY TO TRAILS AND SIDEPATHS

Brownsville Police Chief Orlando Rodriguez, left, and Brownsville Fire Chief Lenny Perez ride down a bicycle trail near Ruben Torres Boulevard. They have joined a cycling group to stay fit and take advantage of Brownsville’s bicycle trails.
FREE Community-Wide Exercise Classes
FREE Nutrition Classes

Brownsville Wellness Coalition
Health Screenings
The UTSPH Brownsville Campus has implemented 8 DSRIP programs in our Region 5.
Implemented diabetes treatment and control services

- Evidence based Wagner CCM model
- Regional partnerships for implementation
- Diabetes management program funded by 1115 waiver
- Served over 2000 clients
- Free DSME education
- CHW home visits
- Case management review
- Re-engagement with medical home
- Referrals and services for behavioral health
- Results show average A1c decreasing
Environmental and Policy Changes
Recent Efforts include:

- Sidewalk ordinance.....done
- Complete streets ordinance.....done
- Safe passing ......done
- Smoke free ordinance.....done
- Bicycle/Pedestrian Coordinator.....in progress
- Dedicated funds for bike/pedestrian infrastructure......ongoing
- Leveraging Dollars
- Healthy concessions......in progress
CycloBia – Open streets family event to encourage physical activity
Brownsville, Texas: Winner of 2014 Culture of Health Prize

Meet the RWJF Culture of Health Prize Winners

These six communities are beacons of hope and progress for healthier people and families. They were selected from more than 250 applicants, and are leading some of the nation’s most innovative efforts to build a national Culture of Health.

https://www.youtube.com/watch?v=-bOLx282R2c&feature=youtu.be
The Approach Can be Replicated!

Town of Combes
City of Rio Hondo

Los Indios