TEXAS BUSINESS REVIEW

Bureau of Business Research • IC² Institute • The University of Texas at Austin

OCTOBER 2009

# Shaping Health Reform for the US-Mexico Border Region

by

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*There is no area in the U.S. where improving health coverage and availability is more urgent than in the Texas-Mexico border, where population growth and disease rates rise, yet the number of physicians and dentists in the health system remains low. How to address these needs has reached critical importance as the federal government debates the shape of national healthcare reform.*

## Health Needs on the U.S. Texas-Mexico Border

About 95% of the population along the 1,254 miles of the Texas-Mexico border (4.6 million Texans and 3.3 million Mexicans) resides in seven pairs of sister cities. These seven metropolitan areas, divided by an international border, share an alarming array of environmental and infectious disease problems. The border population is young, fast-growing, and intertwined. The social and economic interdependence of both sides of the border is reflected in the 65 million north-bound legal border crossings to Texas that occurred in 2007 and in the volume of trade that binds the two countries. Mexico is the largest trading partner for Texas, and the third largest for the U.S.

The disparate socioeconomic and health indicators of the U.S. and Mexico converge at the border (Table 1). Mexico's border states have lower unemployment rates and higher wages, educational levels, and health insurance rates than the rest of the country. Conditions in Texas are the reverse: four of the seven poorest cities and five of the poorest U.S. counties are located along the Texas-

**Table 1**
**Socio-Demographic, Health, and Health System Indicators for Texas and the Texas Border Region**

| | Texas Border Region | Texas |
|---|---|---|
| Per capita income (2005) | $24,184 | $33,160 |
| Poverty rate (2005) | 26% | 17.5% |
| Unemployment rate (2006) | 5.8% | 4.9% |
| Birth rate per 1,000 | 20 | 17 |
| Death rate due to diabetes per 100,000 (2005) | 51.7 | 35.6 |
| Death rate due to hepatitis and liver diseases per 100,000 (2005) | 23.2 | 14.85 |
| Percentage of population under 25 years of age w/o a high school diploma (2000) | 43.2% | 24.3% |
| Physicians per 100,000 population in metropolitan areas | 145.2 | 170.7 |
| Physicians per 100,000 population in non-metropolitan areas | 70.7 | 88.7 |
| Dentists per 100,000 population in metropolitan areas | 15.7 | 41.1 |
| Dentists per 100,000 population in non-metropolitan areas | 11.8 | 25.2 |
| Tuberculosis infection rate per 100,000 residents | 9.0 | 7.4 |
| Hepatitis A infection rate per 100,000 residents | 3.5 | 2.8 |

Source: Senator Eliot Shapleigh, "Texas Borderlands: Frontiers of the Future," February 2009. (www.epcc.edu/LinkClick.aspx?fileticket=jpqmJERa10s%3d&tabid=11651&language=en-US, accessed August 6, 2009.)

## Table 2
### Texas Residents Crossing the Border to Seek Healthcare and/or Medicines in Mexico

| Community studied | Proportion crossing to Mexico for medical care/to purchase medicines |
|---|---|
| Cameron, Hidalgo, Willacy, Starr, Zapata counties, pop > 35 years of age | In 2001-2002 (24 months) and 2005-2006, a respective 76% and 63% of the uninsured received services in Mexico; during the same periods, 24% and 17% of the insured adults received services in Mexico.<br>Source: Bastida, E., et al., "Persistent Disparities in the Use of Healthcare along the US-Mexico Border: An Ecological Perspective," *AJPH.* 2008:28(11):1987-1995. |
| Documented and undocumented low income Mexican immigrants residing in El Paso County | About 24% sought healthcare in Mexico during the previous year; 85% bought medicines in Mexico and 64% purchased Mexican antibiotics.<br>Source: Homedes, N., *Health Seeking Behavior of Undocumented Immigrants in El Paso County.* Final Report. Project funded by the Center for Border Health Research. February 2008. |
| El Paso residents who bought medicines in pharmacies in Ciudad Juarez | Of all medicines purchased in Ciudad Jarez pharmacies, 71% were purchased w/out a prescription, 96% of the prescriptions were written by Mexican doctors, and 66% of the medicines were self-prescribed. Most frequent medicines purchased were for upper respiratory infections, gastrointestinal problems and chronic diseases (pain, cardiovascular and endocrinological problems). Many of the medicines purchased in Mexico were of limited therapeutic value.<br>Source: Homedes, N., *The Impact of Pharmacies in Ciudad Juarez on the Health of the Borderlanders.* Final Report. Project funded by the Center for Border Health Research. February 2008. |
| Laredo Hispanic Population | Among Laredo's Hispanic population, 41.2% sought medical care in Mexico, 27.2% of the insured sought services in Mexico. Border crossers were mainly low income (48.8%) followed by 46.5% of those earning $20-35,000, and 21.5% of those earning over $35,000. Use of Mexican services decreases with higher levels of education: 25.8% of those with a college degree did so (50% with elementary education, 45.8% with high school diploma).<br>Source: Landeck, M., et al., "Utilization of Physician Healthcare Services in Mexico by U.S. Hispanic Border Residents," *Health Mark Q.* 2002: 20:3-16. |
| Residents of colonias in Starr and Hidalgo counties | Over half of the colonia sample indicated a provider in Mexico as their usual source of care. Those who used a Mexican provider were less likely to receive blood pressure, glucose, cholesterol, or vision tests; mammograms; prenatal care; or prostate exams.<br>Source: Ortiz, L., et al., "Access to Healthcare among Latinos of Mexican Descent in Colonias in Two Texas Counties," *The Journal of Rural Health.* 2004:20(3):246-252. |
| Household survey in El Paso | One third of the residents of El Paso purchased medicines in Ciudad Juarez Mexico.<br>Source: Rivera, J.O., et al., "Access to Health Care among Latinos of Mexican Descent in Colonias in two Texas Counties," *The Journal of National Medical Association.* 2009; 101 (2)167-173. |
| Border Behavioral Risk Factor Survey of Lower Rio Grande Valley residents | In 2003, 31.9% of Lower Rio Grande Valley residents with health insurance and 45% of residents w/o health insurance crossed the border to see a doctor. In Starr county, 64.4% of border residents w/o health insurance crossed the border to see a doctor. 41.9% of Lower Rio Grande Valley residents with health insurance and 48.1% w/o health insurance purchased medicines in Mexico.<br>Source: Sanderson M., et al., McIntyre W.J. *LRGV Nutrition Intervention Research Initiative.* UT SPH 2004. |

Eighty percent of the Texas uninsured reside in border counties, where the percentage of uninsured residents ranges between 25% and 38%.

Mexico border. These residents have high levels of poverty, low levels of educational attainment, and higher rates of uninsured individuals, than the national averages. Hospital care is expensive and most border hospitals and physicians report high levels of uncompensated care.[1] Eighty percent of the Texas uninsured reside in border counties, where the percentage of uninsured residents ranges between 25% and 38%.

On both sides of the border, according to the U.S. Environmental Protection Agency, the poorly planned industrial and population growth in this region has resulted in high levels of air pollution, water scarcity, water-and-land contamination (a product of agricultural run-off and inappropriate methods of industrial discharge), inadequate solid waste and sewage systems, and degradation of natural resources and ecosystems.[2]

These conditions explain the high rates of respiratory problems; waterborne diseases (hepatitis, diarrhea, and parasitic infections); vector-transmitted diseases (dengue, West Nile virus, rabies, and rickettsial infections); and other infectious diseases (cysticercosis, brucellosis). In 2002, 22-25% of first graders attending two border school districts had

parasites.[3] Concurrently, the region is undergoing an alarming increase in the rates of diabetes, obesity, and other chronic health problems, including tuberculosis.

### Accessing Health Services

The health systems of the United States and Mexico are very different. In Mexico, access to services is generally easier and speedier than in the U.S. While the availability of health professionals in Mexico's northern border states is similar to the rest of the country, some Texas counties along the border lack even a single physician, and all but one of these counties have been designated by the federal government as medically underserved, and even those with health insurance have difficulties accessing the health services they need. The number of Community Health Centers is insufficient to the demand, especially for adult acute services, and access to specialty care is even more limited. The current economic crisis exacerbates another problem: when people fear for their jobs during a recession, they will go to work even if they feel sick and then do not see their doctors because most U.S. health clinics are only open during regular business hours. In Mexico, to make healthcare accessible to the working public, health providers accept walk-ins and work longer hours including weekends.

While some Mexicans (mainly wealthy ones) travel north for healthcare services in the U.S., the majority of the crossborder traffic for healthcare services is north to south.

About 20-30% of the population on the Texas side of the border with Mexico seeks health and/or dental services in Mexico, and an even larger percentage consumes pharmaceuticals purchased in Mexico (Table 2, p. 2). These percentages are higher among the poor and the uninsured—86% of low-income immigrants residing in El Paso County had consumed Mexican medicines during 2006.[4] In addition to other cultural issues, people travel to Mexico for health services because the costs for services are predictable and more affordable (Table 3, p. 4). For example, a common diagnostic blood chemistry panel (SMAC 25) that costs $112 in the U.S. will only cost between $22 and $37 in Mexico.

Most health providers in Mexico offer accurate cost estimates, some doctors only charge a few dollars per visit, and clients can shop around for the best quality of care they can afford. In contrast, the health financing system in the U.S. is confusing, service costs are perceived as being unreasonably high, and people are afraid of becoming unable to pay for services rendered. While some Mexicans (mainly wealthy ones) travel north for healthcare services in the U.S., the majority of the crossborder traffic for healthcare services is north to south.

### Fostering Improved Healthcare

The interconnectedness of the sister cities and the resulting need to coordinate efforts on both sides of the border in order to improve health conditions have been well recognized by governmental, non-governmental, and international organizations. In 1942, the Pan American Health Organization established a field office in El Paso (the only field office in the U.S.). The opening coincided with the creation of a border-wide, non-governmental organization, the U.S.-Mexico Border Health Association (USMBHA), which is composed of representatives of public health institutions, academics, and members of civil society. In 1993, in preparation for the implementation of the North American Free Trade Agreement (NAFTA), the Texas Department of Health also opened a Border Office, which was originally located only in Austin but which has since opened locations in all seven Texas sister cities. In addition, the governments of both nations established the U.S.-Mexico Border Health Commission in 2000.[5]

Despite these efforts, from operational and financial perspectives, the public health and medical/dental care systems of the U.S. and Mexico continue to operate largely as silos. Communication among health providers on both sides of the border is limited and mistrust runs high.[6] As a result, people who use professionals in both countries expose themselves to duplicative services, might receive contradictory advice, and may resort to self-prescribing. Anecdotes are ubiquitous of people who seek services in Mexico and then need to see U.S.-based physicians and dentists to "repair the damage." Yet many borderlanders would not have access to services if they were unable to buy services in Mexico.

One could conclude that U.S.-Mexico border residents, and especially the uninsured, are privileged when compared with the uninsured who reside in other parts of the country. Some consider Mexico their only safety net. However, the lack of coordination of services across the border means that delivery is often complicated and can be dangerous for U.S. residents who seek healthcare services in Mexico. Why have health insurance companies and local, state, and federal U.S. agencies failed to work on coordinating healthcare delivery across the border, given that so many

...there is no doubt that if quality of care was the only barrier to the integration of both healthcare delivery systems, accreditation programs could be implemented that would solve the problem of cross-border medical care.

**Table 3**
**Price Comparison of Selected Services in El Paso and Ciudad Juarez ($US*)**

| | Medicare reimbursement rates per type of service rendered in El Paso | | | Cost of services rendered in Ciudad Juarez | | |
|---|---|---|---|---|---|---|
| | Hospital cost | MD cost | Total per type service | Private, not for profit hospital | Public hospital | Private hospital |
| Specialty consult | n/a | 112 | 112 | 8 | 14 | 46 |
| General consult | n/a | 119 | 119 | 6 | 8 | 19 |
| Obstetric ultrasound | 91 | 48 | 139 | 14 | 17 | 23 |
| Special ultrasound | 91 | 40 | 131 | 23 | 39 | 54 |
| Mammogram, screening | 84 | 34 | 118 | 15 | 20 | 62 |
| Colonoscopy, screening | 491 | 201 | 692 | 13 | 23 | 69 |
| X-ray (abdomen, 1 view) | 42 | 9 | 51 | 9 | 12 | 19 |
| Normal delivery** | 4,232 | 1,644 | 5,876 | 154 | 369 | 654 |
| C-section** | 5,976 | 1,862 | 7,838 | 346 | 461 | 1,231 |
| Open cholecystectomy | 8,819 | 921 | 9,740 | 500 | 615 | 1,385 |
| Laparoscopic cholecystectomy | 2,847 | 644 | 3,491 | 885 | 1,000 | 1,692 |
| Herniplasty | 1,946 | 646 | 2,592 | 462 | 577 | 1,308 |
| Laparoscopic total hysterectomy | 2,846 | 851 | 3,698 | 500 | 654 | 1,539 |
| Private room differential | 25 | n/a | 25 | 27 | n/a | 92 |
| **Laboratory clinical tests** | | | | | | |
| Prenatal exam | 216 | 61 | 277 | 17 | 27 | 38 |
| SMAC 25 Blood Chemistry Panel | 112 | n/a | 112 | 22 | 27 | 37 |

*The exchange rate to calculate Mexican services was 1US dollar=13 pesos. Amounts were rounded to the nearest US dollar.
**Rates in the USA include costs of neonatal care.
Notes: The cost calculations in the USA and Mexico might not be entirely comparable. The true cost in the USA includes the hospital and the physician costs. Data for the USA were extracted from cms.gov, the cost for services rendered to non-Medicare patients range from 115% and 300% of the amounts allowed for Medicare, although there are examples of negotiated rates below Medicare rates. The data on the cost estimates of Mexican services were provided by SADEC.

residents on both sides of the border are using both U.S. and Mexican systems?

The easy explanation is that the quality of care provided on the Mexican side of the border cannot be trusted, but a systematic comparison of the quality of care offered on both sides has never been performed. Quality of healthcare is difficult and expensive to measure, and good and bad healthcare providers exist on both sides of the border. In recent years, Mexican entrepreneurs have attempted to expand medical tourism by building well-equipped private hospitals predominantly along the border hoping to attract middle-class U.S. residents who are uninsured, or who prefer to be treated by Mexican providers; and some U.S.-based physicians have created the means to offer health services in Mexico for U.S.-based patients. These plans have been stalled by the recent surge in drug-related violence along the border, but there is no doubt that if quality of care was the only barrier to the integration of both healthcare delivery systems, accreditation programs could be implemented that would solve the problem of cross-border medical care.

Another possible explanation is that U.S. health insurers and policymakers are reluctant to coordinate healthcare delivery with Mexican providers due to the fear that more people, not fewer, would use Mexican services if given the opportunity. After all, the reason some borderlanders forgo costly U.S. insurance is because it is cheaper to seek services in Mexico.[7] This freedom of choice might be eliminated if the U.S. healthcare reform mandates universal U.S. health insurance for all U.S. residents.

## Shaping Healthcare Reform

While national U.S. healthcare reform is in the planning stages there is an opportunity in which borderlanders and border policymakers might shape a system that: 1) responds to the

specific needs of the region, 2) is grounded in human rights and justice principles, and 3) respects the preferences of border residents. However, some elements of the reform package currently being debated in Congress might exacerbate, not ameliorate, the problems facing the border healthcare delivery system. For example, requiring universal health insurance prior to having an adequate supply of health professionals would leave accessibility to healthcare unchanged for this region, while it would increase health expenditures for residents who would still need to cross the border to obtain services that are unavailable in the U.S.

The federal healthcare reform initiative provides an opportunity to develop a sound regional cross-border health strategy. Such a plan could expand access, control costs, and improve quality and safety, especially for those who use providers on both sides of the border. California is ahead of Texas in this process.[8] Employers in Southern California offer employees a choice of U.S. or Mexican health insurance; the Mexican plan covers services provided in both Mexico and the U.S. (obstetrics and emergency care) and at present insures tens of thousands of families.

Mexico has a growing health insurance sector, and if carrying health insurance becomes mandatory as a result of the U.S. health reform, Texas should consider allowing border residents to fulfill the requirement by purchasing Mexican insurance at a fraction of what they would pay in the U.S. Insurance companies in the U.S. should facilitate reimbursement for services rendered on the other side of the border as a method of expanding their network of providers and responding to clients' preferences. Accessing Mexican networks would lower medical bills for residents and decrease the levels of uncompensated care to U.S. hospitals and physicians. These savings would enable families to engage in healthier behaviors (improve their diet and exercise regimen, increase their use of preventative and curative care, and more closely adhere to pharmacological treatment) and would free institutional funds for use in health promotion and public health activities.

## Conclusion

If the U.S. and Mexico were to facilitate movement of services and providers across their common border (as many European countries have done) border residents might enjoy a health system that offers universal coverage, greater choice, and better quality than the status quo. Such a system could:

- improve communication among healthcare providers on both sides of the border;
- facilitate the development of common diagnosis and treatment protocols to be used by U.S. and Mexican healthcare providers;
- enable sharing of medical/dental information and referrals among providers;
- foster community-wide interventions to tackle regional health threats such as environmental problems, infectious diseases, the inappropriate use of antibiotics, and the management of obesity, diabetes and other chronic health problems.

There is no reason that healthcare policymakers in the border region, in both Mexico and the U.S., should not envision such improvements in an international healthcare delivery system. The challenges borderlanders face are too great to allow the opportunity presented by federal reform initiatives to pass.

The federal healthcare reform initiative provides an opportunity to develop a sound regional cross-border health strategy. Such a plan would expand access, control costs, and improve quality and safety, especially for those who use providers on both sides of the border.

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*Texas Business Review* is published six times a year (February, April, June, August, October, and December) by the Bureau of Business Research, IC² Institute, The University of Texas at Austin. Subscriptions are available free upon request. Views expressed in this newsletter are those of the authors and do not necessarily reflect the position of the Bureau of Business Research.

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# Announcement

## Regional Economic Research Conference: October 17-20, 2009

The 63rd annual Association for University Business and Economic Research (AUBER) conference will be held in Austin, October 17-20, 2009, and is being hosted by the IC² Institute's Bureau of Business Research at the University of Texas at Austin. The conference will take place at the historic Driskill Hotel located in the heart of downtown Austin's entertainment district on 6th Street.

Anyone interested in hearing from economic experts in government, the private sector, and academia about best practices in regional economic research is encouraged to register and attend. Keynote speakers include David Altig, Director of Research at the Federal Reserve Bank of Atlanta. For registration information, visit www.AUBER.org.