US-Mexico Border Binational Tuberculosis Referral and Case Management Project

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Reported TB Cases, U.S., 2000

- 16,377 TB cases reported (total)
  - 46% (n=7,554) among foreign-born persons
  - 24% (n=3,377) of foreign-born TB cases were born in Mexico
  - 70% (n=1,238) of the Mexican-born TB cases reported from the 4 border states (AZ, CA, NM, TX)
  - Mexican-born TB cases have more than 2X higher rates of single and multiple drug resistance

Background

- U.S.-Mexico border: Frequent crossings complicate case management and continuity of care
- Repercussions of untreated and incomplete TB treatment extend to other parts of U.S. and Mexico
Seminar on Health and Migration, 9-11 June 2004
Session IIB: Public Health and Migration
US/Mexico tuberculosis (TB) border health card: Bilateral TB referral & treatment initiative, Dr Stephen WATERMAN

Goals of the US-Mexico Binational TB Referral and Case Management Project

- Ensure continuity of care and completion of therapy
- Reduce TB incidence and prevent drug resistance
- Coordinate referral of patients between health systems
- Provide model for other diseases

Binational Health Card – Data Elements

- Unique identification number
- Location where card was issued
- Treatment initiation date
- Date of last dose TB treatment
- Treatment regimen
- DOT (yes/no)
- Bilingual
- Toll-free telephone numbers in the US and Mexico

Background (2)

- Nov 2000
  - U.S.-Mexico Border Health Commission inaugural meeting – signed agreement on TB
- 2000-2001 Mexicali City, Atlanta, El Paso
  - U.S. and Mexico key players discuss Binational Card and Information System of TB Case Management
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**TB Patients - Eligibility**

**US**
- Active TB
- Mexico-born, and/or
- Mexico-bound
- Suspect TB
- ICE Detention Centers

**Mexico**
- Active TB

**Pilot Sites**

- **US-Mexico border sister cities/states**
  - San Diego, CA – Tijuana, BC
  - El Paso, TX/Las Cruces, NM - Ciudad Juarez, CHIH
  - Webb/Cameron Counties, TX – Matamoros, TAMAU
  - Arizona – Sonora

- **INS / ICE Detention Centers**
  - Texas, California, Arizona

- **Mexican states**
  - Coahuila, Nuevo Leon

- **US States**
  - Tennessee, Washington, Illinois

**Project Launch: March 27, 2003**

**Training and Educational Activities**

- **Training**
  - All sites have received training and have received all materials
  - Card Project information will be incorporated in local and national trainings/meetings

- **Educational Activities**
  - Mexico has designed and distributed posters and brochures for patients describing the Project
  - A flipbook (“rotafolio”) for patients is currently being completed for both US and Mexico Pilot Sites
Card Distribution and Patient Movement
As of June 3, 2004: US and Mexico Pilot Sites*

**US**
- Total – 292 cards distributed
- 86 moved to Mexico
- 5 patients from Mexico
- Card distribution by state
  - California 48%
  - Texas 34%
  - Arizona 15%
  - Tennessee, Illinois, Washington 2%
- Patients went to 17 Mexican states
- 79% (60/76) went to Mexican Pilot sites

**Mexico**
- 864 cards distributed
- 32 moved to U.S.
- 37 patients from U.S.
- Card distribution by state
  - Baja California 48%
  - Tamaulipas 35%
  - Chihuahua 10%
  - Sonora 3%
  - Coahuila 3%
  - Nuevo Leon 1%
- Patients went to 17 US states
- 19% (64/340) went to US Pilot sites

*Information available as of June 3, 2004 teleconference

**Project Evaluation**
- Is the binational referral system facilitating completion of therapy for patients traveling across the US-Mexico border?
- Can we improve project efficiency?
- How much does it cost?
- Is the model sufficiently effective and feasible to warrant replication in other sites and/or for other diseases?

**Demographic information**
- 90% (73/81) males
- Median age = 35 (range: 1-93 years)
- 48% (39/81) of patients NOT official US cases

**Move destination**
- Patients went to 17 Mexican states
- 79% (60/76) went to Mexican Pilot sites

* Data as of April 30, 2004; Data from Project Database
** Using data collected by the US national TB surveillance system
**Evaluation Site Visit Results (1)**

- High level political commitment exists for this Project in both countries
- The 800 toll-free lines are functional in both countries
- The majority of personnel in the Pilot Sites have been trained in the Card protocol
- According to providers, patients have a favorable attitude towards the Card
- People living directly at the US-Mexico border migrate less than anticipated (while on TB treatment)
- The notification loop between the US and Mexico is not completely functional yet

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**Project Evaluation-Design**

- **Phase 2**
  - Priorities for assessment, determined through group consensus, include:
    - Impact of Project
    - Migration patterns/ tracking
    - Data system/ database analysis
    - Coordination with immigration authorities
    - Patient and provider experience
    - Project cost
  - Protocol in human subjects review
  - Data collection to begin in July and completed by September

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**Challenges - Planning and Implementation**

- Establish mechanisms to safeguard patient confidentiality and legality of information exchange
- Funding and sustainability

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**Challenges – Pilot Operations**

- Notification/ referral information flow between and within countries not completely functional
- Database management challenging
- Remains difficult to obtain treatment outcome status of patients who have moved
- Budget needs
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Funding
- Centers for Disease Control and Prevention (CDC)
- U.S. Agency for International Development (USAID), Mexico
- U.S.-Mexico Border Health Commission
- Health Resources and Services Administration (HRSA)

Project Summary
- Responds to identified TB needs in the region
- Has become an integral part of TB management in ICE detention centers
- Strong political commitment exists at the national, state, and local levels
- Represents a model for consensus for binational collaboration
- Should lead to improved treatment outcomes
- Should provide model for other similar settings or for other diseases in this setting

Project Partners
- National TB Program of Mexico
- Mexican Ministry of Health
- Mexican National Center for Epidemiological Surveillance
- National Institute of Diagnostic and Epidemiological Laboratory
- Centers for Disease Control and Prevention
- US-Mexico Border Health Commission
- California Department of Health Services
- San Diego County Health and Human Services Agency and its CureTB program
- Texas Department of Health, TB Elimination Division
- El Paso City-County Health Department
- Migrant Clinicians Network and its TBNet program
- The Binational TB Prevention and Control Project, “JUNTOS”
- La Fe Community Health Center
- Institute of Health Services of Baja California
- State of New Mexico Department of Health
- Secretary of Health of Chihuahua, Tamaulipas, Sonora, Coahuila, Nuevo León
- Secretary of Health of Jalisco, Michoacán, Vera Cruz, Oaxaca
- Ciudad Juárez Secretary of Health
- US Agency for International Development (USAID)
- US Department of Health and Human Services (HHS)
- US Department of Homeland Security
- US Department of Health Resources and Services Administration (HRSA)
- US Department of Immigration and Naturalization Services (INS)/ICE
- Ten Against TB
- American Lung Association
- American Lung Association of Texas (ALAT)
- Pan American Health Organization (PAHO)

Thank You
Gracias