

Human population movement is the consistent point of reference for the global spread of disease.

From the arrival of measles to the New World to the current spread of HIV disease it is the movement of people, by design, force or chance that has been at the core. Understanding the complexities of human population movement and its role in the spread of disease is essential for the development of effective international disease control strategies.¹

Since 1995, **Migrant Clinicians Network (MCN)**, through Health Network, has proven that mobile patients can achieve health care outcomes that are equivalent to those seen in a stable population. This has been demonstrated most vividly by the TB transnational patient navigation project of Health Network: **TBNet**.



TBNet, an innovative approach to tuberculosis management in migrating patients, provides a compelling example of how TB control can be successfully accomplished in highly mobile populations, even those traveling internationally.

To date **MCN** has managed patients to 60 countries, many returning to their country through deportation proceedings from the U.S. A review of all referrals made by the Department of Immigration Health Services (DIHS) within the Department of Justice Immigration and Customs Enforcement to **TBNet** was conducted. Data was reviewed for 929 cases, starting from the inception of the contract on May 1, 2005, through February 28, 2008. Immigration law within the U.S. allows for the return of individuals prior to completion of treatment for TB disease. Within the population detained by ICE there is a culture-confirmed case rate 2.5 times higher than other foreign-born individuals.² Detainees often return to countries where access to health care is limited, or fail to complete treatment due to mobility.³

Of 929 cases referred for **TBNet** patient navigation, 474 individuals were classified as Active TB (Class 3). For twenty of these case treatment was not recommended by the destination country. Of the remaining 454 cases for whom treatment was recommended, 2 died from causes other than tuberculosis. **TBNet** followed the remaining 452 cases of Active TB. Twenty-one cases

refused treatment once they arrived at their country of origin. Eight cases were lost to follow up. **TBNet successfully managed 383 cases to the end of their treatment for a completion rate of 84.7%.**

Among the 383 cases referred for navigation:

- 10 cases with drug resistant TB (2 MDR)
- 88.6% cases among men
- 64% cases in the 20 to 39 years age range
- 17 cases also HIV + (1 lost to follow up)
- 11 cases with Diabetes (1 lost to follow up)
- 10 cases with Hepatitis B (0 lost to follow up)
- 19 cases with history of drug abuse (1 lost to follow up)
- 28 alcohol abuse (1 lost to follow up)

Table 1. Number and Percent of Patient DIHS Referral Population by Region

N=929	Frequency	Percent
Central America	692	74.40%
Mexico	110	11.80%
South America	41	4.40%
Caribbean	27	2.90%
Asia	16	1.70%
Africa/Mid East	12	1.30%
S/SE Asia	11	1.20%
Europe	5	0.50%
Russia/Central Asia	4	0.50%
Unknown	2	0.20%

These outcomes are presented against the backdrop of the World Health Organization's Stop TB Partnership goal for treatment completion of 85% of smear-positive cases.⁴ **TBNet** completion rates for treatment of tuberculosis rival U.S. rates for its static population. In 2005, the last year for which U.S. treatment completion data are available, 83% of patients requiring treatment of less than one year successfully completed their drug regimen.⁵

In its 25 years of service, **Migrant Clinicians Network** has fully dedicated itself to confronting barriers to care for the mobile poor. **MCN** has determined that poor quality health care and the lack of continuity of care, afflicting millions of poor for decades can be successfully eliminated through sound patient navigation.

TBNet, an innovative approach to tuberculosis management in migrating patients, provides a compelling example of how TB control can be successfully accomplished in highly mobile populations, even those traveling internationally. From the simple idea of medical record transfer, through inclusion of case management, **MCN** has developed a ground breaking patient navigation system in the truest sense of the word. **TBNet**, the tuberculosis project, has provided continuity of care for mobile patients who are diagnosed with TB disease and brought into care by healthcare providers. This project has functioned for 15 years with enormous success.



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CONCLUSION

- The success of **TBNet** demonstrates that patients can be navigated anywhere worldwide.
- **MCN** has a tested system for patient navigation in place that can be replicated, and can be used by anyone with a patient who is leaving their area temporarily or migrating permanently.
- **MCN** is available to provide technical assistance to develop this system in other countries.
- The guarantee of continuity of care can significantly diminish the impact of migration on health.

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