A CLOSER LOOK AT THE HEALTH & HEALTH BEHAVIORS OF MALE MEXICAN MIGRANTS: IMPLICATIONS OF EXPANDING HEALTH INSURANCE COVERAGE

STUDY OBJECTIVES

1) Characterize the health status and insurance usage of male migrants from Mexico,

2) Examine whether having health insurance while in the U.S. is protective of health for individual immigrants, and

3) Calculate the potential costs of providing coverage to this population.

DATA & METHODS

We use data from the Mexican Migrant Project (MMP) to characterize the Mexican migrant population and examine the long-run health benefits of insurance (Objectives 1 & 2). We used the 2009 Medical Expenditure Panel Survey (MEPS) to examine the cost of covering Mexican migrants relative to those who will be covered under the PPACA-created insurance exchanges (Objective 3).

Objective 1. Our outcome variable (y_i) is change in self-reported health between first arrival in the U.S. and time of interview. The respondents were asked to rate their overall health as Poor (0), Fair (1), Good (2) or Excellent (3). Possible values of the outcome variable are 0 or 1. The value 0 refers to self-rated health improving or staying the same; 1 means that it declined over time.

We assessed differences in the following variables using bivariate analyses: age at interview, self-rated health prior to U.S. migration, monthly income at last migration, years of education, months worked in the U.S. agricultural and professional sectors, portion of time spent in the U.S. since first migration, a dummy variable for having been to a doctor or hospital while in the U.S. (1 if Yes; 0 otherwise), a dummy variable for having used private insurance to pay a medical bill while in the U.S. (1 = Yes, 0 = no and/or did not have a health-related bill while in the U.S.), home region in Mexico (Central, South and North), and a trend variable for year of survey (2007-2011).

Objective 2. We estimate four logistic regression models to assess the influence insurance coverage and other key variables on changes in self-rated health in this sample. The first model incorporates all covariates except for age at interview; the second model incorporates age. Our third and fourth models exclude the health care utilization dummy variable to assess the impact of doing so on the significance of the health care use X insurance interaction term (age is, again, excluded from the third model).

Objective 3. Using a subsample of the MEPS data set representing adult males (n=8,930), we calculated the predicted log(health expenditures) using a linear regression model that predicted 34.7% of the variance in the outcome variable. We then calculated predicted health care expenditures using the obtained regression coefficients for the MEPS sample as well as the MMP sample at first-migration and at time of interviewed. We multiplied predicted health care expenditures by 1.15 to incorporate maximum medical-loss ratio expenses to obtain predicted costs of insuring individuals in both of our samples. We compared the mean, median and range of predicted insurance costs across samples.

RESULTS

Objective 1: As the poster illustrates, those who experienced health declines were older, had spent more time in the U.S., had worked longer in the U.S. agricultural sector, were more likely to have used U.S. medical services and had fewer years of education.

Objective 2: In the first set of models a one-unit increase in health prior to U.S. migration increases the odds of a decline in health by 4.55 when age is excluded from the model. Each $1,000 increase in monthly income lowers the odds of health declining by .97; similarly an additional year of education

lowers the odds of decline by .89. U.S. health care utilization and being from Central Mexico increase the odds of health declining by 1.83 and 4.45, respectively. When the age variable is added to the model, the significance of initial health does not decline significantly, but the effects of income and education lose their significance; age, by itself, is statistically significant. The "used insurance to pay a medical bill in the U.S." variable is not significant in either model. In Models 3 and 4 we remove the U.S. health care utilization dummy variable from Models 1 and 2, respectively, to examine the "paid for health care in the U.S. with insurance" interaction term alone. The results, in large part, remain unchanged. While the odds ratios for the insurance variable increased, they did not become significant at the .05 level. For the model that includes the age variable, the p-value of the insurance variable is 0.064.

Objective 3: Based on levels of self-reported health, years of education, income levels and health care use of the MMP sample, the costs to cover male Mexican immigrants both initially as well as after spending time in the U.S. would be lower than the average costs of covering those who are already eligible for coverage through the exchanges, at least in the short-term.

Table 1. Mean Values of Predictor and Outcome Variables

Variable	MEPS Sample	MMP At First Migration	MMP Current
Self-Rated Health (1=Poor, 4=Excellent)	2.3	2.6	3.2
Of Mexico Origin	15%	100%	100%
<10 Years in U.S.	5%	100%	81%
Age	46.2	26.4	46.5
Years of Education	12.6	7.0	7.0
Uninsured in the U.S.	21%	100%	86%
Poverty Category[a]	4.2	2.0	2.7
Mean predicted annual insurance cost[b]	**$1,132**	**$2 – $32**	**$188 – $271**

[a]*Annualized wage data are converted to poverty category based on single-person household FPL ($11,170).*
[b]*Mean and median values of predicted annual insurance costs calculated for MMP samples under 0% and 100% insurance coverage in an effort to establish a range of mean costs.*

CONCLUSIONS

Although we cannot say U.S. insurance coverage is protective against health decline in this sample of male migrants, our cost estimate data demonstrate that this population would be relatively inexpensive to cover, at least in the short-term. Their inclusion would be enlightened self-interest--including immigrants from Mexico could ease premium costs for the working poor who are citizens or legal residents in the short term. Thus, our recommendations include the following:

- Allow undocumented immigrants to purchase through the exchanges (doing so may result in lower average insurance costs of those purchasing through the exchanges),

- Develop state-based binational insurance schemes (starting initially with border states with large populations of Mexican immigrants).