

Informing Public Policy Toward Binational Health Insurance: Empirical Evidence from California

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Abstract

Background: Approximately 11.7 million Mexico-born individuals were living in the U.S. in 2007, and an estimated 56.9% were uninsured for all of 2006. The uninsured receive the majority of their health care from the U.S. safety net. Binational health insurance (BHI) between the U.S. and Mexico is a potential way to improve access to better coordinated care at a lower cost than conventional insurance. BHI plans in California currently have approximately 100,000 to 150,000 enrollees; however, little has been published about reimbursement differences between the U.S. and Mexico as well as the amount of health care accessed by BHI enrollees in Mexico.

Objectives: The objectives of this study are to (1) estimate physician reimbursement rate differences between Mexico-based physicians reimbursed by a BHI plan and U.S.-based physicians reimbursed by Medi-Cal, Medicare, and U.S. private health plans; (2) show the relationship between BHI plan benefit designs and the share of enrollees' health care obtained in Mexico; and (3) estimate the association between HMO enrollees' distance to the U.S.-Mexico border and their use of a Mexico-based provider as a point of service (POS) option.

Data and Methods: The data include BHI membership files and claims data from Sistemas Medicos Nacionales, S.A. de C.V. (SIMNSA) and Salud con Health Net. SIMNSA is a Mexico-based HMO with BHI employer-based products designed to provide most health care services in Mexico (Tijuana, Tecate, and Mexicali), but allow enrollees to access emergency and urgent care in the U.S. The data include 33,841 enrollees with 1.9 million claims during 2004-2009. Salud con Health Net is a Southern California-based BHI plan with employer-based products designed to provide health care services in either California or Mexico. The HMO product includes a POS option that allows an enrollee to access health care services from SIMNSA in Mexico, with lower patient cost sharing. The data include 53,909 HMO enrollees during 2004-2008. The statistical methods include comparison of means and proportions as well as regression analysis.

Results: SIMNSA's physician reimbursement rates averaged 51% of Medi-Cal's, 28% of Medicare's, and 22% of U.S. private plans' for office visits, emergency department visits, pathology and x-rays, hospital visits, and surgeries. Over 99% of SIMNSA BHI enrollees exclusively utilized health care services in Mexico each year. In contrast, less than 0.2% of Salud con Health Net HMO enrollees utilized health care services in Mexico through their POS option each year. Salud con Health Net HMO enrollees insured through employers in Los Angeles and San Bernardino Counties were 0.07 percentage points more likely to have a SIMNSA POS claim than enrollees insured through employers in Orange and Riverside Counties ($p < 0.01$), which was not expected, because these latter counties are relatively closer to the border.

Conclusions: BHI plans between the U.S. and Mexico are a potential way to provide health insurance to uninsured Mexico-born individuals living in the United States. Physician reimbursement rates are significantly lower in Mexico as compared to the

United States. However, if the BHI plan benefit design does not have strong incentives for enrollees to access Mexico-based care, the potential savings from lower cost care in Mexico will be muted due to low substitution of Mexican for U.S. care. Based on the plans analyzed, it appears that BHI plans offering comprehensive care in the U.S. with solely a POS option in Mexico are unlikely to drive utilization to Mexico and significantly lower costs.

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I. Introduction

Approximately 11.7 million Mexico-born individuals were living in the U.S. in 2007, and an estimated 56.9% were uninsured for all of 2006 (Camarota, 2007). Many immigrants will remain uninsured, even though the Patient Protection and Affordable Care Act was enacted in March 2010. The uninsured receive the majority of their health care from the U.S. safety net, primarily from community health clinics for primary care and limited specialty care, and from public and non-profit hospitals for emergency care. Many—over 250,000 California adults in 2001—cross the border into Mexico for care (Wallace et al., 2009). Because their care is not well coordinated across providers and because its financing originates from multiple sources that sometimes have conflicting incentives, the care is not being delivered in the most efficient manner. Binational health insurance (BHI) between the U.S. and Mexico is a potential way to improve coordination of care and to better align incentives for lower cost care. In addition, BHI is more affordable than conventional insurance because of the lower cost of care in Mexico. However, few studies have analyzed BHI.

Study Objectives

This study's specific research questions include the following:

- A. What are the relative physician reimbursement rates between the U.S. and Mexico for different health care procedures?
- B. How is the BHI plan benefit design related to the share of health care utilization obtained in Mexico?
- C. What is the association between HMO enrollees' distance to the U.S.-Mexico border and their use of a Mexico-based provider as a point of service (POS) option?

The findings from these research questions will inform both U.S. and Mexican policy makers about the extent that BHI can be used to increase coverage and reduce health disparities of the Mexican immigrant population. This will help inform decisions about whether public funds should be used to subsidize BHI, either directly through subsidizing premiums (e.g., within the to-be-formed American Health Benefit Exchanges) or from contracting with BHI providers through, for example, Medicaid. It will also inform policy decisions regarding health care capacity requirements, particularly in Mexico, if BHI enrollment were to increase. Our study will also inform policy-makers who are interested in developing a pilot for BHI.

II. Data

The primary data are from Sistemas Medicos Nacionales, S.A. de C.V. (SIMNSA) and Salud con Health Net. SIMNSA is a Mexico-based health maintenance organization (HMO) with over 300 physicians, three medical clinics, a surgical center (within one clinic), and a laboratory. Its services are provided in Tijuana, Tecate, and Mexicali, which are near San Ysidro, Tecate, and Calexico, respectively, in the United States. In 2000, SIMNSA received a license from California's Department of Managed Health Care to market to employers in California. SIMNSA's plans offer emergency and urgent care services in the U.S., with the remaining care being provided in Mexico. SIMNSA also partners with Health Net and Aetna to provide Mexico-based services within those insurers' BHI plans. As of December 31, 2009, SIMNSA had 23,930 enrollees in its own plans, or through its partner plans in which the enrollee selected SIMNSA as its physician provider group. The claims data include 33,841 unique enrollees with 1.9 million claims from January 1, 2004 to November 30, 2009. The

average enrollee age was 32 years old, with the following proportions by age range: aged 0-17 (28.5%), aged 18-64 (70.2%), and aged 65+ (1.4%).¹

Salud con Health Net is a BHI employer-based plan between Health Net in California and SIMNSA in Northern Mexico. The plan began in 2000, and as of December 31, 2008, had approximately 35,000 enrollees through 1,100 employers located in Southern California, specifically in Orange, Riverside, Los Angeles, and San Bernardino Counties. Approximately 95% of enrollees are enrolled in an HMO plan; the remaining enrollees are enrolled in either a preferred provider organization (PPO) or an exclusive provider organization (EPO) plan. An HMO enrollee must select of physician provider group (PPG) that is located within 30 miles of his or her residence or workplace, and has the option of selecting SIMNSA in Mexico as his or her PPG if he or she lives or works within 50 miles of the U.S.-Mexico border. If an enrollee selects a California-based PPG, he or she can access care with lower cost sharing in Mexico through SIMNSA's network using a POS option. If a subscriber's dependent lives in Mexico, then the dependent must select SIMNSA as his or her PPG, and his or her health care services are only covered in Mexico. Approximately 3% of Salud con Health Net enrollees had SIMNSA as their PPG.

The enrollees of interest for our analyses had a California-based PPG. This is because the Salud con Health Net claims data do not include claims from their enrollees who had SIMNSA as their PPG, because health care for these enrollees are reimbursed based on capitation. The data included 53,909 unique HMO enrollees with a California-based PPG who were insured through an employer in Orange, Riverside, Los Angeles, or San Bernardino Counties during the period January 1, 2004 to December 31, 2008.

¹ Sum of percentages does not equal 100 because of rounding.

Females were 40.5% of the enrollees, and the average enrollee age was 34 years old, with the following proportions by age range: aged 0-17 (18.2%), aged 18-64 (80.8%), and aged 65+ (1.1%).² Some of these enrollees were enrolled in more than one year.

III.A. Physician Reimbursement Rate Comparison between the U.S. and Mexico

This section compares the physician reimbursement amounts by SIMNSA, Med-Cal, Medicare, and private U.S. health plans. Table 1 summarizes the SIMNSA data by year, including the number of enrollees and claims; average expenditures; and the age distribution of enrollees with claims. The expenditure data includes all expenditures from Mexico,³ including physician services, hospital care, pharmaceuticals, optometry, and dentistry. In 2008, the last year with complete data, there were 20,875 enrollees. The average SIMNSA expenditure in Mexico per enrollee was \$682 and the average copayment in Mexico per enrollee was \$79, totaling \$761 (all dollar figures in \$US2009).⁴

² Sum of percentages does not equal 100 because of rounding.

³ During 2004-2009, there were approximately 120 SIMNSA claims per year in the U.S.; however, expenditure data associated with these claims were not available.

⁴ The expenditure amounts reported in Table 1 are based on both fee-for-service and capitation claims. The capitation claims are less reliable, because they do not represent actual dollar amount exchanged between SIMNSA and the provider. The physician reimbursement comparison in Table 2 uses only fee-for-service claims.

Table 1: SIMNSA Data Summary

Variable	Average	2004	2005	2006	2007	2008	2009 (a)
Enrollees and claims							
Enrollees	19,113	15,798	16,435	17,908	19,730	20,875	23,930
Enrollees with claims	14,810	12,213	13,339	13,842	15,362	16,884	17,218
Percent with claims	77%	77%	81%	77%	78%	81%	72%
Claims	309,352	241,639	258,993	288,818	330,326	383,718	352,620
Claims per enrollee	20.9	19.8	19.4	20.9	21.5	22.7	20.5
Expenditures per enrollee (\$US 2009)							
Average SIMNSA expenditure	\$580	\$522	\$564	\$571	\$624	\$682	\$519
Average enrollee copayment	\$70	\$64	\$63	\$70	\$74	\$79	\$67
Total	\$650	\$586	\$628	\$641	\$698	\$761	\$586
Age of enrollees with claims							
Mean (years)	32.9	32.5	32.2	32.4	33.1	33.5	33.7
Percent in age-year range							
0-9	14%	15%	15%	14%	14%	13%	13%
10-19	17%	16%	17%	18%	17%	17%	18%
20-29	9%	9%	9%	9%	10%	10%	10%
30-39	16%	18%	17%	16%	15%	14%	14%
40-49	23%	24%	23%	23%	23%	23%	23%
50-59	16%	15%	14%	15%	16%	17%	17%
60-64	3%	3%	3%	3%	4%	4%	4%
65+	2%	1%	2%	2%	2%	2%	2%

(a) The data for 2009 are from January 1 to November 30.

Data source: SIMNSA membership and claims data.

The physician procedures used for the reimbursement comparison were chosen based on their prevalence in the SIMNSA dataset. The SIMNSA data included 287,290 fee-for-service claims for the following five categories: office visits, emergency, pathology and x-ray, hospital visits, and surgery. We selected 35 common procedures within these categories, which included 149,400, or 52%, of these claims. The procedures are identified by the Current Procedural Terminology (CPT®) coding system, which is owned and maintained by the American Medical Association. The Medi-Cal reimbursement rates were obtained from the California Department of Health Care Services (Medi-Cal, 2010), and Medicare reimbursement rates were obtained from the Centers for Medicare and Medicaid Services (CMS, 2009).⁵

⁵ The CMS data include the Medicare Physician Fee Schedule Relative Value file and the Geographic Practice Cost Index. To calculate the Medicare physician reimbursement rate, we used the 2009 transitioned, non-facility relative value units in combination with the Geographic Practice Cost Index (GPCI) for the San Diego metropolitan area, which was carrier/locality code 01192-99.

Table 2 shows that the SIMNSA's physician reimbursement rate averaged 51% of Medi-Cal's reimbursement; this percentage and all aggregate percentages are weighted based on number of procedures in the SIMNSA claims data.⁶ SIMNSA's average reimbursement rate was 28% of Medicare's, and was 22% of U.S. private plans', assuming Medicare's reimbursement averages 78% of U.S. private plans (Fox and Pickering, 2008). SIMNSA's average reimbursement as a percentage of Medi-Cal's reimbursement by category of procedure was as follows: office visits (50-100%), emergency (1-25%), pathology and x-ray (50-100%), hospital visits (100-150%), and surgery (25-50%).

⁶ The SIMNSA reimbursement for a particular CPT code varied among claims; however, outliers did not significantly affect the results. SIMNSA's median physician reimbursement rate was 47% of Medi-Cal's reimbursement.

Table 2: Physician Reimbursement Rates by CPT Code and Payer

Procedure (Current Procedural Terminology [CPT] Code)	SIMNSA			N (SIMNSA)
	(% of Medi-Cal (a))	Medi-Cal (\$US 2009)	Medicare (\$US 2009)	
Office Visits				
Therapeutic procedure - 15 minutes (97110)	100-150%	\$11	\$29	6,953
Office visit established patient - 15 minutes (99213)	50-100%	\$24	\$63	47,289
Office visit new or established patient - 15 minutes (99241)	50-100%	\$30	\$49	9,112
Office visit new or established patient - 30 minutes (99242)	1-50%	\$46	\$92	37,327
Office visit new or established patient - 40 minutes (99243)	25-50%	\$58	\$126	4,902
Subtotal	50-100%			105,583
Emergency				
Emergency department visit (99285)	1-25%	\$106	\$169	11,608
Pathology and X-ray				
X-ray exam of skull (70250)	100-150%	\$25	\$36	694
X-ray exam of neck (70360)	100-150%	\$17	\$27	372
X-ray exam of chest, 2 views (71020)	50-100%	\$25	\$32	2,554
X-ray exam of chest, at least 4 views (71030)	50-100%	\$34	\$47	371
X-ray exam of neck spine (72040)	100-150%	\$25	\$37	894
X-ray exam of lower spine (72100)	100-150%	\$30	\$39	2,426
MRI neck spine without dye (72141)	25-50%	\$564	\$537	167
X-ray exam of knees (73565)	100-150%	\$19	\$30	886
X-ray exam of foot (73630)	50-100%	\$24	\$31	852
X-ray of abdomen, single view (74000)	100-150%	\$17	\$26	694
X-ray of abdomen, complete (74020)	100-150%	\$31	\$41	634
Contrast x-ray, bladder (74430)	150-200%	\$37	\$80	617
Ultrasound, pelvic, complete (76856)	25-50%	\$66	\$123	5,093
Testicular imaging with vascular flow (78761)	25-50%	\$85	\$208	352
Tissue exam by pathologist (88304)	200%+	\$37	\$64	731
Electrocardiogram, tracing (93005)	100-150%	\$16	\$12	1,211
Subtotal	50-100%			18,548
Hospital visits				
Subsequent hospital care, minor complication (99232)	100-150%	\$37	\$67	167
Subsequent hospital care, unstable patient (99233)	100-150%	\$45	\$96	8,424
Hospital discharge day management (99238)	50-100%	\$37	\$67	1,719
Subtotal	100-150%			10,310
Surgery				
Removal of breast lesion (19120)	50-75%	\$207	\$416	246
Repair of nasal septum (30520)	50-75%	\$365	\$552	288
Endovenous laser, first vein (36478)	1-25%	\$1,794	\$1,463	323
Remove tonsils and adenoids (42820)	75-100%	\$165	\$272	413
Repair of anal stricture (46700)	50-75%	\$361	\$561	244
Laparoscopic cholecystectomy (gallbladder removal) (47562)	50-75%	\$457	\$654	790
Circumcision (54161)	50-75%	\$124	\$205	230
Repair of vagina (57260)	25-50%	\$596	\$762	293
Dilation and curettage (uterus) (58120)	50-75%	\$219	\$237	231
Division of fallopian tube (58600)	1-25%	\$743	\$342	293
Subtotal	25-50%			3,351
Total	51%			149,400

Notes: (a) SIMNSA's physician reimbursement as a percent of Medi-Cal's reimbursement is reported in 25-percentage-point ranges, and the range is increased to 50 percentage points if the Medi-Cal reimbursement rate was less than \$50. The ranges are used to protect the confidentiality of the SIMNSA reimbursement rates. The total and subtotal percentages are weighted, based on the number of SIMNSA observations.

N: Number of SIMNSA claims.

Data sources: SIMNSA claims data, Medi-Cal reimbursement rates, and Medicare reimbursement rates.

III.A.1. Limitations

The SIMNSA data is based on the CPT coding system, which is not available in Spanish, increasing the probability of coding errors. For approximately 4 percent of the claims we analyzed, the CPT code did not correspond to the CPT code description, and we removed these claims from our analyses. Based on discussions with SIMNSA, in general, and particularly for surgeries, the claim associated with a CPT code may include non-physician labor costs. However, this implies that our estimate of SIMNSA's physician reimbursement rates relative to the other payers' represents an upper bound, meaning SIMNSA's relative rates may even be lower.

The U.S.-Mexico health care reimbursement comparison is limited to physician services for which SIMNSA reimbursed providers using fee-for-service. Additional data and further research are needed to compare reimbursement rates for other physician services, inpatient hospital care, pharmaceuticals, etc., as well as to other health plans operating in Northern Mexico. Last, the comparison should incorporate patient cost sharing.

III.B. Binational Health Insurance Plan Benefit Designs and Mexico Utilization

This section analyzes how BHI benefit designs are associated with the share of enrollees' health care obtained in Mexico versus the United States. As discussed in Section II, the SIMNSA and Salud con Health Net plans have very different benefit designs with respect to covering care in the California. Recall, SIMNSA has its own plan, hereafter "SIMNSA plan." SIMNSA also provides Mexico-based care for the Salud con Health Net plan. The SIMNSA plan only covers emergency and urgent care in California,

while the Salud con Health Net HMO plan covers all care in California, and allows enrollees to access the SIMNSA network in Mexico using a POS option, with lower cost sharing.

For the Salud con Health Net plan, patient cost sharing between the California Health Net Salud Network and the SIMNSA Network varies among employers. Table 3 shows the cost sharing differences for a typical Salud con Health Net contract for common health care service categories. For physician visits, the California Health Net Salud Network copayment (\$15) is similar to the SIMNSA Network copayment (\$5). However, for a hospitalization, the California Health Net Salud Network copayment (\$250) is much higher than the SIMNSA Network copayment (\$0), and similarly, for an outpatient visit to a hospital or skilled nursing facility, the California Health Net Salud Network coinsurance (20%) is much higher than the SIMNSA Network coinsurance (0%).

Table 3: Salud con Health Net Patient Cost Sharing by Health Care Network

Health Care Service Category	California Health Net Salud Network	Mexico SIMNSA Network under the Salud con Health Net Plan (1)
Physician visit	\$15	\$5
Hospitalization admission	\$250	\$0
Skill nursing facility (SNF) inpatient treatment	20%	0%
Outpatient services from hospital or SNF	20%	0%
Emergency room visit (2)	\$50	\$10
Urgent care center visit (2)	\$15	\$10

(1) The SIMNSA Network cost sharing applies to Salud con Health Net enrollees with a California-based PPG who initiate a POS option with SIMNSA, as well as to Salud con Health Net enrollees who have SIMNSA as their physician provider group.

(2) Copayment is waived if admitted to hospital.

Data source: Salud HMO y Mas Large Group Plan 19Q – Effective November 1, 2005

Based on analyzing the SIMNSA plan data, we found SIMNSA enrollees almost exclusively accessed health care services in Mexico. During 2004-2009, there was an average of 19,113 SIMNSA enrollees, and they generated approximately 120 emergency- and urgent-care claims per year in the United States. Therefore, on average, at least 99.4% of enrollees exclusively utilized health care services in Mexico each year.⁷ In contrast, based on analyzing the Salud con Health Net data, there was an average of 18,703 Salud con Health Net HMO enrollees insured through employers in Orange, Riverside, Los Angeles, and San Bernardino Counties, of whom, an average of only 22 (or 0.12%) utilized health care services in Mexico through their POS option each year, during 2004-2008.

III.B.1. Limitations

The primary limitation is that the Salud con Health Net did not market within San Diego and Imperial Counties until October 2009, and our data only included the years 2004 to 2008. Because these counties border Mexico, data from these enrollees are needed to determine whether they are more likely to access the SIMNSA POS option in Mexico.

Second, approximately 1,000 of the average 18,703 Salud con Health Net enrollees during 2004-2008 were enrolled in the Mexico-only HMO. In that HMO, health care services are only covered in Mexico, except that emergency and urgent care services are also covered in the U.S. It was not possible to identify these enrollees within the data; however, their effect on the results is not significant.

⁷ The 99.4% estimate is a lower-bound estimate, because the same enrollee may have generated more than one claim in the U.S. during a given year.

Third, these results are not necessarily generalizable to other BHI plans. For example, the cost sharing differences between the California Health Net Salud Network and the SIMNSA Network may not be representative of the cost sharing differences in other BHI plans.

III.C. Health Care Service Utilization in Mexico and Enrollees' Distance to the Border

This section estimates whether the share of Salud con Health Net HMO enrollees that used the SIMNSA POS option was associated with their employer's distance to the border.⁸ Between 2004 and 2008, Salud con Health Net was marketed to employers in Orange, Riverside, Los Angeles, and San Bernardino counties.⁹ Orange and Riverside Counties are closer to the U.S.-Mexico border than Los Angeles and San Bernardino Counties. This section analyzes whether this distance difference was associated with whether an enrollee used the SIMNSA POS option.¹⁰

An enrollee's demand for utilizing the SIMNSA POS option is a function of price (i.e., the employee's expected cost sharing and value of time required to travel to the provider), price of the substitute (i.e., employee's expected cost sharing with a California provider and value of time required to travel to the provider), provider quality, employee's household income, and the employee's household tastes (e.g., language and cultural background). The hypothesis is that as the distance to the border increases, the

⁸ Employer geographic information was used, because the Salud con Health Net claim files only include employer zip codes, not residence zip codes.

⁹ In October 2009, Health Net began marketing its Salud products to employers in San Diego and Imperial Counties, but our 2004-2008 data is before this date.

¹⁰ The unit of analysis is an enrollee, not a claim. It is not possible to compare the share of claims that used the POS option by an enrollee's employer's county, because the Salud con Health Net claims data only include claims from non-capitated providers, such as SIMNSA's POS claims.

use of the SIMNSA POS option will decrease, because of the additional time to travel to the provider.

Table 4 shows the share of enrollees with SIMNSA POS claims by county cluster, and the number of SIMNSA POS claims per 10,000 enrollees by county cluster. As stated in Section III.B., during 2004-2008, there was an average of 18,703 enrollees with employers in the four counties, and an average of only 22 enrollees (or 0.12%) used the SIMNSA POS option each year.¹¹ Enrollees with employers in Los Angeles and San Bernardino Counties were 0.065 percentage points more likely to have a SIMNSA POS claim than enrollees in Orange and Riverside Counties ($p < 0.01$). This result was not expected because Los Angeles and San Bernardino Counties are further from the border than Orange and Riverside Counties. The unexpected finding is likely because other factors that are associated with an enrollee using the SIMNSA POS option are also associated with Los Angeles and San Bernardino Counties (see Section III.C.1.: Limitations).

Table 4: SIMNSA POS Claims by County Cluster, 2004-2008

County	Number of Enrollees (average per year)	Share of Enrollees with a SIMNSA POS Claim	Number of SIMNSA POS Claims per 10,000 Enrollees (average per year)
Orange & Riverside	5,017	0.07%	18.3
Los Angeles & San Bernardino	13,686	0.13%	35.1
Total	18,703	0.12%	30.8

Source: Salud con Health Net Membership and Claims Files

Next, we take a closer look at the POS claims. During 2004 to 2008, there was an average of 30.8 SIMNSA POS claims per 10,000 enrollees per year (see Table 4), which totaled 288 claims over the five-year period, including 281 professional and 7 institutional claims. The 281 professional claims were mainly visits for an established

¹¹ During the 2004-2008 period, 108 unique enrollees had a SIMNSA POS claim.

patient (37%) or a new patient (17%), and only a small number were for an emergency room visit (7%). The patients' diagnoses varied substantially; hypertension was the most commonly cited diagnosis (9%), followed by asthma (4%). The seven SIMNSA claims were mainly for the emergency room or surgery with various diagnoses, such as heart failure and deviated nasal septum.

III.C.1. Limitations

There are three key limitations. The estimated association between the distance to the U.S.-Mexico border and the use of the SIMNSA POS option is based on a small sample of enrollees, an average of 22 per year from 2004-2008. Additional utilization data is needed before conclusive results can be drawn.

Second, because we do not have data on the other demand variables, a key assumption is that those variables are not related to the distance to the border. The hypothesis was that as the distance to the border increases, the use of the SIMNSA POS option will decrease, but we found the opposite. This could be explained if, for example, the physician network in Los Angeles County was more limited than the physician network in Orange County, which could induce more Los Angeles County enrollees to use the SIMNSA POS option. Similarly, it could be explained if other demand characteristics such as enrollee income differed across counties. Additional data on such supply and demand factors would help isolate the effect of distance to the border on SIMNSA POS use.

Third, the employer county data are potentially unreliable because they do not always represent where the enrollee works. For example, the employer county denoted

within the data may be based on a headquarters or regional office location, which may be located in county that is different from where the enrollee works.

IV. Conclusions

BHI plans between the U.S. and Mexico are a potential way to provide health insurance to uninsured Mexico-born individuals living in the United States. Physician reimbursement rates are significantly lower in Mexico as compared to the United States. However, if the BHI plan benefit design does not have strong incentives for enrollees to access Mexico-based care, the potential savings from lower cost care in Mexico will be less because of lower utilization in Mexico. Further research is needed to determine the relative costs of non-physician services, and how different BHI plan benefit designs and patient cost sharing between the U.S. and Mexico affect enrollee health care utilization in Mexico. Based on the plans analyzed, however, it appears that BHI plans offering comprehensive care in the U.S. with solely a POS option in Mexico are unlikely to drive utilization to Mexico and significantly lower costs.

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