

Can Private Companies Contribute to Public Outreach  
Efforts? Evidence from California

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## **ABSTRACT**

We study an innovative outreach effort in California, which trains and certifies community organizations to help complete Medicaid and SCHIP applications. We provide a detailed description of participating organizations, the populations they serve, and their success at turning submitted applications into enrollments. We find that insurance brokers and tax preparers, for-profit groups not typically associated with outreach, make significant contributions to California's program. Brokers in particular help serve a hard to reach population, those on the higher end of the income eligibility thresholds.

The share of Americans covered by employer-sponsored health insurance has declined steadily since the late 1970s. Public health insurance expansions have largely spared children from the decline in coverage experienced by their parents. But, the latest figures indicate that the proportion of children without health insurance has started to rise, increasing from 10.8 to 11.2 percent between 2004 and 2005.<sup>1</sup>

If past experience is a guide, many of the 8.3 million children without coverage in 2005 were actually eligible for public health insurance. In 2002, for example, about 2.8 million uninsured children ages 18 and under were eligible for the State Children's Health Insurance Program (SCHIP) and an additional 3.7 million were eligible for Medicaid.<sup>2</sup> Together, they represented over 60 percent of uninsured children.<sup>3</sup>

Devising strategies to increase take-up is essential for reducing the number of uninsured children. Eligible uninsured children are difficult to reach because they are disproportionately children of the "working poor". Their parents often have little experience with means-tested benefits programs and many do not realize that their children are eligible for public insurance.<sup>4</sup>

With this in mind, SCHIP, more than past expansions, emphasized and made a financial commitment to outreach. In almost all states, outreach efforts aimed to increase public awareness through radio, television and newspaper advertisements, brochures and flyers, and toll-free hotlines. Many states also used in-person eligibility workers or volunteers to offer in-depth program information and provide application assistance.<sup>5</sup>

Little is known about the impact of these strategies.<sup>6</sup> The bulk of the literature on outreach has taken a demand-side perspective, assessing the characteristics of the "eligible uninsured" and recommending efforts that target specific populations.<sup>7</sup> While these studies have been crucial in the design and implementation of current outreach strategies, we remain ill-informed about which efforts were most effective. The best information on the supply-side comes from federally mandated SCHIP evaluations.<sup>8</sup> This evidence suggests that personalized efforts, such as hotlines and home visits, were more effective strategies than television or print advertisements and that health centers and schools were more effective settings than libraries or senior centers.<sup>9</sup> To date, however, independent assessments of the effectiveness of different outreach efforts remain rare.

To help fill this gap, we study an outreach strategy adopted by California as part of its implementation of SCHIP. Beginning in 1998, the state worked with a variety of organizations to provide application assistance to families who were potentially eligible for Healthy Families (California SCHIP) or Medi-Cal (California Medicaid). These "enrollment entities" include organizations such as hospitals and clinics that make up the health care safety net as well as schools, faith-based charities and commercial entities such as insurance brokers and agents and tax preparers. Initially, these entities received a payment of \$50 for each successful application and \$25 for each successful renewal.<sup>10</sup> In fiscal years 2000/1 and 2001/2, some schools and community-based organizations were paid on a contract basis. Although contract-based entities are not in our data, they were relatively minor players in the application assistance program, accounting for only 10 to 11 percent of assisted applications.<sup>11</sup>

Application assistance is an important outreach strategy because it addresses several significant barriers to enrollment - complexity of the enrollment process, confusion about eligibility, and language difficulties.<sup>12</sup> A recent study by Aizer suggests that California's use of community-based application assistants was effective at

increasing public insurance take-up.<sup>13</sup> She finds that proximity to an additional bilingual application assistant increased new monthly Medi-Cal enrollments among Hispanic children by 16 to 46 percent and among Asians by 26 to 45percent.<sup>14</sup> As shown in Exhibit 1, analysis of aggregate data indicates that by 2002, roughly 60 percent of Healthy Families applications forwarded to the state and almost 70 percent of those deemed eligible were completed with assistance.<sup>15</sup>

Despite this apparent success and the fact that the application assistance budget was less than one percent of the Healthy Families budget, the state suspended the program in 2003 in response to its fiscal crisis. This resulted in a steep decline in the percentage of applications filed with assistance (see Exhibit 1). Moreover, as suggested by program administrators and illustrated in Exhibit 2, this drop in assistance increased the number of applications that were incomplete or completed with error, delaying new enrollments and leading to denials of applications that, if properly completed, might have been accepted.

Payments to enrollment entities were reinstated in July 2005 and since increased to \$60 for successful applications and \$50 for successful (annual) renewals. The

increase since July 2005 in the share of forwarded and eligible applications that were completed with assistance (see Exhibit 1) indicates the importance of the fees in maintaining entity effort. But the long-term future of this program remains in doubt as funding is subject to an annual budget and allocation process. Even if funding is continued, there are important questions as to how the program should be structured. Should the state continue to partner with so many different types of organizations? Or, as has been suggested, should outreach efforts be more targeted to certain entities, such as schools? More generally, as SCHIP comes up for reauthorization in 2007, California's experience leveraging outside resources to increase and maintain enrollments may provide important lessons for other states around the nation.

In this study, we provide a detailed description of the organizations that provide application assistance in California. We begin by documenting differences among different types of organizations in participation rates and one measure of effectiveness, the percent of submitted applications deemed eligible. Then, we examine the extent to which different types of organizations serve different populations. The latter part of the analysis is particularly important because the population of children

eligible for public insurance is now quite heterogeneous in terms of socioeconomic status. As a result, organizations that are effective at reaching very poor children may be less well-positioned to enroll children in families at the upper end of the SCHIP income eligibility range.

## **Data**

Our analysis is based on detailed information on all "Enrollment Entities" (EEs) operating in California from the start of Healthy Families in 1998 through June of 2002. In addition to location, we know when the EE entered the program, the type of organization it is (clinic, community or faith-based organization, government-funded organization, hospital, insurance broker/agent, provider, school, or tax preparer), how many "Certified Application Assistants" were associated with the EE, what languages were spoken by EE staff, and, most importantly, how many applications were submitted and how many were deemed eligible for SCHIP or Medi-Cal Children. Since EEs differ in how long they were in the program as of June 2002, in some analyses we divide the total number of submissions by that length of time and present the data in terms of the number of applications submitted per 100 days.



## **Application Assistance by Entity Type**

Exhibit 3 describes the distribution of enrollment entities and application assistants by organizational type. There is considerable variation across types in both the number of participating entities and certified assistants. For example, insurance brokers represent almost 40 percent of enrollment entities, but because these are small organizations—often just a single individual—they account for a much smaller share of all assistants. In contrast, hospitals, which have many assistants (6.5 on average), account for less than 3 percent of EEs but almost 8 percent of all CAAs. Government-funded organizations, typically outreach programs run by a county or municipal department of health, have an average of 17 CAAs per entity, far more than any other organization type. This may reflect government-funded organizations' efforts to target the neediest cases. Many of their assistants may focus on adults or other groups for whom the state does not pay an application assistance fee.<sup>16</sup> And, many employees at government-funded organizations may be certified to provide application assistance even if most of their time is spent on other responsibilities.

To gauge participation and effectiveness, the last three columns of Exhibit 3 provide statistics on the share

of applications submitted and accepted statewide as well as acceptance rates by entity type. Clinics submitted about a third of all assisted applications over the study period. Only community-based organizations, which for the purpose of our tables include faith-based charities, come close in terms of the share of applications submitted; they submitted 18 percent of applications.

Schools play a small role in the state's fee-based outreach efforts, accounting for only about 6 percent of submitted and 5 percent of accepted applications. Some schools, however, participate as grant based contractors. These grants allow schools to hire dedicated outreach staff who direct families to other important resources - toll free information hotlines, referral forms with joint Healthy Families/Medi-Cal applications and, local organizations offering application assistance.<sup>17</sup> Hospitals also appear to play a relatively small role in outreach, submitting only about 8 percent of applications.

But, not all applications are deemed eligible. Overall, about 42 percent of applications submitted lead to successful enrollments.<sup>18</sup> The acceptance rate varies across entity types. While insurance brokers contribute only about 13 percent of submissions, they have the highest acceptance rate. About 44 percent of all applications

submitted by brokers are deemed eligible. A more detailed investigation reveals that the high acceptance rate of brokers is driven by a small number of high volume entities. This relationship between volume and accuracy, which holds for other entity types as well, suggests that there may be significant learning-by-doing. As entities submit more applications, they may gain a better understanding of the eligibility rules and requirements concerning documentation.

Hospitals, in contrast, have a relatively low acceptance rate (37.7 percent). As a result, they account for only about 7 percent of accepted applications. Government-funded organizations, community based organizations (CBOs), schools, and tax preparers all perform slightly below average.

The variation in acceptance rates across groups is consistent with differences in incentives and the nature of the interaction with the client. Applications from hospitals are triggered when an uninsured patient presents for outpatient treatment or admission. Many of these patients arrive at the hospital without the necessary documentation or information for the hospital to make an accurate eligibility assessment. At the same time, submitting an application represents a minimal cost to the

hospital, as the application only marginally increases the necessary paperwork. And, the benefit to the hospital—the difference between what Medi-Cal or the Healthy Families plan will reimburse for the care and what they can recover from an uninsured patient—is potentially quite large. Thus, hospitals have an incentive to submit applications even when the probability of acceptance may be low.

In contrast, because the only benefit that insurance brokers receive from submitting an application is the \$50 fee and because they can easily request that a client return with more documentation, they may be reluctant to expend effort on cases where acceptance appears unlikely. Providers and clinics (other than hospitals) are the only other groups that come close to brokers in terms of acceptance rates. Like hospitals, these entities stand to gain reimbursement for services rendered on top of the application fee. Relative to hospitals, however, providers and clinics may have an added incentive to recruit and submit quality applications - obtaining insurance coverage for their clients may increase the likelihood of repeat business. Moreover, like insurance brokers and unlike emergency departments, providers and clinics may be able to request the documentation needed to determine eligibility before rendering services.

## **Application Assistance by Neighborhood Socioeconomic Status and Entity Type**

The heterogeneity of the population that is eligible for public health insurance provides one rationale for partnering with different types of organizations. Previous work suggests the importance of taking account of language differences when designing outreach strategies.<sup>19</sup> Income is another important source of heterogeneity.

The Healthy Families income eligibility limit for a family of four is nearly \$50,000. Organizations that are effective at reaching very low income families may not be as adept at enrolling families at the upper end of the SCHIP income eligibility range, and vice versa. And the geographic distribution of organizations makes them more accessible to different types of communities. For example, while the average clinic, provider, school, or hospital-based EE is located in zip codes with per capita median income of below \$40,000, the typical tax preparer, government-funded and CBO-based EE operates in zip codes with per capita income of just over \$40,000. Insurance brokers are located in zip codes with an average median per capita income of almost \$50,000. In addition, insurance brokers, in contrast to other EE types, operate in the

widest range of zip codes by income, with median per capita income under \$15,000, at the lowest end, and just over \$119,000 at the highest end.

To shed light on the role of different EEs across the income distribution, in Exhibit 4 we stratify the data by per capita zip code income and examine the distribution of submissions and acceptances by income quartiles. Quartiles are defined by the 1999 median per capita income across zip codes where at least one enrollment entity was operating during the study period. The first thing to note is that the distribution of submissions and acceptances by entity type varies substantially by area income. The results suggest that clinics and CBOs are critical sources of assistance for very low-income applicants, but provide fewer services to families at the upper end of the eligibility range. Together they account for about 60 percent of all applications submitted and accepted in the lowest income zip codes, but less than 40 percent of submitted or accepted applications in the top income quintile. The opposite pattern holds for brokers. While they submit only 6 percent of applications in the lowest income quartile, in the highest quartile brokers account for a greater share of applications submitted and deemed eligible than any other type of entity—24 percent and 26

percent, respectively. We see a similar pattern for tax preparers, which account for a tiny share of applications in the lowest income zip codes, but submit almost a tenth of all applications in the highest income category.

Several other differences across income groups and entity types deserve mention. Consider hospitals. Across all but the second income quartile, hospitals have a lower than average success rate. The acceptance rate for hospitals is especially low in the top half of the distribution. In the highest quartile, only a quarter of applications submitted by hospitals are deemed eligible. This pattern provides support for the idea that hospitals are less able to screen for eligibility and more likely to submit applications irrespective of the probability of acceptance. According to this argument, hospitals located in affluent areas have lower success rates than those in poor areas because they interact with a population that has a lower probability of eligibility.

Insurance brokers perform comparatively well across zip codes in all income quartiles. But, brokers located in zip codes in the highest income quartiles perform particularly well. In the two highest income quartiles, where the overall acceptance rates are each just about 38 percent, insurance brokers still turn over 40 percent of

their submissions into successful applications. Thus, in areas where the probability of encountering an eligible client may be lowest, insurance brokers have contributed the most to Medicaid and SCHIP enrollments.<sup>20</sup>

### **Within Neighborhood Comparisons of Application Assistance**

Enrollment entities are not randomly distributed across the state. Exhibit 4 suggests that some differences in performance may be driven by location, in particular, differential access to more favorable applicant pools. To better understand how different types of entities perform, we need to control for key features of the environment where they operate. To do this, we use multivariate regression techniques to estimate zip code fixed effect models of application submissions (measured per 100 days) and the percent of all submissions that were accepted. The zip code fixed effects capture the impact of all time-invariant local area factors. (Details about the regression specification and the full results are presented in the appendix.)

The regression results confirm the patterns in Exhibits 3 and 4. Within a given zip code hospitals submit a larger than average number while insurance brokers submit a smaller than average number of applications per 100 days.



However, insurance brokers have higher success rates. Similarly, while not obvious from the raw data, once we account for their zip codes of operation, tax preparers also have relatively high success. Holding factors such as neighborhood socioeconomic status constant, the success rates of insurance brokers and tax preparers are roughly 20 percent higher than that for other types of entities.

Our regression models also control for the number of application assistants working for each entity and how long the entity had been involved in the program. As expected, EEs with more application assistants on staff submit a higher number of applications, though interestingly they have a lower success rate. The success rate increases with how long an EE has been involved in the program, which may reflect the importance of learning by doing.

## **Discussion**

Prior research shows that insurance brokers and agents play a critical, if underappreciated, role in the small group and non-group health insurance markets.<sup>21</sup> Small employers and individuals purchasing non-group coverage rely on them for information on insurance options and assistance with enrollment. And insurers view brokers as a key component of their distribution channel. In the 1990s,

some states that enacted small group reforms attempted to lower premiums by "cutting out the middleman" and reducing consumers' reliance on brokers. These efforts were generally unsuccessful. Even where reforms made it easier for small employers to purchase insurance directly from insurers or through a cooperative, a large fraction continued to go through brokers.

Our results suggest that insurance brokers can also play an important role in assisting eligible families enroll in Medicaid and SCHIP. Relative to other types of enrollment entities, brokers have been quite successful at increasing public health insurance take-up in California. They are located near and thus may have better access to those on the higher end of the public health insurance income eligibility thresholds. This is important because many of these families have little or no prior experience with the social service system and may not be in contact with the same types of organizations as lower income families.

But, even within neighborhoods, insurance brokers are better at turning applications into enrollments. The reason for their success may be manifold. State officials indicate that brokers are experienced at filling out complex forms. Because of their profession, most brokers

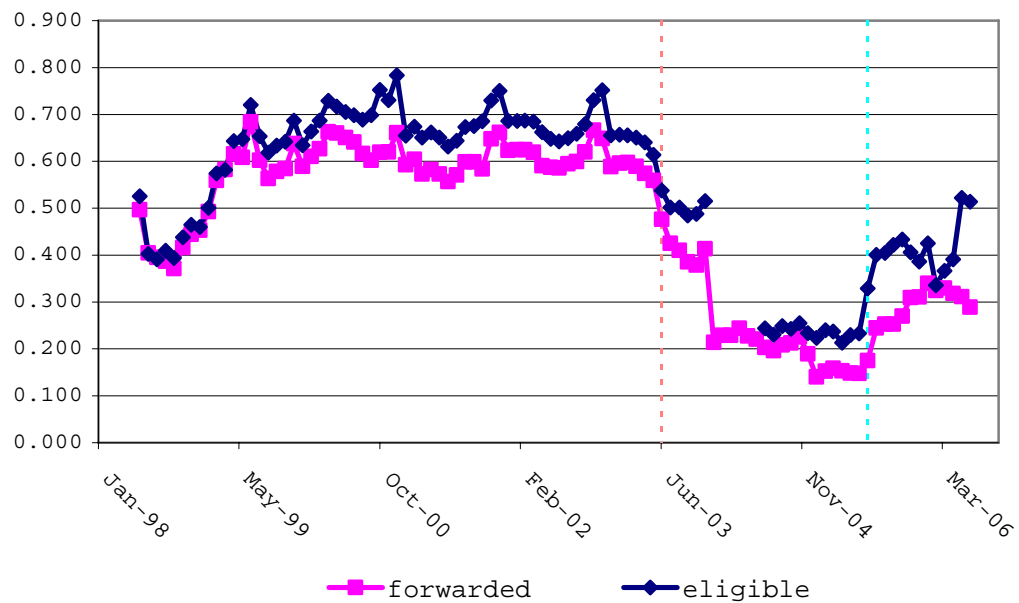
should have a pre-existing system for identifying people who are interested in obtaining health insurance. The financial reward for application assistance is such that brokers have little incentive to submit applications that are unlikely to be eligible. They may also use the programs as alternative options for commercial product line customers that have family members who do not qualify for or cannot afford the cost of those product lines.

Similarly, our results suggest that tax preparers may be an underutilized resource in outreach efforts. Accounting for the neighborhoods where they operate, tax preparers have higher success rates than clinics and most other organizations operating in the same zip codes. Their success may reflect their access to the most important application requirement, income documentation, allowing them to more readily and accurately assess eligibility than other entities. As suggested by their low submission rates, however, tax preparers have not actively participated in the program and, when they do, their efforts are seasonal (January through April). Recognizing their potential to be an efficient source of applications and enrollments, state administrators are currently exploring ways, including partnering with a major tax preparer, to increase tax preparer participation rates.

California's application assistance program offers lessons for many states and public benefit programs. Only three other states (Illinois, North Carolina and Virginia) provide incentives to insurance brokers who assist SCHIP enrollments.<sup>22</sup> To our knowledge, no other state recruits tax preparers to provide application assistance. Yet, our results indicate that means-tested benefit programs may be well served by recruiting a diverse set of organizations, including those that, like brokers and tax preparers, are not typically associated with outreach efforts. Insurance brokers and tax preparers may be even more critical in implementing policies aimed at reducing the number of "middle class" Americans who lack insurance.

While this study provides important new information on organizations involved with Medicaid and SCHIP outreach, more detailed research would help guide policy makers in this area. How do successful brokers "market" public health insurance to eligible families? What role do employers play in this process? Are there differences across enrollment entities in retention? Finally, it is important to note that enrollment is only an intermediate goal; ultimately, we want to know whether children who are enrolled through alternative channels differ in their access to and utilization of health care.

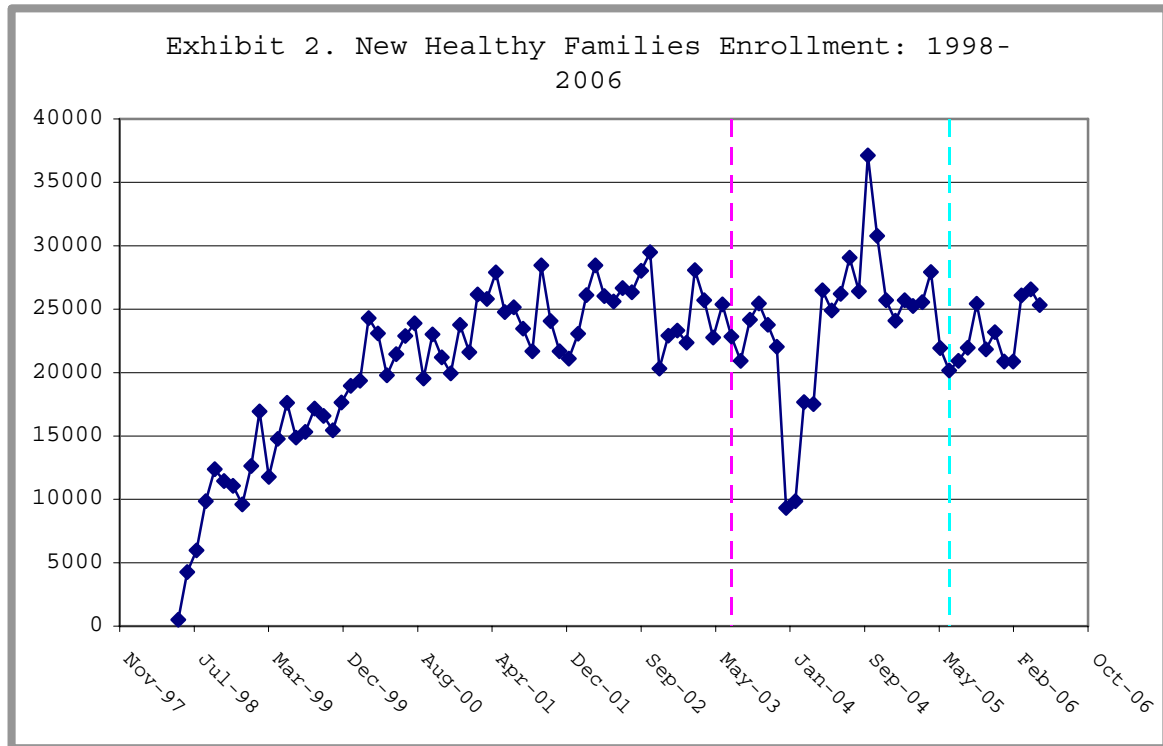
Exhibit 1. Forwarded and Eligible Healthy Families Applications Completed With Assistance: 1998-2005



Source: Managed Risk Medical Insurance Board's Healthy Families Program Enrollment Reports (various issues). See <http://www.mrmib.ca.gov/MRMIB/HFP/HFPReportsHis.shtml>

Notes: The first dotted line corresponds to the suspension of the \$50 application assistance fee in July 2003. The second dotted line corresponds to the reinstatement of the \$50 fee in July 2005.

Changes to data reporting between December 2003 and July 2004 make it impossible to calculate the share of eligible applications that were submitted with assistance during that period.



Source: Managed Risk Medical Insurance Board's Healthy Families Program Enrollment Reports (various issues). See <http://www.mrmib.ca.gov/MRMIB/HFP/HFPReportsHis.shtml>

Notes: The first dotted line corresponds to the suspension of the \$50 application assistance fee in July 2003. The second dotted line corresponds to the reinstatement of the \$50 fee in July 2005.

The state switched administrative vendors in late 2003, which may have also impacted the efficiency of application processing, enrollments, and eligibility appeals.

**Exhibit 3. Healthy Families or Medi-Cal Children Submissions by Type of Enrollment**

**Entity (Data through June 2002)**

	<b>Entities</b>	<b>Assistants</b>	<b>Applications Submitted</b>	<b>Applications Accepted</b>	<b>Acceptance Rate</b>
Total	2722	10116	189145	77942	42.1%
<b><i>Share or rate by Type of Entity</i></b>					
Clinic	13.2%	15.0%	30.2%	31.5%	42.8%
Community-based Org.	17.5	25.4	18.0	17.3	39.6
Government Funded	2.5	11.4	8.9	8.7	40.6
Hospital	2.8	4.9	7.9	7.2	37.7
Insurance Broker	39.2	17.6	12.7	13.4	43.6
Provider	13.8	9.2	13.3	13.8	42.6
School	7.5	13.2	6.1	5.3	35.7
Tax Preparer	3.5	3.3	2.9	2.8	39.8

**Exhibit 4. Application and Acceptance Rate by Entity Type and Area Income**

	Below 25 <sup>th</sup> Percentile		25 <sup>th</sup> to 50 <sup>th</sup> Percentile		50 <sup>th</sup> to 75 <sup>th</sup> Percentile		Above 75 <sup>th</sup> Percentile	
	Submitted Applications	Acceptance Rate	Submitted Applications	Acceptance Rate	Submitted Applications	Acceptance Rate	Submitted Applications	Acceptance Rate
All Entities	64887	42.5%	51046	42.4%	48058	38.3%	22173	38.3%
<i>By Entity Type</i>	Share of Applications		Share of Applications		Share of Applications		Share of Applications	
Clinic	39.3%	42.7%	30.6%	44.6%	22.1%	38.2%	18.0%	46.4%
CBO	20.9	45.9	17.8	34.4	13.2	33.6	19.9	39.2
Government Funded	4.9	41.4	4.7	41.5	20.7	41.4	4.3	25.2
Hospital	4.0	39.9	6.4	50.8	11.7	36.4	15.8	25.8
Insurance Broker	5.9	44.7	12.8	42.6	16.5	45.3	24.2	40.9
Provider	19.5	40.3	17.2	47.1	5.6	37.8	4.6	45.8
School	4.6	35.5	7.8	37.2	7.3	32.1	3.8	29.9
Tax Preparer	1.0	36.7	2.7	38.3	2.9	41.4	9.3	40.8



## Technical Appendix

We estimated multivariate regression models to test for within-area differences in enrollment entity (EE) performance. The two performance measures we analyzed were number of submissions per 100 days—i.e. volume—and the share of applications deemed eligible—i.e. the acceptance rate. Specifically, we estimated models of the form:

$$(1) \quad Y_{ze} = \alpha + X'\beta + \gamma TYPE + \delta_z + \varepsilon_{ze},$$

where  $Y_{ze}$  measures the volume or acceptance rate for entity  $e$  in zip code  $z$ . The acceptance rate models were weighted by submissions to account for differences in EE volume. The variables in  $X$  capture basic EE characteristics — the log of their number of CAAs, the number of competitors in the zip code at entry into the program, and, for the share analysis, the number of days the entity has been operating in the program and its square.

*TYPE* represents a set of indicator variables for each type of EE — community/faith-based organization, government-funded, hospital, provider, insurance broker/agent, tax preparer or clinics (the omitted category). The models include zip code fixed effects,  $\delta_z$ , to control for unobserved time-invariant characteristics of

the zip codes where an EE operates. Exhibit A-1 presents the full regression results.

**ExhibitA-1. Predictors of Healthy Families or Medi-Cal Children Application Submissions and Share of Submissions Accepted by Enrollment Entities**

Type of Entity	Submissions Per 100 Days mean = 5.28	Share Accepted weighted mean = .412
Log(# of CAAs)	7.95 (.976)	-.016 (.007)
# of Competitors upon entry	-.424 (.176)	-.002 (.004)
Days in Program	--	.0002 (.00006)
(Days in Program) <sup>2</sup>	--	-2.52e-08 (2.74e-08)
Community or Faith Based Organization	-6.16 (1.53)	.0053 (.025)
Government Funded	.229 (.427)	-.079 (.042)
Hospital	1.22 (3.43)	-.010 (.046)
Insurance Broker/Agent	-2.44 (1.17)	.077 (.027)
Provider	-1.71 (1.29)	.019 (.024)
School	-7.69 (1.97)	.043 (.028)
Tax Preparer	-1.08 (2.29)	.087 (.033)
Zip Code Fixed Effects	Yes	Yes
Observations	2722	2722
Adjusted R-squared	.405	.731

Notes: Data are at the enrollment entity level. Clinic is the omitted group. All regressions include zip code fixed effects. Regressions of the share of applications that were accepted are weighted by the number of submissions. Standard errors are “clustered” at the zip code level.

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<sup>1</sup> C. DeNavas-Walt et al., *Income, Poverty, and Health Insurance Coverage in the United States: 2005*, U.S. Government Printing Office, Washington, DC, 2006.

<sup>2</sup> T.M. Selden, J.L. Hudson, and J.S. Banthin, "Tracking Changes In Eligibility And Coverage Among Children, 1996-2002." *Health Affairs*, 23, no.5 (2004): 39-49.

<sup>3</sup> Estimates from the March 1999 CPS indicate that over 70 percent of uninsured children in California were eligible for Medicaid or SCHIP (California Department of Health Services, 2000).

<sup>4</sup> M. Perry et al., *Medicaid and Children: Overcoming Barriers to Medicaid Enrollment: Findings from a National Survey*. Washington DC: Kaiser Commission on Medicaid and the Uninsured. 2000; D. Card and L. Shore-Sheppard, "Using Discontinuous Eligibility Rules to Identify the Effects of the Federal Medicaid Expansions on Low Income Children," *Review of Economics and Statistics*, 86, no. 3 (2004):752-766.; G. Kenney, and J. Haley, *Why Aren't More Uninsured Children Enrolled in Medicaid or SCHIP?*, The Urban Institute, Series B, No. B-35. 2001; G. Kenney, J. Haley and L. Dubay, *How Familiar Are Low-Income Parents With Medicaid and SCHIP*, The Urban Institute, Series B, No. B-34, 2001; J.S. McAlearney, "Opportunities for Outreach:

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Medicaid Participation Among Children in Ohio," *Journal of Health Care for the Poor and Underserved*, 15 (2004): 357-74.

<sup>5</sup> M. Mickey, CHIP Outreach and Enrollment: A View from the States, American Public Health Services Association Report, 1999; Perry et al. "Medicaid and Children"; Rosenbach et al. "Implementation"; D. Ringold, T. Olson, and L. Leete, CHIP and Medicaid Outreach: Strategies, Efforts, and Evaluation, Federalism Research Group. 2003.

<sup>6</sup> More is known about the impact of SCHIP design features on take-up. This work finds that eliminating asset tests and face to face interviews, offering continuous coverage without monthly income verification, and instituting a joint SCHIP/Medicaid application form increases take-up. Mandatory waiting periods have the opposite effect. C. Bansak and S. Raphael, "The Effects of State Policy Design Features on Take Up and Crowd Out Rates for the State Children's Health Insurance Program," *Journal of Policy Analysis and Management* (forthcoming); B. Wolfe and S. Scrivner, "The Devil May be in the Details: How the Characteristics of SCHIP Programs Affect Take-Up," *Journal of Policy Analysis and Management*, 24, no. 3 (2005): 499-522; K. Kronebush and B. Elbel, "Enrolling Children in

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Public Insurance: SCHIP, Medicaid and State Implementation," *Journal of Health Politics, Policy, and Law*, 29, no. 3 (2004): 451-489.

<sup>7</sup> US General Accounting Office, 1998. *Medicaid: Demographics of non-enrolled children suggest state outreach strategies*. Washington DC:US Government Printing Office, (GAO Pub no. GAO/HEHS-98-93); M. Perry et al., *Medicaid and Children*; Kenney and Haley, *Why Aren't More Uninsured Children Enrolled*; McAlearney, "Opportunities for Outreach"; J. Stuber and E. Bradley, "Barriers to Medicaid Enrollment: Who Is at Risk?" *American Journal of Public Health*, 95, no. 2 (2005): 292-298.

<sup>8</sup> I. Hill, M.E. Harrington, and C. Hawkes, 2003. *Congressionally Mandated Evaluation of the State Children's Health Insurance Program, Final Cross-Cutting Report on the Findings from Ten State Site Visits*. Report submitted to the U.S. Department of Health and Human Services. Mathematica Policy Research and The Urban Institute; Rosenbach et al. "Implementation".

<sup>9</sup> Wolfe and Scrivner, 2005 also provide evidence that dedicated phone help lines and websites improve take-up.

<sup>10</sup> Reimbursements are based on successful applications by program. If a family application has multiple children,

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some eligible for Medi-Cal and some for SCHIP, the maximum reimbursement for that application would be \$100 (\$50 for Healthy Families and \$50 for Medi-Cal).

<sup>11</sup> See <http://www.mrmib.ca.gov/MRMIB/HFP/CAAFactBk.pdf>

<sup>12</sup> M. Perry et al., *Medicaid and Children*; J. Stuber et al., *Beyond Stigma: What Barriers Actually Affect the Decisions of Low-Income Families to Enroll in Medicaid*, Center for Health Services Research and Policy, The George Washington University, Issue Brief, 2000.

<sup>13</sup> A. Aizer. "Public Health Insurance, Program Take-up and Child Health," *Review of Economics and Statistics*, forthcoming.

<sup>14</sup> Aizer also analyzed the effect of a statewide television advertising campaign. Her results indicate that this also had a large impact on enrollment.

<sup>15</sup> During the 2000/1 and 2001/2 fiscal years, about 10 percent of assisted applications deemed eligible were completed by contract-based entities.

<sup>16</sup> Prior to July 2003, fees were paid for assisting women applying for the state's subsidized insurance for pregnant women and infants (AIM) and adults applying for the state's high risk insurance pool (MRMIP). Application assistance fees for these programs have not been reinstated.

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<sup>17</sup> State administrators indicate that referral forms distributed by schools are an effective and growing outreach tool, which is consistent with the experience in other states that use schools for SCHIP outreach (see Rosenbach et al. "Implementation.").

<sup>18</sup> This success rate is far below official reports (e.g. see *2002 Application Assistance Factbook*). Official figures put success rates for assisted application at about 79 percent (compared to 63 percent for unassisted applications). Some of the discrepancy is from double counting resubmitted applications that were initially deemed incomplete. Some may also stem from double counting applications that are forwarded to both the Healthy Families and Medi-Cal programs for eligibility determination.

<sup>19</sup> A. Aizer, "Public Health Insurance"; Perry et al. "Medicaid and Children"; Stuber et al. *Beyond Stigma*.

<sup>20</sup> Data limitations prevent us from assessing subsequent utilization. Brokers, although better than other EE types at enrolling children in public health insurance, may, for example, be less efficient at ensuring access to care.

<sup>21</sup> D.W. Garnick, K. Swartz and K.C. Swarka, "Insurance Agents: Ignored Players in Health Insurance Reform," *Health Affairs* (March/April 1998): 137-143; J.M. Yegian et al.,



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"The Health Insurance Plan of California: The First Five Years," *Health Affairs*, (September/October 2000); M.A. Hall, "The Role of Independent Agents in the Success of Health Insurance Market Reforms," *The Milbank Quarterly*, (2000): 23-45.

<sup>22</sup> Rosenbach et al. "Implementation."

## Technical Appendix

We estimated multivariate regression models to test for within-area differences in enrollment entity (EE) performance. The two performance measures we analyzed were number of submissions per 100 days—i.e. volume—and the share of applications deemed eligible—i.e. the acceptance rate. Specifically, we estimated models of the form:

$$(1) \quad Y_{ze} = \alpha + X'\beta + \gamma TYPE + \delta_z + \varepsilon_{ze},$$

where  $Y_{ze}$  measures the volume or acceptance rate for entity  $e$  in zip code  $z$ . The acceptance rate models were weighted by submissions to account for differences in EE volume. The variables in  $X$  capture EE characteristics — the log of their number of CAAs, the number of competitors in the zip code at entry into the program, and, for the share analysis, the number of days the entity has been operating in the program and its square.

*TYPE* represents a set of indicator variables for each type of EE — community/faith-based organization, government-funded, hospital, provider, insurance broker/agent, tax preparer or clinics (the omitted category). The models include zip code fixed effects,  $\delta_z$ , to control for unobserved time-invariant characteristics of the zip codes where an EE operates. Exhibit A-1 presents the full regression results.

**ExhibitA-1. Predictors of Healthy Families or Medi-Cal Children  
Application Submissions and Share of Submissions Accepted by  
Enrollment Entities**

	Submissions Per 100 Days mean = 5.28	Share Accepted weighted mean = .412
Log(# of CAAs)	7.95 (.976)	-.016 (.007)
# of Competitors upon entry	-.424 (.176)	-.002 (.004)
Days in Program	--	.0002 (.00006)
(Days in Program) <sup>2</sup>	--	-2.52e-08 (2.74e-08)
Community or Faith Based Organization	-6.16 (1.53)	.0053 (.025)
Government Funded	.229 (.427)	-.079 (.042)
Hospital	1.22 (3.43)	-.010 (.046)
Insurance Broker/Agent	-2.44 (1.17)	.077 (.027)
Provider	-1.71 (1.29)	.019 (.024)
School	-7.69 (1.97)	.043 (.028)
Tax Preparer	-1.08 (2.29)	.087 (.033)
Observations	2722	2722
Adjusted R-squared	.405	.731

Notes: Data are at the enrollment entity level. Clinic is the omitted group. All regressions include zip code fixed effects. Regressions of the share of applications that were accepted are weighted by the number of submissions. Standard errors are "clustered" at the zip code level.