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FROM SAN FRANCISCO

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ABSTRACT

In 2006 San Francisco adopted major health reform, becoming the first city to implement a pay-or-play employer health spending mandate. It also created Healthy San Francisco, a “public option” to promote affordable universal access to care. Using the 2008 Bay Area Employer Health Benefits Survey, we find that most employers (75%) had to increase health spending to comply with the law, yet most (64%) are supportive of the law. There is substantial employer demand for the public option, with 21% of firms using Healthy San Francisco for at least some employees, yet there is little evidence of firms dropping existing insurance offerings in the first year after implementation.

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Introduction

On July 18, 2006, San Francisco took the first steps towards achieving universal health care coverage in the city by passing the Health Care Security Ordinance (HCSO) into law. Part of this reform was a pay-or-play type of minimum employer health spending requirement which became effective on January 9, 2008 and now covers all private sector employers hiring 20 or more workers. Additionally, the city created a low-cost health access plan called “Healthy San Francisco” which both strengthened the safety net and provided a “public option” for employers to fulfill their health spending requirement. Although this public option is not formally insurance, it is tantamount to a generous public insurance policy, with the significant caveat that it is restricted to a network of providers located only within San Francisco (Katz 2008).

Operated by the San Francisco Department of Public Health, Healthy San Francisco was launched in July of 2007 and offers affordable access to select public and private facilities within the city of San Francisco for uninsured San Francisco residents. Employers can meet their spending requirement through providing insurance to workers, paying into Health Savings Accounts or Health Reimbursement Accounts, or by paying into the public “Healthy San Francisco” program. In this sense, the policy is similar to “pay or play” mandates that have been widely discussed in the context of national and state level health reform debates.

Employer health insurance mandates have garnered increasing attention as Massachusetts has implemented state-level health reform and recently enacted federal health insurance reform has also included a variant of a pay-or-play mandate. There are many unresolved questions as to how an employer mandate would perform in practice, but there is little evidence to inform projections of employer response at the state or national level. When given different options, how do employers choose to comply with the mandate? If one of these options is paying into a

public program, how many and what type of employers opt to “pay” into a public plan, as opposed to “play”—i.e., meet the spending requirement through providing employees with insurance or health accounts? How supportive are employers of such mandates? Using the unique policy innovation implemented in San Francisco, we provide initial evidence on these questions.

Hawaii and Massachusetts are the only two states so far yielding evidence on employer mandates, although Massachusetts’ employer requirement is fairly minimal (a \$295 annual “fair share” contribution) (www.mass.gov). Since 1974, Hawaii has required all employers to provide health care benefits to any employee who works 20 hours a week or more (there is no “pay” option). San Francisco is the first effort to enact an employer health spending mandate at the municipal level. Massachusetts’ reform, like reform in San Francisco, was also associated with an eligibility expansion for public health coverage. However, Massachusetts stands alone in also implementing an individual mandate to carry insurance.

In 2014, the federal Patient Protection and Affordable Care Act will assess a fee on all U.S. employers with more than 50 employees that do not offer coverage but have at least one full-time employee who receives a premium tax credit. That fee will be \$2,000 per full-time employee, excluding the first 30 employees from the assessment. Employers with more than 50 employees that offer coverage, but who have at least one full-time employee receiving a premium tax credit, will pay the lesser of \$3,000 for each employee receiving a premium credit or \$2,000 for each full-time employee (Kaiser Family Foundation 2010). This is a form of a pay-or-play mandate similar to the one in San Francisco, and is about the same magnitude as the San Francisco mandate for medium size firms. Certain characteristics of the Patient Protection and Affordable Care Act make it more difficult for employers to comply with than the San Francisco

Ordinance, such as the fact that health reimbursement accounts will not be an allowable option for meeting the federal requirement. But other provisions make the federal law less costly for employers—e.g., a smaller proportion of employers will be subject to the federal mandate, part-time workers are exempted, and the fee assessed on non-offering employers is lower. Although generalization from a single city (especially a high income city with a strong safety net) such as San Francisco must be done with care, experience from San Francisco’s mandate may provide a useful benchmark compared to other less stringent mandates.

Several recent studies have examined employer responses to the Massachusetts mandate. Based on a pre-post comparison from a Massachusetts household survey, Long and Masi (2008) found no evidence of dropped coverage or restricted eligibility, and no major changes in the scope of benefits, network of providers, cost to employees or quality of available care under health plans. They also found that employer sponsored coverage had expanded due to increased take up among employees. Gabel and colleagues surveyed Massachusetts employers, finding that the percentage of firms with 3 or more employees offering health benefits increased from 73 to 79 percent, that there was an increase in firms offering Section 125 plans, and that Massachusetts employers were less likely than other US firms to terminate coverage or restrict eligibility (Gabel et al. 2008, Gabel, Whitmore, Pickreign 2007). Furthermore, evidence from Massachusetts indicates that despite concerns about potential crowd out from new public options (Cutler and Gruber 1996, Gruber and Simon 2008), there was actually an expansion in private coverage. However, in the Massachusetts case it can be difficult to sort out the effects of the employer mandate separately from that of the individual insurance mandate. In contrast, San Francisco does not have such an individual mandate, but imposes a strong employer mandate, allowing clearer interpretation of the effects of a pay-or-play requirement.

Researchers have also studied how the Hawaii employer mandate has affected coverage levels using the United States or individual states as a comparison group. The Hawaiian plan is an employer mandate without a “pay” option, which is useful for isolating insurance coverage effects, but cannot help in predicting the crowd-out or selection behaviors when a public option is available. Research on the Hawaii mandate has shown that the mandate reduced uninsurance, though the amount of the reduction is disputed (Buchmueller, DiNardo, Valletta 2009, Dick 1994, Lee et al. 2005, Lewin and Sybinsky 1993, Neubauer 1993, Thurston 1997). However, there is some evidence that employers avoid the mandate by hiring part time workers, indicating labor market distortions. In San Francisco such substitution toward part-time workers would be unlikely, given that the mandate applies to all employees working 8 hours or more (as well as temp and contract workers).

The San Francisco reforms offer a unique opportunity to advance our understanding of the effects of these types of reforms. One key feature is that surrounding Bay Area counties offer natural comparison groups that allow for a stronger research design than have been possible for Hawaii and Massachusetts. Second, the nature of the policy allows us to answer some questions that were not possible to answer using either or both of the other policy interventions. For example, the use of a public plan in the “pay” option in San Francisco allows us to evaluate how employers choose these options, something that the Hawaiian experience cannot speak to. Moreover, given the minimal nature of the fee paid by non-offering employers in Massachusetts, inferences from that state may be difficult to generalize to more stringent pay-or-play mandates such as those scheduled to take effect in 2014 under new federal reform. There is also little evidence on how employers change their health plans in response to a mandate, how employers choose to comply with a mandate, or the role of Health Reimbursement Accounts (HRAs) and

Health Savings Accounts (HSAs). Finally, it is always possible that the nature of the effects may relate to the unique characteristics of Hawaii and Massachusetts. Although the same is true when focusing on a particular city like San Francisco, evidence from multiple cases helps paint a more representative picture about the effects of employer mandates.

The San Francisco Health Care Security Ordinance

The HCSO took effect on January 9, 2008 for private employers with 50 or more employees, and April 1, 2008 for for-profit employers with 20-49 employees. After the ordinance was adopted by the city of San Francisco in 2006, the HCSO was challenged under the Employee Retirement Income Security Act (ERISA) by the Golden Gate Restaurant Association, leading to a minor eight day postponement of implementation as well as further court challenges that were not resolved until June 2010 when the Supreme Court rejected a request to review the ordinance. The employer spending requirement varies by employer size and profit status. In 2008, the Ordinance required employers in San Francisco with 20-99 workers nationwide to meet a minimum spending requirement of \$1.17 for health care services for each of their employees. Employers with 100 or more workers nationwide were required to spend \$1.76 per hour per worker. On January 1, 2009, this rate was increased to \$1.23 per hour for employers with 20-99 employees and \$1.85 for firms with 100 or more employees. For-profit employers with fewer than 20 employees and non-profit employers with fewer than 50 employees are exempt from the spending requirement (about 25% of San Francisco workers at for-profit firms are employed at exempt firms).¹ A key feature of the HCSO compared to some other employer mandates is that the employer must spend this minimum amount not as an average percent of payroll, but rather for each and every non-exempt employee. This feature implies that the San

¹ Author calculations from Dun and Bradstreet database, provided by Survey Sampling, Inc.

Francisco employer mandate is substantially more stringent than the key pay-or-play provision in the 2010 federal Patient Protection and Affordable Care Act.

Employers may spend the funds on a third-party health provider (including medical, dental and vision insurance), reimburse employees directly for their health expenses, create health savings or health reimbursement accounts, or pay the funds to the City for their employees' access to health care through participation in Healthy San Francisco. Some limited classes of workers are exempt from the mandate: managerial, supervisory, and confidential employees who earn over \$72,450 per year, employees who are eligible for Medicare and/or CHAMPUS/TRICARE, and employees working less than 10 hours per week are exempt. Finally, workers who verify that they receive dependent coverage may opt out voluntarily.

Conceptual Framework

Under the San Francisco Health Care Security Ordinance, firms must decide whether to offer private health benefits or pay into the public plan. If they offer private benefits, employers must decide how much to contribute, and which types of benefits to offer. In a competitive labor market with a fixed labor supply, theory predicts that the imposition of an employer mandate to provide health benefits will shift the labor demand curve downward and wages and employment will fall. However, if employees value the additional benefit at its cost, labor supply will shift outward and employment will not fall (though wages will fall by the value employees place on the benefit). In equilibrium, if the value employees place on health insurance is equivalent to the employers' costs of providing insurance, wages will be reduced by the full cost of the benefit and employment will be unchanged. If employees are near minimum wage though then it may not be possible for wages to adjust, thus some employers may have added reason to prefer the minimum

allowable benefit packages. It follows that an employer's benefit decisions are based largely around local labor market conditions, the cost of the benefits (net of public subsidies), and the value that employees place on different types of benefits and wages (Bundorf 2002, Dranove, Spier & Baker 2000). The cost and value of the benefit package is influenced by firm and employee characteristics, such as employer size or the health profile of employees.

Pay-or-Play Decision

When there is no mandate to provide coverage, an employer will offer a private benefit package if the sum of the value that employees in the firm place on this benefit package is greater than the cost to the employer offering the benefit. Under a pay-or-play mandate, the choice becomes whether to offer private coverage or pay into the public option, Healthy San Francisco. The employer will pay into Healthy San Francisco if the total compensation costs (necessary to attract the optimal labor supply) are lower when paying the minimum benefit to the City than when offering private benefits. Thus theory predicts that firms hiring workers with weak preferences for private health insurance, and firms in which the costs of providing coverage are higher, will be less likely to offer private health benefits. Historically, the firms least likely to offer coverage or other benefits are those with fewer employees, lower-wage workforces, greater turnover, no unions, and a large proportion of part-time employees (Gabel, Claxton, Holve, et al. 2003). Employers are more likely to offer benefits and to make greater contributions in communities with tighter labor markets, less concentrated labor purchasers, greater union penetration, and a greater share of workers in big business and a small share in regulated industries (Marquis & Long 2001).

Crowd Out

Under an employer mandate with a public option, some firms may choose to drop their private coverage policies if they feel that the public option and private coverage are substitutes to employees and the public option is less expensive (Cutler & Gruber 1996). In this case, Healthy San Francisco and private health insurance are not likely to be perceived as substitutes in the first year of implementation: Healthy San Francisco has a limited provider network, there may be stigma associated with public programs, enrollment may be perceived as difficult, and Healthy San Francisco may be perceived as temporary. All of these factors may reduce the value of the public option to employees. In addition, employees must themselves enroll in Healthy San Francisco after the employer makes a contribution on their behalf. If the employee does not enroll or does not attribute the reduced participation fees to the employer, they will not perceive any value from the benefit, and employers will be less able to pass on any of the costs to wages. However, if employees are part-time, or if they qualify for means-tested Healthy San Francisco premium subsidies, this public option may be more attractive to workers. Healthy San Francisco quarterly enrollment fees are based on a sliding scale, with greater subsidies for low-income workers. In addition, after employers pay into Healthy San Francisco for part-time workers, these employees are eligible to receive benefits at a 75% discount, the same rates as full time workers. Healthy San Francisco premiums are also community rated, so firms with higher risk profiles may find significant cost savings in Healthy San Francisco compared to the private market. Workers in these categories may place higher value on Healthy San Francisco benefits, and firms with more part-time, low-wage, or high risk employees may be more likely to choose the public option.

Health Reimbursement Accounts

In addition to traditional private insurance and Healthy San Francisco, employers have the option of putting the required funds in a Health Reimbursement Account (HRA) for the employee. HRAs are attractive to employers because the employer owns the account and can take back unused funds at the end of the year or upon termination of employment. It is currently unclear whether firms may meet the minimum spending requirement based on the amount of gross contributions to an HRA, even if they take back unused funds such that the net amount paid is below the minimum spending requirement. Anecdotally, benefits consultants in San Francisco have suggested to businesses that HRAs may be the lowest cost strategy for meeting the requirement, thus it is of interest to measure how commonly this strategy is adopted.

Market Distortions and Policy Constraints

In reality there are many distortions already existing from a theoretically perfectly competitive insurance market. For example, moral hazard increases the cost of insurance,, employer-sponsored insurance premiums are exempt from taxes (lowering the cost of insurance to workers), employers differ in underlying cost of providing health insurance, and the cost of offering each worker a different health insurance plan would be prohibitive. Additionally, the presence of a city-wide minimum wage law in San Francisco implies that wages may not be able to adjust to compensate for the employer health spending requirement. In 2008, the minimum wage was \$9.36, significantly higher than the federal rate of \$6.55. In 2009-2010, the minimum wage in San Francisco is \$9.79 an hour, while the federal rate is \$7.25. In addition, all employers in San Francisco must provide paid sick leave to each employee. If workers do not have productivity equal to the minimum wage in addition to the cost of the fringe benefits including

health insurance and paid sick leave benefits, these workers risk becoming unemployed (Bundorf 2002). Besides passing health spending costs on to employees via reduced wages, employers may find other ways to absorb costs such as reducing number of hours of employment, or passing costs along to the consumer in firms facing imperfectly competitive product markets. Additionally, in the presence of labor market frictions, an increase in the level of overall compensation may make it easier for firms to fill vacancies and retain employees. The employer spending requirement in San Francisco amounts to about \$2,415 annually for an employee in a medium size firm (20-99 employees) and \$3,633 annually for an employee in a large firm (≥ 100 employees). This represents a substantial increase in compensation: 12% for a minimum wage worker in a medium size firm and 18% for a minimum wage worker in a large firm.

Study Data and Methods

The primary data source for this analysis is the 2008 Bay Area Employer Health Benefits Survey, conducted in 2008 by the University of California, Berkeley. National Research, LLC was contracted to complete the interviews.² National Research conducted telephone interviews with employee benefit managers during August 2008 – January 2009. The survey has many similarities to the Kaiser Family Foundation/HRET employer health benefits survey (and used the same survey firm) with relevant additions to analyze the San Francisco market and HCSO. The survey asked firms about their health benefit offerings in 2007 before the employer spending requirement went into effect, in addition to 2008 changes in benefits, in order to measure both baseline offerings and post-implementation changes. This characteristic of the survey may introduce recall bias, as the survey asks employers to recollect details of health benefit plans

² Funding for the survey was provided by the Robert Wood Johnson Foundation, the University of California Labor and Employment Research Fund, and the California Program on Access to Care.

from the prior year. However, since health benefit plans are updated infrequently (usually annually), the magnitude of such bias is likely to be limited.

Our sampling frame consisted of all 2,886 for-profit San Francisco firms with more than 20 employees according to a Dun and Bradstreet database of firms, of which we interviewed 523. During the same period, we also surveyed 310 firms with more than 20 employees from areas surrounding San Francisco to serve as a control group. In addition, we sampled another 146 non-profit firms in San Francisco with greater than 50 employees and interviewed 20 of them. The overall response rate was 21%. An additional 639 firms in San Francisco and 371 firms in comparison counties refused to participate in the survey but answered one question: “Does your firm currently offer health benefits to at least some of your employees?” The percent offering health insurance was 94% in our completed sample as compared to 91% in the sample refusing to participate; thus while the low response rate is concerning, evidence suggests that systematic differences in health insurance offering were small. All results reported below are weighted to reflect the population distribution of firm characteristics in the surveyed counties.³

Our analysis begins by categorizing the degree to which firms were already in compliance with the health spending requirements at the 2007 pre-HCSO baseline, or conversely how large of a change they would have to make to their health benefit spending to comply with HCSO. First, we consider the percent of employees eligible for health coverage, and then the percent of employees taking up coverage. To then calculate how many employees still need to be offered coverage and paid for, we calculate the proportion of workers required to be covered under the mandate by estimating the proportion of workers exempted due to being part-time or

³ Response rates differed only slightly by industry group and employer size, with somewhat lower response in the Transportation, Communications, Electric, Gas, And Sanitary Services SIC group and larger firms. We constructed employer expansion weights based on firm size at site, 1-digit SIC industry group and profit status.

new employees.⁴ An “eligibility gap” is then created by subtracting from this the percentage of workers covered by insurance prior to the employer mandate. By then adding to the eligibility gap the proportion of workers who were *eligible* in 2007 but opted to not take up coverage, we calculate the “coverage gap.” This gap represents the additional percentage of workers who will need to be covered under the mandate unless they sign a waiver.

A third type of compliance measure that we report is the “contribution gap,” which is based on the difference between post-HCSO mandated spending levels and pre-HCSO reported employer total health benefit spending in 2007. The baseline per-worker-hour spending contribution is calculated for each health plan the firm offers by dividing the single enrollee monthly employer premium by 172 work hours. For each plan the firm offers, this figure is then subtracted from either \$1.76 for firms with more than 100 employees nationwide or \$1.17 for nonprofit firms with more than 50 employees and for-profit firms with more than 20 employees nationwide. For firms with multiple plans we create a weighted average of these payment differences based on the enrollment in each health plan and the number of workers who were uncovered in 2007. This contribution gap measures the per worker hour increase in health spending that the firm will be required to make to comply with the employer mandate (assuming that spending does not decrease for any employees currently exceeding the minimum). Because we need to make various exemption assumptions to calculate these compliance measures, we also report ranges of compliance corresponding to upper and lower bound assumptions.⁵

⁴ We subtract out the proportion of workers who worked less than 10 hours per week (because they were exempt from the mandate in the first year), and a quarter of those hired in the past year (because employees with less than 90 calendar days of work are exempt). The remaining workers are assumed to be eligible under the mandate, i.e. no voluntary waivers, and no other exemptions.

⁵ First, we do not know the number of workers hired in the last 90 calendar days; we only know the number of workers hired in the past year. We assume an even distribution of hiring over the year and use a quarter of those hired in the past year as an estimate for this group. Second, we do not know the joint distribution of tenure and

A different set of analyses examines various strategies that San Francisco firms have reported adopting by 2008 or are highly likely to adopt for 2009. These include the proportion contributing to the Healthy San Francisco public option, the proportion expanding private coverage in various dimensions, and the proportion contracting private coverage. Contraction could be due to either crowd out, or the need to reduce generosity for some employees in order to finance increased spending for other employees. We report each of these means for the overall San Francisco sample of firms covered by the employer mandate, as well as for a subgroup of firms who we estimate should be least impacted (have a small eligibility gap so little increased spending is needed) and most impacted (have a large eligibility gap, requiring larger spending increases). Our initial hypothesis is that highly impacted firms would respond more to the HCSO, but it is possible that less impacted firms (that have already revealed strong preferences for employer health spending) could also exhibit substantial changes.

To investigate the extent to which health benefit changes were likely caused by HCSO rather than reflecting other local trends, we next report regression-adjusted comparisons of health benefit changes in San Francisco firms compared to similar firms in surrounding Bay Area counties not subject to the HCSO mandate using a difference-in-difference framework. The local difference-in-difference method controls for common trends in the local area (i.e., San Francisco and adjacent counties) that vary along observable firm characteristics. It is possible that firms in San Francisco may have experienced other non-mandate related shocks that might differ from the surrounding counties in our comparison group. However, other recent work in

hours. We assume that those who were exempt due to part-time work were not also newly employed. If the same workers who were recently hired work less than 10 hours per week, we would overestimate the number of exempt workers in the firm. Finally, we do not know the effect of waivers on exemption. Workers with another form of health care coverage can sign a waiver to exempt them from the health care spending requirement. If those who currently do not take up insurance sign waivers, we would be underestimating the number of exempt workers in the firm.

identifying treatment effects across policy borders shows that local comparisons are often able to remove potential bias present in cross-state comparisons (Holmes 1998; Dube, Lester, Reich forthcoming).

To generate comparable survey responses for firms within and outside of San Francisco, the survey questions analyzed in this section did not refer to the HCSO, but rather asked simply whether firms had adopted the relevant change between 2007 and 2008. Questions analyzed include both coverage expansions and coverage contractions. For each question we report the San Francisco proportion of firms adopting the change, and then the regression-adjusted change in comparison counties as an estimate of the degree of change that San Francisco firms would have adopted even in the absence of the HCSO. The difference between the San Francisco and comparison firms is our best estimate of the degree to which HCSO causally induced health benefit changes by 2008. We report results both for the full sample of firms size 20 and over, and also for the subset of highly impacted firms. Regressions controlled for firm size (number of employees), profit status, whether the firm is part of a chain, and indicators for one-digit SIC industry type. We used ordinary least squares models for continuous outcome variables and probit models with reported marginal effects for binary outcome variables with one exception. We used linear regression in the “plan to start offering insurance” regression because of substantial problems of perfect prediction in this small sample of non-offering firms. We report Huber-White heteroskedasticity-robust standard errors for all regressions.

Results

Baseline Insurance Benefit Offering in San Francisco

Most targeted firms already offered health benefits to some employees, but not to all employees covered by HCSO. In San Francisco, 93 percent of firms with 20 or more employees already offered health insurance to some employees in 2007 before the employer mandate was implemented (Figure 1). This differed somewhat by firm size: firms with 20-99 employees had a 90 percent offer rate compared to 95 percent for firms with 100+ employees. These statistics are similar to national averages: 91% of U.S. firms with 20 or more employees offer health benefits, and the rate rises to 93% if we limit the sample to this size group in urban areas (Kaiser/HRET 2008). Among firms in San Francisco, restaurants were significantly less likely to offer health benefits at baseline, as were smaller firms with 20-50 employees. Firms with unionized workers were significantly more likely to offer health benefits.

After adjusting for firm characteristics, the percentage was statistically similar in comparison firms outside of San Francisco (94 percent overall), but lower in small San Francisco firms not subject to the mandate (80 percent). Like similar surveys, we found that the offer rate was slightly higher in our sample of completed interviews than among firms who refused to participate in the survey but answered just a single question about whether they offer insurance (Claxton et al. 2008). But the difference was very small: in the larger sample including these non-responders, insurance was offered by 93 percent of firms size 20 and over in San Francisco.

As mentioned above, the mandate is per each worker in the firm, thus while most firms offered insurance to some employees, initial eligibility rates are also important for measuring how binding the policy was for affected firms. In San Francisco and comparison firms that

offered insurance, about 86% of workers were eligible for benefits. Due to other forms of coverage or coverage refusal, 89% of eligible employees in San Francisco took up coverage (83% in comparison firms). This resulted in coverage for 77% of employees in San Francisco firms that offered health benefits (70% in comparison firms outside the city). On average, San Francisco firms required a minimum of 29.2 hours per week of work to qualify for benefits in 2007. Under the first year of implementation of the Health Care Security Ordinance, any employee who worked 10 hours per week or more on average needed to be paid health benefits. In 2009, workers who worked less than 8 hours a week on average were exempt.

Baseline Offering and Spending Gaps Relative to Mandate

Many plans offered in San Francisco at baseline did not meet the minimum health spending requirements of the mandate. The mean baseline monthly employer contribution for the most popular plan a company offered a single employee was \$320 for San Francisco firms and \$290 for comparison firms. In 2008, the average premium in the U.S. was \$392/month or \$4,704/year for single coverage (including employer and employee contributions, Claxton et al. 2008). The most popular plan across San Francisco firms with 20-99 employees had a mean hourly contribution of \$1.63 (based on a 172 hour work month). About 25 percent of surveyed firms in this group would not meet the minimum hourly benefit of \$1.17. Across San Francisco employers with more than 100 employees, the mean hourly contribution to the most popular plan was \$2.06. The required \$1.76 falls at about the 42nd percentile. Outside San Francisco, the mean hourly contribution for the most popular plan was \$1.69 and the median was \$1.66.

Figure 2 shows our three measures of compliance gaps for San Francisco firms at baseline before HCSO went into effect – based on eligibility, coverage, and enrollment-weighted

payments for health benefits across all plans the firm offers. At baseline, about 58% of firms were in compliance with eligibility requirements, 35% were in compliance with coverage requirements, and 25% were in compliance with coverage and spending requirements. The mean gap in hourly spending requirements on a per worker basis was \$0.54. This figure describes how much an employer needs to pay assuming that the employer keeps existing plans in place and there is no redistribution from more generous plans to less generous plans. The 25% in compliance estimate relies on several assumptions; if we instead assumed that half of the workers hired in the last year were hired in the last 90 days, and all of those who were eligible for insurance in 2007 but did not take up benefits sign voluntary waivers, then this estimate would rise to 41%. Alternatively, baseline compliance would have been estimated as low as 17% if we assumed every employee needed to be covered under the health spending requirement (i.e., assuming no part-time or new employees and no waivers).

Regression analyses show that firms with more low-wage, part-time (non-exempt), temporary and unionized workers and smaller firms were significantly more likely to have gaps in eligibility and coverage (results not shown). San Francisco restaurants were also more likely to have gaps in eligibility and coverage. In examining the relationship between generosity of benefits (as measured by the gap in per worker-hour spending at baseline), San Francisco firms had lower gaps (indicating more generous benefits) than firms in surrounding counties, as did firms with a greater proportion of workers over 65.

Employer Reported Changes in Health Benefits in San Francisco after Mandate Implementation (2008)

San Francisco firms employed a variety of strategies to comply with the mandate (Figure 3). About 21% of firms paid into Healthy San Francisco, about one-quarter of which also reported some other benefit change as well. Many of the firms who made a change to their health benefits did so by adding a new health insurance offering (28%). The new health insurance offering might include a Health Reimbursement Account (14%), a new high deductible health plan (10%), or a mini-medical plan (a plan with far lower benefits than a typical insurance plan, 9%). All of these changes are statistically significant except the proportion dropping a health insurance plan, which is too small to be differentiated from zero. Figure 3 shows the overall proportion of San Francisco firms adopting each strategy, along with the proportions among the least impacted (those who were already in compliance at baseline according to our best point estimate) and the most impacted (those with a spending gap of at least \$0.50 per worker). Those most heavily impacted by the HCSO were significantly more likely to create a new high deductible plan (7%), pay into an HRA (21%) or increase the employer insurance contribution (28%) than the least impacted firms.

There has been a significant demand for the public option, with about one-fifth of firms paying into Healthy San Francisco for at least some employees. Firms made use of the opportunity to pay into Healthy San Francisco to satisfy the mandate requirements. Of San Francisco firms in our sample, 21.2% responded that they were paying into Healthy San Francisco for their employees. The majority (87%) of those contributing paid into Healthy San Francisco for only some of their employees, not all firm employees. This figure suggests that employers were using the Healthy San Francisco public option for workers who are not eligible

or taking up coverage at baseline. Only 13% of those who contributed to Healthy San Francisco did so for all of their workers. Multi-establishment chains were significantly more likely to contribute to Healthy San Francisco, while smaller firms (firms with 20-50 and 50-100 employees) were less likely to use Healthy San Francisco to meet the mandate.

According to the city's reports, as of June 4, 2010 there are 53,058 enrollees in Healthy San Francisco; this compares to an estimated 60,000 uninsured adults in the city when Healthy San Francisco began, indicating high demand for the program by not just employers but individuals as well (Healthy San Francisco website). As of April 2009, over 902 employers had elected to pay into the public option, out of an estimated 5,000 total covered employers, yielding administrative estimates of public option demand that are quite similar to our survey-based estimates of 21%. Among the employees being paid for, approximately half live within San Francisco and hence are eligible for health care access through the Healthy San Francisco program, and half live outside San Francisco thus receive their payments through a city-run Health Reimbursement Account (SF Department of Public Health 2009).

Comparison of Changes in Health Benefits with Neighboring Counties

About half of non-offering firms subject to the mandate reported that they were likely to begin offering insurance after the 2008 implementation of the mandate. Descriptively, 42% of non-offering firms in San Francisco who were subject to the mandate said they were very or somewhat likely to start offering insurance in 2008, as opposed to only 15% in comparison firms (but the sample size is small, with only 42 non-offering firms). When San Francisco firms were separately asked a direct question about how they would respond to the mandate, again about half of non-offering firms subject to the mandate reported that they had already implemented or

were planning to implement insurance offering. Table 1 reports regression adjusted estimates of the effect of Healthy San Francisco on new insurance offering among baseline non-offerors: firms in San Francisco were 33 percentage points more likely to report that they planned to begin offering insurance in 2008 compared to bay area firms not subject to the HCSO, a statistically significant difference.

San Francisco firms were also significantly more likely than their bay area counterparts to begin offering a Health Reimbursement Account (HRA) after the mandate. Health Reimbursement Accounts are attractive to employers because a) employers can deposit the exact amount of the mandate for each worker into the account, b) the employer owns the account and can take back unused funds at the end of the year or upon termination of employment and c) employees who live outside San Francisco are not eligible for Healthy San Francisco, which makes HRA's more attractive from their perspective. After adjusting for firm characteristics, firms subject to the mandate were more likely to offer a new Health Reimbursement Account in 2008 (15% of San Francisco firms added a new HRA as opposed to 7% in bay area firms). In the group most impacted by the HCSO, firms in San Francisco were 25% more likely to begin offering an HRA. San Francisco firms likely to offer an HRA were disproportionately in the restaurant industry, and were characterized by a greater proportion of female workers, a greater proportion of temporary workers, and a greater proportion of low wage workers earning between \$10 and \$12 dollars per hour (results not shown).

Table 1 also presents analysis of reported reductions in health benefit generosity. Relative to comparison firms outside of San Francisco, a smaller portion of firms in San Francisco cut back employer sponsored health benefits over time. After adjusting for firm characteristics, fewer firms in San Francisco (11%) raised employee health insurance premiums

by 25% or more, raised the deductible on a popular plan, dropped coverage or restricted benefits than we predict would have absent the mandate (18%, Table 1). There is also some evidence that the HCSO may be slowing the adoption of high deductible plans in San Francisco. After adjusting for firm characteristics, a slightly smaller portion of San Francisco firms (10%) added a new high deductible health plan (which tend to have lower monthly premiums) than otherwise would have occurred (14%). Also, a smaller proportion (3% vs. 8%) increased the deductible of a popular plan to over \$1,100 for singles in order to make it Health Savings Account qualified.

There is little evidence of crowd-out due to the introduction of improved safety net coverage and the “public option.” The unadjusted portion of firms dropping insurance in San Francisco (0.5%) is slightly lower than in the control group (2%, not shown). After adjustment for firm characteristics, the portion predicted in San Francisco with the treatment was not any higher than in surrounding counties (Table 1). The unadjusted proportion of firms restricting benefits in 2008 was also not any higher in San Francisco (1.1% in San Francisco versus 2.0% in bay area firms). After regression adjustment, the difference was not significant. Finally, although not reported in the table, less than 5% of firms who were offering coverage in 2007 and are now paying into the city option for some of their workers indicated that they have already dropped or are considering dropping private employer health insurance plans.

Employer Attitudes Towards the Mandate

Most employers reported supporting the mandate, even among the highly impacted firms. After 6 months to a year into implementation, only 14% of firms subject to the mandate were unaware of the regulation (Figure 4). This high awareness is likely in part due to the City’s aggressive employer outreach efforts, which include mailing out notices to employers,

distributing brochures in six languages, doing merchant walks, making radio public service announcements, running bus shelter and print advertisements, and making presentations to employer and employee associations.

In terms of employer expectations regarding the mandate, 41% of San Francisco employers felt it is very likely that the health spending requirement will still be in place in one year, while about 10% felt it is not likely. At the time of the survey there was still considerable uncertainty about the outcome of the legal challenges to the employer mandate, thus some employers may have refrained from planning major benefit changes in response to the mandate in this first year. Since the Healthy San Francisco public option may have been the simplest alternative for many employers, this uncertainty may have raised the use of the public option over what it might have been otherwise. But the uncertainty may also have restrained other employers from dropping insurance coverage in favor of the public plan. Longer-term follow-ups will be needed to better understand these competing effects of the uncertainty.

Most employers said that it was not difficult to comply with the mandate, while 17% thought it was very difficult to comply and 26% found compliance somewhat difficult, for a total of 43% reporting some difficulty with compliance. Among San Francisco restaurants surveyed, about 85% found it difficult to comply with the HCSO and 66% of those who were most impacted found it difficult to comply.

Despite the large percent of firms who needed to make changes to become compliant, the majority of firms (64%) were very or somewhat supportive of the mandate. Surprisingly, the proportion was similar among restaurants (61%), one of the groups whose industry association was most vocally against the HCSO. The proportion of firms in support was also similar among

firms that are most impacted by the HCSO (55%), while it was only slightly lower (51%) in the small subset of firms that did not offer health insurance in 2007.

Discussion

San Francisco firms subject to a mandated health spending requirement have altered their behavior in 2008 as compared to Bay Area comparison firms not subject to mandated spending. In the early stages of implementation, about one-fifth of employers are responding to the spending requirement by paying into the Healthy San Francisco public option for some employees. While comparison firms outside San Francisco are increasing employee contributions and switching to high deductible health plans, San Francisco firms subject to the mandate are adding new health insurance options. There is little evidence at this time of crowd-out due to the mandate, such as stopping offering insurance or restricting the generosity of benefits for some workers. There is some evidence that San Francisco firms are more likely to increase HRA offerings in response to the mandate. When we considered a highly impacted industry with a large share of minimum wage workers, restaurants, we did not see a differential employment trend in San Francisco as compared to surrounding areas. We do find evidence that restaurants are passing some of these costs on to consumers through surcharges.

It is still early to draw firm conclusions about how firms absorbed the added costs of the health spending requirement. Economic theory predicts that there may be impacts on employment, wages, prices, or other compensation benefits. Any disemployment effect would be most likely for workers earning at or near the minimum wage (currently \$9.79 in San Francisco). In our sample, around 3% of workers in firms with more than 19 employees earned less than 10 dollars an hour. One of the industries most impacted by the HCSO is the “Eating and

Drinking Places” group. Within this group, our sample shows that 25% of the workers earn under 10 dollars an hour, and 68% of establishments are in our most impacted group, with a gap in health benefit spending per worker of at least 50 cents per hour. A related paper on this topic shows that the worries about substantial job losses from the employer spending requirement did not materialize during the first year the mandate was in place (Colla, Dube, Dow 2010). This was also true for highly impacted sectors such as restaurants, who seemed to have passed some of the cost of the mandate on to consumers through HCSO-specific surcharges.

How relevant are these findings to the national context in terms of a pay-or-play employer mandate as part of the federal Patient Protection and Affordable Care Act? Given the limited evidence available from other settings it is important to study San Francisco’s experience carefully. But there are features of the San Francisco case that are important to bear in mind: geographic and political characteristics of San Francisco, and specific parameters of the employer health spending mandate. First, San Francisco has the unique trait of being a city and a county giving it broad municipal power. Second, the residents of San Francisco are largely high-income (median household income in 2008 was \$73,798) and well-educated (81% high school, 45% bachelor degree or higher (City Data website, DeLeon 2002)). Third, San Francisco is a peninsula, which makes some geographic product markets more limited. Finally, it is important to bear in mind that San Francisco’s HCSO is on a per worker-hour basis, more firms will have to make changes than if the health spending requirement were as a percentage of payroll or if more workers were exempt due to part-time hours. Most firms in San Francisco will have to make a change to their health benefit policies due to the Health Care Security Ordinance, particularly in the eligibility of classes of workers such as temporary or part-time workers.

Employer responses to a pay-or-play mandate will also differ according to perceived costs and benefits of each choice, particularly the perceived benefits of a public option such as Healthy San Francisco. Healthy San Francisco is in many ways a repackaging of the relatively generous set of public health services previously available in San Francisco, although that is changing as private providers such as Kaiser have now also become care delivery options for program enrollees. Safety net usage may also be perceived as more legitimized now that it has clear copayments and authorizations, as well as medical homes for enrollees. But the fact that access is limited only to San Francisco implies that this will necessarily be perceived as an inferior option for many employers and employees, thus crowd-out is likely to be lower here than if a true Medicare-like “public option” were introduced at a national level. Nevertheless it will be interesting to see if the use of this program by employers rises or falls with time and development of the program.

Like Massachusetts and Hawaii, the Patient Protection and Affordable Care Act neither includes a public option for access to health benefits, nor would an HRA qualify as coverage. Therefore, some of the lower-cost and commitment choices that employers made in the early days of the San Francisco Ordinance will not be available to firms to comply with the Patient Protection and Affordable Care Act. Those San Francisco firms currently offering HRAs in order to comply with the San Francisco law will need to begin offering more traditional insurance plans, as HRAs won’t qualify for the individual mandate. Finally, workers are unlikely to attribute the fine an employer pays for not providing health insurance as a benefit of employment the way they might in San Francisco (because they automatically receive discounted Healthy San Francisco program fees). This will likely make employers less likely to choose the “pay” option

since they will be less able to pass it along to wages in the long run. In essence, what qualifies as health coverage in the national plan is much more onerous than the San Francisco Ordinance.

On the other hand, some aspects of the national law will make it easy for firms to comply compared to the San Francisco Ordinance. For example, the national law considers a worker exempt for part time status if they work less than 30 hours a week, which will allow many more employees to qualify as exempt from the law. In San Francisco, employers have to make contributions for workers who work at least 8 hours per week. Research from Hawaii shows that under the national policy firms may switch to using more exempt part-time workers (Buchmueller, DiNardo, Valletta 2009). In addition, existing group and individual insurance plans are “grandfathered in” as acceptable coverage under the federal plan. This in conjunction with more categories of exempt workers indicates that the proportion of firms affected by the mandate will be much lower than in San Francisco since firms will not have to make changes in the generosity of benefits or cover some categories of marginal workers, such as those who work part-time.

It is unclear how the San Francisco Ordinance and Healthy San Francisco will interact with the Patient Protection and Affordable Care Act. It is likely that Healthy San Francisco will not meet the requirements for qualifying health coverage and so some of those currently enrolled in Healthy San Francisco will have to obtain more traditional insurance. The city has reported that 70% of Healthy San Francisco enrollees are under the poverty line, however, so many may be eligible for Medicaid (with a new income threshold of 133% of the poverty line for citizens) after the federal reforms. The situation is further complicated by the fact that there are many exemptions to the individual mandate – financial hardship, religious objections, American Indians, those without coverage for less than three months, undocumented immigrants,

incarcerated individuals, those for whom the lowest cost plan option exceeds 8% of an individual's income, and those with incomes below the tax filing threshold. These San Francisco residents will still need Healthy San Francisco, and it may be that other cities will create a plan like Healthy San Francisco to bridge the gap for residents who fall into these categories. For example, according to the Congressional Budget Office (2010) undocumented immigrants account for about one-third of the 23 million individuals who are expected to remain uninsured. Healthy San Francisco provides benefits regardless of immigration status and could continue to cover this population after 2014. Mayor Gavin Newsom recently created a working group that will determine how health care reform will affect Healthy San Francisco.

Lessons from the San Francisco mandates can help policymakers determine what to expect with implementation of a national-level benefit mandate. First, pay-or-play mandates of this size are feasible; employers in San Francisco have been able to absorb the extra cost of providing health benefits without significant negative effects on employment or earnings. Some firms in industries where most competitors are also subject to the mandate, such as restaurants, have been able to pass the costs of the mandate directly along to consumers. Second, employers are likely to choose the lowest-cost option available. In the San Francisco case, this has largely played out through use of HRAs, Healthy San Francisco, and mini-medical plans, which are designed to just meet the health spending requirement. Finally, despite most employers having to make changes in their benefit policies to comply with the mandate, most employers are supportive of the Health Care Security Ordinance. This bodes well for implementation of the national employer mandate in 2014.

Finally, the San Francisco policy is occurring in a single city. Multi-establishment firms with locations outside the city may respond differently when confronted with a mandate in one

of many locations, as opposed to a national mandate. San Francisco also has one of the highest minimum wages in the country (\$9.79 as of January 2009), though the difference is less striking after adjusting for the high general cost of living. The higher overall labor costs may influence the effects of the mandate, although *a priori* it is not clear in which direction. On the one hand, the additional costs due to the mandate may represent a smaller increase in overall costs. They also represent a smaller fraction of compensation, making it somewhat easier to absorb through lower wage income. On the other hand, coming on the heels of other mandates (such as the high minimum wage and 2007 newly enacted paid sick days requirements) might make it more onerous for businesses than would be the case nationally.

In future work, it will be important to study the medium-term effects of the San Francisco Health Security Ordinance on wages, firm size (firms close to the 20 or 100 employee thresholds may decide to stay at 19 or 99 employees due to the discontinuity in mandated costs), and the number of uninsured in San Francisco. Long term effects will be more difficult to study, given the new changes expected with the passage of comprehensive federal health insurance reform in 2010.

References

- Buchmueller, T.C., DiNardo, J., and R.G. Valletta. (2009) "The Effect of an Employer Health Insurance Mandate on Health Insurance Coverage and the Demand for Labor: Evidence from Hawaii." FRBSF Working Paper 2009-08, April.
- Bundorf, MK (2002). "Employee demand for health insurance and employer health plan choices." *Journal of Health Economics*, 21:65-88.
- City-Data Website. <http://www.city-data.com>. Accessed March 29, 2010.
- Claxton, G. et al. (2008). "Health Benefits In 2008: Premiums Moderately Higher, While Enrollment In Consumer-Directed Plans Rises In Small Firms." *Health Affairs*, Sept 24, 2008.
- Colla, C.H., Dube, A., Dow, W.H. (2010). "The Impact of San Francisco's Employer Health Spending Requirement: Findings from the Labor Market." Working Paper.
- Congressional Budget Office (March 10, 2010). Page 9. Douglas W. Elmendorf, Director. <http://www.cbo.gov/ftpdocs/113xx/doc11379/Manager%27sAmendmenttoReconciliationProposal.pdf>. Accessed April 16, 2010.
- Cutler, D. and J. Gruber (1996). "Does public health insurance crowd-out private insurance?" *Quarterly Journal of Economics* 111: 391-430.
- DeLeon, R. (Nov/Dec 2002). "Only in San Francisco? The city's political culture in comparative perspective." *San Francisco Planning + Urban Research Association newsletter*. <http://www.spur.org/publications/library/article/onlyinsf11012002>.
- Dick, A.W. (1994) "Will employer mandates really work? Another look at Hawaii." *Health Affairs*, Spring 1994.
- Dranove D, Spier KE, Baker L (2000). "'Competition' among employers offering health insurance." *Journal of Health Economics*, 19: 121-140.
- Dube, A., Lester, T.W., and M. Reich (forthcoming). "Minimum Wage Effects Across State Borders: Estimates Using Contiguous Counties." *Review of Economics and Statistics*.
- Gabel, J.R. et al. (2008). "After The Mandates: Massachusetts Employers Continue To Support Health Reform As More Firms Offer Coverage." *Health Affairs* 27 (6).
- Gabel J, Claxton G, Holve E, Pickreign J, Whitmore H, Dhont K, Hawkins S and D Rowland (2003). "Health Benefits In 2003: Premiums Reach Thirteen-Year High As Employers Adopt New Forms Of Cost Sharing." *Health Affairs*, 22(5): 117-126.

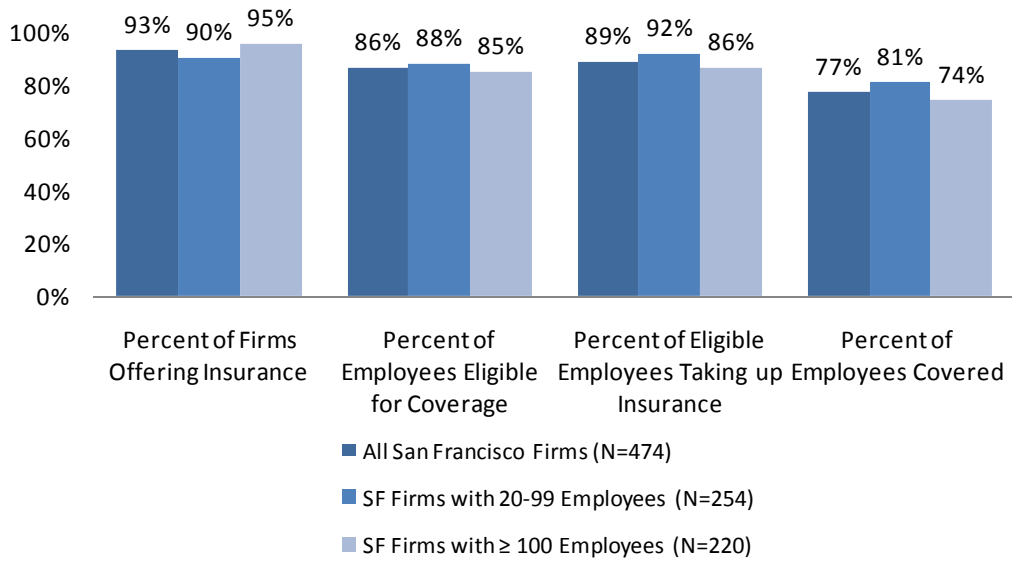
- Gabel, J.R., H. Whitmore, J. Pickreign (2007). "Report From Massachusetts: Employers Largely Support Health Care Reform, And Few Signs Of Crowd-Out Appear." *Health Affairs* 27 (1).
- Gruber, J. and K. Simon (2008). "Crowd-out 10 years later: Have recent public insurance expansions crowded out private health insurance?" *Journal of Health Economics* 27 (2):201-217.
- Healthy San Francisco website. http://www.healthysanfrancisco.org/about_us/Stats.aspx#. Accessed August 17, 2009.
- Holmes, T.J. (1998). "The Effects of State Policies on the Location of Industry: Evidence from State Borders." *Journal of Political Economy* 106, 4: 667-705.
- Kaiser Family Foundation and Health Research & Educational Trust (2008). *Employer Health Benefits Annual Survey 2008 Report*. Henry J. Kaiser Family Foundation, Menlo Park, California, and Health Research & Educational Trust, Chicago, Illinois.
- Kaiser Family Foundation (2010). *Summary of New Health Reform Law. Focus on Health Reform*. Accessed April 7, 2010: <http://www.kff.org/healthreform/upload/8061.pdf>.
- Katz, M.H. (2008), "Golden gate to health care for all? San Francisco's new universal-access program," *N Engl J Med*. 2008 Jan 24;358(4):327-9.
- Lee, S.H. et al. (2005). "The Effect of Mandatory Employer-Sponsored Insurance on Health Insurance Coverage and Labor Force Utilization in Hawaii: Evidence from the Current Population Survey 1994-2004." Working paper, Department of Economics, University of Hawaii.
- Lewin, J.C. and P.A. Sybinsky (1993). "Hawaii's employer mandate and its contribution to universal access." *JAMA*, 269 (19): May 19, 1993.
- Long, S.K. and P.B. Masi (2008). "On the Road to Universal Coverage: Impacts of Reform in Massachusetts at One Year," *Health Affairs* 27 (4).
- Marquis MS, and SH Long. "Employer Health Insurance and Local Labor Market Conditions." *International journal of Health Care Finance and Economics*, 1, 273-292, 2001.
- Massachusetts state website. Fair Share Contribution:
[http://www.mass.gov/?pageID=elwdtopic&L=3&L0=Home&L1=Businesses&L2=Fair+Share+Contribution+\(FSC\)&sid=Elwd](http://www.mass.gov/?pageID=elwdtopic&L=3&L0=Home&L1=Businesses&L2=Fair+Share+Contribution+(FSC)&sid=Elwd). Accessed March 23, 2010 Commonwealth of Massachusetts.
- Neubauer, D (1993). "State Model: Hawaii, A Pioneer in Health System Reform." *Health Affairs*, Summer 1993.

San Francisco Department of Public Health, the Office of Labor Standards Enforcement and the City Controller's Office. Status Report on the Implementation of the San Francisco Health Care Security Ordinance. January 2009.

http://www.healthysanfrancisco.org/files/PDF/January_2009_Bos_Report.pdf

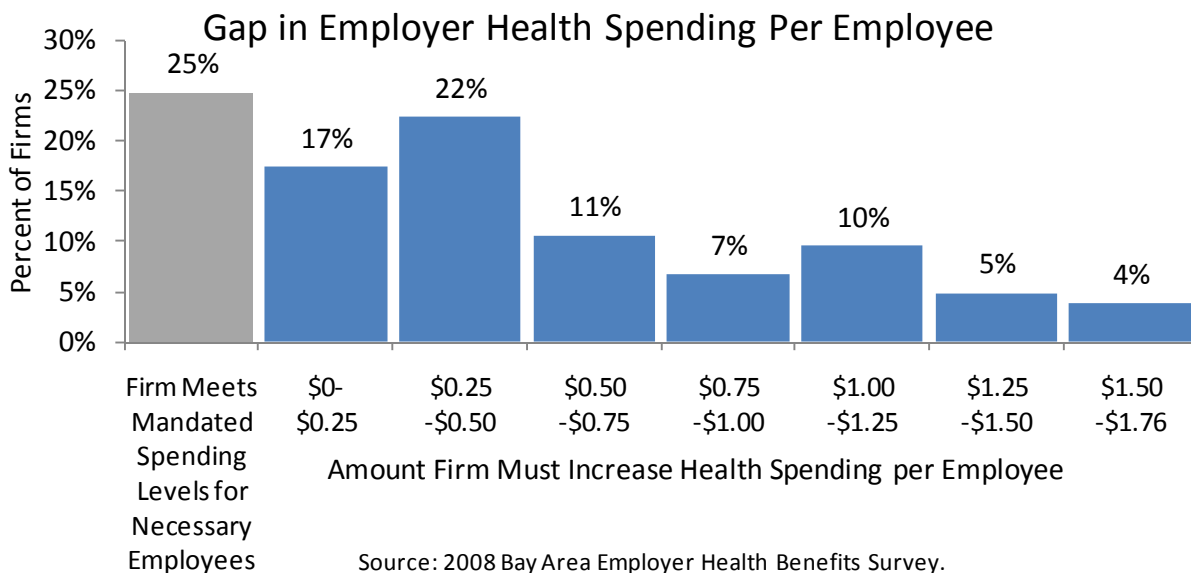
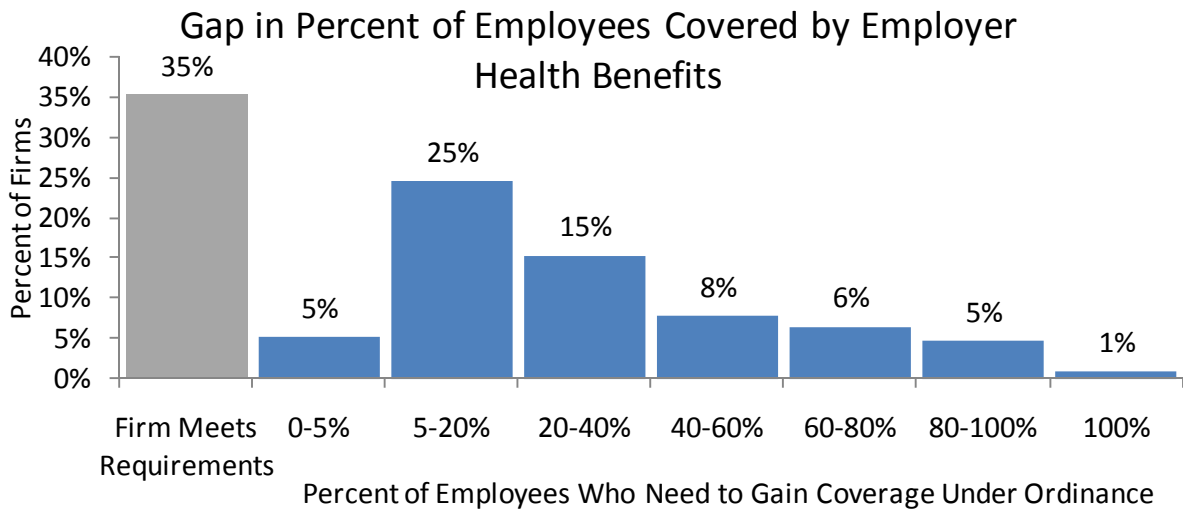
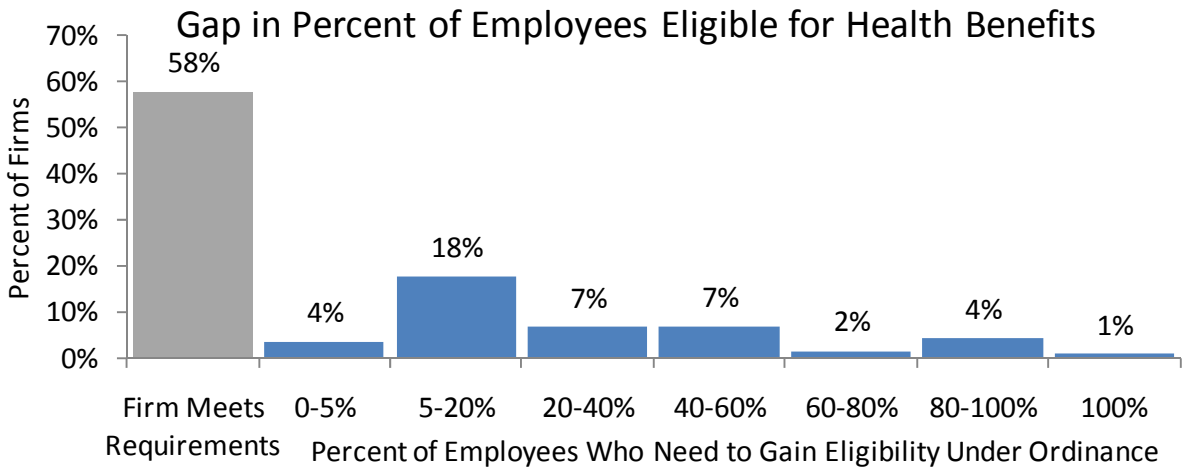
Thurston, N.K. (1997) "Labor Market Effects of Hawaii's Mandatory Employer-Provided Health Insurance." *Industrial and Labor Relations Review* 51(1):117-135.

Figure 1: 2007 Health Benefit Statistics



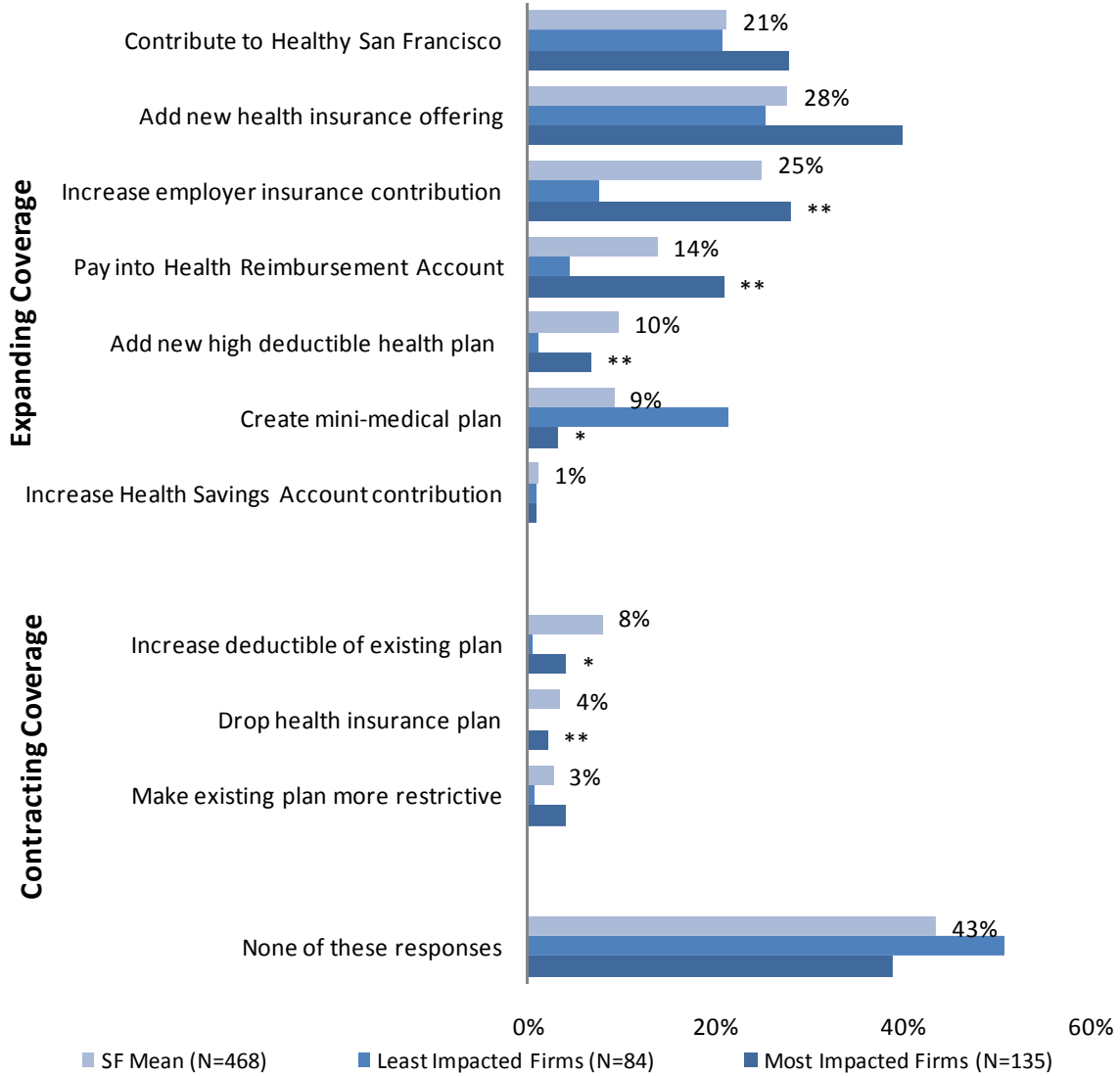
Source: 2008 Bay Area Employer Health Benefits Survey.

Figure 2: Health Care Security Ordinance Compliance Levels at Baseline (2007)



Source: 2008 Bay Area Employer Health Benefits Survey.

Figure 3: San Francisco Employer Responses to the HCSO



Source: 2008 Bay Area Employer Health Benefits Survey. Notes: "Yes" includes already implemented, definitely will implement, very likely to implement in next year. "No" includes somewhat likely, not too likely, not at all likely to implement in the next year. Least impacted firms are those without a spending gap at baseline, most impacted have a spending gap of at least \$0.50 per worker hour. The medium impact group is not displayed in the exhibit. **indicates significant difference between the most and least impacted group at the 5% level and * indicates difference at the 10% level.

Table 1: Effect of Mandate on Health Benefits

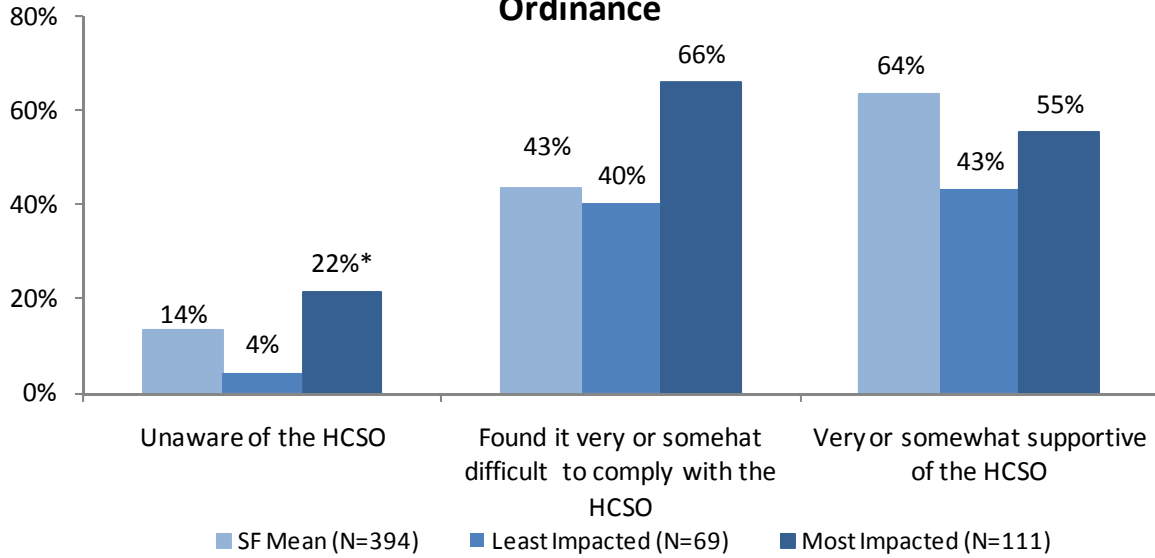
2008 Health Benefit Change	Full Sample			Most Impacted Firms
	San Francisco	Regression Adjusted Comparisons	Difference (SE)	Difference (SE)
Plan to Start Offering Insurance (of firms currently not offering)	41.72%	8.46%	33.25% * (17.95%)	33.25% * (17.95%)
New Health Reimbursement Account (of firms who did not offer an HRA in 2007)	14.52%	6.98%	7.54% ** (3.71%)	24.58% ** (7.76%)
Reduced Some Health Benefits (includes increasing employee premium, raising deductible, dropping coverage, or restricting benefits).	11.16%	17.87%	-6.72% * (3.69%)	3.65% (9.26%)
New High Deductible Health Plan	9.96%	13.67%	-3.71% (3.86%)	-5.59% (8.74%)
Raised Deductible of Popular Plan >\$1,100 (to become HSA-qualified)	3.42%	7.91%	-4.48% ** (1.72%)	-0.36% (1.32%)
Stopped Offering Health Insurance (of those who offered insurance in 2007)	0.48%	0.57%	-0.09% (0.12%)	-2.53% (2.91%)
Restricted Health Benefits	1.12%	0.54%	0.59% (0.80%)	1.36% (4.29%)

Source: 2008 Bay Area Employer Health Benefits Survey.

Notes: Adjusted for firm size categories, one-digit SIC code, profit status, and whether the firm is part of a chain.

Difference is marginal effect from probit regression. Weighted using employer sampling weights based on firm size, profit status, and industry. * Indicates significance at the 10% level using heteroskedasticity-robust standard errors, ** indicates significance at the 5% level. Most impacted group includes firms with a spending gap of at least \$0.50 per worker.

Figure 4: Employer Sentiment Regarding Health Care Security Ordinance



Source: 2008 Bay Area Employer Health Benefits Survey. Notes: Least impacted firms are those without a spending gap at baseline, most impacted have a spending gap of at least \$0.50 per worker hour. The medium impact group is not displayed in the exhibit. *indicates difference from least impacted group at the 10% level.