

Uptake, utilization, and satisfaction with employer sponsored health insurance in a population of vineyard farmworkers

A survey of farmworkers in Napa County found that health insurance offered by the employer had the largest impact on workers' satisfaction with their benefits.

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Hired farmworkers in the United States are a vulnerable workforce experiencing health outcomes lower than the general population (Grzywacz et al. 2010; Matias et al 2022; Moore et al. 2016; Villarejo et al. 2010). This disparity is compounded by financial insecurity, the occupational hazards inherent to agricultural work, and social stressors (Castillo et al. 2021; Leigh et al. 2014; Padilla et al. 2014; Swanton et al. 2016). A critical issue is the underutilization of health services by farmworkers, who face multiple barriers to access including cost, immigration status, language, limited understanding of the health system, and lack of transportation (Guild et al. 2016; Hoerster et al. 2009; Hoerster et al. 2011; Sandhu et al. 2023). Diminished farmworker health outcomes are also a significant burden to employers in the form of reduced productivity, lost workdays, replacement worker costs, and costly compensation claims (Matias et al. 2022; McCurdy and Carroll 2000; Swanton et al. 2016; Villarejo et al. 2010).

Abstract

California farmworkers experience lower health outcomes and underutilize health services compared with the general population, impacting their well-being and farm productivity. Employer sponsored health insurance facilitates access to health services and represents one method for improving farmworker health outcomes, but more knowledge is needed to promote employee uptake and utilization. From 2021 to 2023, we surveyed 497 vineyard workers in Napa County on their views of health insurance. Offering insurance has a large impact on benefits satisfaction. However, satisfaction is limited and uptake low when employers contribute less than 80% to the annual premium. This is principally because when the cost to them is greater, farm employees opt out of health insurance to avoid wage reductions to prioritize other essential living costs. Seasonal workers opt out at especially high rates because they are offered the lowest employer premium contributions and are simultaneously the lowest earners.

A vineyard worker takes a lunch break in Napa Valley. According to a new UC Cooperative Extension study, farmworkers primarily opt out of employer-sponsored health insurance because of wage deductions. Photo: jimkruger, iStock.

Thus, addressing the issue of farmworker healthcare access can foster a healthier, more resilient labor force and enhance agricultural productivity.

One avenue for improving healthcare access is via employer sponsored health insurance that facilitates the use of health services, but a significant proportion of farmworkers lack such coverage (Hoerster et al. 2009; Luo and Escalante 2018; Moore et al. 2016). After the introduction of the Patient Protection and Affordable Care Act (ACA), the percentage of California farmworkers with health insurance increased from 37.3% in 2011 to 64.8% in 2018 (Sandhu et al. 2023). This is attributed to improved access to cheaper plans and the mandate that employers with more than 50 full-time employees must offer insurance. Nonetheless, the ACA does not extend coverage to workers on farms with fewer than 50 full-time employees, undocumented workers, or seasonal employees working fewer than 120 days per year for an employer. Consequently, local coverage rates can be lower. For example, only 30% of farmworkers in Sonoma County are reported with health insurance, in stark contrast to an 86% coverage rate among other adults in the county (Moore et al. 2016).

Encouraging farm employers to offer health insurance, even when they are not mandated by ACA regulations, can improve farmworker access to health services but the substantial financial resources required are a barrier for employers. Labor is the largest expenditure for California farms (USDA 2022) and offering insurance can add significantly to this cost. An employer will be expected to pay a portion of the annual premium, which averaged \$8,083 for a single California employee in 2022 (Claxton et al. 2023). Moreover, the U.S. health system is burdened with inordinate administrative “sludge”, the unnecessary forms and complexity, that incurs additional hidden economic costs for employers and employees who are forced to spend considerable time dealing with insurance

administration (Pfeffer et al. 2020). For employers to rationalize committing significant resources they need reassurance that investments in health insurance have organizational advantages and greater knowledge of how to promote employee uptake and utilization.

An economic argument has been established that provision of health benefits can create cost-effective organizational advantages for industries in the long-term as they increase employee retention, recruitment, job satisfaction, commitment, productivity, and the return rates of seasonal farmworkers (e.g., Gabbard and Perloff 1997; Kang et al. 2016; Rutledge and Richards 2023; Tsai et al. 2004; Vidal-Salazar et al. 2016). Less well understood are farmworker perceptions of health insurance and other benefits, and how they engage with them when offered. Farmworkers are not simply passive recipients of benefits or victims of a failure to provide them. They are decision-makers with their own diverse needs and expectations. Employee attitudes and uptake of health insurance can hinge on their individual situations and how well an organization administers benefits packages (Hobbs, Herrero et al. 2020; Torre-Ruiz et al. 2019).

From September 2021 through August 2023, we surveyed farmworker job satisfaction as part of a collaborative outreach project between the UC Cooperative Extension and the Napa Valley Farmworker Foundation (FWF) that aimed to foster communication between employees and employers. This presented an opportunity to mine data on satisfaction with health insurance within the context of overall benefits packages. In the second year of the project, we were able to ask specific questions on uptake and utilization of health insurance. We also asked a question on the related issue of recent California regulations that removed agricultural worker exemptions from overtime. These regulations have impacted farmworker income and may have affected their ability to afford health coverage. These additional questions allowed us to determine some of the key features of benefits packages that farmworkers find (dis)satisfactory and understand some of the factors that influence farmworker decisions on health insurance.

Surveying workers’ satisfaction

We surveyed 497 predominantly Spanish speaking (99%) vineyard workers from 15 companies operating in Napa County (table 1). Participating companies represented the two main types of farm labor employers in Napa County, vineyards who directly employ farmworkers ($n = 10$) and vineyard management companies who farm for multiple clients ($n = 5$). The FWF advertised the project across Napa County and recruited volunteer companies to the project who then allowed their farmworkers to be approached at worksites during breaks or team meetings to participate in a voluntary job satisfaction survey. It was possible to survey almost all farmworkers from the smaller companies

TABLE 1. Job role and employment status of survey participants (+ percentage of total sample)

	Vineyard ($n = 10$)	Management company ($n = 5$)	Total
Field workers*	2 (0.4%)	10 (2%)	12 (2.4%)
Seasonal field workers	41 (8.2%)	204 (41.4%)	245 (49.3%)
Permanent field workers	74 (14.9%)	65 (13.1%)	139 (28%)
Irrigator	6 (1.2%)	8 (1.6%)	14 (2.8%)
Tractor driver	30 (6%)	23 (4.6%)	53 (10.7%)
Leadership role	14 (2.8%)	18 (3.6%)	32 (6.4%)
Mechanic	2 (0.4%)	—	2 (0.4%)
Total	169 (34%)	328 (66%)	497

* Unknown employment status.

Where multiple job roles were reported, the most senior role is listed. Seasonal H2A workers were excluded from the study because the company using them was unable to provide their benefits information. “Vineyard” is defined as a company directly hiring workers to farm winegrapes. “Management company” is defined as a company that is contracted to farm winegrapes for vineyard clients.

(< 10 employees). For larger companies, we requested introductions to a representative selection of their employees across job roles, but the sample size from each of these companies was restricted to the logistical convenience of each operation. Participants completed the questionnaire in groups (< 50 farmworkers) while paid their normal hourly rate by their employer, and in the absence of managers or senior supervisors. A bilingual (Spanish/English) representative from the FWF explained the purpose of the project, displayed the questions on a flipchart, and read them aloud. Participants were encouraged to ask for clarification when they did not understand and answered using a paper- or phone-based version of the survey. Responses were anonymous, names were not recorded, and individual responses were not given to employers who were shown only aggregate summary data.

Survey measures

Employment status (seasonal or permanent) and job role were recorded from participants. Employers provided key details on the benefits packages they offered employees by job role and employment status (table 2). We were then able to cross-reference details of the benefits packages with the demographic data to determine the specific benefits offered to each participant. We assigned participants into five categories of benefits packages based on the level of health insurance and additional key benefits: life, dental, vision insurance plans, dependent coverage, 401k, and ability to opt out or choose from different plans.

Benefits satisfaction was measured using the fringe benefits sub-scale of the job satisfaction survey (Hobbs, Klachky et al. 2020; Spector 1994). Items were rated on a six-point scale (0 = strongly disagree; 5 = strongly agree). The benefits we wanted participants to consider



From September 2021 through August 2023, the authors surveyed 497 vineyard workers from 15 companies operating in Napa Valley. Photo: Malcolm Hobbs.

in their ratings were listed on the survey (health, dental, vision, life insurance, 401k). In 2023, participants were asked three additional questions about their decisions surrounding health insurance: (1) “How do you use your company health insurance?”; (2) “If health insurance is offered by your company but you do not use it, why not?”; (3) “Has the recent reduction in the work week from 10 to 8 hours been: ‘good’, ‘bad’, ‘mixed’ or ‘don’t know?’”, with an open-ended option to explain their answer.

Worker satisfaction with benefits

Health insurance has largest impact

The dataset allowed us to conduct a cross-sectional analysis of satisfaction between the five categories of benefits packages. Health insurance had the largest impact on benefits satisfaction, and this was related to

TABLE 2. Numbers of farmworkers offered five categories of employer-sponsored health insurance (*n* = 443) and number of farmworkers (+ percentage) within each category offered additional key benefits

Additional benefits	No health insurance (<i>n</i> = 56)	Health insurance offered			
		50% premium paid (<i>n</i> = 58)	50%–75% premium paid (<i>n</i> = 138)	78%–80% premium paid (<i>n</i> = 63)	80%–100% premium paid (<i>n</i> = 128)
Dependent health insurance*	—	—	35 (25%)	30 (48%)	119 (93%)
Life insurance	—	—	7 (5%)	—	119 (93%)
Dental insurance	—	—	35 (25%)	—	128 (100%)
Dependent dental insurance*	—	—	35 (25%)	—	102 (80%)
Vision insurance	—	—	131 (95%)	—	115 (90%)
Dependent vision insurance*	—	—	131 (95%)	—	115 (90%)
401k	27 (48%)	7 (12%)	138 (100%)	10 (16%)	127 (99%)
Choice to opt out or choose different plans	—	58 (100%)	111 (81%)	54 (86%)	110 (86%)

* Company pays portion of premium paid by employer for dependents. The categories were determined by using logical cut-offs and to create samples that were of sufficient sample size to make comparisons. For example, 13 participants had 78% of their health insurance premium paid by their employer while 50 participants had 80% of the premium covered. Therefore, we collapsed them into a single group because the percentage of the premiums covered were similar and to avoid a category containing only 13 participants.

Note: Sample is < 497 because not all companies provided data.

the percentage of the premium paid by an employer. Participants were dissatisfied (mean < 7.5) with benefits when no health insurance was offered but satisfied when health insurance was the only benefit offered (fig. 1). Satisfaction significantly increased when the premium paid by employers was 78% to 80%, compared with 50%, of the premium.

Other benefits do not consistently boost satisfaction

Satisfaction was often numerically higher when health insurance was accompanied by additional benefits (fig. 1), but the primary driver of satisfaction was health insurance. Participants in the 50% to 75% health insurance category, which included additional benefits, were more satisfied than those in the 50% health insurance only category. However, those in the 78% to 80% health only category were statistically more satisfied than the 50% to 75% category and no less satisfied than those in the 80% to 100% category who were offered the most comprehensive benefits packages.

The impact of the non-health insurance benefits was difficult to disentangle as they were typically offered in combination, and comparisons within categories, where we could control for the outsize impact

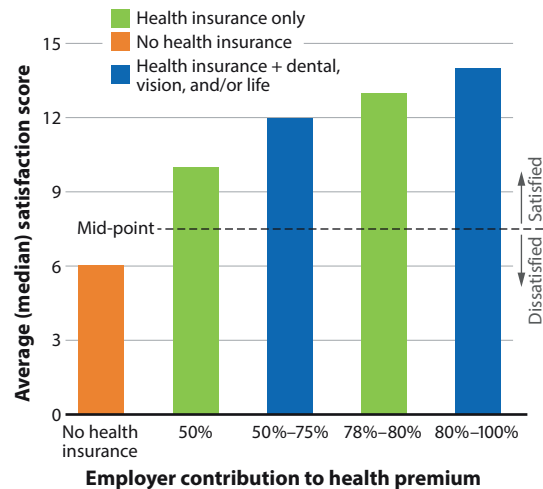


FIG. 1. Average benefits satisfaction ($n = 443$) for five categories of health insurance and additional key benefits. Cronbach's Alpha value for the benefits satisfaction scale was 0.88, indicating a high level of reliability. Statistical differences between categories were tested using non-parametric Kruskal-Wallis and post hoc Mann-Whitney U tests. Holm's sequential Bonferroni procedure was applied to post hoc tests (Holm 1979). Scores were different between every category ($P_s < 0.05$), except the 78% to 80% vs. 80% to 100% categories ($P = 0.83$). Some participants in the health insurance-only categories were offered a 401k but there was no difference ($P = 0.66$) between those with or without 401k and they were collapsed into a single group. There was no difference between those with dependent health insurance and those not without in each category ($P_s = 0.22$) or between those with dental insurance and those not in the 50% to 75% category ($P = 0.15$).

of healthcare, did not yield high enough sample sizes (table 2). For example, 119 participants in the 80% to 100% category were offered life insurance versus nine that were not, which was not enough for a valid comparison. Additionally, as only seven other participants were offered life insurance in another category, we were unable to draw a conclusion on the merit of offering these plans. Where comparisons were possible, we found no boost in satisfaction from 401k, dependent health insurance, or dental insurance (fig.1). This does not reflect a universal lack of value attributed by farmworkers to these benefits but a variation in personal preference and the limitations of our survey. For example, dependent coverage is only valuable for those with dependents, and our survey did not record numbers of dependents. Also, in prior interviews, individual Napa vineyard workers have requested a desire for dental and vision plans (Hobbs, Herrero et al. 2020).

Over half of workers with health insurance actively used it

Of the 332 participants that answered the questions about their decisions surrounding health insurance, 146 (44%) had accepted health insurance (fig. 2). Of those 146 participants, 91 (62%) had actively used it to access healthcare, suggesting that it facilitated access to health services for most participants, although not for a significant minority. Of those not utilizing their insurance, 30% responded they had not yet had a reason to use it (fig. 3). While for these participants insurance would be valuable in an emergency, this may indicate an area where efforts could be explored to promote greater utilization for non-emergency (e.g., generalized health screening) or to remove other barriers to access.

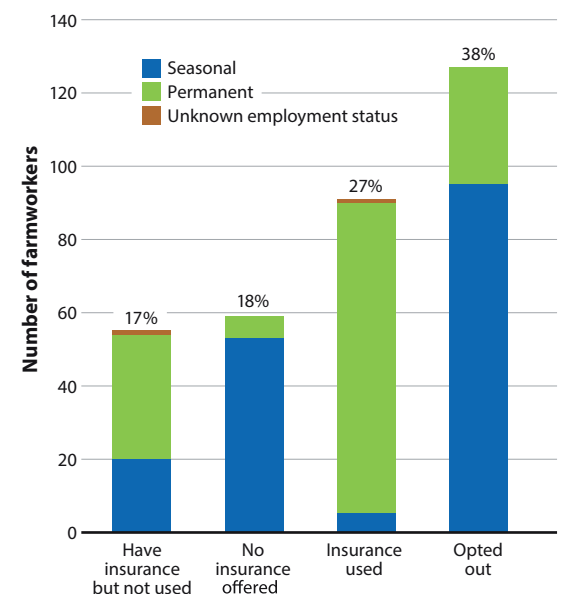


FIG. 2. Number and percentage of farmworkers utilizing employer sponsored health insurance ($n = 332$).

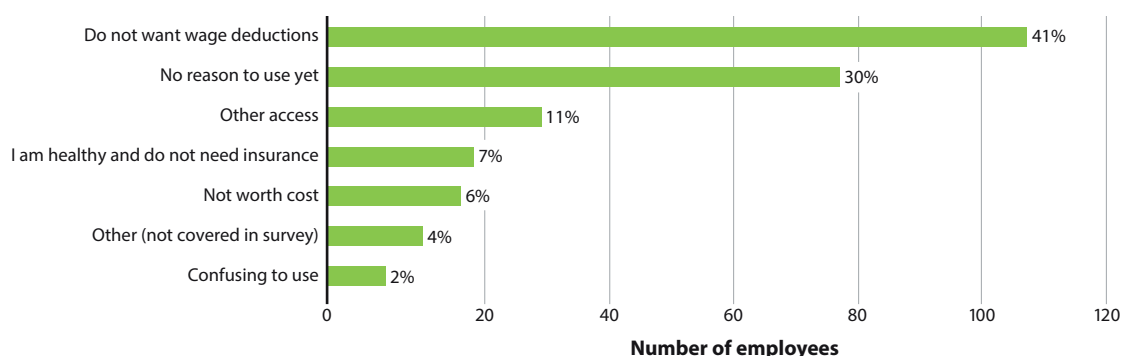


FIG. 3. Reasons farmworkers gave for not using or opting out of health insurance ($n = 261$). The survey question was “If health insurance is offered by your company but you do not use it, why not?” (check all that apply) with the following response options: a. I am healthy and do not need insurance; b. There has been no medical reason to use the insurance yet; c. I do not want the money deducted from my pay for insurance; d. The insurance is not worth the cost (e.g., co-pays are too high); e. I find the insurance confusing to use; f. I have other access to medical treatment (e.g., free clinic, insurance through family); g. Other (please specify).

Opting out due to wage deductions

The 127 farmworkers (38%) opting out of health insurance were predominantly seasonal employees (fig. 2). Furthermore, opting out was related to the percentage of the premium paid by the employer, with 44% to 54% opting out when employers paid <80% of the premium and only 4% opting out when employers paid ≥80% (fig. 4). The leading reason given for opting out was to avoid wage deductions (41%; fig. 3). Farmworker populations have high levels of financial insecurity, and they may be forced to prioritize living expenses with short term urgency over those with long-term advantages such as health insurance (Padilla et al. 2014). Seasonal employees appeared to opt out at higher rates because most (82%) in the sample were offered health insurance with only a 50% employer contribution and we assume because elsewhere they are reported as the lowest earners in Napa County vineyards (Hobbs et al. 2020).

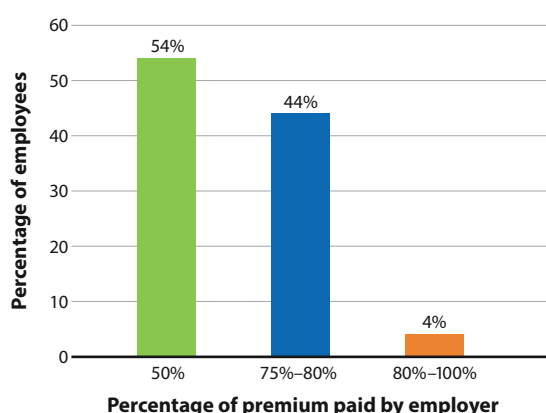


FIG. 4. Percentage of farmworkers ($n = 127$) opting out of health insurance versus employer contributions to premium. The survey question and response options were: “How do you use your company health insurance?” (check one) a. Company does not offer me health insurance; b. I opt out of company health insurance; c. I have company health insurance, but I have not used it for treatment; d. I have used it for medical treatment for myself and/or family members.

Given the documented importance of wages within this community, factors impacting wages are likely to be a key determinant of health insurance uptake. The largest recent change to California farmworker wages is new regulations that have decreased the workday from 10 to 8 hours and oblige agricultural employers to pay 1.5 times the hourly wage beyond an eight-hour shift (Hill and Tanabe 2023). Theoretically, these regulations are fairer for farmworkers and should increase income. However, our survey indicated that an unintended consequence has been reduced work hours and income for many farmworkers. Most participants (fig. 5) were evenly split between those viewing the changes to overtime regulations as “good” (39%) or “bad” (37%).

Participants left 38 comments explaining their views. Nine positive comments explained that the shorter workdays were welcome for rest and the extra leisure time. In contrast, 29 negative comments explained that some employers have responded by decreasing work hours and reducing total income (e.g., “My salary is now lower, and the lower hours worked is not enough”), and as a result many workers cannot cover their living expenses (e.g., “The bills are very high: the maintenance, rent and my transportation”; “40 hours/week is not enough for expenses; everything is very expensive. They should provide more hours, but they don’t want to pay overtime”). Although these responses did not directly address health insurance, we speculate that because as many as a third reported struggling to cover basic living expenses, they would also find it difficult to consider accepting health insurance and partly explains the high opt out rate.

Choice over benefits packages is important

Minority reasons for opting out or not utilizing health insurance included having other access to health insurance, such as through a family member or free clinic, current health not warranting insurance, insurance not worth the cost, confusing to use, or other reasons (fig. 3). These indicate the diversity of individual needs and, when combined with the desire of many to avoid wage

Offering health insurance has a significant impact on benefits satisfaction and facilitates access to health services, but uptake and satisfaction is highly dependent on the percentage of the premium paid by the employer.

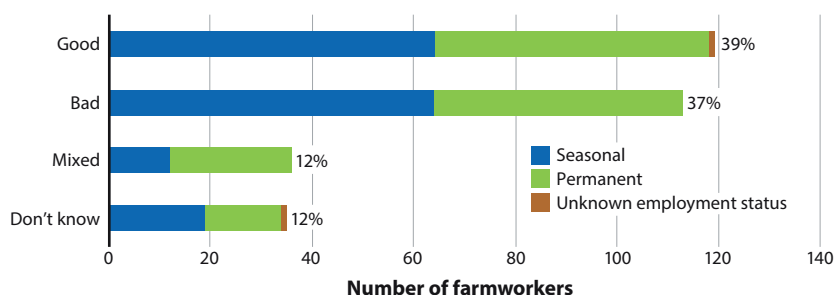


FIG. 5. Vineyard farmworker views in Napa of changes in overtime regulations ($n = 304$) as “good”, “bad”, “mixed”, or “don’t know”.

deductions, that choice to accept benefits or choose from different levels of insurance plans can be important. Indeed, the 45 (11%) participants who were not given this choice by their employer were less satisfied on average ($P = 0.02$). Flexible benefits packages have been shown, in other job sectors, to be more attractive to workers, improve satisfaction, and increase understanding of benefits (e.g., Vidal-Salazar 2016).

Conclusion

Our survey highlights how agricultural employers can increase benefits satisfaction and promote uptake of health insurance by employees. Offering health insurance has a significant impact on benefits satisfaction and facilitates access to health services, but uptake and satisfaction is highly dependent on the percentage of the premium paid by the employer. Maximizing uptake and satisfaction requires employers to pay 80% or more of the annual premium, which is commensurate with the California-wide average employer contribution of 85% (Claxton 2023). Lower employer contributions may fulfil regulatory obligations or be well intentioned but result in limited satisfaction and uptake of health insurance.

Our survey also illustrates the contribution of employee decisions when reflecting on the limited impact of ACA regulations to improve health insurance coverage rates for farmworkers. Criticism of the ACA usually focuses on its failure to extend regulations to sub-populations of farmworkers. This survey data shows that even where ACA applies, large numbers of farmworkers opt out of health insurance, primarily because they still cannot afford it, but sometimes for other reasons. Choice for farm employees in tailoring their own benefits packages to meet their specific needs is important. Where farmworkers accept employer-sponsored health insurance there is scope to increase their utilization of it to access health services, which merits further investigation.

Our survey illustrated how the broad structure of benefits packages can influence satisfaction and decisions to opt in or out of health insurance. However, the survey was limited in that we were mostly forced to collapse other benefits (dental, vision, life, 401k, dependent coverage) into a single “additional benefits”



The authors’ results show that health insurance uptake and satisfaction among agricultural workers is highly dependent on the percentage of the premium paid by the employer. *Photo:* Malcolm Hobbs.

category or not consider them in a satisfactory manner. Thus, we were unable to disentangle the influence of specific benefits. We also did not consider certain relevant demographic variables that influence decisions and perceptions of benefits such as age and family status (e.g., Polsky et al. 2005). These limitations should be addressed and investigated further in future studies.

The current system in the United States, whereby health insurance is linked to employment, leaves many farmworkers uninsured and with inadequate access to health services. Ideally, within this system every agricultural employer would offer their employees health insurance, which other studies show can be cost-effective in terms of productivity and have long-term positive organizational impacts for companies and farmworker well-being. The cost burden for farm employers with limited resources to do this is high and some may be unable to do so. Nevertheless, the participating companies in this survey that provide their employees with generous benefits packages demonstrate a successful and commendable model of how this can be put into practice. [CA](#)

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