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Authors: Anek Belbase, Norma B. Coe, Matthew S.

Rutledge

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IMPROVING EMPLOYEES' LIFE AND DISABILITY INSURANCE BENEFIT DECISIONS: RESULTS OF AN EMPLOYER SURVEY

Anek Belbase, Norma B. Coe, and Matthew S. Rutledge

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Center for Retirement Research at Boston College Hovey House 140 Commonwealth Avenue Chestnut Hill, MA 02467 Tel: 617-552-1762 Fax: 617-552-0191 http://crr.bc.edu

Anek Belbase is the research project manager for the Center for Retirement Research at Boston College (CRR). Norma B. Coe is an assistant professor at the University of Washington and a faculty research fellow at the National Bureau of Economic Research (NBER). Matthew S. Rutledge is a research economist at the CRR. The research reported herein was pursuant to a grant from Prudential Financial. The findings and conclusions expressed are solely those of the authors and do not represent the views of Prudential Financial, the University of Washington, NBER, or Boston College. All errors are their own.

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Center for Retirement Research at Boston College Hovey House 140 Commonwealth Ave Chestnut Hill, MA 02467 Tel: 617-552-1762 Fax: 617-552-0191 http://crr.bc.edu

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Introduction

The group benefits landscape is changing dramatically. The menu of available options has expanded, employers are paying for fewer benefits, and the responsibility for selecting the right benefit package has been increasingly left to the employee. However, very little is known about how individuals select their insurance benefits packages, if their selections are optimal for their circumstances, or what employers can do to encourage them to select the optimal benefit package. In this changing landscape, it is important to determine identify: (1) What are current employer practices and their resulting take-up and coverage patterns?; (2) Which practices influence employees' selections?; and (3) What can employers do to make their employees' selections closer to their optimal choices?

The current study is the third in a series conducted by the Center for Retirement Research (CRR), in partnership with Prudential Financial Inc., to examine these questions. The first study utilizes in-depth interviews to find that, despite the similarities between life and long-term disability insurance products, decision processes vary dramatically (Coe and Belbase 2015). Individuals understand the need for life insurance, but they have a hard time determining how much insurance is necessary. The need for disability insurance is even less clear – disability incidence and the insurance product are not well understood and prone to behavioral biases – and it is infrequently purchased.

The second study uses an online experiment to identify behavioral-economics-based interventions that affect life and disability insurance participation and coverage levels (Coe, Belbase, and Wu 2015). The results suggest that simple, personally relevant information, provided at the time of enrollment, can nudge individuals to overcome behavioral impediments and elect more optimal life and disability insurance coverage.

Unlike the first two studies, which focused on the employee's decision, the present study examines group benefits from the employer's perspective. Data on employer practices, benefit information, and aggregate employee characteristics are obtained through a firm-level survey conducted by the Society for Human Resource Management (SHRM). Survey results are used to describe the landscape of employer practices with respect to supplementary life and disability insurance and to investigate correlations between employer practices (such as cross-advertising group benefits with health insurance) and employee take-up.

This report proceeds as follows. Section 1 discusses the methodology, including the survey instrument and resulting sample characteristics, data quality tests, and the empirical strategy. Section 2 summarizes employer practices, both in general and specific to supplementary life and disability insurance benefits. Section 3 presents the regression results examining the association between employer practices and benefit take-up. Section 4 concludes that timing enrollment and cross-advertising benefits in ways that maximizes the salience of life and disability insurance benefits is associated with higher-take up of these benefits.

Methodology

The Survey. Traditional economic literature describes two factors that influence the takeup of life and disability insurance: individual characteristics (demand-side factors) and product characteristics (supply-side factors) (Frank 1989, Norman 2003). Using models that smooth consumption over an individual's lifetime, standard economic theory suggests that most people will be better off with a positive amount of life and disability insurance (Yaari, 1965). But actual life and disability insurance take-up does not reflect the predictions made by utility-maximizing models, especially with respect to coverage among the young and poor (Chandra and Samwick 2009, Richard 1975). Behavioral economics offers an explanation for this deviation between predicted and actual take-up by imposing limits on the extent to which human beings are able to rationally process information. This limited rationality, in turn, makes decision architecture – the way in which choices are presented – an important factor to consider when examining the takeup of insurance products (Kahneman and Tversky 1979, Mullainathan, and Thaler 2000). Supporting this notion, prior work in the current research program finds relatively simple employer communication practices – such as on-screen personalized coverage recommendations – can increase take-up of life and disability insurance in an experimental setting (Coe, Belbase, and Wu 2012).

This project developed and conducted an online survey to collect information on factors predicted by standard and behavioral economic theories to affect benefit take-up. ¹ The survey includes questions on aggregate employee characteristics, characteristics of the life and disability

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¹ Using a survey to solicit information about supplementary benefits introduces a potential for confusion between employer-paid benefits and voluntary, employee-paid benefits. We attempt to address this potential problem through clear and consistent word choice. A preliminary version of the survey asked respondents to upload benefit enrollment documents to analyze pricing, benefit framing, and benefit-specific communication practices, but poor response rates during a pretest of the survey led us to abandon this approach.

insurance products offered by employers, and (both general and benefit-specific) employer enrollment and communication practices. Table 1 summarizes the data solicited by the final 50-question survey, and Appendix A includes the full survey instrument.

Table 1. Data Solicited by Employer Survey

Aggregate employee	General benefit	Life-insurance	Disability-insurance
characteristics	practices	specific data	specific data
Average age	Benefits offered	Take-up	Take-up
Percent female	Enrollment timing	Coverage level	Coverage level
Percent married	Enrollment channel	Guaranteed issue amount	Waiting period
Percent with children	Enrollment cross- advertising	Maximum issue amount	Exhaustion period
Average wage	Benefit communication channel and method	Monthly premium	Monthly premium
	Benefit administration arrangement	Benefit framing	Use of defaults
		Coverage option increment amount	Employer-provided coverage
		Use of defaults Guidance provided	Guidance provided

The Sample. The targeted sample consisted of 7,000 randomly selected participants from SHRM's 250,000 US-based, firm-level members. Exactly 850 firms (or around 12 percent) completed the survey, with 468 respondents filling out information about a supplementary life insurance benefit, 143 respondents filling out information about a supplementary long-term disability insurance benefit, and 84 respondents filling out information about a short-term disability insurance benefit. Approximately 80 percent of the respondents possess a job title of "Manager, Generalist," "Director or Assistant/Associate Director," "Administrator," or "Specialist."

Generalizability. This sample raises concerns about the generalizability of our findings in three ways. First, SHRM's members may not be representative of firms in the United States. Second, employees within SHRM member firms may not be representative of employees as a whole. Third, the low response rate could introduce selection bias, making the final sample non-

representative of SHRM members. However, testing for selection bias at the response stage is difficult without information on the non-respondents. To examine the representativeness of our final sample, we compare the aggregate employee characteristics to the sample of employed individuals from the August 2014 *Current Population Survey* (Table 2). Organizations in our SHRM sample have a slightly greater percentage of married employees and female employees, but the differences are not substantively large. The difference in the percentage of parents is higher, as are the average wages paid to their employees; to the extent that higher-income workers and parents are more likely to take up insurance benefits anyway, the influence of factors like enrollment timing and cross-advertising on take-up may be somewhat overstated.

Table 2. Sample Employee Characteristics Compared to Employed Sample in the CPS

	SHRM sample	CPS employed
Percent female	51%	47%
Percent married	59%	54%
Percent parents	42 %	32%
Mean age among benefit-eligible employees	42	42 **
Median annual income	\$56,000	\$41,444

Notes: CPS data are August 2014; ** = Median.

Source: Authors' calculations.

Data Reliability. We conduct several data quality tests, including tests for non-responsiveness and response consistency. As is typical in voluntary online surveys with no reward for participation or completion, item non-response is a concern. Fifty-five percent of respondents skip three or more mandatory questions, of which data on benefit premiums is the most commonly skipped item. Only 29 percent of respondents offering life insurance provide premium data and 4 percent of respondents offering long- or short-term disability insurance provide premium data. Supplementary short- and long-term disability coverage levels are also frequently skipped: only 36 percent of respondents provide this information. Outside of data on premiums and disability insurance coverage levels, the remaining data show an acceptable non-response rate and response consistency; while we examine both coverage rates and levels for life insurance, we limit our analysis to coverage rates – ignoring levels due to small sample size – for long- and short-term disability.

Item non-response is also fairly common among the independent variables. We conduct the analysis on the full sample, including variables that capture missing characteristics, rather than imputing missing answers or limiting the analysis to the subset who answered every question. This methodology provides us the largest sample size and the most flexibility in the event that non-response is not random.

The Empirical Strategy. For each benefit type (life, short-term disability, and long-term disability insurance), the following linear regression model is used to estimate the association between employer and benefit characteristics and benefit take-up (and, in the case of life insurance, coverage level):

$$T_{bj} = \propto_j + \beta_1 X_{bj} + \beta_2 X_{\sim bj} + \beta_3 W_j + \varepsilon_{bj} \tag{2}$$

where T_{bj} is the take-up rate of benefit b at employer j. This rate is a function of the characteristics of benefit b at employer $j(X_{bi})$, which includes the price, offer mechanism, enrollment window, default option, and other employer practices.² It could also be a function of the same characteristics for the other benefits offered by that employer $(X_{\sim bi})$. We also control for the underlying demand for the benefit by controlling for aggregate workforce characteristics (W_i) . ε_{bi} is a normally distributed idiosyncratic error term. The life insurance analysis also includes an estimate using the level of coverage as the dependent variable (i.e., the ratio of benefits to annual salary).³

The analysis outlined above will further our understanding of the association between employer practices and benefit take-up at the employer level. However, it is important to note some limitations with the approach taken. The study relies on survey rather than institutional or administrative data, which introduces random variability or "noise" into the data. In combination with a relatively small sample and missing responses, this noise contributes to difficulty in establishing the statistical significance of results. In addition, the study does not establish a causal relationship between employer practices and benefit take-up; if employers

³ There were insufficient data to conduct this analysis for disability insurance.

² Most variables have an accompanying dummy variable that equals one if the variable is missing. The exceptions are coverage levels and coverage amounts; we exclude observations with missing values for these variables.

offer particular benefits in reaction to feedback from their employees (i.e., reverse causality), then the results may not be generalizable to firms that do not yet offer these benefits.

Descriptive statistics

General Employer Practices. Supplemental life insurance, which is offered by over 90 percent of employers, is the most commonly offered benefit in the study. In contrast, supplemental long-term disability insurance is offered by only 34 percent of employers, and supplemental short-term disability insurance is offered by 25 percent of employers. Table 3 summarizes the rate at which various benefits are offered by employers in the sample.

Table 3. Benefit Offer Rate

	100% Employer paid	100% Employee paid	Employer & employee paid	Benefit not offered
Health/medical insurance	8%	0%	92%	1%
Dental insurance	11	15	73	1
Basic life insurance	87	2	9	2
Supplemental life insurance	1	85	6	8
Long-term disability insurance	67	15	11	7
Supplemental long-term disability insurance	1	31	2	65
Short-term disability insurance	60	19	7	14
Supplemental short-term disability insurance	1	23	1	75
Basic accidental death and dismemberment insurance	79	8	6	7
Supplemental accidental death and dismemberment insurance	1	58	3	38
Accident insurance	9	36	2	53
Critical illness insurance	0	39	2	58
Defined benefit pension plan open to current employees	15	3	12	70

Source: Authors' calculations.

Benefit administration arrangements and enrollment practices vary across employers (Table 4). Almost half of the responding employers administer at least some benefits through a traditional broker-carrier or third-party administrator, while about 40 percent of employers self-administer one or more benefits, and approximately a quarter of employers administer benefits

directly from a work-site carrier. On the other hand, enrollment in group benefits is typically coordinated by employers in the sample (although 16 percent of long-term disability plans and almost a quarter of short-term disability insurance plans are coordinated by broker-carriers).

Table 4. Enrollment Coordinator

	Employer	Broker-carrier	Both
Health/medical insurance	91%	2%	7%
Dental insurance	92	3	6
Basic life insurance	92	3	5
Supplemental life insurance	88	6	6
Long-term disability insurance	91	4	5
Supplemental long-term disability insurance	77	16	7
Short-term disability insurance	88	5	7
Supplemental short-term disability insurance	67	24	9
Basic accidental death and dismemberment insurance	91	3	6
Supplemental accidental death and dismemberment insurance	85	8	7
Accident insurance	59	32	9
Critical illness insurance	49	41	10
Defined benefit pension plan open to current employees	91	4	5
Defined contribution retirement savings plan (401k, 403b, etc.)	75	7	18

Source: Authors' calculations.

Differences in enrollment timing and benefit communication bundling lead to a range of opportunities for cross-advertising across employers. While almost two-thirds of employers enroll employees via a single annual enrollment event, one-third of employers either allow enrollment at any time or offer multiple enrollment events each year. Furthermore, one-half of employers communicate all benefits simultaneously, while 38 percent communicate group benefits with medical benefits and 8 percent communicate each benefit individually.

Table 5. Opportunity for Cross-benefit Communication

	Benefits communicated together	Only health and group benefits communicated together	Each benefits communicated separately
Single annual enrollment	34%	27%	5%
Enroll at any time or other policy	18	13	3

A large proportion of employers still use pre-Internet enrollment channels and communication methods. Only 66 percent of employers allow online enrollment, while almost the same proportion (59 percent) enroll employees using paper forms and 30 percent enroll employees in-person at a benefit office. Similarly, 75 percent of employers communicate benefits through some form of in-person channel, compared to approximately 66 percent of employers utilizing email to communicate benefits. Table 6 presents a breakdown of communication channels by employee type.

Table 6. Benefit Communication Group, by Employee Type

	At open enrollment only	For new employees only	Both	Neither
In-Person				
Group meetings	36%	13%	37%	14%
Individual, one-on-one meetings	3	46	17	33
By mail				
Mail received at home or at the workplace	27	6	27	40
Over the phone				
A toll-free phone number or outbound calls to employees during the enrollment period	7	1	13	79

⁻⁽cont'd)-

Table 6. Benefit Communication Group, by Employee Type (cont'd)

	At open enrollment only	For new employees only	Both	Neither
Electronically				
Email	33	1	38	28
An online presentation <u>without</u> the use of interactive tools	15	4	15	66
An online presentation with the use of interactive tools such as insurance estimator	9	1	13	77
Mobile devices (e.g., BlackBerry, iPhone)	3	0	4	93
Other	4	1	4	92

Life Insurance. This section summarizes responses to questions on supplementary life-insurance plan benefit utilization and employer practices. On average, 40 percent of employees enroll in supplementary life, but with a high degree of variability in the take-up rate (Figure 1). Less variability is seen in average coverage levels, with most employers reporting average coverage levels of one to three times pay (if coverage is presented as a pay-multiple) or between \$50,000 and \$200,000 (if coverage is presented as a lump sum).

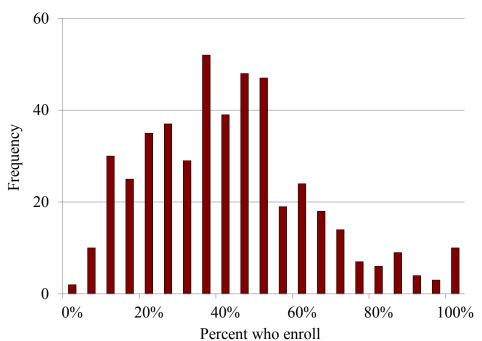


Figure 1. Distribution of Supplemental Life Insurance Take-up

A number of life-insurance product characteristics (or "supply side" variables) also vary across employers. The guaranteed issue amount (the amount below which a medical check-up is not necessary) is less than six times annual salary, or less than \$500,000, for most employers, but considerable heterogeneity exists within this range (Figure 2). Similarly, the standard deviation for the average monthly life insurance premium is \$77.73 for a 45 year old male, compared to a mean of \$42.53. The maximum issue amount (MIA) for supplementary life insurance also varies among employers, but over half of all employers report an amount of five times annual salary, or \$500,000 a year in coverage, as the MIA.

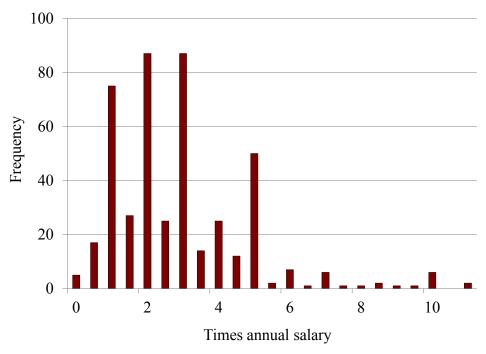


Figure 2. Distribution of Guaranteed Issue Amount

The survey also sheds light on the prevalence of less well-known life-insurance practices, such as defaulting employees into a particular level of coverage, the presentation format of benefit options, and the guidance available:

- Almost 15 percent of employers report defaulting employees into some form of life insurance coverage, with either a flat level of \$10,000 or a multiple of salary (most often, one to two times) being popular default options.
- Roughly half of employers present life insurance as a multiple of pay vs. a lump-sum.
- Most employers offer \$10,000 increments for lump-sum coverage options.
- Seventy percent of employers do not provide guidance on life insurance coverage, and only 19 percent of employers provide guidance on the enrollment screen or form.⁴

Long-Term Disability Practices. This section summarizes survey responses related to supplementary long-term disability. On average, 32 percent of employees enroll in this benefit compared to 40 percent in the case of supplementary life insurance. Similar to life insurance, a

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⁴ Coe, Belbase, and Wu (2012) find evidence that information present in the enrollment screen is more likely to affect behavior than information outside of the enrollment screen.

great deal of variation exists in take-up across employers (Figure 3). The majority of supplemental long-term disability insurance plans pay 60 percent of salary (Figure 4).⁵

30 30 20 10 0% 20% 40% 60% 80% 100% Percent who enroll

Figure 3. Average Take-Up Rate for Supplementary Long-Term Disability Insurance

Source: Authors' calculations.

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⁵ The distribution of the supplemental long-term disability coverage level is puzzling, because a significant minority of employers report coverage of less than 30 percent of salary (Figure 4). Conversations with Prudential researchers indicate that a coverage level under 30 percent is rare (if such options exist at all), so this finding suggests respondents might be reporting the coverage *increase* rather than the total salary replaced under the supplementary coverage option. Supplemental short-term disability also exhibits a substantial proportion of coverage levels below 30 percent of salary.

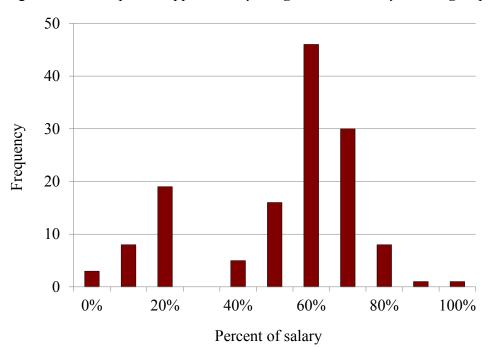


Figure 4. Most Popular Supplementary Long-Term Disability Coverage Option

The survey also reveals information on the characteristics of other supplementary long-term disability insurance products offered by employers, including the average monthly employee premium, waiting periods for benefit payout, and exhaustion period (i.e. the maximum duration of benefits). Most employers report a waiting period of 12 months or less before benefits are paid out, with a high degree of variability within this range (Figure 5). Premiums similarly vary widely across employers, with a reported average monthly premium of \$10.71 to cover 60 percent of pay with a standard deviation of \$24.43. Unlike waiting periods and premiums, which vary considerably, almost all employers offer disability benefits that last until retirement.

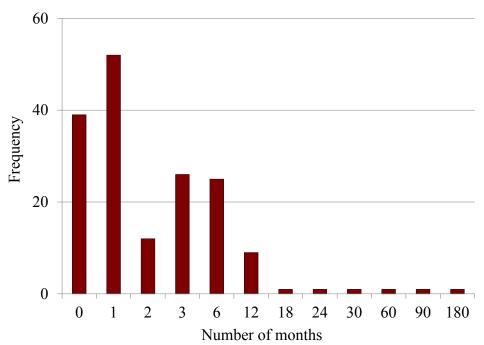


Figure 5. Distribution of Waiting Period of Supplementary Long-Term Disability Plans Offered

In contrast to life insurance, default coverage into supplementary disability insurance is rare. However, mirroring our findings for life insurance, most employers (62 percent) do not provide guidance on long-term disability coverage, with only 21 percent of employers providing guidance on the enrollment screen or form.

Short-Term Disability Practices. This section summarizes responses to questions on supplementary short-term disability. On average, 28 percent of employees enroll in this benefit, compared to 32 percent in supplementary long-term disability insurance and 40 percent in supplementary life insurance. Similar to life insurance and long-term disability insurance, the take-up rates for short-term disability insurance exhibit substantial variation (Figure 6). Nearly all short-term disability policies pay out 60 percent of salary (Figure 7).

Figure 6. Distribution of Employer Take-Up Rates for Supplementary Short-Term Disability Insurance

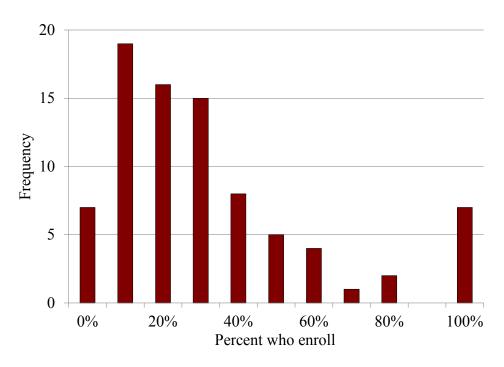
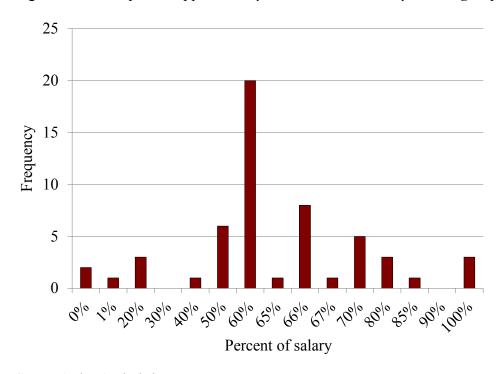


Figure 7. Most Popular Supplementary Short-Term Disability Coverage Option



Source: Authors' calculations.

As is the case for long-term disability insurance, the survey provides information on the prevalence of the characteristics of the supplementary short-term disability insurance products offered by employers, including the average monthly employee premium, waiting period, and exhaustion period. Most employers report waiting periods of between 0 and 90 days before benefits are paid out, with a high degree of variability within this range (Figure 8). Premiums similarly vary widely across employers, with a reported average monthly premium of \$16.61 to cover 56 percent of pay with a standard deviation of 36.58. In contrast to the wide variation in waiting periods and premiums, almost all employers offer disability benefits that last either three or six months (about half for each duration).

Frequency 10 14 15 28 30 60 90 180 365 Number of days

Figure 8. Average Waiting Period of Supplementary Short-Term Disability Plans Offered

Source: Authors' calculations.

Similar to life insurance and long-term disability insurance, most employers (69%) do not provide guidance on appropriate short-term disability coverage, with only 20 percent of employers providing such guidance on the enrollment screen or form.

Regression Results

Using regression analysis, the study finds that cross-advertising, the enrollment window, and the enrollment channel are correlated with benefit take-up for supplementary life insurance, supplementary long-term disability insurance, and supplementary short-term disability insurance. Benefit characteristics and the use of defaults are also related to the take-up of specific benefits. Detailed regression results can be found in Appendix B.

Life Insurance. This study examines the relationship between employer practices and two measures of supplementary life-insurance coverage: the take-up rate and coverage level. The existence of a high default (over two times pay) is associated with a 15 percentage point decrease in take-up, the largest change in take-up associated with any practice. Practices that lower the probability of cross-advertising – communicating benefits separately and allowing employees to enroll at any time instead of during a single annual enrollment event – are also associated with lower take-up of supplementary life insurance. Notable factors positively correlated with take-up include the maximum issue amount and the practice of enrolling all employees online or over the phone using interactive tools (as opposed to enrolling new hires in person using paper forms). Table 7 summarizes these results; detailed results for all regressions in Tables 7-10 are available in Appendix B.

Table 7. Factors Related to Supplementary Life Insurance Take-Up

Baseline condition	Test condition	Change in take-up (percentage points)
Default of no coverage	Default coverage of more than 2 times pay	-15
All benefits communicated together	Each benefit communicated separately	-6
Enrollment is open once a year	Enrollment is open all year	-4
All benefits communicated together	Only health and group benefits communicated together	-4
Benefits administered by employer or directly through a work-site carrier	Benefits administered through a third party	-3
Average age of employees is 42	Average age of employees is 45	-1
Maximum issue amount is 5.4 times pay	Maximum issue amount is 6.4 times pay	+1
New hires enroll in person using paper forms and lack access to online tools	All employees enroll online or over the phone and have access to interactive tools	+6

Notes: Percent change from a baseline of 39 percent. Statistically significant at an 85 percent confidence level. *Source:* Authors' calculations.

Several factors related to take-up are also related to coverage level, but with an inverse relationship. While high default coverage levels correlate with lower take-up, they are associated with higher coverage levels. Similarly, allowing all employees to enroll online or over the phone with interactive tools (a practice associated with higher take-up) is related to lower coverage levels. Third-party administration of benefits is associated with both lower take-up and lower-coverage levels and this consistency is unique. Surprisingly, requiring new hires to sign up for life insurance in person (using paper forms) is associated with higher coverage levels. Finally, as economic theory predicts, the guaranteed issue amount (the coverage threshold over which medical examinations become necessary) is positively related to coverage level. Table 8 summarizes these results.

Table 8. Factors Related to Supplementary Life Insurance Coverage Level

Baseline condition	Test condition	Change in coverage level (pay multiple)
New hires enroll in-person using paper forms and lack access to online tools	All employees enroll online or over the phone and have access to interactive tools	-0.75
Benefits administered by employer or directly through a work-site carrier	Benefits administered through a third-party	-0.25
Guaranteed Issue Amount is 2.8 times pay	Guaranteed Issue is 3.8 times pay	+0.21
Default of no coverage	Default coverage of more than 2 times pay	+0.56
All employees enroll online or over the phone and have access to online tools	New employees enroll in person using paper forms	+0.91

Notes: Relative to a baseline of 2.2 times annual pay. Statistically significant at an 85 percent confidence level. *Source:* Authors' calculations.

Long-Term Disability Insurance. Only two aspects of employer practice are correlated with the take-up of supplementary long-term disability benefits in a statistically significant way: the enrollment window and the enrollment channel. Similar to life insurance, having a single enrollment event for long-term disability insurance (rather than allowing employees to enroll at any time) is associated with a higher take-up rate. Unlike life insurance, however, allowing existing employees to enroll online or over the phone (without access to online tools) decreases take-up compared to enrolling in-person using paper-forms. In addition to these employer practices, a younger employee base and a higher proportion of parents in an employee base are associated with higher take-up of supplementary long-term disability insurance. Table 9 summarizes these results.

Table 9. Factors Related to Supplementary Long-Term Disability Insurance Take-Up

Baseline condition	Test condition	Change in take-up (percentage points)
All employees enroll in-person using paper forms	Existing employees enroll online or over the phone without access to online tools	-13
Enrollment is open once a year	Enrollment is open all year	-10
Average age of employees is 42	Average age of employees is 45	-3
42 percent of employees are parents	52 percent of employees are parents	+10

Notes: Percent change from a baseline of 32 percent. Statistically significant at an 85 percent confidence level. *Source:* Authors' calculations.

Short-Term Disability Insurance. The enrollment window and cross-advertising are also related to the take-up of short-term disability insurance. Similar to life insurance and long-term disability insurance, having a single annual enrollment event (rather than allowing employees to enroll at any time) is associated with a higher take-up rate. Unlike the other benefits examined, communicating short-term disability insurance simultaneously with only health benefits is associated with higher take-up than communicating the benefit with health and retirement benefits. In addition to these employer practices, higher proportions of parents and/or women in an employee-base are associated with higher take-up of supplementary short-term disability insurance. Table 10 summarizes these results.

Table 10. Factors Related to Supplementary Short-Term Disability Insurance Take-Up

Baseline condition	Test condition	Change in take-up (percentage points)
Enrollment is open once a year	Enrollment is open all year	-19
51 percent of employees are female	61 percent of employees are female	+2
42 percent of employees are parents	52 percent of employees are parents	+3
All benefits communicated together	Only health and group benefits communicated together	+13

Notes: Percent change from a baseline of 32 percent. Statistically significant at an 85 percent confidence level. *Source:* Authors' calculations.

Conclusion

The current study examines group benefits from the employer's perspective. The variation in benefit characteristics and employee practices is substantial, with each having the potential to affect employees' coverage decisions. Using regression analysis, the study finds that cross-advertising, the frequency of the enrollment window, and the enrollment channel – phone, online, or in person – are related to benefit take-up for all three benefits examined: life insurance and short-term and long-term disability. Benefit characteristics and the use of defaults are also related to the take-up of specific benefits.

One theme that emerges from this study is that communication strategies that increase the salience of insurance products correlate with higher take-up rates. Specifically, the study identifies two important strategies: timing and bundling. Across all three benefits, timing enrollment to focus attention on benefits in one annual event is associated with higher take-up than when employees are allowed to enroll at any time during the year. Similarly, bundling less-salient benefits (in this case, life and disability insurance) with more-salient ones (health insurance and retirement benefits) is linked with higher take-up across all three benefits examined. In the case of short-term disability, communicating disability insurance together with health insurance has a dramatic effect on take-up, but this effect disappears/weakens when retirement benefits are also included. This result is consistent with findings from earlier studies in the current research program which show that simply bringing attention to the potential for debilitating illnesses can raise disability insurance take-up rates (Coe and Belbase 2013, Coe, Belbase, and Wu 2012).

Other results from this study also echo results from our previous work. Both Coe and Belbase (2012) and Coe, Belbase and Wu (2012) showed that individuals have an aversion to any steps that increase the hassle of enrollment. Several findings from this study support this theme. Life insurance coverage level is strongly positively correlated with the guaranteed issue

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⁶ During a qualitative study of the life and disability insurance decision-making process, several participants reported that they consider short-term disability insurance as an extension of medical insurance. Unlike long-term disability insurance, it was easy to imagine needing short-term disability insurance in the context of medical issues. ⁷ For example, during interviews conducted as part of a qualitative study, participants report not attending in-person information sessions on benefits and relying on inertia (past coverage decisions or the default coverage option) to decide how much life insurance coverage to get. A second study using an online enrollment experiment showed that communication strategies requiring effort, such as clicking on a link to a calculator, are less effective in changing behavior compared to strategies that minimize participant effort (or hassle), such as having the calculator on the same page as the relevant box from the enrollment form.

amount – the amount above which obtaining coverage becomes a "hassle". Similarly, allowing enrollment online or over the phone – which is generally easier for employees than filling out paper forms – is associated with higher take-up of life insurance. An exception to this pattern can be found in the take-up of long-term disability insurance, where requiring individuals to enroll in-person using paper forms (a high-effort process) is associated with higher take up. One reason may be that in-person enrollment provides employees with an opportunity to seek guidance from a human resources professional, offsetting the extra effort required. Since the study does not control for blue- versus white-collar work, it's possible that companies with in-person enrollment are also more likely to employ workers who engage in more hazardous blue-collar work. An alternative explanation in line with the prior studies is that low long-term disability take-up is driven primarily by a lack of salience, and anything that makes disability more salient (such as a conversation about coverage options) has the potential to raise take-up.

These results are subject to several caveats. First, the findings are correlational. Even though important factors (such as benefit generosity) are controlled for, other variables that affect benefit utilization, such as employee-specific disability rates, are omitted due to a lack of data. Second, the sample is not designed to be nationally representative. Third, the study uses a survey rather than administrative data to analyze benefit practices and take-up rates. Despite these limitations, the study sheds much-needed light on the prevalence of employer practices that might affect life and disability insurance take-up, and it takes a step toward identifying practices that may influence employee behavior. Future studies with access to administrative data spanning periods in which benefit practices have changed could further improve our understanding of this topic.

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Appendix A. The Full Survey

Consent Form

The Society for Human Resource Management (SHRM) is conducting a CONFIDENTIAL survey of HR professionals about employee benefit practices. Please participate in this survey by answering the following questions and hitting the submit button at the end no later than {3 weeks from date survey is fielded}.

You are being asked to participate in a research study titled "Improving Employees' Benefit Decisions" by the Society for Human Resource Management (SHRM). You were selected to participate in this project because our records indicate that you are familiar with decisions regarding the employee benefits your organization offers.

The purpose of this study is to understand the prevalence and effectiveness of HR practices related to life and disability insurance.

This study will be conducted through this online survey. The survey should take you approximately **15-20 minutes** to complete.

Your participation is voluntary. You are free to withdraw or skip questions for any reason. There are no penalties for withdrawing or skipping questions.

If you have questions or concerns concerning this research you may contact Tanya Mulvey, SHRM, at 703-535-6355, or Surveys4@shrm.org. If you have questions about your rights as a research participant, you may contact the Office for Research Protections, Boston College, at 617-552-4778 or irb@bc.edu.

If you agree to the statements above and agree to participate in this study, please check the "Consent Given" box below and click the "Next" button to start the survey.

□ Consent Given [REQUIRED]

Ab	out	you

1.	What is your role at your organization?
	 President, CEO, Chairman Partner, Principal CHRO, CHCO Vice President or Assistant/Associate Vice President Director or Assistant/Associate Director Manager, Generalist Administrator Coordinator Representative, Associate Specialist Other
2.	Are you familiar with: 1) the goals of your organization's employee benefits program, 2) the process by which the benefits program is communicated and administered, and 3) the manner and extent to which employees participate in the benefits program? [IF QUESTION NOT ANSWERED, CONTINUE TO Q3]
	 Yes, I am familiar with all three topics No, I am not familiar with one or more topics [DISQUALIFY] Not applicable; our organization does not offer any benefits [DISQUALIFY]
	What percent of your organization's benefit-eligible employees: Is female % Is married % Is the parent or guardian of any children under the age of 18 %
	What is the average age of benefit-eligible employees in your organization? years of age. What is the average or median annual salary of benefit-eligible employees in your organization?
	Average dollars per year \$ Median dollars per year \$

About the benefits your organization offers its benefit-eligible employees:

3. Which of the following benefits does your organization offer to benefit-eligible employees?

which of the followin	100%	100%	Employer	Benefit
	Employer	Employee	&	Not
	Paid	Paid	Employee	Offered
			Paid	
Health/Medical	0	0	0	0
Insurance				
Dental Insurance	0	0	0	0
Basic Life Insurance	0	0	0	0
Supplemental Life	0	0	0	0
Insurance				
Long-Term	0	0	0	0
Disability Insurance				
Supplemental Long-	0	0	0	0
Term Disability				
Insurance				
Short-Term	0	0	0	0
Disability Insurance				
Supplemental Short-	0	0	0	0
Term Disability				
Insurance				
Basic Accidental	0	0	0	0
Death and				
Dismemberment				
Insurance				
Supplemental	0	0	0	0
Accidental Death				
and Dismemberment				
Insurance				
Accident Insurance	0	0	0	0
Critical Illness	0	0	0	0
Insurance				
Defined Benefit	0	0	0	0
Pension Plan Open				
to Current				
Employees				
Defined	0	0	0	0
Contribution				
Retirement Savings				
Plan (401k, 403b,				
etc.)				

4.	How are your benefits administered? Please check all that apply.				
	 Self-administered. Directly from a work-site carrier (self-insured) Through a traditional broker-carrier. Through a third-party administrator.).			
5.	When are all employees able to enroll in the <u>supplemental</u> life and disability insurance programs offered by your organization? [SHOW IF Q3 Supplemental Life, LTD or STD DOES NOT= "Benefit Not Offered"]				
	Once a year during open enrollment.At any time during the year.Other				
6.	6. How are benefits options, prices, etc. communicated to employees at each open enrollment and to new employees? Please check all that apply.				ment
			At Open		
-	Y		Enrollme	ent Employee	es
-	In-person	<u> </u>			
-	Group meetings				
Individual, one-on-one meetings					
By mail					
Mail received at home or at the workplace					
-	Over the phone				
	A toll-free phone number or outbound calls to	'			
-	employees during the enrollment period				
-	Electronically	1			
-	Through email	mo otivvo			
	An online presentation <u>without</u> the use of intertools	ractive			
	An online presentation with the use of interact	tive			
-	tools like an insurance estimator				
-	Mobile devices (e.g., BlackBerry, iPhone)				
	Other				
	If you selected "other" above, please describe communicated to employees:	the other	ways that ben	nefits options are	
7. Who communicates benefits to <u>new employees</u> ? <i>Please check all that apply</i> . [only sbenefits offered based on question 3]			hat apply. [only sho	ow	
ſ		The	Employer	The Broker-Car	rier
	Health/Medical Insurance				
Dental Insurance					
Ī	Basic Life Insurance				
L					

Supplemental Life Insurance		
Long-Term Disability Insurance		
Supplemental Long-Term Disability		
Insurance		
Short-Term Disability Insurance		
Supplemental Short-Term Disability		
Basic Accidental Death and Dismemberment		
Insurance		
Critical Illness Insurance		
Defined Benefit Pension Plan Open to Current Employees		
Defined Contribution Retirement Savings Plan (401k, 403b, etc.)		
 □ Online via Internet or intranet □ Over the phone □ In-person (e.g., at a benefits office) □ Paper forms □ Automatically enrolled in certain benefits □ Other 		
 i.e., retirement savings, health, and other group Information on benefits is communicated to Each benefit is communicated separately as Health/medical and other group benefits are 	benefits as one pack ogether as part of a pass a standalone benefit	rage – or separately? ackage. t.
	upport your organiza — —	tion's benefit programs?
	Long-Term Disability Insurance Supplemental Long-Term Disability Insurance Short-Term Disability Insurance Supplemental Short-Term Disability Insurance Basic Accidental Death and Dismemberment Insurance Supplemental Accidental Death and Dismemberment Insurance Accident Insurance Critical Illness Insurance Defined Benefit Pension Plan Open to Current Employees Defined Contribution Retirement Savings Plan (401k, 403b, etc.) How are employees able to enroll in benefits? Please check all that apply. Online via Internet or intranet Over the phone In-person (e.g., at a benefits office) Paper forms Automatically enrolled in certain benefits Other Does your organization communicate informat i.e., retirement savings, health, and other group Information on benefits is communicated to Each benefit is communicated separately as the elith/medical and other group benefits arbenefits.	Long-Term Disability Insurance Supplemental Long-Term Disability Insurance Short-Term Disability Insurance Supplemental Short-Term Disability Insurance Basic Accidental Death and Dismemberment Insurance Supplemental Accidental Death and Dismemberment Insurance Supplemental Insurance Supplemental Accidental Death and Dismemberment Insurance Critical Illness Insurance Critical Illness Insurance Defined Benefit Pension Plan Open to Current Employees Defined Contribution Retirement Savings Plan (401k, 403b, etc.) How are employees able to enroll in benefits? Please check all that apply. Online via Internet or intranet Over the phone In-person (e.g., at a benefits office) Paper forms Automatically enrolled in certain benefits Other Does your organization communicate information on all of the benefice., retirement savings, health, and other group benefits as one pack Information on benefits is communicated together as part of a potential penefit is communicated separately as a standalone benefice. Health/medical and other group benefits are communicated separately as a standalone beneficential penefits.

Supplemental life insurance: [SHOW SECTION IF Q3 Supplemental Life Insurance = 100% employer, 100% employee, or employer & employee paid]

11.	1. How many of your employees are eligible for and elect to buy supplemental life-insurance coverage?				
	Number of eligibl Number of emplo	le employees: yees who enroll:	_		
12.	. What is the supple	emental life insurance	guaranteed issue amount	?	
	times annu	al salary; OR \$	in face value.		
13.	. What is the <i>maxin</i>	num supplemental life	insurance issue amount?		
	times annu	al salary; OR \$	in face value		
14.	. What is the month coverage?	nly employee premium	by age for \$100,000 in s	supplemental life insurance	
		Monthly en	nployee premium per \$10	00,000 in coverage	
	Age	Male	Female	Either sex (if premium not known by sex)	
	25	\$	\$	\$	
	35	\$	\$	\$	
	45	\$	\$	\$	
	55	\$	\$	\$	
	65	\$	\$	\$	
15.		It coverage option for s	supplemental life insuran	ce coverage?	
	 No coverage. 	, c e			
 A coverage amount of \$ A coverage amount of times annual salary. 					
	o Other, please	specify:times	s amuai salary. 		
16.	16. How are supplemental life insurance coverage options presented to employees? <i>Please check all that apply</i> .				
	☐ As a multiple	of pay.			
	□ As a lump-sur				
		specify:	.		

i	Show if Q16 = lump-sum amount] In what coverage increments are supplemental life nsurance coverage options presented to employees (in \$10,000 increments, \$25,000 ncrements, etc.)?
\$	S
	Are employees provided with any guidance on an appropriate level of supplemental life nsurance coverage? <i>Please check all that apply</i> .
	No. [EXCLUSIVE] Yes, guidance is available on the enrollment screen or form. Yes, guidance is provided outside of the enrollment screen or form. If yes, please describe the type of guidance:
	What is the average supplemental life insurance coverage amount for employees who elect his benefit?
_	times annual salary; OR \$ in face value.
	Employer-Paid Long-term disability insurance: [SHOW SECTION IF Q3 Long-term bility Insurance = 100% Employer Paid]
	What percentage of salary does the employer provide for long-term disability coverage <u>at no cost to employees</u> ?
0,	% of salary; OR dollars in face value \$
	plemental Long-term disability insurance: [SHOW SECTION IF Q3 Supplemental LTD 0% Employer Paid, 100% Employee Paid, or Employer and Employee Paid]
	How many of your employees are eligible for and elect to buy supplemental long-term disability coverage?
1	Number of eligible employees: Number of employees who enroll:
S	What are the two most popular coverage options that your organization offers for supplemental long-term disability coverage? Coverage option 1:% of salary Coverage option 2:% of salary
	What is the monthly employee premium by age for supplemental long-term disability coverage, for the following coverage option(s)?

Monthly Employee Premiums, By Coverage Option and Age

Age	[Answer 1 Q22]% of Salary	[Answer 2 Q22]% of Salary
25	\$	\$
35	\$	\$
45	\$	\$
55	\$	\$
65	\$	\$

24.	What is the waiting period for supplemental long-term disability coverage? <i>If coverage began on the date of hire, enter 0; if coverage began on the first of the month following the date of hire, enter 1; otherwise enter the number of months until coverage began.</i>
	months.
25.	. What is the exhaustion period for supplemental long-term disability coverage?
	 Limited number of years. Please enter the number of years: Retirement. Other, please specify:
26.	. What is the default coverage option for supplemental long-term disability coverage?
	 No coverage. Coverage from prior year. A percent of salary equal to%. Other, please specify:
27.	. Are employees provided with any guidance on the appropriate level of supplemental long-term disability coverage? <i>Please check all that apply</i> .
	 No. [EXCLUSIVE] Yes, guidance is available on the enrollment screen or form. Yes, guidance is provided outside of the enrollment screen or form. If yes, please describe the type of guidance:
	0% Employer-Paid Short-term disability insurance: [SHOW SECTION IF Q3 Short-term sability Insurance = 100% Employer Paid]
28.	. What percentage of salary does the employer provide for short-term disability coverage <u>at no cost to employees</u> ?
	% of salary; OR \$ in face value

Supplemental Short-term disability insurance: [SHOW SECTION IF Q3 Supplemental STD = 100% Employer Paid, 100% Employee Paid, or Employer and Employee Paid]

29.	. How many of your employees are eligible for and elect to buy <u>supplemental</u> short-term disability coverage?				
	Number of eligible employees: Number of employees who enr	roll:			
30.	What is the average <u>supplement</u> elect this benefit?	ntal short-term disability coverag	ge level for employees who		
	% of salary; OR \$	in face value.			
31.	1. What are the two most popular coverage options that your organization offers for supplemental short-term disability coverage? Coverage option 1:% of salary Coverage option 2:% of salary				
32.	What is the monthly employee coverage, for the following cov	premium by age for supplement verage option(s)?	tal short-term disability		
_	Monthly Empl	oyee Premiums, By Coverage C	ption and Age		
	Age	[Answer 1 Q31]% of Salary			
	25	\$	\$		
	35	\$	\$		
	45	\$	\$		
	55	\$	\$		
	65	\$	\$		
33.	3. What is the waiting period for supplemental short-term disability coverage? days.				
34.	4. What is the exhaustion period for supplemental short-term disability coverage?				
	months.				
35.	5. What is the default coverage option for supplemental short-term disability coverage?				
	 No coverage. Coverage from prior year. A percent of salary equal to				

term disability coverage? Please check all that apply.	
□ No. [EXCLUSIVE]	
☐ Yes, guidance is available on the enrollment screen or form.	

☐ Yes, guidance is provided outside of the enrollment screen or form. If yes, please describe the type of guidance:

36. Are employees provided with any guidance on the appropriate level of supplemental short-

Thank You for Participating in SHRM Surveys!

Your responses to the *Improving Employees' Benefit Decisions Survey* have been successfully submitted.

View recently released research from SHRM

Are you PHR, SPHR, GPHR, PHR-CA, SPHR-CA, HRMP or HRBP Certified?

Please print this page with the name of the survey you have participated in along with the date. You will also be sent an email indicating that you have participated in this survey. Please use this information as documentation for your HRCI recertification credits.

You will receive 1 HRCI general recertification credit for taking this survey by following the instructions below. Remember, a maximum of 1 credit per year will be awarded for survey participation.

Instructions for Receiving HRCI Recertification Credits:

If you are a SHRM member with a current PHR, SPHR, GPHR, PHR-CA, SPHR-CA, HRMP or HRBP credential from the HR Certification Institute, you will receive 1 general recertification credit per year for completing a SHRM Research survey.

This means that over the three year recertification period, you can earn 3 general recertification credits by completing 3 surveys (1 survey per year).

To log your recertification credit for taking this survey:

- 1. Go to the HR Certification Institute's website <u>www.hrci.org</u> and login with your HRCI login information. The "Login" button is located on right side of the page.
- 2. Under the Action Items section, click on the "Report or Add New Activity to Online Recertification Application" to record your participation. When the new page loads, scroll down to Leadership and click on Add/Review.
- 3. Under the Type of Activity dropdown box, select "Participation in SHRM Survey," then under Activity Details enter the title of the survey in which you participated. Remember, a maximum of 1 credit per year will be awarded for survey participation.

QUESTIONS? Please contact the SHRM Survey Research Center at +1.703.535.6301 or by email at surveys4@shrm.org.

For general inquiries, contact SHRM at 800.283.7476 or by e-mail at shrm.org.

Appendix B. Summary Statistics and Detailed Regression Results

Table A1. Summary Statistics for Supplemental Life Insurance, Take-up Regression

Variables	Number of observations	Mean	Standard deviation	Minimum	Maximum
Life insurance paid 100% by employer	468	0.91	0.29	0	1
Benefits offered	468	9.75	2.45	0	13
Benefits administered, through broker carrier	468	0.52	0.50	0	1
Benefits administered, through third party	468	0.45	0.50	0	1
Enrollment, allowed at anytime	468	0.21	0.41	0	1
Enrollment, other than at anytime	468	0.12	0.33	0	1
Coverage offered by Broker Carrier only	468	0.06	0.25	0	1
Coverage offered by Broker Carrier and Employer	468	0.06	0.23	0	1
Coverage offered from by other than the Broker Carrier or Employer	468	0.42	0.49	0	1
Enrollment channel, online/phone with interactive tools for just new employees	468	0.20	0.40	0	1
Enrollment channel, online/phone with interactive tools for new and existing employees	468	0.11	0.32	0	1
Enrollment channel, online/phone with no interactive tools for just new employees	468	0.26	0.44	0	1
Enrollment channel, online/phone with no interactive tools for new	.00	0.20	· · · ·	· ·	-
and existing employees	468	0.15	0.35	0	1
Benefit communication, all separately	468	0.07	0.26	0	1
Benefit communication, health/medical benefits communicated				-	
separately from retirement	468	0.41	0.49	0	1
Percent female	468	47.16	26.35	0	100
Percent married	468	45.89	28.38	0	100
Percent parents	468	29.26	25.72	0	100
Average age	468	36.17	16.02	0	57
Average wage	468	4.87	3.20	0	15
Monthly premium	468	0.10	0.22	0	3

⁻⁽cont'd)-

Table A1. Summary Statistics for Supplemental Life Insurance, Take-up Regression (cont'd)

Variables	Number of observations	Mean	Standard deviation	Minimum	Maximum
Default coverage, \$10,000 in coverage	468	0.03	0.16	0	1
Default coverage, 1 times salary	468	0.03	0.17	0	1
Default coverage, 2 times salary	468	0.02	0.13	0	1
Default coverage, other	468	0.95	0.21	0	1
Guidance provided, in enrollment screen	468	0.20	0.40	0	1
Guidance provided, outside of enrollment screen	468	0.10	0.30	0	1
Guaranteed issue amount	468	2.19	2.02	0	11
Maximum issue amount	468	4.09	3.24	0	12
Benefits offered, missing	468	0.04	0.19	0	1
Benefits administered, through broker carrier, missing	468	0.00	0.00	0	0
Enrollment, allowed at anytime, missing	468	0.02	0.15	0	1
Coverage offered by Broker Carrier only, missing	468	0.00	0.00	0	0
Coverage offered by Broker Carrier and Employer, missing	468	0.94	0.23	0	1
Coverage offered from other than the Broker Carrier or Employer,					
missing	468	0.01	0.10	0	1
Enrollment channel, online/phone with interactive tools for just new					
employees, missing	468	0.00	0.00	0	0
Enrollment channel, online/phone with no interactive tools, missing	468	0.00	0.00	0	0
Benefit communication method, all separately, missing	468	0.00	0.05	0	1
Percent female, missing	468	0.09	0.28	0	1
Percent married, missing	468	0.22	0.41	0	1
Percent parents, missing	468	0.30	0.46	0	1
Average age, missing	468	0.15	0.35	0	1
Average wage, missing	468	0.18	0.39	0	1
Monthly premium, missing	468	0.53	0.50	0	1
Default coverage, \$10,000 in coverage, missing	468	0.07	0.26	0	1
Default coverage, other, missing	468	0.07	0.25	0	1
Guidance provided, in enrollment screen, missing	468	0.03	0.16	0	1
Guaranteed issue amount, missing	468	0.21	0.41	0	1
Maximum issue amount, missing	468	0.24	0.43	0	1

Table A2. Regression Results for Life Insurance Take-up Rate

Variables	Coefficient
Life insurance paid 100% by employer	-3.65
	(3.62)
Benefits offered	-0.08
	(0.68)
Benefits administered, through broker carrier	-3.59*
Danafita administered through third norty	(2.08) -2.83
Benefits administered, through third party	(2.08)
Enrollment, allowed at anytime	-4.19*
Emoniment, and weat at anythine	(2.59)
Enrollment, other than at anytime	1.33
	(3.21)
Coverage offered by Broker Carrier only	-2.66
	(4.82)
Coverage offered by Broker Carrier and Employer	-2.55
	(4.93)
Coverage offered from by other than the Broker Carrier or Employer	0.95
	(2.36)
Enrollment channel, online/phone with interactive tools for new employees	-2.30
Enrollment channel, online/phone with interactive tools for new and existing	(3.69)
employees	6.34
	(4.70)
Enrollment channel, online/phone with no interactive tools for just new	2.12
employees	2.12
Enrollment channel, online/nhone with no interactive tools for new and existing	(3.26)
Enrollment channel, online/phone with no interactive tools for new and existing employees	0.11
employees	(4.08)
Benefit communication method, all separately	-6.09*
2 4.10.10 4 0.11.11.11.11.11.11.11.11.11.11.11.11.11	(4.18)
Benefit communication method, health and medical separate from retirement	-3.86*
•	(2.15)
Percent female	-0.01
	(0.05)
Percent married	0.10
D	(0.08)
Percent parents	0.04
Avaraga aga	(0.06) -0.36*
Average age	-0.36** (0.20)
-(cont'd)-	(0.20)

Table A2. Regression Results for Life Insurance Take-up Rate (cont'd)

Variables	Coefficient
Average wage	-0.24
	(0.49)
Monthly premium	-4.68
D C 1, 010,000;	(5.35)
Default coverage, \$10,000 in coverage	7.67
	(6.52)
Default coverage, 1 times salary	-1.16
Default coverage, 2 times salary	(9.74) Omitted
Default coverage, other	-15.21*
	(7.91)
Guidance provided, in enrollment screen	-2.80
	(2.64)
Guidance provided, outside of enrollment screen	1.40
•	(3.52)
Guaranteed issue amount	0.22
	(0.65)
Maximum issue amount	1.06**
	(0.48)
Benefits offered, missing	-0.74
	(9.08)
Benefits administered, through broker carrier, missing	Omitted
Enrollment, allowed at anytime, missing	5.54
	(6.85)
Coverage offered by Broker Carrier only, missing	Omitted
Coverage offered by Broker Carrier and Employer, missing	Omitted
Coverage offered from other than the Broker Carrier or Employer, missing	-9.57
	(10.39)
Enrollment channel, online/phone with interactive tools for just new employees, missing	Omitted
Enrollment channel, online/phone with no interactive tools, missing	Omitted
Benefit communication method, all separately, missing	-3.06
······································	(21.78)
Percent female, missing	8.23*
-, <i>U</i>	(5.47)
Percent married, missing	-5.12
, .	(5.74)

Table A2. Regression Results for Life Insurance Take-up Rate (cont'd)

Variables	Coefficient
Percent parents, missing	9.18**
	(4.05)
Average age, missing	-18.59**
	(9.31)
Average wage, missing	0.61
	(4.31)
Monthly premium, missing	-3.26
	(2.60)
Default coverage, \$10,000 in coverage, missing	-8.61
	(16.32)
Default coverage, other, missing	7.00
	(16.72)
Guidance provided, in enrollment screen, missing	1.94
	(7.14)
Guaranteed issue amount, missing	-2.70
	(3.74)
Maximum issue amount, missing	1.28
	(3.96)
Adjusted R ²	0.05
Number of observations	468

Note: Robust standard errors are in parentheses. The coefficients are significant at the 15-percent level (*), or the 5percent level (**).

Source: Authors' calculations.

Table B1. Summary Statistics for Supplemental Life Insurance Coverage, Level Regression

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Life insurance paid 100% by employer	374	0.92	0.28	0	1
Benefits offered	374	9.68	2.55	0	13
Benefits administered, through broker carrier	374	0.49	0.50	0	1
Benefits administered, through third party	374	0.43	0.50	0	1
Enrollment, allowed at anytime	374	0.20	0.40	0	1
Enrollment, other than at anytime	374	0.11	0.31	0	1
Coverage offered by Broker Carrier only	374	0.05	0.23	0	1
Coverage offered by Broker Carrier and Employer	374	0.06	0.24	0	1
Coverage offered from by other than the Broker Carrier or Employer	374	0.43	0.50	0	1
Enrollment Channel, online/phone with interactive tools for just new					
employees	374	0.22	0.42	0	1
Enrollment Channel, online/phone with interactive tools for new and					
existing employees	374	0.13	0.34	0	1
Enrollment Channel, online/phone with no interactive tools for just new					
employees	374	0.27	0.44	0	1
Enrollment Channel, online/phone with no interactive tools for new and					
existing employees	374	0.15	0.36	0	1
Benefit communication method, all separately	374	0.05	0.23	0	1
Benefit communication method, health and medical separate from					
retirement	374	0.43	0.50	0	1
Percent Female	374	46.24	25.45	0	100
Percent Married	374	46.99	27.41	0	95
Percent Parents	374	29.43	25.25	0	99
Average age	374	37.91	14.53	0	57
Average wage	374	5.41	2.96	0	15
Monthly premium	374	0.11	0.24	0	3
Default coverage, \$10,000 in coverage	374	0.02	0.13	0	1
Default coverage, 1 times salary	374	0.03	0.18	0	1
Default coverage, 2 times salary	374	0.02	0.14	0	1

⁻⁽cont'd)-

Table B1. Summary Statistics for Supplemental Life Insurance Coverage, Level Regression (cont'd)

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Default coverage, other	374	0.95	0.23	0	1
Supplemental Life Insurance presented as a lump sum amount to					
employees	374	0.40	0.49	0	1
The coverage increment level (if presented as a level amount to					
employees)	374	4308	7412	0	50000
Guidance provided, in enrollment screen	374	0.21	0.41	0	1
Guidance provided, outside of enrollment screen	374	0.10	0.30	0	1
Guaranteed issue amount	374	2.41	2.02	0	11
Maximum issue amount	374	4.45	3.09	0	12
Benefits offered, missing	374	0.04	0.20	0	1
Benefits administered, through broker carrier, missing	374	0.00	0.00	0	0
Enrollment, allowed at anytime, missing	374	0.02	0.14	0	1
Coverage offered by Broker Carrier only, missing	374	0.00	0.00	0	0
Coverage offered by Broker Carrier and Employer, missing	374	0.94	0.24	0	1
Coverage offered from other than the Broker Carrier or Employer,					
missing	374	0.01	0.07	0	1
Enrollment Channel, online/phone with interactive tools for just new					
employees, missing	374	0.00	0.00	0	0
Enrollment Channel, online/phone with no interactive tools, missing	374	0.00	0.00	0	0
Benefit communication method, all separately, missing	374	0.00	0.05	0	1
Percent Female, missing	374	0.08	0.27	0	1
Percent Married, missing	374	0.20	0.40	0	1
Percent Parents, missing	374	0.30	0.46	0	1
Average age, missing	374	0.11	0.32	0	1
Average wage, missing	374	0.10	0.30	0	1
Monthly premium, missing	374	0.48	0.50	0	1
Default coverage, \$10,000 in coverage, missing	374	0.03	0.17	0	1
Default coverage, other, missing	374	0.02	0.15	0	1

⁻⁽cont'd)-

Table B1. Summary Statistics for Supplemental Life Insurance Coverage, Level Regression (cont'd)

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Supplemental Life Insurance presented as a lump sum amount to					_
employees, missing	374	0.00	0.00	0	0
The coverage increment level if presented as a level amount to					
employees, missing	374	0.62	0.49	0	1
Guidance provided, in enrollment screen, missing	374	0.00	0.00	0	0
Guaranteed issue amount, missing	374	0.12	0.33	0	1
Maximum issue amount, missing	374	0.17	0.37	0	1

Table B2. Regression Results for Life Insurance Coverage Level

Variables	Coefficient
Life insurance paid 100% by employer	-0.09
	(0.25)
Benefits offered	0.01
	(0.05)
Benefits administered, through broker carrier	-0.18
	(0.14)
Benefits administered, through third party	-0.25*
Engellment allowed at auxiliars	(0.14)
Enrollment, allowed at anytime	0.20 (0.17)
Enrollment, other than at anytime	-0.18
Elifornient, other than at anythile	(0.23)
Coverage offered by Broker Carrier only	-0.32
Coverage officied by Broker Currier only	(0.34)
Coverage offered by Broker Carrier and Employer	0.09
coverage energy of product current units proper	(0.33)
Coverage offered from by other than the Broker Carrier or Employer	-0.05
	(0.15)
Enrollment Channel, online/phone with interactive tools for just new	
employees	0.91**
	(0.24)
Enrollment Channel, online/phone with interactive tools for new and existing	
employees	-0.75**
	(0.30)
Enrollment Channel, online/phone with no interactive tools for just new	0 0 -
employees	-0.07
	(0.22)
Enrollment Channel, online/phone with no interactive tools for new and	0.00
existing employees	0.09
Benefit communication method, all separately	(0.27) 0.09
Benefit communication method, an separately	(0.33)
Benefit communication method, health and medical separate from retirement	-0.07
Denent communication method, hearth and medical separate from rethement	(0.14)
Percent Female	-0.01*
	(0.00)
Percent Married	-0.01**
	(0.01)
Percent Parents	0.00
	(0.00)
Average age	0.03*
(cont'd)	(0.01)

Table B2. Regression Results for Life Insurance Coverage Level (cont'd)

Variables	Coefficient
Average wage	-0.05*
	(0.03)
Monthly premium	-0.28
	(0.33)
Default coverage, \$10,000 in coverage	-0.66
	(0.55)
Default coverage, 1 times salary	Omitted
Default coverage, 2 times salary	0.38
	(0.61)
Default coverage, other	0.56*
	(0.39)
Supplemental Life Insurance presented as a lump sum amount to employees	-0.24
	(0.49)
The coverage increment level if presented as a level amount to employees	0.00
- · ·	(0.00)
Guidance provided, in enrollment screen	0.28*
	(0.17)
Guidance provided, outside of enrollment screen	0.10
r,	(0.24)
Guaranteed issue amount	0.21**
	(0.04)
Maximum issue amount	0.04
THE AMERICAN	(0.03)
Benefits offered, missing	0.30
Delicitis officied, imissing	(0.60)
Benefits administered, through broker carrier, missing	Omitted
Belletits administered, through broker carrier, missing	Offitted
Enrollment, allowed at anytime, missing	-0.61
	(0.49)
Coverage offered by Broker Carrier only, missing	Omitted
Coverage offered by Broker Carrier and Employer, missing	Omitted
Commence of the defendant of the Dealer Commence Francisco	0.26
Coverage offered from other than the Broker Carrier or Employer, missing	-0.26
	(0.96)
Enrollment Channel, online/phone with interactive tools for just new	0
employees, missing	Omitted
Enrollment Channel, online/phone with no interactive tools, missing	Omitted
Zamoranie, omnie, prone with no interactive tools, missing	
Benefit communication method, all separately, missing	0.19
, r	(1.30)
-(cont'd)-	(/

Table B2. Regression Results for Life Insurance Coverage Level (cont'd)

Variables	Coefficient
Percent female, missing	-0.50
	(0.40)
Percent married, missing	-1.19**
	(0.39)
Percent parents, missing	0.56**
	(0.27)
Average age, missing	0.77
	(0.63)
Average wage, missing	0.36
	(0.32)
Monthly premium, missing	0.20
	(0.17)
Default coverage, \$10,000 in coverage, missing	-0.93
	(1.01)
Default coverage, other, missing	0.16
	(1.09)
Supplemental Life Insurance presented as a lump sum amount to employees,	
missing	Omitted
The coverage increment level if presented as a level amount to employees,	
missing	0.01
	(0.52)
Guidance provided, in enrollment screen, missing	Omitted
Guaranteed issue amount, missing	0.32
	(0.27)
Maximum issue amount, missing	0.02
·	(0.27)
Adjusted R ²	0.15
Number of Observations	374

Note: Robust standard errors are in parentheses. The coefficients are significant at the 15-percent level (*), or the 5-percent level (**). *Source*: Authors' calculations.

Table C1. Summary Statistics for Supplemental Long Term Disability Take-up Rate Regression

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Enrollment, allowed at anytime	143	0.23	0.42	0	1
Enrollment, other than at anytime	143	0.07	0.26	0	1
Enrollment Channel, online/phone with interactive tools for just new employees	143	0.20	0.40	0	1
Enrollment Channel, online/phone with interactive tools for new and existing employees	143	0.11	0.32	0	1
Enrollment Channel, online/phone with no interactive tools for just new employees	143	0.29	0.45	0	1
Enrollment Channel, online/phone with no interactive tools for new and existing employees	143	0.13	0.34	0	1
Benefit communication method, all separately	143	0.06	0.24	0	1
Benefit communication method, health and medical separate from					_
retirement	143	0.43	0.50	0	1
Percent Female	143	47.45	26.79	0	100
Percent Married	143	49.43	26.42	0	100
Percent Parents	143	29.38	25.60	0	100
Average age	143	36.43	16.21	0	57
Average wage	143	5.03	3.22	0	15
Coverage option #1, as a percent of salary	143	40.90	28.55	0	100
Waiting period, days	143	101.54	255.05	0	2700
Default coverage option, as a percent of salary	143	10.85	23.72	0	100
Guidance provided, in enrollment screen	143	0.22	0.42	0	1
Guidance provided, outside of enrollment screen	143	0.16	0.37	0	1
Percent of salary covered by employer	143	40.44	29.54	0	100
Benefits administered, missing	143	0.00	0.00	0	0
Enrollment, allowed at anytime, missing	143	0.05	0.22	0	1
Enrollment Channel, online/phone with interactive tools for just new					
employees, missing	143	0.00	0.00	0	0

⁻⁽cont'd)-

Table C1. Summary Statistics for Supplemental Long Term Disability Take-up Rate Regression (cont'd)

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Enrollment Channel, online/phone with no interactive tools, missing	143	0.00	0.00	0	0
Benefit communication method, all separately, missing	143	0.01	0.08	0	1
Percent Female, missing	143	0.09	0.29	0	1
Percent Married, missing	143	0.17	0.38	0	1
Percent Parents, missing	143	0.29	0.45	0	1
Average age, missing	143	0.15	0.36	0	1
Average wage, missing	143	0.17	0.38	0	1
Monthly premium, missing	143	0.56	0.50	0	1
Coverage option #1, as a percent of salary, missing	143	0.20	0.40	0	1
Waiting period for long term disability, days, missing	143	0.10	0.30	0	1
Default coverage option, as a percent of salary, missing	143	0.81	0.39	0	1
Guidance provided, in enrollment screen, missing	143	0.01	0.08	0	1
Percent of salary covered by employer, missing	143	0.28	0.45	0	1

Table C2. Regression Results for Supplemental Long Term Disability Take-up Rate

Enrollment, allowed at anytime Enrollment, other than at anytime Enrollment Channel, online/phone with interactive tools for just new employees Enrollment Channel, online/phone with interactive tools for new and existing employees Enrollment Channel, online/phone with interactive tools for new and existing employees Enrollment Channel, online/phone with no interactive tools for just new employees Enrollment Channel, online/phone with no interactive tools for new and existing employees Enrollment Channel, online/phone with no interactive tools for new and existing employees Enrollment Channel, online/phone with no interactive tools for new and existing employees 6.7 (9.20 Benefit communication method, all separately -0.6 (10.38 Benefit communication method, health and medical separate from retirement 4.6 (0.12 Percent Female 0.0 (0.12 Percent Married 0.11 (0.20 Percent Parents -0.4 Average age -0.8 Average wage 0.3 (1.16	ent
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Enrollment Channel, online/phone with interactive tools for just new employees -5.9 (9.55) Enrollment Channel, online/phone with interactive tools for new and existing employees -1.7 (11.47) Enrollment Channel, online/phone with no interactive tools for just new employees -13.4 (7.03) Enrollment Channel, online/phone with no interactive tools for new and existing employees 6.7 (9.20) Benefit communication method, all separately -0.6 (10.38) Benefit communication method, health and medical separate from retirement 4.6 (0.12) Percent Female 0,010 Percent Married 0,110 Percent Parents -0.4 (0.14) Average age -0.8 (0.45) Average wage 0,03	
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employees -13.4 (7.03 Enrollment Channel, online/phone with no interactive tools for new and existing employees 6.7 Benefit communication method, all separately -0.66 (10.38 Benefit communication method, health and medical separate from retirement 4.6 (4.87 Percent Female 0.00 (0.12 Percent Married 0.16 (0.20 Percent Parents -0.46 (0.14 Average age -0.88 (0.45 Average wage 0.3)
Enrollment Channel, online/phone with no interactive tools for new and existing employees Benefit communication method, all separately Benefit communication method, health and medical separate from retirement 4.6 (10.38) Percent Female O.00 (0.12) Percent Married O.14 Average age Average wage (7.03) (7.03) (6.7) (9.20) (10.38) (10.38) (0.12) (0.14) (0.20) (0.14) (0.14) (0.14) (0.45) (0.45)	
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existing employees (9.20) Benefit communication method, all separately -0.66 (10.38) Benefit communication method, health and medical separate from retirement (4.87) Percent Female 0.09 Percent Married 0.19 Percent Parents -0.46 (0.14) Average age -0.88 (0.45) Average wage 0.3)
Benefit communication method, all separately Benefit communication method, health and medical separate from retirement Percent Female Percent Married Percent Parents Out Out Average age Average wage (9.20 (9.20 (10.38 (10.38 (4.87 (0.12 (0.12 (0.12 (0.12 (0.20 (0.20 (0.14 (0.14 (0.45 (0.45 (0.45 (0.45) (0.45) (0.45) (0.45) (0.45)	
Benefit communication method, all separately Benefit communication method, health and medical separate from retirement Percent Female Percent Married Percent Parents Average age Average wage -0.80 (0.45 Average wage -0.80 (0.45 Average wage	1
Benefit communication method, health and medical separate from retirement 4.6 (4.87 Percent Female 0.09 Percent Married 0.10 Percent Parents 0.10 (0.20 Percent Parents 0.14 Average age 0.38 Average wage 0.39)
Benefit communication method, health and medical separate from retirement 4.6 (4.87 Percent Female 0.09 Percent Married 0.10 Percent Parents 0.10 (0.20 Percent Parents 0.14 Average age 0.38 Average wage 0.39	5
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Percent Female 0.09 Percent Married 0.10 Percent Parents 0.14 Average age 0.045 Average wage 0.3	_
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Percent Married (0.16) Percent Parents -0.46 Average age -0.86 (0.45) Average wage 0.3	_
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Percent Parents -0.4e	Ó
Percent Parents -0.4e)
Average age -0.89 (0.45 Average wage 0.3	-
Average age -0.89 (0.45 Average wage 0.3)
(0.45 Average wage 0.3)**
)
	1
)
Coverage option #1, as a percent of salary 0.0	_
(0.13)	
Waiting period for long term disability, days 0.00	/
(0.01))
Default coverage option, as a percent of salary 0.1	_
(0.34))
Guidance provided, in enrollment screen 0.92	/
(6.18	
Guidance provided, outside of enrollment screen -2.8	/
(6.84	
Percent of salary covered by employer -0.09	/
(0.15)	

Table C2. Regression Results for Supplemental Long Term Disability Take-up Rate (cont'd)

Variable	Coefficient
Benefits administered, missing	Omitted
Enrollment, allowed at anytime, missing	4.95
Zanomino, mao wee we wal, vinie, maoning	(11.02)
Enrollment Channel, online/phone with interactive tools for just new	, ,
employees, missing	Omitted
Enrollment Channel, online/phone with no interactive tools, missing	Omitted
Benefit communication method, all separately, missing	28.76
	(28.85)
Percent Female, missing	-9.94
	(15.11)
Percent Married, missing	-2.99
	(14.57)
Percent Parents, missing	-6.16
Avamaga aga missing	(8.93)
Average age, missing	-30.14* (20.48)
Average wage, missing	0.07
Average wage, missing	(10.82)
Monthly premium, missing	-10.72*
The state of the s	(5.43)
Coverage option #1, as a percent of salary, missing	-15.86*
	(9.28)
Waiting period for long term disability, days, missing	-0.08
	(8.93)
Default coverage option, as a percent of salary, missing	7.56
	(20.01)
Guidance provided, in enrollment screen, missing	16.62
	(30.64)
Percent of salary covered by employer, missing	3.56
1. 1. 1. p.2	(10.46)
Adjusted R ²	0.05
Number of Observations	143

Note: Robust standard errors are in parentheses. The coefficients are significant at the 15-percent level (*), or the 5-percent level (**). *Source*: Authors' calculations.

Table D1. Summary Statistics for Supplemental Short Term Disability Take-up Rate Regression

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Enrollment, allowed at anytime	84	0.17	0.37	0	1
Enrollment, other than at anytime	84	0.05	0.21	0	1
Enrollment Channel, online/phone with interactive tools for just new employees	84	0.19	0.40	0	1
Enrollment Channel, online/phone with interactive tools for new and existing employees	84	0.08	0.28	0	1
Enrollment Channel, online/phone with no interactive tools for just new employees	84	0.31	0.47	0	1
Enrollment Channel, online/phone with no interactive tools for new and existing employees	84	0.14	0.35	0	1
Benefit communication method, all separately	84	0.06	0.24	0	1
Benefit communication method, health and medical separate from					_
retirement	84	0.44	0.50	0	1
Percent female	84	50.48	26.49	0	100
Percent married	84	51.99	26.64	0	92
Percent parents	84	33.75	25.04	0	85
Average age	84	37.05	15.74	0	57
Average wage	84	4.53	3.12	0	15
Percent of salary covered by employer	84	31.94	36.65	0	100
Coverage option #1, as a percent of salary	84	31.61	32.28	0	100
Waiting period, days	84	24.19	48.28	0	365
Exhaustion period, days	84	10.62	27.97	0	180
Default coverage, as a percent of salary	84	5.33	17.00	0	67
Guidance provided, in enrollment screen	84	0.25	0.44	0	1
Guidance provided, outside of enrollment screen	84	0.23	0.42	0	1
Enrollment, allowed at anytime, missing	84	0.05	0.21	0	1
Coverage offered by Broker Carrier only, missing	84	0.00	0.00	0	0

⁻⁽cont'd)-

Table D1. Summary Statistics for Supplemental Short Term Disability Take-up Rate Regression (cont'd)

Variable	Number of observations	Mean	Standard deviation	Minimum	Maximum
Coverage offered from other than the Broker Carrier or Employer,					
missing	84	0.01	0.11	0	1
Enrollment Channel, online/phone with interactive tools for just new					
employees, missing	84	0.00	0.00	0	0
Enrollment Channel, online/phone with no interactive tools, missing	84	0.00	0.00	0	0
Benefit communication method, all separately, missing	84	0.01	0.11	0	1
Percent Female, missing	84	0.06	0.24	0	1
Percent Married, missing	84	0.15	0.36	0	1
Percent Parents, missing	84	0.20	0.40	0	1
Average age, missing	84	0.13	0.34	0	1
Monthly premium, missing	84	0.63	0.49	0	1
Coverage option #1, as a percent of salary, missing	84	0.44	0.50	0	1
Exhaustion period, days, missing	84	0.27	0.45	0	1
Default coverage, as a percent of salary, missing	84	0.12	0.33	0	1
Guidance provided, in enrollment screen, missing	84	0.01	0.11	0	1
Percent of salary covered by employer, missing	84	0.52	0.50	0	1

Table D2. Regression Results for Supplemental Short Term Disability Take-up Rate

Variable	Coefficient
Enrollment, allowed at anytime	-18.74*
	(10.43)
Enrollment, other than at anytime	-1.58
	(17.45)
Enrollment Channel, online/phone with interactive tools for just new employees	-10.61
	(15.48)
Enrollment Channel, online/phone with interactive tools for new and existing	
employees	17.64
	(18.81)
Enrollment Channel, online/phone with no interactive tools for just new	
employees	-6.15
	(10.08)
Enrollment Channel, online/phone with no interactive tools for new and existing	
employees	-3.30
	(14.27)
Benefit communication method, all separately	5.39
	(22.13)
Benefit communication method, health and medical separate from retirement	13.24*
	(7.75)
Percent Female	0.24*
	(0.16)
Percent Married	-0.08
	(0.26)
Percent Parents	0.29
	(0.21)
Average age	-0.39
	(0.71)
Average wage	-0.58
	(1.40)
Percent of salary covered by employer	-0.06
	(0.25)
Coverage option #1, as a percent of salary	0.29
	(0.27)
Waiting period, days	-0.04
	(0.08)
Exhaustion period, days	-0.17
	(0.15)
Default coverage, as a percent of salary	0.34
	(0.28)
Guidance provided, in enrollment screen	4.30
<u>-</u>	(10.76)
-(cont'd)-	

Table D2. Regression Results for Supplemental Short Term Disability Take-up Rate (cont'd)

Variable	Coefficient
Guidance provided, outside of enrollment screen	-1.60
	(9.37)
Enrollment, allowed at anytime, missing	2.96
	(17.06)
Coverage offered by Broker Carrier only, missing	Omitted
Coverage offered from other than the Broker Carrier or Employer, missing	-1.70
	(43.33)
Enrollment Channel, online/phone with interactive tools for just new employees,	
missing	Omitted
Enrollment Channel, online/phone with no interactive tools, missing	Omitted
Benefit communication method, all separately, missing	42.55
	(31.56)
Percent Female, missing	-1.16
	(22.33)
Percent Married, missing	-10.81
	(23.96)
Percent Parents, missing	20.95
	(18.59)
Average age, missing	-26.10
Monthly premium, missing	(31.96) 8.32
Monthly premium, missing	(8.50)
Coverage option #1, as a percent of salary, missing	-11.88
coverage option with as a percent of saturity, intesting	(18.97)
Exhaustion period, days, missing	-4.22
	(11.75)
Default coverage, as a percent of salary, missing	18.88
	(14.16)
Guidance provided, in enrollment screen, missing	-9.83
	(33.98)
Percent of salary covered by employer, missing	-15.86
A direct of \mathbb{D}^2	(19.85)
Adjusted R ² Number of Observations	0.04 84
Number of Observations	04

Note: Robust standard errors are in parentheses. The coefficients are significant at the 15-percent level (*), or the 5percent level (**).

Source: Authors' calculations.

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