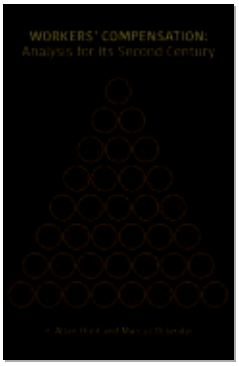
Ch 3 - The Challenge of Return to Work in Workers' Compensation Programs



Chapter 3

The Challenge of Return to Work in Workers' Compensation Programs

Among the many goals of workers' compensation programs (prevention, compensation, rehabilitation, etc.), the most recent to emerge into public policy concern has been the goal of return to work (RTW), which can be regarded as the ultimate objective of medical care and rehabilitation services after disability resulting from an industrial injury or illness. One could argue that this is the best measure of the value of the social systems that deal with work-related disability—namely, restoring the person to the previous status quo. Preventing injuries and illness is paramount; compensating the individuals adequately while healing and rehabilitation take place is critical; but a return to gainful employment has the potential to allow the injured worker to resume her/his productivity and quality of life.

For most of the first century of workers' compensation programs in the United States, the RTW goal was either left to the parties themselves or managed by the system of vocational rehabilitation that was also included within these statutory programs. Trained vocational rehabilitation professionals evaluated the level of impairment, designed programs for rehabilitation, and assisted injured workers back to gainful employment. However, the length of treatment and the outcomes achieved were frequently not found sufficient to justify the cost, and many workers' compensation agencies have moved away from dependence on formal systems of vocational rehabilitation (Gardner 1985).

As health care costs rose in an increasingly challenging business climate in the 1980s and 1990s, greater emphasis was placed by employers on gaining control of the process after injury and illness claims occurred. This chapter will explore research findings and

policy initiatives that address the return-to-work goal explicitly. It will highlight early research efforts at the Upjohn Institute that helped to document the potential of disability prevention and management through analysis of survey data on workers' compensation claims in Michigan.[1] And it will provide several examples of state workers' compensation policy initiatives that have developed to support the return-to-work goal.

DETERMINANTS OF RETURN TO WORK

Clearly, the determinants of return to work are multidimensional; they include medical treatment, rehabilitative services, employer policies, injured worker characteristics, job requirements, and many other factors. The failure to achieve the return-to-work goal arises from the multiplicity of these contributing causes for disability, perhaps compounded by a general excess supply of labor, which can influence employer behavior in hiring and retention decisions.[2]

Obviously, there are important medical issues, such as the type and severity of the injury, resulting functional impairments and possible comorbidities, timely access to effective treatment and rehabilitation, and many others, that will influence the recovery as well as what kind of work can be performed after a work injury or illness. In addition, personal factors of the injured worker come into play. Beyond the possibility of impaired work skills and productivity, there are family circumstances and social influences, including the attitudes and beliefs of fellow workers, the workplace culture, and the very real fear of potential reinjury.

There are also institutional determinants impacting RTW, such as employer policies and practices, workers' compensation disputes and settlements, insurer behavior, and labor relations. Labor market dynamics also play a role when an excess supply of labor creates highly competitive conditions in the labor market, or when deficient demand due to recession reduces the chance of finding an alterna-

tive job. The employer-at-injury may have suffered business reverses, leaving the injured worker with limited alternative work options, or left out completely and subject to the vagaries of the general labor market.

There are also policy causes of failure to return to work. One possibility is that an injured worker might qualify, or think she/he will qualify, for social insurance benefits other than workers' compensation. This could make returning to work to meet financial obligations seem unnecessary, or a less appealing alternative. The largest disability compensation program in the United States is the Social Security Disability Insurance (SSDI) program, administered by the Social Security Administration and funded by the Old Age, Survivors, and Disability Insurance (OASDI) payroll tax system. Theoretically, there should be very little overlap between workers' compensation and SSDI populations because the severity of disability required to qualify for SSDI is very high (disability expected to last more than one year or result in death). This would rule out all but the most severely disabled of workers' compensation claimants (less than 2 percent of the total).

O'Leary et al. (2012) estimate that 7 percent of new SSDI awards in the state of New Mexico result from workers' compensation–covered injuries or diseases. Strikingly, the impact of a compensable lost-time injury on the likelihood of SSDI receipt some years later is about the same as aging by 10 years (p. 12). Assuming that these empirical estimates from New Mexico are representative of the nation as a whole, there would be as many as 70,000 new SSDI awards to former workers' compensation beneficiaries every year. So the relative magnitudes suggest that transitioning to SSDI may be fairly common for seriously disabled workers' compensation claimants.[3]

However, a full understanding of the requirements for SSDI eligibility is not widespread, so injured workers may believe they qualify for benefits when they actually do not. The exact line between meeting and not meeting the requirements in the SSDI disability listings can be somewhat mystifying, leading to considerable uncertainty

about who will qualify and to pervasive legal representation and administrative litigation. Standards also appear to vary somewhat in their application in different states, as it is a state government agency that makes the initial determination as to which cases are eligible.[4] Thus, seriously injured workers who have used up their workers' compensation benefits or private disability benefits, or who expect to do so, may mistakenly regard SSDI as a potential alternative or supplement to workers' compensation benefits for work-related injuries and illnesses.[5]

Disabled workers who become impoverished may also be eligible for state and local welfare assistance and/or federal Supplemental Security Income (SSI) benefits. So while there are a variety of sources of income for work-injured employees, none of them provide full earnings replacement or the typical package of benefits that accompany most full-time jobs. Still, they should be considered a significant policy factor affecting RTW outcomes for workers' compensation programs.

Likely the biggest barriers to RTW are the private decisions made by employers and employees in our employment-at-will labor markets. Employers may decide that they do not want to employ an injured individual any longer. If the ADA or other antidiscrimination statute does not come into play, that is their right. Employees may decide that they would prefer not to return to their at-injury job. No doubt both of these decisions are very common. The fact that they have not been studied sufficiently reflects the difficulties involved in researching such private and multidimensional decisions rather than a lack of public interest.[6]

The magnitude of the RTW problem has been quantified by a unique series of interview studies of injured workers. The Workers Compensation Research Institute (WCRI) conducted studies of completed samples of about 400 workers in each of 15 states (Arizona, Connecticut, Florida, Georgia, Indiana, Iowa, Kentucky, Massachusetts, Michigan, Minnesota, North Carolina, Pennsylvania, Tennessee, Virginia, and Wisconsin) over the period 2013–2015. All of these

injured workers missed at least seven days of work because of their injury. They were interviewed by telephone between 2.8 and 3.0 years after their injury. Table 3.1 shows the range of RTW results among the 15 states, but more significantly the high proportion who were not working about three years later "predominantly due to the injury." Those who were not working at the time of the interview ranged from 11 to 19 percent, and those who had never returned to work for more than 30 days since the injury ranged from 9 to 19 percent. These numbers are concerning. In addition, from 6 to 11 percent of those who had returned to work reported that they were earning "a lot less" than before the injury, which further demonstrates the magnitude of labor market problems encountered by injured workers.[7]

Last, among those who had returned to work "successfully," meaning for at least 30 days, between 19 and 37 percent had different job duties with the at-injury employer predominantly because of the injury, and between 2 and 10 percent had a new employer because of the injury (Savych and Thumula 2016).

While these are somewhat subjective measures gleaned from an interview study, they indicate the degree of labor market disruption created by a compensable injury in a typical state. Adding those who reported that they earned a lot less to those who were no longer working, we get a figure of 18 to 27 percent of workers' compensation wage-loss claimants who were still suffering significant economic loss nearly three years after their injury, the major cause for this being lack of employment. It is worth noting that these results are roughly comparable to those for dislocated workers whose employers have closed completely (Jacobson, LaLonde, and Sullivan 1993).

The Emergence of Disability Management as an RTW Solution

During the 1980s and 1990s, largely in response to the spiraling costs of workers' compensation insurance, larger corporate employers began to adopt techniques that came to be collectively known as "disability management." Disability management refers to the set of

Table 3.1 Return-to-Work Performance in 15 States

	AR	CT	FL	GA	IN	IA	KY	MA	MI	MN	NC	PA	TN	VA	WI
% not working three years after injury, predominantly because of the work injury	16	15	14	17	11	13	17	17	12	12	19	17	16	13	12
% who never returned to work for 30 days within three years after the work injury	15	12	14	19	9	14	18	14	9	11	15	15	15	13	10
% working at interview who reported earning "a lot less" because of the injury	8	8	11	8	8	9	7	9	7	11	8	8	8	7	6

NOTE: Based on samples of about 400 workers in each of 15 states. Telephone interviews were conducted from 29 to 40 months after a compensable injury involving at least seven days of lost work time. State response rates ranged from 25 to 31 percent, and the interviews were conducted in three phases—eight states in 2013, four states in 2014, and three states in 2015.

SOURCE: Savych and Thumula (2016), Tables 3.2 and 3.5.

practices designed to minimize the disabling impact of injuries and health conditions that arise during the course of employment. This includes better medical management, more accommodation of existing limitations, and other such efforts to prevent work disability.

Disability management is not the same as accident prevention, but rather is broadly focused on preventing the development of work disability that can follow an initial injury or disease, or on ameliorating the effects of such disability. This might include changing hours of work, altering work assignments, redesigning specific work tasks, or other accommodations that make it possible for the impaired individual to return to work despite his or her impairment. Disability management is also much broader than just return-to-work techniques, but it includes all of those policies and practices that are designed to minimize the impact of disability in the workforce.

Disability Management, the classic work by Akabas, Gates, and Galvin (1992), provided the following definition: "Disability management is a workplace prevention and remediation strategy that seeks to prevent disability from occurring or, lacking that, to intervene early following the onset of disability, using coordinated, cost-conscious, quality rehabilitation service that reflects an organizational commitment to continued employment of those experiencing functional work limitations" (p. 2).

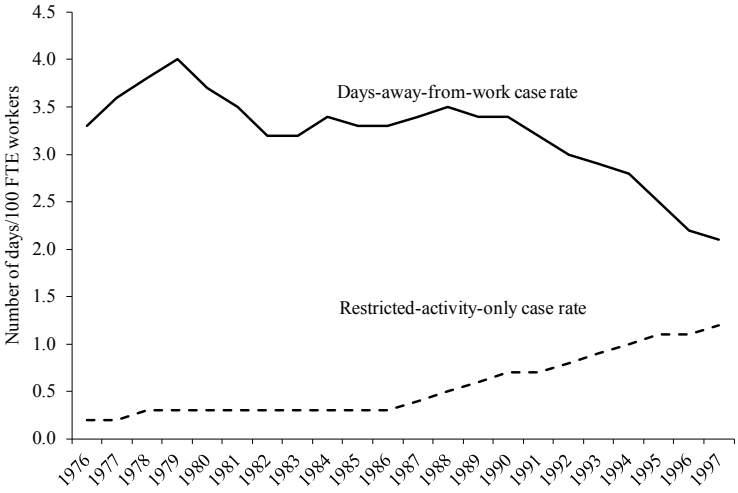
Disability management is time-specific, because it relates to an individual during a particular period of time, and it is employer based, because employers generally control the conditions of employment. Workers' compensation insurers also practice disability management as a method of loss control and service to their employer clients.

Disability management supports a win-win philosophy, which can result in substantial benefits for both employer and employee. The injured worker returns to employment sooner and suffers less loss of earnings, as well as very possibly a lower likelihood of permanent disability. The employer gets less production interruption, lower costs of replacement labor, and likely lower workers' compensation costs due to less time off work, resulting in lower benefit payments.[8]

Figure 3.1 shows the decline in injuries and diseases with days away from work and the commensurate increase in days of restricted work activity, as measured by the Bureau of Labor Statistics (BLS) Survey of Occupational Injuries and Illnesses (SOII). These trends appear to reflect the spread of disability management in U.S. private industry. In the context of a rapidly declining OSHA-reported injury rate, the number of cases with days away from work as a result of injury or disease has declined continuously since the late 1980s.

The incidence rate of lost-workday cases has declined by more than 50 percent since 1985. Yet the number of restricted-work cases increased at least through 2000, ultimately approaching 42 percent of the number of cases with days away from work (Ruser and Wiatrowski 2013). While there is no direct measurement of the effect, it seems likely that an increasing percentage of all OSHA-recordable

Figure 3.1 National Trends in Rates Associated with Lost Workdays (rates per 100 full-time-equivalent workers), Private Industry, 1976–1997



SOURCE: Ruser (1999).

cases in the U.S. private sector may be experiencing some application of disability management aimed at reducing days away from work, and this is manifested in the rising proportion of restricted-work cases.

Upjohn Institute Research on Impacts of Disability Management

The Upjohn Institute began work on these issues under two research contracts with the Michigan Department of Labor, beginning in 1987 and ending in 1993. The first project, funded by the Michigan Bureau of Workers' Disability Compensation, sought to explain the wide differences among employers in claim rates for workers' compensation benefits. Analyzing administrative data that showed variation of more than tenfold in workers' compensation claim rates, it was found that these differences were only partially explained by industry, size of firm, and location (only about 25 percent of the variance was explained by these factors). Also, high-claim firms had twice as many accidents but four times as many workers' compensation claims (Hunt 1988). This raised the question of whether there were differences in policies and practices of employers that might explain the differences in performance, and this policy and practice dimension was probed in a second study with sponsorship from the Bureau of Safety and Regulation of the Michigan Department of Labor.

The Michigan Disability Prevention Study was a collaborative effort between the Upjohn Institute, Michigan State University, and the Bureau of Safety and Regulation (Hunt et al. 1993).[9] A mail survey (which achieved a 46 percent response rate) of a random sample of 220 Michigan establishments with more than 100 employees from seven industry groups (Food Production SIC 20, Furniture Manufacturing SIC 25, Rubber and Plastics SIC 30, Fabricated Metals SIC 34, Nonelectrical Machinery SIC 35, Transportation Equipment SIC 37, and Health Services SIC 80) was conducted in 1991. The research team had access to the administrative records for workers' compensation claims for these firms as well.

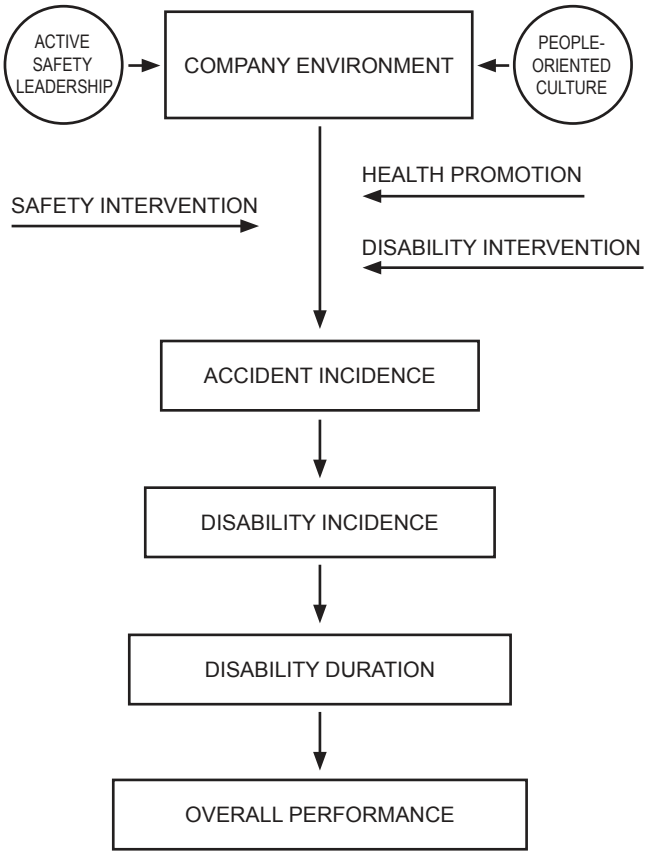
Figure 3.2 displays the conceptual model that guided the project. The model sees the company environment as being determined by dimensions like "people-oriented culture" and "safety leadership" and mediated by policies of health promotion, safety intervention, and disability management techniques. The result is a specific level of disability prevention and management performance, as measured by accident incidence, disability incidence, and disability duration (Hunt et al. 1993, Fig. 1).

The study correlated differences in self-reported achievement of relevant policy and practice dimensions with firm performance on disability outcome measures. The policy and practice dimensions were developed from an intensive literature search, with review and refinement by a group of expert advisers. From a total of 228 relevant concepts identified in the literature, 139 were selected for possible scale development. After pilot testing and further expert consultation, a total of 95 items in eight scales (determined through factor analysis) were incorporated in the Organizational Policies and Practices (OPP) survey instrument (Habeck, Hunt, and VanTol 1998). The eight scales were labeled 1) People-Oriented Culture, 2) Active Safety Leadership, 3) Safety Diligence, 4) Safety Training, 5) Disability Case Monitoring, 6) Proactive RTW Program, 7) Wellness Orientation, and 8) Ergonomic Solutions.[10]

Variation in firm self-reported achievement of these policy and practice dimensions was correlated with outcome measures, including the OSHA recordable incident rate per 100 employees, the lost workday case rate per 100 employees, the workers' compensation wage-loss claim rate per 100 employees, and the total lost workdays per 100 employees (Habeck, Hunt, and VanTol 1998).

Three multivariate models were estimated reflecting the underlying conceptual model. The Prevention Model estimated the effect of *preinjury policies and practices* in reducing the frequency, severity, and duration of disability resulting from work-related injuries and diseases. The Disability Management Model estimated the role of *policies and practices that occur after the injury* in reducing the

Figure 3.2 Conceptual Model of Disability Prevention among Michigan Employers



SOURCE: Hunt et al. (1993).

occurrence, the severity, and the duration of disability. The Managerial Model estimated the influence of the *specific elements of the company environment* on their injury and disability experience.

In each case, the measures were scaled, so the effect of a 10 percent difference in an independent variable (policy and practice) was expressed in the percentage difference in each dependent variable (disability outcome). The multivariate regression estimates also controlled for structural variables like employment level of the firm, multiple-site firms, union presence, self-insurance, and wage level.

The significance of this early study was in its analytical and design rigor combined with simplicity in presentation. It was not difficult for employers to understand that 10 percent better performance in *Safety Diligence* was associated with a 6.6 percent lower incidence of OSHA recordables and a 16.6 percent lower level of lost workday cases (Habeck, Hunt, and VanTol 1998). In fact, this study led to great interest from employers who wanted to improve their performance on disability prevention and lower their workers' compensation costs. Extensive outreach efforts were conducted by the research team and by the Michigan Bureau of Safety and Regulation.

Overall, the empirical results confirmed that employer policy and practice dimensions like People-Oriented Culture, Active Safety Leadership, Safety Training, Safety Diligence, Disability Case Monitoring, and Proactive Return to Work were very effective in explaining differences among Michigan firms in the incidence of lost workday cases, workers' compensation claims, and total lost workdays. And while this was a cross-sectional study of different firms at a particular point in time, findings were widely interpreted as indicating that these policy and practice dimensions offered firms the opportunity to improve their performance through time.

Research has continued using the organizational policies and practices scale (OPP), developed in the Michigan study, and derivatives of that scale. Ben Amick at the Institute for Work and Health (IWH), located in Toronto, Ontario, conducted a study of 198 workers with carpal-tunnel-release surgery claims in Maine (Amick et al.

2000). Other studies include a study of 65 manager-worker pairs in Ontario (Ossman et al. 2005) and a study of 188 health care workplaces in Ontario (Williams et al. 2007). The results of these additional studies have strongly confirmed the relationship between the OPP variables and workplace outcomes.

Subsequently, an abbreviated version of the organizational policies and practices survey was incorporated into the Ontario Leading Indicators Project (OLIP), which has been used to survey over 2,000 workplaces in Ontario since 2011. More recently, an even more abbreviated version of the OPP was field tested by the Workers' Compensation Board of the Province of New Brunswick (WorkSafeNB). After a study of about 250 employers, WorkSafeNB adopted the tool to use in its Focus Firm program, which targets firms with high workers' compensation claim frequency for their industry. So the practical usefulness of the research concepts has been confirmed in their adoption by public agencies as well as private employers.

Other Empirical Research on Return to Work

With funding from the California Commission on Health and Safety and Workers' Compensation (CHSWC), the RAND Institute for Civil Justice has conducted several major studies of workers' compensation, including the return-to-work dimension. In a working paper, McLaren, Reville, and Seabury (2010) reported the estimated difference in the number of weeks before return to work between large firms with a return-to-work program and those without such a program.

They found four major return-to-work techniques in use by their sample firms: 1) modified work tasks, 2) modified work station or equipment, 3) reduced work time and schedule changes, and 4) transfer to a different job. The results, based on a nonrandom survey of 40 large, self-insured employers in California in the year 2000, are shown in Table 3.2. These firms reported huge impacts of disability management programs, in the range of 40 percent shorter median

Table 3.2 Estimated Improvements in Weeks before RTW

	All workers		PPD claims	
	No fixed effects	Fixed effects	No fixed effects	Fixed effects
Weeks to RTW without program	9.0 (41.1)	8.9 (40.8)	39.7 (69.5)	35.5 (65.2)
Difference *with* program	−3.8 (−15.7)	−3.6 (−15.1)	−18.8 (−25.9)	−12.6 (−17.6)
Median change (%)	−42.2	−40.4	−47.4	−35.5
Mean change (%)	−38.2	−37.0	−37.3	−27.0

NOTE: Columns show median number of weeks (means in parentheses).
SOURCE: Adapted from McLaren, Reville, and Seabury (2010).

durations with a RTW program in place (columns 1 and 2). This result held for all injuries as well as for permanent partial disability (PPD) cases. The mean differences were almost as large, which is surprising since long-duration claims would seem to be less amenable to disability management treatments.

Using statistical models to control for characteristics of the employer (columns 2 and 4) reduced the size of these effects somewhat, but very large differences remain. According to the authors, "Our findings suggest that return to work programs are highly effective when adopted at large, self-insured firms. . . . Future work should study how return to work programs can be implemented effectively at small firms" (McLaren, Reville, and Seabury 2010, p. S-7).

Franche et al. (2005) at the IWH conducted a systematic review of the quantitative literature on workplace-based return-to-work interventions covering published literature from 1990 through 2003. They identified more than 4,000 papers in English and French published during the period. A total of 35 studies were deemed quantitative in nature, and 10 of these studies, producing a total of 23 scholarly publications, met their quality appraisal criteria.[11] Four of the studies came from Canada (from three different provinces), three from the United States (three different states), and one each from Finland, the Netherlands, and Sweden.

Data were extracted from these 10 studies and subjected to evidence synthesis analysis.

Three key quantitative outcome dimensions were used to assess the impact of disability management activities: 1) work disability duration, 2) associated costs, and 3) quality-of-life outcomes. The disability management activities included early contact with the worker, work accommodation offer, contact with a health-care provider, ergonomic visits to the work site, replacement staffing, and RTW coordination. Findings were summarized as follows: "There was strong evidence that work disability duration is significantly reduced by work accommodation offers and contact between healthcare provider and workplace; and moderate evidence that it is reduced by interventions which include early contact with the worker by the workplace, ergonomic work site visits, and presence of RTW coordinator" (Franche et al. 2005, p. 623).

Table 3.3 shows the distribution of disability management interventions and outcomes. It seems that effects of disability management on quality of life of the injured worker are not strong. However, all other activities garner at least moderate evidence of impact on work disability duration and the costs associated with work disability. This constitutes a strong empirical validation of employer benefits from disability management techniques. Similar positive results have been reported in other survey articles, including Tompa et al. (2008) and van Oostrom et al. (2009).

Table 3.3 Effect of Return-to-Work Programs on Duration of Work Disability

Intervention component	Effect on disability duration	Cost	Effect on quality of life
Early contact by the workplace	Moderate	Moderate	Mixed
Work accommodation offer	Strong	Moderate	Mixed
Contact with health provider	Strong	Moderate	Mixed
Ergonomic work site visit	Moderate	Moderate	Mixed
Presence of RTW coordinator	Moderate	Moderate	Insufficient

SOURCE: Adapted from Franche et al. (2005), p. 623.

Another approach is represented by a recent set of studies from the Stay-at-Work/Return-to-Work Policy Collaborative between Mathematica Policy Research (MPR) and the Office of Disability Employment Policy (ODEP) of the U.S. Department of Labor (Bardos et al. 2015). MPR simulated the private and public costs and benefits of returning a disabled worker to the job versus replacing that worker. In such a comparison, it is clear that both the disabled worker and the federal government will experience substantial financial gains over the worker's remaining working life if the disabled worker can be returned to work. The employer's financial return depends critically on the productivity comparison between the disabled worker and the replacement worker.

In their conclusion, Bardos, Burak, and Ben-Shalom (2015) raise the possibility of the government providing federal subsidies for lost productivity due to disability. They believe this is likely to be more effective than subsidizing the rather minimal costs of workplace accommodations in promoting RTW.[12]

Based upon our own experience, we believe it is clear that disability management can prevent or reduce the duration of many workers' compensation claims. It also seems clear that larger employers with generous benefit packages find that disability management programs further the interests of both the firm and its employees. What may not yet be clear is whether these techniques can be effectively applied in smaller firms with more modest benefit packages and fewer administrative resources.[13] However, as will be shown in the next section, policymakers in several states have been convinced that promoting return to work is in the public interest, and they have proven to be highly innovative in designing approaches to encourage RTW programs.

Public Policy Measures to Promote Return to Work

Because of the perceived payoff to disability management techniques and return-to-work programs, especially among larger, self-

insured employers, several workers' compensation jurisdictions in the United States have sought to promote such programs with public policy initiatives.[14] We will review several of these in some detail, but a brief overview is useful first. These policies have fallen into one or more of the following approaches:[15]

Medical Management–Based Methods

Medical management–based methods seek to improve the medical management of work injuries with the objective of reducing lost-time, residual-disability, and employer costs. One successful example is the Washington Department of Labor and Industries program called Centers of Occupational Health and Education (COHE). This began as an experiment in two areas of the state and has proven sufficiently successful to have been expanded to the entire state by the 2011 legislative reforms to the workers' compensation system. COHE is an attempt to increase the availability of specialized occupational medicine personnel and provide priority medical treatment to injured workers. A full-scale evaluation of the program at the two pilot sites, published in 2011, found that injured workers who were treated by health care providers affiliated with a COHE lost 20 percent fewer days from work. COHE treatment was found to reduce total medical and disability costs by $510 per claim in the first year after the injury (Wickizer et al. 2011).

With more recent expansions from two to four and then to six COHEs, performance has slipped only slightly. According to an April 24, 2014, briefing, the statistics show a 4.1 day reduction in time loss per claim, and savings of $480 in the first year. The projected ultimate savings per COHE claim are approximately $1,600 (Washington State Department of Labor and Industries 2014b).

Methods based on medical management also include treatment guidelines for specific conditions and attempts to improve information and communication among medical professionals, insurers, employers, and injured workers and their representatives.

Incentive-Based Methods

Incentive-based methods attempt to provide monetary incentives for employers or workers to minimize the time lost from work. The most striking adoption of this method was in California, which in 2004 established separate tiers of wage-replacement benefits for permanent disability claims, depending upon whether the at-injury employer made a qualifying employment offer to the injured worker. If the employer made such an offer, and the injured worker declined to accept the offer, weekly benefits would be reduced by 15 percent. If no qualifying job offer was made by the employer, weekly benefits would be increased by 15 percent (California Department of Industrial Relations 2014).

Another approach to incentives is illustrated by the Oregon Employer-at-Injury Program (EAIP). Employers are offered a wage subsidy of up to 50 percent for two months if they take an injured worker back under modified work provisions. There is also the possibility of a subsidy to offset the cost of job or work-site modifications required to make such an offer. In addition, when workers are not able to return to their jobs in the short term but have permanent work restrictions, another program called the Preferred Worker Program (PWP) can provide a 50 percent wage subsidy for up to six months and exemptions from workers' compensation premiums for that worker for three years (Oregon Department of Consumer and Business Services 2015).

Accommodation-Based Methods

Particularly since the passage of the Americans with Disabilities Act (ADA) in 1990, which requires accommodation of disabilities by any employer with more than 15 employees unless it causes "undue hardship" for the employer, accommodation has become much more common, including among disability management programs for workers' compensation.

Accommodation to promote employment or return to work for injured workers can encompass reduction in hours, change in work assignment, job rotation, specific job modifications, and other similar methods that promise to improve the worker's fit with the demands of employment. Since full implementation of the ADA in 1992, failure to accommodate a disability leaves the employer open to a potential civil lawsuit with treble damages, unless accommodating the disability will cause undue hardship for the employer.

The ADA prevents employers from discriminating against current or prospective employees based on disability, in cases where "disability" means one of the following three things:

1) A physical or mental impairment that substantially limits a major life activity
2) A record of such an impairment (which might include a workers' compensation claim)
3) Being regarded as having such an impairment[16]

It seems clear that many compensable workers' compensation injuries would give rise to a disability under the ADA definition, but certainly not all claims would. Generally, workers' compensation claims that are designated as permanent partial or permanent total disability claims would probably all potentially be subject to the ADA (Flynn and Bruyere 2001).

But the legal mandate for accommodation under the ADA should not divert attention from the return-to-work potential and cost-saving improvements that drive the disability management movement. It should concentrate rather than divert the employer's attention in dealing with work-related disability. We fear that the employer could become concerned with building a record that will withstand legal scrutiny under the ADA rather than trying to maximize the productivity of the injured worker for successful and mutually beneficial RTW outcomes.

Productivity-Based Methods

There is also another approach that has been associated with vocational rehabilitation: providing the injured worker with training sufficient to support a new occupation in which any residual impairment will be less of an issue. This can be thought of as a "supply side" approach to accommodating work disability. Workers' compensation programs have supported this vocational rehabilitation approach to a greater or lesser extent over the years. However, as in workforce development programs, the quicker and less expensive job placement approach based on existing transferable skills has become dominant. This approach can be expected to lead to lower wages on average, even if the injured worker can be returned to the original at-injury employer. Training is needed to effectively rehabilitate injured workers.

However, it is clear that encouraging employer-based disability management and RTW is now preferred public policy in many states. Whether through economic incentives or government mandate, asking the "job creators" to find ways to work around individual impairments and restore injured workers to employment is now the "state of the art." But there is a wide range of policy devices for encouraging such practices among employers, and we will review some of the most noteworthy examples here, beginning with the pathbreaking policies in Oregon.

Some Examples of State Policy Initiatives to Encourage Return to Work

To determine how prevalent employer-based return-to-work programs are in workers' compensation programs, the Upjohn Institute used LexisNexis to survey legislative enactments or administrative rules that mandated or supported such return-to-work programs. We found a multiplicity of approaches that explicitly support private-sector employers in efforts to get injured workers back on the job

after a compensable injury or disease. Some real-world examples are illuminating.

Oregon

Oregon was the first program to directly incentivize employers to take injured workers back. Beginning in 1987, under pressure to reduce the costs of workers' compensation programs in Oregon, the legislature enacted several measures that dealt with the return-to-work issue. The Preferred Worker Program (PWP) was begun in 1987 to provide wage subsidies, premium exemption, claim cost reimbursement, and accommodation cost support for permanently disabled workers' compensation claimants who were unable to return to their regular jobs because of their injuries. This was accompanied by a scaling back of the traditional vocational assistance program in Oregon. Workers with permanent work-related disabilities receive an identification card that informs prospective employers that the worker is eligible for a possible 50 percent wage subsidy for up to six months, work-site modification expense support, and exemption from workers' compensation premiums on that worker for three years. There is no time limit on claiming PWP benefits in Oregon.

In 1993, the better-known "Employer-at-Injury Program" (EAIP) was added to provide 50 percent wage subsidies for up to three months for employers of disabled employees engaged in light duty or transitional work assignments. Work-site modification and other expenses connected with return to work were also covered. The costs of these programs are paid by the Workers' Benefit Fund, which is supported by joint contributions from workers and employers. The assessment rate has been 3.3 cents per hour since 2013, with half (1.65 cents per hour) coming from the employer and half from the worker. This fund also supports cost-of-living adjustments for long-term permanent total disability claimants (Oregon Department of Consumer and Business Services 2014).

Utilization of these programs has varied with economic conditions through the years. In 2013, the EAIP benefit costs were $22 million, while the PWP cost was about $6 million. In 2014, over 25 percent of accepted disabling claims had used one or more of the RTW programs within four years after the claimants' injuries—i.e., since 2010. In 2013, the Oregon Department of Workers' Compensation approved support for 9,085 placements with 2,143 separate employers (Oregon Department of Consumer and Business Services 2015). Oregon also maintains a sophisticated follow-up system that uses quarterly administrative earnings records to compare the earnings of disabled workers against earnings of medical-only claims for 13 quarters (just over three years) after the injury. These statistics make it possible to measure the impact of these programs.

In 2014, for the cohort of accepted disabling claims from 2010, those who used any of the RTW programs were 8 percentage points more likely to be employed than those with similar injuries who did not use the programs. The advantage in wage recovery was even greater, at 14 percentage points. On average, those who used the RTW programs recovered to 100 percent of their preinjury wages, even controlling for statewide upward trends in wages and employment (Oregon Department of Consumer and Business Services 2015).[17]

Note that the EAIP is aimed primarily at workers with temporary disabilities, while the PWP is for those with permanent disabilities who still have some work potential. For more severely disabled workers, Oregon still offers its Vocational Assistance Program. This program provides traditional vocational rehabilitation benefits for those who are permanently disabled and unable to achieve reemployment at 80 percent of their previous wage level. In 2013, only 377 workers qualified for these benefits (Oregon Department of Consumer and Business Services 2015).

Washington

Next door to Oregon, Washington legislators adopted the Washington Stay at Work Program in 2011 as part of a negotiated reform package for this exclusive state fund insurance system.[18] For eligible employers, beginning in mid-2012, wage reimbursement of 50 percent of base wages is available for up to 66 days, or a maximum of $10,000 per claim of light-duty or transitional employment. If it is necessary for the employer to incur any expenses to accommodate the injured worker's unique needs, reimbursement is available for up to $1,000 for training fees or materials, up to $2,500 for special tools, and up to $400 for special clothing required.

More importantly, the Department of Labor and Industries created Early Return to Work teams in local administrative offices around the state. When a time-loss claim exceeds 14 days of benefits, the claim is automatically referred to the Early Return to Work team in the nearest office. The mission of the team is to facilitate communication between injured workers, health care providers, and employers, with the objective of exploring return-to-work options.

While we are not aware of any empirical evaluations of this program as yet, the utilization has grown rapidly in the first two-and-a-half years to involve 3,000 employers, 12,000 injured workers, and $27 million in reimbursements for 2014. L&I reports that the system savings from the reform package (including Stay at Work) reached $91 million in 2014, substantially exceeding the original projections (Washington State Department of Labor and Industries 2014a).

New Hampshire

New Hampshire offers a version of the rehiring requirement for injured workers. All employers with five or more full-time employees "shall provide temporary alternative work programs to bring injured employees back to work" (New Hampshire General Court 2016, Chapter Lab 504.04[a]). Furthermore, the rules specify that

transitional "means the duty elements are variable as the employee's work capacity increases" (Lab 504.04[b]). Employers are required to "develop an outline of each position that details present requirements and essential functions of each job within the organization" (Lab 504.04[d]) and provide the treating physician with the outline and task analysis as soon as possible after the injury (Lab 504.04[f]). Finally, the "employer shall offer a position as approved by the treating physician and the employee shall demonstrate a reasonable effort to comply" (Lab 504.04[g]).

These provisions are supported by "joint loss-management committees" that are required as well. This provision relates to employers of 15 or more employees in the state of New Hampshire. While these committees are primarily concerned with safety and health issues, they are also charged to "assist with the identification and definition of temporary, alternate tasks" in support of the return-to-work objective (New Hampshire General Court 2016, Lab 603.02[i]).

New Mexico

The State of New Mexico has followed a similar if less aggressive approach. Effective in 2013, they imposed a limited rehiring requirement for employers, in which the former employee "is receiving, has received, or is due to receive benefits under the workers' compensation act." If the injured worker applies for her/his former job, or a modified similar job, and the employer is hiring, "that employer shall offer to rehire a worker who applies for any job that pays less than the preinjury job, provided that the worker is qualified for the job and that the treating health care provider certifies that the worker is fit to carry out the job offered" (New Mexico Compilation Commission 2013).

Massachusetts

An imaginative program with a very different approach is the Qualified Loss Management Program (QLMP) for assigned risk

(residual market) employers in Massachusetts. In 1990, facing a rapidly expanding residual market for employers who could not secure workers' compensation insurance in the regular voluntary market, the Massachusetts legislature adopted a program for residual market employers that provided premium credits for those adopting disability management techniques. A premium credit (i.e., in advance of performance) of up to 10 percent was offered to employers who would engage a certified consultant to implement a "loss control management" program. Furthermore, this credit could be maintained for up to three years, provided the loss control program continued in effect for the employer. However, the third year only carried 50 percent of the credit, as the goal was to improve employer performance and depopulate the assigned risk pool. Subsequently, based upon the results for the first three years, the program was expanded to a fourth year, with 25 percent of the original credit available in year four. In addition, the maximum premium credit was increased to 15 percent to provide even more incentive for employers.

Most interesting as a program design element, the actual size of the premium credit is determined by the average credit factor assigned to the loss management firm, not the employer's actual performance. Provided the loss management firm certifies full QLMP participation, the performance improvements of *other* firms actually provide the basis for the premium credit. So the system is built upon the assumption that disability management practitioners can replicate their average loss management performance in any firm.

According to an evaluation done in 1999, the program produced immediate and sustained benefits for participating employers. In the first year of the program (September 1990 through August 1991), QLMP participants showed 13 percent more improvement than nonparticipating employers in the loss ratio (ratio of incurred losses to standard premium) at first report (after 18 months of experience). In the second year, the same cohort of employers showed 36 percent improvement, and in the third year, 40 percent improvement over nonparticipating employers.

Furthermore, these results held up through second (30 months of experience) and third report (42 months of experience)—i.e., as claims matured over time (Mahler and Blomstrom 1999, Table 3). So there was clearly an improving result over time for participating employers, which would seem to validate the program design.

This innovative program is still in effect in Massachusetts (see www.wcribma.org for more details), and was subsequently emulated to a greater or lesser degree in workers' compensation systems in West Virginia, New Hampshire, and Missouri.

New York

New York has adopted yet another approach. In 2009, the Workplace Safety Incentive Programs were implemented. These are voluntary programs for employers with annual workers' compensation premiums of at least $5,000 and an experience rating modification under 1.3. This means they have a payroll of over $250,000 and a workers' compensation claim frequency that was worse than average, although still not too bad. Such firms can participate in three programs: 1) a Safety Incentive Program, 2) a Drug and Alcohol Prevention Program, and 3) a Return to Work Program.

The program specifications dictate that "an acceptable Return to Work Program facilitates an employee's return to work as soon as medically possible after a job-related injury or illness" (New York State Insurance Fund 2012). All three programs, referred to as "Code Rule 60" programs, reward employers who participate with credits on their workers' compensation policy premiums. The credit is 4 percent the first year, reduced to 2 percent thereafter, and is renewable for three years at a time. It is interesting that the New York State Department of Labor evaluates the application and issues the incentive, which then must be honored by the insurer. Services under the Return to Work Program may be provided by the employer, jointly by the employer and the union, by the union itself, or by an outside provider. Procedures for ensuring the involvement of the injured employee, a

designated representative of the employee, and the treating physician are required (New York State Department of Labor 2016).

Ohio

Another interesting application of disability management principles has been adopted as policy in Ohio, another state with an exclusive fund system. The Health Partnership Program began in 1993. This is a managed care program originally designed to improve medical care for injured workers in Ohio. It has evolved more recently into a full disability management program with extensive support available from the Ohio Bureau of Workers' Compensation (BWC).[19]

Ohio's disability management program ("Remain at Work") offers a full range of services, which can be financed with a grant from the Ohio BWC, resulting in a low-cost way for employers to gain control of their future workers' compensation costs. In addition, the Ohio BWC offers a premium discount program ("PDP+"), which offers up to a 30 percent reduction in the employer's workers' compensation premium. It requires the implementation of a 10-step "Safety and Health Business Plan." This plan must reduce the claims frequency and severity for the employer by 15 percent to achieve the maximum premium discount.

Ohio is also rather unusual in publishing a "report card" on managed-care organizations (MCOs) operating in Ohio. The current version reports the following:

- the number of policies assigned to the MCO
- the number of claims in hand at the end of the year
- timing of the first report (average number of days between the date of injury and claim filing with the BWC)
- first-report turnaround efficiency (the number of days from receiving the notice of injury from the employer to the date the claim is filed with the BWC)

- the days absent compared to the statewide average, and the "recent medical" charges (excluding claims in the days-absent measure) compared to the statewide average (Ohio Bureau of Workers' Compensation 2014)

The Ohio BWC publishes these performance statistics on the MCOs who are operating in the state (currently 16 in number) on their website annually, enabling comparisons by employers shopping for these services.

Unfortunately, an evaluation of this program finds that the addition of a performance bonus payment to the program in 1995, as well as the specific rules around payment of bonuses, partially undermined the intention. In the final analysis, the managed care organizations in Ohio were incentivized to reduce the duration of short-term claims but increase the duration of more serious claims to take them out of the performance measurement (McInerney 2010).

California

The state of California has struggled with both poor adequacy of benefits for injured workers and poor affordability for employers for some time (Boden, Reville, and Biddle 2005). In 2004, the legislature attempted to tackle their perceived problems with a number of provisions, including a substantial reduction in the level of permanent disability benefits. There was also an explicit attempt to improve the return-to-work performance in California.

For employers of at least 50 employees, the statute varies permanent partial disability benefits, depending upon a return-to-work offer. If the employer, within 60 days of the condition becoming permanent and stationary, makes an offer of regular work, modified work, or alternative work for a period of at least 12 months, the permanent partial disability benefit is reduced by 15 percent, regardless of whether the employee accepts or rejects the offer. Contrarily, if the employer does not make such an offer, the permanent partial disability benefit is increased by 15 percent.

This unique "bump-up/bump-down" provision was in effect from 2005 through 2012. However, it was used sparingly because the timing of the "permanent and stationary" decision on the claim made it impractical to administer. In the final analysis, employers and insurers pronounced it "unworkable" (Seabury et al. 2011, pp. 19–20). The provision was repealed in 2013.

For small employers—those with fewer than 50 employees—the legislature created a more traditional return-to-work program. This program provided subsidies for small employers who incurred expenses for work-site modifications, equipment, furniture, tools, or other items necessary to accommodate work restrictions of the injured worker. This program, however, was largely ignored by California employers. According to one source, in the years 2007 and 2008, there were only 36 applications for reimbursement under this program, of which 11 were granted, for a total of less than $9,000 in expenditures (California Commission on Health and Safety and Workers' Compensation 2009).

An additional complication in California comes from the Fair Employment and Housing Act, which provides protections for individuals with disabilities that limit a major life activity and applies to employers with more than five employees. While this is a civil rights law and provides potentially unlimited tort damages, including punitive damages, it was likely beginning to have more traction at about the same time that the return-to-work provisions were added to the workers' compensation law in California (Seabury et al. 2011, pp. 28–30).

Seabury et al. (2011) conclude that changes in the Fair Employment and Housing Act that made it easier for injured workers to file a claim may have played a significant causative role in improving RTW results. It is also possible that medical treatment improvements may have contributed. In addition, they allow that "another possibility is that the improvement was driven endogenously by the problems with the system" (p. 68). Things got so bad in California that employers were forced to pay attention to their spiraling costs of workers' com-

pensation. One of the responses was likely improved attention to disability management techniques.

CONCLUSION

Unfortunately, there is no consistent measure of return-to-work across all state workers' compensation programs, and there is no definitive source that tells how much performance on this critical dimension may have improved. However, while the OSHA incidence of cases with days away from work has been steadily declining since the late 1980s, the number of restricted-work cases increased steadily from the mid-1980s through at least 2000. So the clear implication is that disability prevention and management programs, which use restricted work and other techniques to reduce time lost from work, have been expanding over the past 30 years. Since their focus is to reduce lost workdays and improve the transition back to work, it is logical to believe that overall performance on return to work has improved, especially if there is evidence that more and more employers are using such programs.

But the WCRI worker outcome surveys as well as the studies of benefit adequacy demonstrate that a significant minority of claimants do not return to work successfully following a compensable injury. In addition, average indemnity cost per lost-time claim has increased rapidly, at 4.8 percent a year from 1995 to 2012 (Antonello 2014). In the absence of substantial increases in benefit rates, which have not been seen during this period, this implies a rising average duration for workers' compensation indemnity claims, referred to by the NCCI as rising "severity."

One possible explanation for this trend has been called "the small potatoes effect." It is unlikely that disability management techniques will have much impact on a really serious injury, as opportunities to accommodate or ameliorate will be minimal, at least until considerable healing has taken place. But less serious injuries allow maximum

scope for such interventions, thereby reducing both the incidence and duration of relatively short-term disabilities. This can cause an increase in the average duration because of the elimination or reduction of the "smaller," less expensive claims. It is one of the truisms for employers that engage in aggressive disability management that their average measured duration of workers' compensation claims will likely increase because the less serious injuries are no longer there to be counted. It is also true that the "burden" of claiming is relatively high for minor injuries, making it more attractive to "absorb" such claims with wage continuation, vacation time, employer-sponsored health insurance, or other mechanisms.

The growing capability of employers, especially large employers, to prevent workers' compensation claims during the last three decades seems obvious. There is some debate about the extent to which such efforts result in improved performance for the worker versus claim suppression and cost savings for the employer (Young et al. 2005). But the picture is clear—many employers are managing their workers' compensation claims more effectively. Many injured workers are realizing better outcomes as well, especially when the less serious injuries that do not qualify for wage-loss benefits are included. While all states have not rushed in with programs to support these efforts, there is enough legislative activity among the states, and enough diversity in program approach and dimension, to demonstrate that this is an emerging area of workers' compensation policy as well.

The lessons learned from this experience seem obvious in hindsight. First, it is clear that disability management techniques do have the *potential* to remove many barriers to work and thereby reduce the incidence of lost workdays. This means reduced workers' compensation costs for the employer, but also improved chances that an injured worker will suffer less wage loss from a shorter period of disability. This likely makes it easier to maintain her/his lifestyle during the period of the disability. Maintaining the connection with work also increases the likelihood of a successful recovery from the injury or disease. Given that the same accommodation and amelioration tech-

niques could be applied to persons with disabilities that did not result from work injury, there could be a bonus for employers in dealing with their responsibilities under the Americans with Disabilities Act as well.[20]

Second, it is now obvious that the relationship between the at-injury employer and the injured worker is critically important through the healing and recovery process. Once that connection is lost, the worker's chances of returning to work drop precipitously, and the trajectory of lifetime expected earnings is significantly lowered.[21] There is no practical alternative to basing return-to-work efforts in the employment relationship. Many years of experience with vocational rehabilitation programs show that it is exponentially more difficult and more expensive to achieve an alternative employment placement for individuals who have lost their connection with the original at-injury employer.

Third, while there are some concerns about employers using disability management techniques to discourage or resist legitimate workers' compensation claims, that does not seem a sufficient reason to restrict or prevent the use of such techniques. And the fact that employers using these techniques are able to reduce their workers' compensation costs does not make this a bad deal for workers. In fact, improving return-to-work performance with disability management techniques constitutes a genuine win-win situation for employers and their employees.

Notes

1. We use the term "disability prevention and management" to reference a proactive, employer-based approach to do three things: 1) prevent the occurrence of accidents and work-related disability, 2) provide early intervention services for health and disability risk factors, and 3) foster coordinated administrative and rehabilitative strategies to promote cost-effective restoration and return to work. See Habeck et al. (1991), p. 212.
2. See Baldwin, Conway, and Huang (2009) and Galizzi and Boden (2003) for empirical investigations of some of these causes.

3. See Guo and Burton (2012) for a careful study of the influence of workers' compensation programs on the rate of applications to SSDI.
4. See Coe et al. (2011) for an investigation of state variation in SSDI applications and awards.
5. The relationship between benefit payments from workers' compensation and SSDI depends upon the jurisdiction. By federal law, combined benefits from workers' compensation and SSDI are limited to 80 percent of the preinjury wage level. In 15 states, workers' compensation benefits are reduced or offset, while in 35 states it is the other way around and SSDI benefits are reduced while workers' compensation benefits are maintained.
6. But see Burkhauser, Butler, and Kim (1995) for an early contribution.
7. There was no measurement of voluntary labor force withdrawal, so these figures include all those who chose to quit working or were forced out by their employer. While the respondents did indicate that their labor force status "was predominantly due to the injury," that does not exclude the possibility that the injury caused them to retire early. Whether this is a "voluntary" retirement is open to debate.
8. It is also true that the methods of "disability management" have been used by some employers as a way to pressure workers to go back to work before they are ready, or even to persuade them not to claim workers' compensation benefits, and generally to take advantage of injured workers.
9. The full research report is available on the Upjohn Institute website at http://research.upjohn.org/up_technicalreports/4/.
10. The scales and their items are included in Appendix A of the original research report, Hunt et al. (1993).
11. This includes the Michigan Disability Prevention Study, described earlier.
12. For a broader view of reemployment options, see Hollenbeck (2015).
13. It is well established that the closer personal connections in small firms lead to many of the same methods being applied to prevent separation of employees after accident or injury.
14. There are also a small number of states that have mandated RTW by requiring the employer to take the injured worker back under certain circumstances.
15. The various methods described on the following four pages come from McLaren, Reville, and Seabury (2010).
16. Americans with Disabilities Act, Title I.
17. This does not mean that such results would be available to all, as there is likely some preselection involved in such programs.

18. Washington has a Preferred Worker Program as well. Note that Washington also collects workers' compensation premiums from workers, primarily to support medical aid benefits. Worker contributions account for approximately one quarter of total system costs for the state fund in Washington.
19. See www.ohpinc.com for more information.
20. See Gifford and Parry (2016) for evidence on occupational and nonoccupational claims.
21. See Galizzi and Boden (2003) and Baldwin, Conway, and Huang (2009).