

Synthesis of Stay-at-Work/Return-to-Work (SAW/RTW) Programs, Models, Efforts, and Definitions

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Contents

Glos	sary of	Terms	v			
Exec	utive S	ummary	vi			
	Stak	eholder Incentives	vi			
1.	Intr	Introduction				
	1.1	Purpose of the Report	2			
	1.2	Methods				
		1.2.1 Previous Work Completed Under the SAW/RTW Collaborative	3			
		1.2.2 Structured Search of Academic and Non-Academic Literature	3			
		1.2.3 Expert Interviews	4			
		1.2.4 Targeted Searches for Private Industry Practices				
	1.3	Organization of this Synthesis				
2.	Defi	Definitions and Classifications				
	2.1	Conceptual Framework for SAW/RTW Programs				
	2.2	Stakeholder Incentives				
	2.3	Classification of SAW/RTW Programs	10			
	2.4	Description of Program Components	11			
3.	Emj	ployer-provided Job Accommodations	14			
4.	Fina	ancial Incentives for Employers and Workers	17			
	4.1	Subsidies Targeted to Employers	17			
	4.2	Subsidies Targeted to Workers	19			
5.	Info	ormation	21			
	5.1	Coordination	22			
	5.2	Counseling	23			
	5.3	Technical Assistance	24			
6.	Med	Medical Management				
	6.1	Direct Engagement with Medical Providers	26			
	6.2	Expanding Worker Engagement with Health Care Providers	27			
7.	Emj	ployment Services and Training	29			
8.	Key Findings and Next Steps					
	8.1	Findings from Review and Synthesis	32			
	8.2	Interviews with Experts				
	8.3	Next Steps	34			

Appendix A: Description of Reviewed SAW/RTW Programs	35
Appendix B: Tabulations of Programs by Classification Dimension	53
Appendix C: Elements of Employer-Based SAW/RTW Programs	55
Appendix D: Stakeholder Incentives	57
Appendix E: Evidence for Programs Identified in the Program Synthesis	68
References	70

List of Exhibits

Exhibit ES-1:	Number of Programs, by Category	viii
Exhibit 2-1:	A Stylized Map of the SAW/RTW Concept	
Exhibit 3-1:	Prevalence of Accommodation Service Strategies, by Administrative Entity	15
Exhibit 4-1:	Wage Subsidies Implemented through WC Insurance Programs	18
Exhibit 4-2:	Wage Subsidies Implemented through the Tax Code	19
Exhibit 5-1:	Prevalence of Information Components, by Administrative Context	21
Exhibit 7-1:	Training Provisions in Programs Operated by Workers' Compensation Agencies	29
Exhibit 7-2:	Employment Services and Training Components of "Late-Stage" Interventions	30
Exhibit A-1:	Description of Programs Reviewed for SAW/RTW Synthesis	35
Exhibit A-2:	Description and More Information on Programs Reviewed for SAW/RTW	
	Synthesis	39
Exhibit B-1:	Number of Programs, by Program Component	53
Exhibit B-2:	Number of Programs, by Administrative Context	53
Exhibit B-3:	Number of Programs, by Timing	53
Exhibit B-4:	Number of Programs, by Type of Disability	54
Exhibit B-5:	Number of Programs, by Relation of Injury to Work	54
Exhibit B-6:	Number of Programs, by Stakeholders Involved	54

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Alternative Work An accommodation strategy that entails a permanent change in job duties

that allows an individual who experiences an injury or illness to work.

Assistive Technology Any item, piece of equipment, or product system, whether acquired

commercially, modified, or customized to increase, maintain, or improve

functional capabilities of individuals with disabilities.

Disability Management A general term that captures any and all efforts taken—usually by

employers—to prevent and address absence from work due to a work

disabling condition.

Job Accommodation Any change or adjustment to a job or work environment that permits a

> qualified applicant or employee with a disability to participate in the job application process to perform the essential functions of a job, or to enjoy benefits and privileges of employment equal to those enjoyed by

employees without disabilities

Job Analysis A detailed delineation of the functions and other demands required to

carry out the duties of a job. Job analysis identifies possible work

arrangements for a worker with a disability.

Job Modification A specific approach to accommodation that entails a change to job

requirements to enable an individual with a disability to work. This may

include an adjustment to work schedules or a change to job duties.

Preferred Worker A worker with permanent medical conditions as a result of on-the-job

injury such that an employer who hires such an individual would be

eligible for financial incentives.

Transitional Work An accommodation strategy that entails a temporary change in job duties

that allows an individual who experiences an injury or illness to continue

working during a period of recovery.

Executive Summary

Stay-at-Work/Return-to-Work (SAW/RTW) programs intend to help a worker who experiences an illness or injury to remain at work, or if the worker has left the labor force, to return as soon as medically feasible. The U.S. Department of Labor (DOL) Office of Disability Employment Policy (ODEP) and Chief Evaluation Office (CEO) seeks to build the knowledge base about SAW/RTW programs that exist across the U.S. DOL has contracted with Abt Associates to conduct a comprehensive review of SAW/RTW programs to describe the initiatives that are operating, review evidence about their effects, and based on that information about the current program landscape to develop new intervention and evaluation design options.

This document, Synthesis of SAW/RTW Programs, Efforts, Models, and Definitions, meets the requirements of Deliverable 2.1 for the study of Stay at Work/Return to Work (SAW/RTW) Models and Strategies. This synthesis describes the context in which SAW/RTW programs operate as of early 2018 and the types of service models being implemented as of that timeframe. The synthesis also catalogues the range of SAW/RTW programs that existed as of early 2018 and describes their key features. This program synthesis sets a foundation for other project work to review evidence about SAW/RTW programs and to develop intervention and evaluation design options. The synthesis considers a broad range of programs and includes SAW/RTW initiatives active or in early stages of implementation in 2018, as well as demonstrations that had concluded.

Stakeholder Incentives

When workers experience a work disability (defined as a work-limiting illness or injury), several factors influence whether they stay at or return to work. First are factors related to the worker—their preferences, skills, financial incentives, family and other relationships, and current and future functional capacity. The set of choices that workers face, and the attractiveness of those choices, also depends in part on their interactions with other stakeholders including employers, physicians and the medical system, employment programs, federal income supports such as Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI), and other insurance programs. Each of these stakeholders has its own goals and incentives. Some of these incentives are aligned with the larger goal of keeping workers attached to the labor force; others are not. Our review of stakeholder incentives points to several lessons that could be used to improve incentives to encourage and support SAW/RTW.

- SAW/RTW is valuable to the insurers who pay benefits to workers, but they often have little direct control over worker's employment choices
- SAW/RTW is valuable to many, but not all, workers
- SAW/RTW can be valuable to employers, but can be costly
- Medical providers face limited SAW/RTW incentives
- Innovations from Workers' Compensation demonstrate potential improvements to the SAW/RTW landscape, but applying these lessons to a broader context will be challenging

Methods

To identify SAW/RTW programs for this synthesis, the Abt team conducted a comprehensive scan of the field. The team used four sources: 1) a review of previous work completed under the S@W/R2W Policy Collaborative, supported by ODEP (ODEP 2018); 2) a structured online search for literature from academic and non-academic sources; 3) consultation with experts in SAW/RTW interventions from the private and public sectors; and 4) targeted web searches of six large employers and 10 private disability insurers. Altogether, these methods identified 68 SAW/RTW programs.

SAW/RTW Program Dimensions

Our review of the 68 programs showed that SAW/RTW programs may vary in several respects. Programs vary in the entities that administer the program, to the service providers that engage with the program, to the types of services offered. Administrative entities can include employers, state workers' compensation (WC) systems, state vocational rehabilitation (state VR) agencies, insurance companies, or a variety of other organizations. Interventions might feature a range of services such as employer-provided job accommodations, including job modifications or assistive technologies, medical treatment innovations, case management or information sharing, or counseling and training of various kinds. Throughout the process, programs may engage with stakeholders such as employers, education and training providers, medical professionals, insurers, and other service providers.

This broad conceptual framework for SAW/RTW programs points to six dimensions that distinguish SAW/RTW programs. The Abt team examined these dimensions for each of the 68 programs identified in the search. Exhibit ES-1 displays the number of programs, by category.

- 1. **Program component** refers to the services or activities undertaken to promote SAW/RTW. Chapters 3 through 7 present detailed descriptions of the five program components we identified in the literature and through our review of programs. The five components are: employer-provided accommodations; financial incentives to employers and workers; information; medical management; or employment services and training. Information-related components were most common (identified in 41 reviewed interventions). Financial incentives (27) and employer-provided accommodations (24) were the next most common program types. Medical management (18) and employment services and training (18) appear less frequently in our synthesis.
- 2. Administrative context refers to the type of entity responsible for program administration, such as a state WC agency or a private disability insurer. While the review team identified some concentration among programs administered within state WC systems (18 of the 68), the search results included programs operating within a diverse set of administrative systems such as state vocational rehabilitation, private disability insurance firms, state workers' compensation, and others.
- 3. **Timing** refers to when the intervention occurs. For this study, we define early-stage interventions as those that intervene to assist a worker prior to application for the Social Security Disability Insurance (SSDI). Such interventions may not necessarily be early relative to the onset of the injury or illness. For this study we define medium-stage interventions occur during the window between application and award of SSDI benefits. Late-stage interventions target SSDI beneficiaries. We classified nearly all (61 of the 68) of the reviewed programs as early-stage interventions. We did not identify any medium-stage interventions. Seven programs targeted SSDI beneficiaries, and we categorized these as late-stage programs.

- 4. Target group refers to the specific medical conditions targeted, if any. Nearly all programs (64 out of 68) targeted workers with a broad set of conditions, including musculoskeletal impairments, mental health conditions, and other illnesses. Of the four SAW/RTW programs that targeted specific conditions, three targeted mental health conditions, and one targeted individuals with diabetes.
- 5. Relation of injury/illness to work refers to whether the program offers services only to workers who experience work-related injuries or illnesses. Because work-related injuries are a small fraction of the conditions that might threaten a worker's attachment to the labor force, this program synthesis considers program models that address any sort of medical condition that may threaten a worker's attachment to the labor force. We found that 23 of the 68 programs restricted eligibility to workrelated injuries or illnesses, and the remainder of programs appeared unrestricted by the type of incident.
- 6. **Stakeholders involved** refers to whether the program involves the following entities: the employer, employee, attending physician, other health care professionals, or other.

Exhibit ES-1: Number of Programs, by Category

Program Component *	Number of Programs
Employer-provided Job Accommodations	26
Financial Incentives for Employers and Workers	25
Information	41
Medical Management	18
Employment Services and Training	18
Administrative Context	
Employer program (public or private)	8
Medicaid	6
Private Disability Insurer	10
SSA demonstration	5
State Vocational Rehabilitation agency	6
State Workers' Compensation agency	18
Tax code	8
Workforce system	4
Other	3
Timing	
Early	61
Medium	0
Late	7
Type of Disability	
Broad	64
Mental Health	3
Other	1

Type of Injury/Illness	
All	41
Work-related	23
Other	4
Stakeholders Involved*	
Employee	55
Employer	41
Attending Physician	14
Other Medical Professional	8
Other	7

^{*}Total does not sum to 68, because a single program could include more than one component.

Results

Overall, the program synthesis produced some general findings about SAW/RTW programs that we summarize here.

- Only a little more than half of programs (39 out of 68, or 57 percent) incorporated more than one of the five service components. Nearly every intervention (64 out of 68) included either an employerprovided accommodation, financial incentive, or information component, but most of those (38 out of 64, or 59 percent) included only one of the three components. It appears that many interventions are designed to emphasize one primary approach to SAW/RTW.
- The exceptions are programs that include a medical management component, which is always used in conjunction with other program components. Of the 18 programs that included a medical management component, 10 also included employer-provided accommodations and 14 included an information component.
- The approach taken by most WC agencies that operate SAW/RTW programs involves incentivizing employers to hire or retain workers with disabilities through a job accommodation or transitional work arrangement. Three Preferred Worker Programs, implemented in Washington, North Dakota, and Oregon, all offer employers a wage reimbursement and relief from workers' compensation premiums or future claims costs in return for hiring a qualifying worker.
- The state of Washington's approach differs from that of most state WC agencies. Washington's WC system—considered monopolistic in its design—requires employers to either self-insure or purchase WC insurance directly from the state. The state acts as a single payer with a capacity to centralize and coordinate the WC claims process. Therefore, the state is in a relatively unique position to implement a program such as the Centers of Occupational Health and Education (COHE), which relies heavily on communication and coordination between claims administrators, employers, and health care providers. Under this more centralized administration of WC, Washington coordinates its various

North Dakota, Wyoming, and Ohio are the three other states that operate monopolistic WC programs. On a more limited basis, North Dakota attempts to engage more extensively with local medical providers through its Return to Work program.

SAW/RTW programs (see Appendix A), creating a complementary set of services where other states' SAW/RTW programs may operate in relative isolation.

- A majority (60 percent) of SAW/RTW interventions that we identified include some form of an information-based component (i.e., technical assistance, case management, or case coordination). Current SAW/RTW practice emphasizes assisting injured workers with navigation of post-injury services. However, unlike other entities responsible for program administration, less than half of interventions implemented by WC agencies incorporated an information-based component.
- SAW/RTW programs often engage with workers' attending physicians to obtain approval for accommodation plans, yet our review identified few interventions that prioritize ongoing engagement with health care providers. We believe that an obstacle to medical management interventions can be the regulatory restrictions imposed by the Health Insurance Portability and Accountability Act (HIPAA) that restricts physicians from sharing health information about workers with third parties including employers. Under an exemption afforded to WC insurers and their agents, the COHE program is able to surmount these HIPAA-related barriers, but for other models outside of the WC system, HIPAA restrictions may pose challenges for implementing a medical management program component.²

Most efforts to develop best practices in support of preparation for and implementation of SAW/RTW services approach the issue from the perspective of the employer (see Appendix C). When developing the search terms and classification dimensions for our synthesis of programs, we identified several sources from the field that examine these kinds of preparatory practices that set the foundation for employerbased SAW/RTW programs. SAW/RTW programs can be thought of as including three pre/injury-illness elements that employers can establish: 1) defining essential functions and usual duties of a particular job, which facilitates decision-making about an individual's ability to fulfill job duties; 2) creating a team to implement a SAW/RTW plan; and 3) developing a process for communication and case management.

Next Steps

This synthesis of SAW/RTW programs and interventions fulfills the first stage in this study. Equipped with knowledge of the field as it stands today, the study team next assessed the evidence base for the field of SAW/RTW programs. From that point, the team conducted several analyses of publicly available survey data to identify opportunities for early intervention. The analysis involved developing a set of likely pathways by which a worker might progress from the point of injury or illness to application for SSDI. The analysis also created a set of profiles for target populations most likely to benefit from early SAW/RTW services. Finally, we formulated a set of intervention and evaluation design options.

Disclosures for Workers' Compensation. Accessed at: https://www.hhs.gov/hipaa/forprofessionals/privacy/guidance/disclosures-workers-compensation/index.html

Introduction

The Social Security Disability Insurance (SSDI) program is the nation's primary earnings-replacement program for workers who become unable to work substantially due to long-term or terminal physical or mental conditions. Administered by the Social Security Administration (SSA), in 2017 the SSDI program paid \$142.7 billion in cash benefits to 10.4 million disabled workers and their dependents. Since 1991, several factors—low benefit termination rates, lower ages at disability onset, and a growing number of claims³—have contributed to substantial growth in the SSDI caseload and in program costs.

The long-term trend of increasing disability and lower work among persons with a disability poses critical public policy problems (Autor and Duggan, 2006; Bound, Lindner, and Waidmann, 2014). First, forecasts expect the SSDI Trust Fund to be exhausted by 2028 (Social Security Administration, 2017). Another area of concern is the lost income and productivity that accrue when workers who experience an injury or illness exit the labor force when they might have continued to work.

No uniform or coordinated service delivery system currently exists to help the worker who experiences illness, injury, or disability to remain at work. Instead, workers who experience a medical condition that

threatens their ability to work must navigate on their own a range of systems with different goals and rules (Ben-Shalom et al., 2017).

If a medical condition occurs on the job, the worker is typically eligible for medical care and cash assistance through the state's workers' compensation (WC) program. Workers' Compensation programs thus offer one potential service system in which to design interventions to encourage attachment to the workforce, but only for work-related medical conditions, which make up only a small share of all disabling conditions that lead to SSDI award. O'Leary et al., (2012) estimate that about seven percent of new SSDI awards in the State of New Mexico from 1995–2000 resulted from WC covered illnesses or injuries for which WC benefits were paid. Similarly, Reville and Schoeni

Workers compensation programs insure employees against the costs associated with illnesses and injuries that arise from the job. The program reimburses employees for the cost of medical care to treat the illness or injury and pays a portion of the employee's salary while the employee is unable to work. The WC program is mandated by the state, and each state sets rules that govern WC benefit provision and compensability. Four states, North Dakota, Ohio, Washington, and Wyoming have what is called monopolistic WC program. In these states, employers must obtain WC insurance from a compulsory state fund or, in OH and WA, self-insure. In other states, employers can also obtain WC insurance from private insurers.

(2004) analyzed data from the 1992 wave of the Health and Retirement Survey found that of SSDI participants in the survey, 36.5 percent reported that their impairment was due to work. However, only

Several demographic factors have driven the growth in claims, including population growth, the aging of the population, and an increase in women's labor force participation. The financial outlook of the DI Trust Fund has improved somewhat in recent years. In their most recent annual report, the Social Security Board of Trustees note that disability applications have been declining steadily since 2010 and that the total number of disabledworker beneficiaries in current payment status has been falling since 2014 (SSA 2019a). These trends have led to a change in the projected date of trust fund depletion, from 2023 (projected in 2016) to the current projection of 2052 (SSA 2016; SSA 2019c).

4.7 percent of the SSDI beneficiaries in the survey had received workers' compensation benefits prior to SSDI.

When a worker experiences a non-occupational medical condition and therefore not covered by workers' compensation, several entities could potentially coordinate care and other services.

- About 40 percent of workers have **private disability insurance**, either provided by their employers or purchased on their own (Ekman, 2015). Private disability insurance can pay a portion of lost wages when an individual is unable to work. Often, private disability insurance uses less stringent definitions of disability than federal disability benefits programs (namely SSI and SSDI) and may offer larger benefits.
- Workers also turn to their private health care providers who may or may not offer treatment intended to help the individual stay at work.
- Some workers may seek assistance from state vocational rehabilitation (VR) programs to help them remain at work.
- Some employers may provide services to workers with illnesses or injuries to help them remain at work.

The terms Stay-at-Work/Return-to-Work describe a broad range of programs that are intended to help an injured or ill employee to retain attachment to the labor force or, if the worker has left the labor force, to return as soon as medically feasible. The U.S. Department of Labor (DOL) seeks to build the knowledge base about SAW/RTW programs and intervention and evaluation design options. DOL CEO and ODEP have contracted with Abt Associates to conduct a comprehensive review of SAW/RTW programs to describe the initiatives that are operating, review evidence, and develop intervention and evaluation design options,. The synthesis examines a range of service systems to identify SAW/RTW programs.

The Department of Education's Rehabilitation Services Agency provides funds to each state to operate State Vocational Rehabilitation (VR) programs. These programs also offer a wide range of services including vocational assessments, counseling and guidance, vocational training, assistive technology, job placement, and post-employment services. To be eligible for state VR services, an individual must have a significant impairment that interferes with his or her ability to work. When resources are limited, state VR programs must establish an order of selection with highest priority given to individuals with the most severe impairments. The recent Workforce Innovation and Opportunity Act provided state VR agencies with additional flexibility, allowing them to serve employed workers who might otherwise be at risk of losing their job due to a significant medical condition, even if an order of selection is in place. With this flexibility, state VR programs offer another opportunity for developing SAW/RTW interventions.

1.1 **Purpose of the Report**

This synthesis describes the current types of service models and the context in which SAW/RTW programs operate. To that end, this document catalogues the range of SAW/RTW programs that currently exist and describes their key features. This catalogue of programs will support future project work to identify intervention and evaluation design options. To meet the objective set for the project's Knowledge Development Task, this synthesis considers a broad range of programs and includes SAW/RTW initiatives that are currently active as well as those that are in early stages of implementation as well as demonstrations that have concluded.

The Abt team conducted a systematic and structured search that identified 68 programs. This document reviews each of those programs and classifies them according to five types of program components: 1) employer-provided job accommodations; 2) wage and other subsidies; 3) information; 4) medical management; and 5) employment services and training. This document also summarizes other attributes of the SAW/RTW programs such as the administrative context; timing, types of impairments targeted, and the kinds of stakeholders involved in delivery of the intervention.

The programs presented in this synthesis focus primarily on *early interventions*—defined as interventions that assist workers after the onset of injury or illness but before application for SSDI. The rationale for examining early interventions is to identify program strategies that might promote workplace retention and prevent long-term disability and application for SSDI. Nonetheless, we included in the synthesis any medium- or late-stage SAW/RTW programs—as defined below—identified in our search.

1.2 Methods

To identify SAW/RTW programs for this synthesis, the Abt team conducted a comprehensive scan of the field. The team used three sources: 1) a review of previous work completed under the S@W/R2W Policy Collaborative, supported by ODEP (ODEP 2018); 2) a structured online search for literature from academic and non-academic sources; and 3) consultation with experts in SAW/RTW interventions from the private and public sectors.

We limited the search process to programs operating in the U.S. In addition, we only considered programs that either delivered SAW/RTW services directly to workers or that subsidized the delivery of those services. In practice, this meant that we excluded sources that only offered guidance to program administrators interested in implementing a SAW/RTW program. We also prioritized recent programs, which we considered those studied or documented within the last ten years.

Previous Work Completed Under the SAW/RTW Collaborative

Between 2013 and 2017, the S@W/R2W Policy Collaborative sponsored by ODEP supported a Community of Practice that produced original research, analysis, and policy proposals that promote positive SAW/RTW outcomes for workers likely to leave the workforce due to injury or illness.

The Abt team reviewed each publication produced under the Collaborative. Of particular interest were those materials that explored different SAW/RTW program models, including discussions of state-level programs and possible expansions of existing program models (Ben-Shalom, 2016; Ben-Shalom et al., 2017; Sung et al., 2017). Specifically, we examined each paper's citations as well as later publications that cited each reviewed paper. These searches identified additional research and examples of relevant SAW/RTW programs to be included in our synthesis. We added these to our final list for the synthesis.

Structured Search of Academic and Non-Academic Literature

To ensure our synthesis considered SAW/RTW initiatives that may not have been included in the scope of the Collaborative, we also conducted a systematic search of the academic and non-academic literature. We generated a list of 10 search terms based on the results of the first review discussed above and based on the review team's knowledge of the disability management field. Those search terms are:

- Stay at Work/Return to Work Programs
- Stay at Work/Return to Work After Injury

- Stay at Work/Return to Work AND Workers' Compensation
- Stay at Work/Return to Work AND Job Accommodations
- Stay at Work/Return to Work AND Short-Term Disability
- Stay at Work/Return to Work AND Preferred Worker
- Stay at Work/Return to Work AND Vocational Rehabilitation
- Stay at Work/Return to Work AND Case Management
- Stay at Work/Return to Work AND Plan for Employment
- Stay at Work/Return to Work AND Occupational Health.

The team searched for each term in two engines, Google and Google Scholar. The team included the modifiers "Stay at Work" and "Return to Work" with each term separately. In total, we completed 40 independent searches (10 terms, each searched twice in two different engines). The Google search identified primarily non-academic sources. The Google Scholar search identified academic sources. We restricted both searches only to U.S.-based interventions. We restricted the Google Scholar search to sources published from 2008-2018. The Google search was unrestricted.

For each of those 40 searches, the review team conducted a preliminary review of the top 20 results, or 800 results total. This preliminary review screened results as relevant or not relevant, and all results deemed relevant were included in a subsequent review. This preliminary review identified about 16 percent of our results as potentially relevant for the second-stage review.

During this second-stage review of the approximately 130 screened sources, the team scanned the sources to identify any SAW/RTW programs or initiatives that met our definition for inclusion in the synthesis. That is, these programs needed to fit within the conceptual model of a SAW/RTW program as discussed in Section 2.1 below. We added to the synthesis programs that met the definition.

1.2.3 **Expert Interviews**

To supplement our structured search process, we sought input from experts in the field to identify additional directions for our review through phone interviews. In consultation with DOL, we identified representatives from federal government agencies and private sector employers who could potentially recommend sources of programs or strategies to include in the synthesis. By the end of February, we conducted phone interviews with 14 federal government representatives at eight agencies:

- DOL Employment and Training Administration
- DOL Office of Workers' Compensation Programs
- Rehabilitation Services Administration
- National Institute on Disability, Independent Living, and Rehabilitation Research
- Assistant Secretary for Planning and Evaluation at Department of the Health and Human Services
- U.S. Postal Service

- Centers for Medicare and Medicaid Services
- National Institute for Occupational Safety and Health.

During each interview, we asked each representative to recommend potential programs to include in our review and suggest any additional contacts with whom we might discuss SAW/RTW strategies. At the recommendation of our contact at DOL's Office of Workers' Compensation Programs, we contacted and held an additional interview with a representative from the United States Postal Service.

For the most part, these calls with federal experts did not yield many recommendations for specific SAW/RTW programs to include in this synthesis (although those that were relevant are included in this synthesis). Instead, most of the federal contacts discussed how a SAW/RTW program might connect with existing systems or incorporate design options for new interventions. We expect to utilize these references as we develop intervention and evaluation options as part of later project tasks (see Chapter 5).

Targeted Searches for Private Industry Practices

The Abt team also attempted to interview representatives from five large employers, recommended by DOL officials as firms that may have developed SAW/RTW initiatives. The firms are Aetna, EY, Lockheed Martin, Merck, and Northrop Grumman. At the time of publication, none of these employers was able to schedule an interview with the Abt team. In lieu of those conversations, the study team reviewed the publicly available information about each firm to ascertain whether they operate any sort of SAW/RTW initiatives for their employees. As appropriate, we include those initiatives in this synthesis.

While we did not restrict our structured search described above to public sector activity, we conducted a targeted review of specific private firms to ensure our synthesis covered at least a minimal level of private sector activity. We identified a list of the largest private disability insurance firms by premium volume in the country from a 2014 and 2015 market survey and reviewed their websites to identify other potential programs (Correia and Alpren, 2016). These firms are Unum, CIGNA, MetLife, The Hartford, Liberty Mutual, Aetna, Prudential, Lincoln Financial Group, Sun Life Financial, and The Standard.

1.3 Organization of this Synthesis

We organize this synthesis as follows. Chapter 2 presents a conceptual framework for SAW/RTW programs identified for our synthesis and defines a classification system used to describe those programs included in the synthesis. Chapters 3 through 7 synthesize the set of programs, and each chapter corresponds to a specific program component defined in Chapter 2. Specifically, Chapter 3 describes programs that involve employer-provided job accommodations to assist workers to remain at work after injury or illness. Chapter 4 describes SAW/RTW programs that offer financial incentives to employers or employees. Chapter 5 discusses programs that feature information services. Chapter 6 discusses programs that focus on medical management services. Chapter 7 reviews programs that offer employment related services and training. Finally, Chapter 8 summarizes the review of programs to highlight the status of program operations and implications for demonstration design. Appendix A provides additional detail about the results of the classification process and a short description of each of the 68 programs identified. Appendix B includes tabulations of programs across classification dimensions. Appendix C presents additional information regarding common preparatory practices employers should consider prior to delivery of SAW/RTW interventions after the onset of injury or illness. Appendix D discusses incentives of various stakeholders in the SAW/RTW process and Appendix E summarizes evidence available about the 68 programs identified in this program synthesis.

2. **Definitions and Classifications**

This chapter describes the organizational scheme we developed to describe the SAW/RTW field and to structure our synthesis of SAW/RTW programs. SAW/RTW programs can encompass a wide range of activities conducted by several entities in a multitude of settings. The chapter begins by introducing a broad conceptual framework for SAW/RTW programs in Section 2.1. This conceptual framework illustrates how SAW/RTW programs fit into the complex interactions between workers who experience illness and injury, their employers, and service providers. The broad conceptual framework suggests six dimensions that distinguish SAW/RTW programs: 1) program components, 2) administrative context, 3) timing, 4) target group, 5) type of illness or injury (work-related or other), and 6) stakeholders involved. Section 2.2 discusses incentives of the various stakeholders in SAW/RTW programs and Section 2.3 defines the program dimensions and describes the prevalence of each dimension among the 68 SAW/RTW programs identified in our search.

We structured the program synthesis in Chapters 3 through 7 around a detailed analysis of the first of these dimensions: program components. Section 2.4 describes five types of program components, which we selected based on previous classifications used in the literature and on our own review of SAW/RTW programs. We discuss each of these five types of program components in its own chapter. As appropriate, the discussions in Chapters 3 to 7 consider interactions between the types of program components and the other five program dimensions to provide a comprehensive review of the programs identified in the search.

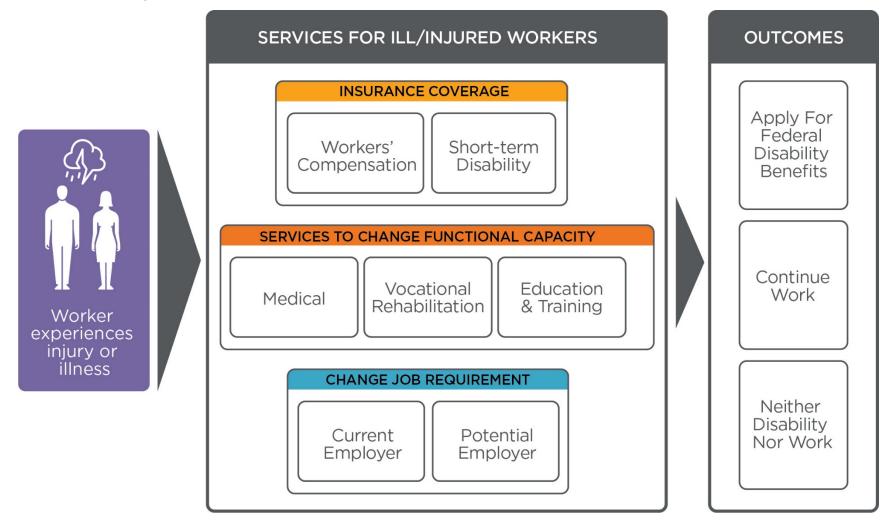
2.1 **Conceptual Framework for SAW/RTW Programs**

When a worker experiences an injury or illness that results in a disability (temporary or permanent), that worker, the employer, and other entities can pursue a variety of activities to minimize the impact of that disabling condition on work. Programs "designed to return an injured, disabled, or temporarily impaired worker to the workplace as soon as medically feasible" are known generically as SAW/RTW programs (Job Accommodation Network, 2013).

While meeting this broad mission, a collection of SAW/RTW programs may vary in several respects, from the entities that administer the program, to the service providers that engage with the program, to the components of the program and the types of services offered. Administrative entities can include employers, state WC systems, state VR agencies, insurance companies, or a variety of other organizations. Interventions might feature a range of services such as employer-provided job accommodations, including job modifications or assistive technologies, medical treatment innovations, case management or information sharing, or counseling and training of various kinds. Throughout the process, programs may engage with stakeholders such as employers, education and training providers, medical professionals, insurers, and other service providers.

We illustrate the structure and the process by which all of these potential interactions take place using a stylized map in Exhibit 2-1. At the point of onset of an injury or illness, we distinguish between those events that are work-related and those that are non-work-related. Individuals who experience either kind of injury or illness both have access to a network of available services. In general, those services are comparable across both types of events, with exceptions. Certain forms of insurance, namely Workers' Compensation, only cover work-related injuries or illnesses.

Exhibit 2-1: A Stylized Map of the SAW/RTW Concept



Abt Associates

Within the network of services, the worker may engage with four general and not mutually exclusive service options. First, the worker may take up a disability benefit offered through coverage under workers' compensation, short-term disability insurance, or other provider. The available coverage depends on the type of injury or illness and whether it was work-related or not. Second, the worker may directly seek certain services to improve his/her functional capacity for work, including medical treatment, VR, or new education and training (shown in the "Change in Functional Capacity" section). Third, the worker may pursue a change in the conditions of his/her work. These include accommodations made for the individual's disabling condition that allow the individual to continue or resume work. Fourth, the worker may enter a SAW/RTW program or activity. Generally, a SAW/RTW program can coordinate across all of these activities and can alter incentives or information of any of the stakeholders.

Any of the stakeholders can operate SAW/RTW programs, including insurers, employers, or health providers, or a program could be a stand-alone operation. Regardless, we anticipate that an effective program is likely to engage with multiple stakeholders and use several service strategies to encourage the worker to remain in the labor force. However, if these actions are not successful in facilitating a return to work, the individual may not continue working and may eventually apply for federal disability benefits (shown on the far right).

This broad conceptual framework suggests that our program synthesis must describe a wide range of SAW/RTW programs that could employ different strategies or engage different stakeholders. Different program entities could administer these programs. The programs could facilitate a return to work immediately or long after the point of injury, and they could limit their eligibility to only certain kinds of injuries, illnesses, or subsequent disabling conditions. This conceptual framework suggests six dimensions along which the SAW/RTW programs may vary.

2.2 Stakeholder Incentives

When workers experience a work disability (defined as a work-limiting illness or injury), several factors influence whether they stay at or return to work. First are factors related to the worker—their preferences, skills, financial incentives, family and other relationships, and current and future functional capacity. Other factors include their employer's willingness and ability to make accommodations to help the worker return to work, and the worker's ability to find a new job.

The set of choices that workers face, and the attractiveness of those choices, also depends in part on their interactions with other stakeholders including employers, physicians and the medical system, employment programs, federal income supports such as Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI), and other insurance programs. Each of these stakeholders has its own goals and incentives. Some of these incentives are aligned with the larger goal of keeping workers attached to the labor force; others are not.

Many of the incentives relevant to SAW/RTW are financial. For example, workers' compensation programs are responsible for partially replacing the lost wages of insured workers with approved claims. Thus, these programs have an incentive to make it easier to return to work. Other incentives are based on a mission or set of goals. For example, an employer that takes pride in taking care of its workers might put more effort into keeping workers who experience work disabilities attached to the firm, simply because that is part of the firm's mission. Similarly, workers often take pride in their work, and may prefer working to not working even when the financial returns to work are quite small.

A discussion of incentives faced by all major SAW/RTW stakeholders appears in Appendix D. Based on our review of incentives we note several lessons that could be used to improve incentives to encourage and support SAW/RTW.

SAW/RTW is valuable to those who pay benefits, but they often have little direct control over work outcomes

The insurers that pay benefits – short term disability insurance, long-term private disability insurance, Workers' Compensation, and Social Security – have strong incentives to encourage work. However, decisions about SAW/RTW are mainly made by individual workers who decide whether to seek or accept work and under what conditions, and employers who decide whether and what employment to offer. Many insurers offer incentives and assistance to workers and employers, but programs vary widely. Although SSA is a major player, it does not offer such incentives, and SSDI is not currently configured to do so. Addressing this mismatch by improving the channels for SSA and other benefit providers to affect others' actions might allow for better outcomes.

SAW/RTW is valuable to many, but not all, individuals

For the average worker who is just allowed SSDI benefits, income would be higher had they been denied and instead attempted to work, but some workers would earn more and others less (Maestas, Mullen, and Strand, 2013). In addition to varying across individuals, the benefits of returning to work are often unknown to workers when they make choices. Giving workers more information about their options, or information that is more tailored to their individual situation, might make them better able to make the best possible choices. Allowing more flexibility in choices – for example, by providing time-limited benefits conditioned on following a treatment or training plan – might also enable workers to change their decisions as their circumstances change.

SAW/RTW can be valuable to employers, but can be costly

An employer who is able to retain an employee can avoid the recruitment and training costs associated with replacing the worker. The employer may also benefit from having an employee who is an especially good fit for the position, or who is especially dedicated to the job. To the extent that some employers are better than others at meeting the needs of workers who have experienced work-limiting injuries or illnesses, these employers may attract a broader range of job candidates, and may be able to hire more qualified individuals. However, retaining that employee, or becoming and remaining a firm that successfully accommodates and recruits workers with work limitations, may be costly. 4 Employers will select the workers for whom they believe this strategy is valuable – likely very skilled or hard-to-replace workers – who will not always be those most in need of accommodation. Policies, such as programs that offer technical assistance or reimbursement for accommodations can reduce these costs, and also provide incentives for employers to act in ways that are beneficial to other stakeholders.

It is possible that employers overestimate the costs of accommodation. Research by the Job Accomodation Network (2019) suggests that more than half (58 percent) of accommodations that employers offer to employees have no monetary costs. Of accommodations that do involve monetary costs, the average cost was \$500. These figures pertain only to accommodations that employers have offered to their employees. Assuming employers are more likely to offer accommodations when they are less expensive, offered accommodations are likely less costly than the average potential accommodation, However, these statistics suggest that many accommodations can be inexpensive.

Medical providers face limited SAW/RTW incentives

Although medical providers play an important role in the SAW/RTW process, they have very few incentives to act in ways that encourage or support work, except to the extent that good medical care facilitates work. Programs like COHE that incentivize occupational health best practices suggest that medical providers could become more active partners in the process.

Innovations from WC demonstrate potential improvements to the SAW/RTW landscape, but applying these lessons to a broader context will be challenging

Workers' compensation programs have implemented some of the more innovative and promising return to work initiatives, most notably the COHE program, with its focus on information coordination and occupational health best practices. Workers' compensation programs also provide lessons about ways to modify the workplace to accommodate return to work. Because many WC claims occur soon after illness or injury, WC programs offer opportunities to test early intervention strategies during this critical period, when it is difficult to identify and recruit relevant workers in most settings. In this early period following injury and illness return to work efforts may be most successful. However, lessons from the WC program may be difficult to apply to non-work conditions. There are several reasons for caution. First, there is far less coordination outside of the WC system, and greater potential for missed opportunities and misaligned incentives. While few states offer the kind of coordination found in COHE, simply the fact that a coherent WC system exists in each state means that there is more coordination than in the broader SAW/RTW landscape. Second, while all but the smallest employers have a substantial incentive to retain workers with occupational injuries and illnesses, fewer have such incentives when the condition is not workrelated. ⁵ Because the employer's active participation is an important part of maintaining employment, this presents a fundamental difference. Policymakers will need to consider how to overcome these hurdles when applying lessons from WC to SAW/RTW more broadly.

2.3 Classification of SAW/RTW Programs

The search process described in Section 1.2 identified 68 programs that fit within our broadly defined concept of SAW/RTW programs. To describe and synthesize this set of programs, we classified each program along six dimensions. This section defines the dimensions and summarizes the prevalence of each among the 68 programs included in the synthesis. Appendix B provides tabulations of the distribution of programs within each of these dimensions.

1. **Program components** are defined by the activities undertaken to promote retention of workers or a return to work. We classify program components as employer-provided job accommodations, financial incentives to workers or employers, information, medical management, or employment services and training. We describe each of these components in detail in Section 2.3. Chapters 3

Employers who provide private disability insurance (short- or long-term) and pay experience-rated premiums face similar incentives to retain workers.

To develop this list of components, we reviewed a collection of program guides and best practices. While most of these sources identified SAW/RTW practices from the perspective of employers, we took into account the roles played by other stakeholders in the SAW/RTW process, including health care providers. Therefore, our list extends beyond employer-specific program components. Nonetheless, those employer-focused sources identified several steps employers can take to lay groundwork for establishing SAW/RTW programs. We document these in Appendix C.

through 7 focus on each component in turn. Information-related components were most common (identified in 41 reviewed interventions). Financial incentives (27) and accommodation services (24) followed as the second and third most common. Medical management (18) and employment services and training (18) appear less frequently in our synthesis.

- 2. Administrative entity refers to the type of entity responsible for program administration, such as a state workers' compensation agency or a private disability insurer. While there was some concentration among programs administered within state WC agencies (18 of the 68), the search identified programs operated within a diverse and broad set of administrative systems.
- 3. **Timing** refers to when the intervention occurs. For this study, we define early-stage interventions as those that intervene to assist a worker prior to application for the Social Security Disability Insurance (SSDI). Such interventions may not necessarily be early relative to the onset of the injury or illness. For this study we define medium-stage interventions occur during the window between application and award of SSDI benefits. Late-stage interventions target SSDI beneficiaries. We classified nearly all (61 of the 68) of the reviewed programs as early-stage interventions. We did not identify any medium-stage interventions. Seven programs targeted SSDI beneficiaries, and we categorized these as late-stage programs.
- 4. **Target group** refers to the specific disabling conditions targeted, if any. Nearly all programs (64 out of 68) offer services to workers with a broad set of conditions, including musculoskeletal impairments, mental health conditions, and other illnesses. Of the four programs that specified a targeted type of condition, three SAW/RTW initiatives targeted mental health conditions, and one targeted individuals with diabetes.
- 5. Relation of injury/illness to work refers to whether the interventions apply only to work-related injuries or illnesses. We found that 23 of the 68 programs restrict eligibility to work-related injuries or illnesses, and the remainder of programs appeared unrestricted by the type of incident.
- 6. **Stakeholders involved** refers to whether the program involves the following entities: the employer, employee, attending physician, other health care professionals, or other entity.

2.4 **Description of Program Components**

The first dimension, **program component**, describes the approach or approaches a program uses to promote staying at work or returning to work. We organize the program synthesis in Chapters 3 through 7 based on five types of components identified in the literature and through our own review of programs. Relative to the other classification dimensions listed in Section 2.2, Chapters 3 through 7 offer a deeper exploration of the program components dimension. However, within the discussion of each program component, Chapters 3 through 7 also consider how each component interacts with those other program dimensions.

Due to a historical focus on workers' compensation, some programs may restrict SAW/RTW programs to those that target work-related injuries and illnesses, but those represent a small fraction of the injuries or illnesses that might threaten a worker's attachment to the labor force. Therefore, we do not limit this program synthesis to program models that address work-related injury or illness.

The five program components are:⁸

- 1. **Employer-provided job accommodations**: a modification or adjustment to a job or the work environment. Broadly, we include any service that facilitates remaining in or returning to the employee's current position and/or a transition to a new position without rehabilitation or additional skill acquisition. 10 In the programs we identified, the common examples included physical changes to the employee's workplace or workstation to promote accessibility such as automatic door openers, ramps, or wider doorways and assistive technologies such as speech recognition software, screen readers, automatic page-turners, and book holders. Other types of accommodations included modifications to work policies and procedures such as allowing flexible work times or modifications to job duties.
- 2. Financial incentives to employers and workers: any change in financial or other resources targeted to either workers or employers. Our review identified two primary types of employertargeted subsidies: those implemented through WC programs and those implemented through the tax code. The program synthesis also identified a couple of examples of policies operated through workers' compensation and short-term disability insurance programs to lessen disincentives to work that arise for workers through the wage replacement benefits the programs offer. These include not allowing vacation and sick time to accrue during the absence, holding the job open for a defined period of time, setting proactive return to work policies, and communicating with workers during the absence. Insurers can also implement programs to improve the attractiveness of returning to work. Some of these programs operate through incentives to employers to offer the worker an easy return to work.
- 3. Information: services delivered by a "Return-to-Work Coordinator," case manager, or other individual that facilitates communication between stakeholders and navigation of transitional/alternative work programs, the disability benefits system, and other services, such as those available through the health care or workforce development system. This component also includes technical assistance services typically delivered by an industry expert to help employers with SAW/RTW strategies, such as workplace modification or proper use of assistive technologies.
- 4. **Medical management**: any intervention intended to improve the delivery of health care services in response to occupational injury or illness. Services typically target attending physicians or other health care professionals, and they often include incentives, best practice guidelines, or

We adapted these from our review of previous examinations of SAW/RTW programs, specifically Hunt and Dillender (2017), McLaren, et al., (2010), Carruthers (2015), Georgia State Board of Workers' Compensation (n.d.), Institute for Research on Labor and Employment (2010), International Association of Industrial Accident Boards and Commissions (2016), International Social Security Association (2013), Job Accommodation Network (2013), Lax (2015), and New York State Workers' Compensation Board (n.d.).

[&]quot;Accommodations," U.S. Department of Labor, accessed February 22, 2018, https://www.dol.gov/odep/topics/Accommodations.htm

¹⁰ We include reimbursements for accommodation in this "accommodations" category and not in the "wage and other subsidies" category, because we categorized program components according to the mechanism that promotes SAW/RTW, even if that mechanism is indirectly implemented. Since a reimbursement for accommodation inherently relies on an accommodation strategy to promote SAW/RTW, we categorize it in the "accommodation" category, even though it is indirectly implemented through a payment to employers.

- educational services to change behavior. Our review found two basic approaches to improving medical management of injuries and illnesses: (1) direct engagement with the medical provider on the part of the SAW/RTW program staff and (2) encouraging more engagement with medical providers about return to work on the part of the worker.
- 5. **Employment services and training:** services that facilitate entry into a new occupation/position, sometimes following functional rehabilitation and typically delivered during a period of separation from employment. This includes re-employment services delivered to assist with navigating the labor market, such as job search, resume writing, and interviewing assistance. Our review suggests that employment services and training are not commonly included among the SAW/RTW initiatives implemented in the WC system. This is consistent with the emphasis on transitional and light-duty work in the context of many WC initiatives. These transitional assignments focused on worker retention may require the worker to utilize existing skills in a modified work assignment rather than new skills applied to alternative work.

3. **Employer-provided Job Accommodations**

This chapter considers the first of the program components listed in Section 2.4: "employer-provided job accommodations." Accommodations allow individuals with a disability to perform their job duties successfully. 11 Consistent with the definition included in Chapter 2, common examples include:

- Physical changes, such as the addition of ramps, wider doors, and automatic door openers to make a workplace more accessible to workers with disabilities;
- Assistive technologies, such as speech recognition software or screen readers; and
- Modification to work policies and procedures to promote flexible work times or alter the job duties of an injured worker.

In all, 26 (38 percent) of the programs identified in our review include an accommodation component. In this chapter, we review those programs along each of the other five classification dimensions listed in Section 2.2, providing additional detail around the different approaches utilized for accommodation. We conclude with a summary of findings.

Administrative Entity. Accommodation components are implemented across a variety of administrative contexts. We identified fourteen implemented by state WC agencies—four by private disability insurance firms, six by private or public employers direct to their employees, and the remaining two include others such as a state VR or Medicaid agency. 12

Exhibit 3-1 lists the administrative entity and the service delivery strategy for each accommodation program model. Programs incorporate accommodation components in two ways. The most common strategy incentivizes accommodations, and the second directly provides for accommodated work, most often in the form of transitional or alternative work. 13

Also, Exhibit 3-1 reveals a clear difference in the strategy through which programs implement accommodation components in these administrative contexts. Workers' compensation programs typically reimburse employers for the implementation of a job accommodation. All 14 accommodation components administered by WC agencies involved a reimbursement along these lines. Sometimes, these payments target the employer at injury (e.g., Oregon Employer-at-Injury Program), and in other cases they target any employer willing to hire a worker with a disability (e.g., Preferred Worker Programs).

¹¹ "Accommodations," U.S. Department of Labor, accessed February 22, 2018, https://www.dol.gov/odep/topics/Accommodations.htm

While every state has an agency dedicated to vocational rehabilitation services, we did not include those vocational rehabilitation programs in their entirety in our synthesis. Vocational rehabilitation in general could be considered a Return to Work strategy, in the sense that the goal of vocational rehabilitation is to assist individuals with realizing employment goals. However, our intention is to synthesize interventions that are focused on SAW/RTW targeted to workers. Not all state VR programs are attempting these types of interventions.

Note that we differentiate between the direct provision of transitional or alternative work (covered in this chapter) and financial subsidies intended to incentivize the hiring of an unemployed worker, possibly into an alternative work position (covered in the next chapter).

Exhibit 3-1: Prevalence of Accommodation Service Strategies, by Administrative Entity

Program Administrative Entity	Total Number of Programs	Number of Programs Directly Providing Accommodations	Number of Programs Using Reimbursements for Accommodation
Employer program (public or private)	8	5	1
Private Disability Insurer	10	1	3
State Vocational Rehabilitation	6	0	1
Workers' Compensation agency	18	0	14
Other	26	0	1
Total	68	6	18

In contrast, when employers implement an accommodation intervention for their own employees, they handle accommodations internally, often in the form of transitional employment. Of the six accommodation components administered by employer-based programs, five involved the direct implementation of a transitional or alternative work arrangement.

Employers who include accommodation components in their SAW/RTW programs make those accommodations directly. In these instances, employers typically maintain transitional, "light-duty" work or alternative work programs. For example, the State of Georgia will arrange for flexible scheduling or alternative work when state employees experience work-related injuries that limit their ability to perform their previous job. Likewise, our search identified two universities that implement temporary or alternative work programs for staff and faculty. In our judgement, employers are better able to provide accommodations in a SAW/RTW program when they have (1) a heterogeneous set of tasks or jobs to which they are able to assign workers and (2) management that understands the range of worker capabilities and task requirements.

Stakeholders Involved. As expected, accommodation strategies always involve the worker and the employer in some capacity because the accommodation must both meet the worker's needs and fit within the employer's staffing structure. In 13 instances, we identified the worker's attending physician as an active stakeholder. In these cases, physicians review or approve the transitional or alternative work arrangement, ensuring it does not exceed the injured worker's functional limitations. In our judgement, SAW/RTW programs could expand this sort of physician involvement when implementing accommodation approaches, and we discuss this physician involvement in more detail in the section dedicated to medical management components below.

Timing. We classified all of the programs, which in our review include an accommodation component as "early-stage" programs, that is prior to application for federal disability benefits. That is, they are included in programs that do not exclusively target SSDI beneficiaries. Transitional work arrangements in particular target individuals who may have experienced only a temporary or partial disability. These individuals may continue working in a limited capacity during a transitional period before, ideally, resuming pre-injury job duties.

Type of Disability and Relation of Injury/Illness to Work. Programs that use accommodation components did not target a particular kind of disabling condition. The programs offering employerprovided job accommodations provided accommodations to workers with many different types of impairments. Most programs that we identified in the program synthesis incorporate accommodation strategies restrict eligibility to work-related injuries or illnesses, but this is due to the fact that, of the programs we reviewed with accommodation components, more than half were implemented by WC agencies. Among those programs implemented by other administrative entities, such as employers or private disability insurers, about half were limited to work-related incidents.

Summary. In sum, our review of SAW/RTW programs that offer job accommodations suggests a program model that has the potential to intervene shortly after the onset of an injury or illness and is generally applicable to a wide range of disabling conditions. The extent to which existing SAW/RTW programs either incentivize accommodation strategies or directly implement an accommodation depends on the administrative setting for the program. Ultimately, the experience of the worker is largely the same. That is, workers are able to remain at work or return to work in some capacity due in part to some alteration to the work environment, be it via a new technology, a modification to job duties, or some other strategy that facilitates continued work after the onset of an illness or injury.

Financial Incentives for Employers and Workers

This chapter considers the second of the program components listed in Section 2.4: "financial incentives for employers or workers to encourage workers to stay at work. While the employer-provided job accommodation strategies discussed in the previous chapter approach the issue of SAW/RTW from the perspective of an individual's capability to carry out his or her job duties, some SAW/RTW programs focus on altering the incentives of workers and employers regarding the worker's return to work. We recognize that SAW/RTW programs may also target incentives of other stakeholders, namely health care providers, but since these incentives typically encourage changes in medical practice, we discuss them in Chapter 6.

In all, 25 (37 percent) of the interventions identified in our review include a financial incentive component. In the sections below, we examine the ways in which this program component interacts with two of our other five program dimensions, namely the administrative entity and the involved stakeholders. However, we do not discuss the interaction with the three remaining dimensions—the timing of the program, the targeted type of injury (work-related or not), and the targeted disabling condition—because we found little variation. Nearly all of the 25 programs were considered "early-stage" and generally applicable across a broad definition of disability and all types of injuries and illnesses.

We divide the synthesis of these financial incentives into two categories: those targeted to the employer and to the worker. Employer-focused strategies reduce the cost of retaining an incumbent worker or employing a worker with a disability. By reducing employment costs, these interventions attempt to offset for the employer the injured worker's reduced productivity. ¹⁴ On the other end, worker-focused strategies tend to supplement the individual's income in order to facilitate a return to work or assist with remaining at work.

4.1 Subsidies Targeted to Employers

Program administrators implement employer-targeted subsidies in two ways: through WC programs and through the tax code. We discuss both here.

Workers' Compensation Programs. Subsidies implemented through WC programs may take one of several forms, including direct wage reimbursements, WC premium exemptions, and protections against future WC claims. We reviewed five WC-based subsidy programs, all of which are described in Exhibit 4-1.

All five of these WC-based subsidies provide some form of wage reimbursement, but two of the five offer only the wage reimbursement and no other subsidy. The remaining three include additional subsidies in the form of exemptions from workers' compensation premiums and costs associated with new claims filed by "preferred workers." These three "Preferred Worker Programs" are implemented with similar

¹⁴ Not all injuries or illnesses will necessarily reduce a worker's productivity, and the extent to which productivity is affected may vary based on numerous factors, such as the severity of the injury/illness, the worker's industry, and person-level intangibles. However, these sorts of wage subsidies—to the extent they incentivize SAW/RTW—are geared primarily to injuries/illnesses that do affect productivity.

rules in Washington, Oregon, and North Dakota. However, Washington's Preferred Worker Program includes an additional retention bonus payment made to employers who retain workers for a full year.

We illustrate the differences between WC-based programs in Exhibit 4-1. One possible explanation for this difference between Preferred Worker Programs and other WC-based return-to-work subsidies is that, relative to other WC-based incentives, Preferred Worker Programs target a different kind of worker and are attempting to encourage a different kind of action. The Preferred Worker Program model targets those individuals who are not currently working and are less likely to return to their employer at injury, but are nonetheless looking to return to work. The other WC-based programs included in Exhibit 4-1 typically assist an employer with retention of an incumbent worker in a transitional employment position.

Exhibit 4-1: Wage Subsidies Implemented through WC Insurance Programs

Program	Wage Reimbursement	Premium Exemption	Claims Protection
Washington State Stay at Work	50% of wage for up to 66 days	None	None
Washington State Preferred Worker Program	50% of wage for up to 66 days Bonus of 10% of the worker's wages after 12 months of continuous employment of the preferred worker	Premium relief for up to 3 years	Exemption from new claim costs for up to 3 years
North Dakota Preferred Worker Program	Up to 50% of wage for up to 26 consecutive weeks	Premium relief for up to 3 years	Exemption from new claim costs for up to 3 years
Oregon Employer-at- Injury Program	45% of wage for up to 66 days	None	None
Oregon Preferred Worker Program	50% of wage for up to 183 days	Premium relief for up to 3 years	Exemption from new claim costs for up to 3 years

With regard to the timing of these programs, we categorize all five as early interventions. However, these programs typically define a preferred worker as one who experiences an injury or illness that prevents a return to his or her original job due to permanent medical restrictions. Because these individuals are more likely to have experienced severe injuries, we expect that workers and employers will use these subsidies after a longer period post-injury.

Tax Code Incentives. Exhibit 4-2 lists programs that subsidize the employment of individuals with a disability by offering tax credits to employers. Like the wage reimbursements discussed above, the tax credits also reduce costs associated with hiring or retaining workers with disabilities. However, delivery of the subsidy occurs through the tax code rather than as direct payments from a WC agency.

Exhibit 4-2: Wage Subsidies Implemented through the Tax Code

Credit	Parameters
Work Opportunity Tax Credit	Generally 25% or 40% of a new employee's first-year wages, up to a maximum
Delaware Employer Tax Credit for Hiring Individuals with Disabilities	10% of the employee's gross wages during the taxable year, up to \$1,500
lowa Income Tax Benefit for Employers Who Hire Persons with Disabilities	65% of wages paid in the first 12 months, up to \$20,000
Louisiana Employment of Certain Disabled Individuals Deduction	50% of wages paid during the first four months and 30% during each subsequent continuous month of employment during the taxable year
Maryland Disability Employment Tax Credit	30% of wages paid during the first and second years of employment, up to \$2,700
New York's Workers with Disabilities Employment Tax Credit	35% of wages paid during the second year of employment, up to \$2,100
Tennessee Jobs Tax Credit for Hiring Persons with Disabilities	\$2,000 (part-time) or \$5,000 (full-time) for qualified hires retained for at least 12 consecutive months

At the federal level, the key tax code incentive is the Work Opportunity Tax Credit. Employers may claim the credit if they hire and retain individuals referred from VR with significant barriers to employment. The credit applies to all qualifying employees hired in a tax year and is generally worth 25 percent or 40 percent of a new employee's first-year wages, up to a maximum. In addition to the federal credit, the program synthesis found that six states (Delaware, Iowa, Louisiana, Maryland, New York, and Tennessee) offer task credits to employers to encourage hiring workers with disabilities.

4.2 **Subsidies Targeted to Workers**

Workers' compensation and short-term disability insurance programs offer wage replacement benefits to workers to offset lost wages when workers are unable to work at their previous job. These benefits offer income replacement when workers are ill or injured, but can create disincentives to work. The program synthesis identified a couple of examples where program operators have adopted policies to ameliorate those disincentives.

These include not allowing vacation and sick time to accrue during the absence, holding the job open for a defined period of time, setting proactive return to work policies, and communicating with workers during the absence. Insurers can also implement programs to improve the attractiveness of returning to work. Some of these programs operate through incentives to employers to offer the worker an easy return to work. Insurers can also offer temporary partial disability benefits for workers who are able to return to light duty or part-time work, at lower earnings than the pre-injury job. This type of benefit is common in WC programs and might help to maintain the worker's attachment to the job and make returning to work more financially beneficial to the worker than remaining out of work altogether (McLaren et al., 2018).

Five states (California, Hawaii, New Jersey, New York, and Rhode Island) operate mandatory short-term disability insurance programs that cover most workers in the state, or mandate that employers provide short-term disability insurance. Rhode Island's TDI Partial Return to Work Program is explicitly designed to encourage return to work (Bourbonnierre & Mann, 2018). California's program provides support for returning employees working shortened schedules, but not those working in lower-paying tasks (State of California Employment Development Department, n.d.). Family and Medical Leave programs passed by

FINANCIAL INCENTIVES FOR EMPLOYERS AND WORKERS

the District of Columbia, Washington, and Massachusetts in recent years also provide income replacement for workers temporarily unable to work due to health conditions. Washington State and the District of Columbia programs will allow for intermittent work, but not partial days of work: The District requires that leave be taken in units of days (DC Law 21-264 § 101.9, 2017); Washington State does not provide benefits for days on which a person worked for pay (Washington Substitute Senate Bill 5975, §5d, 2017.) The Massachusetts program, however, will allow for partial payments in a similar framework to that used by Rhode Island (Mass Gen Laws ch.175M § 3c, 2018).

SSA has implemented two national demonstrations to evaluate whether changes to the SSDI benefit rules increases employment and earnings of SSDI beneficiaries. We include in our review both the Benefit Offset National Demonstration and Promoting Opportunity Demonstration. Under current law, SSA beneficiaries lose their entire SSDI benefit if earnings exceed the substantial gainful activity level for a sustained period. 15 In response, both demonstrations test a benefit offset that reduces benefits more gradually when earnings exceed a given threshold. (Gubits et al., 2017; Promoting Opportunity Demonstration, 2018).

The risk of losing one's health insurance coverage may also discourage employment. With regard to individuals with a disability who are not working and are eligible for Medicaid, the risk of losing Medicaid coverage without an alternative source of health insurance poses a disincentive to work among beneficiaries. As a return-to-work strategy, the Medicaid Work Incentive program operated in Utah and the South Dakota Medical Assistance for Workers with Disabilities program both allow Medicaid-eligible individuals to maintain their eligibility and coverage while earning more income—specifically 250 percent of the federal poverty level—than traditional Medicaid eligibility rules would allow.

¹⁵ The SGA level is a dollar amount of earnings set by SSA. Individuals who earn more than the SGA level (net of certain expenses) on a monthly basis are not eligible for disability benefits.

5. Information

The information component (the third SAW/RTW program component listed in Section 2.4) underscores the importance of communication among several parties—employee, health care provider, employer, and insurer. Many programs include an information component in addition to other program services to help facilitate communication. For example, a case coordinator may assist a person with a disability with navigation of transitional work opportunities. In some cases, the programs and interventions identified in our review are comprised only of an information component.

In all, 41 (60 percent) of the interventions identified in the program synthesis include an information component. This chapter begins with a brief discussion of the interaction between the information component and the administrative context in which the program operates. With regard to the other classification dimensions, we did not identify any notable variation. We observe information program components in early- and late-stage interventions, targeted to individuals with various kinds of disability and injuries.

Exhibit 5-1 shows that, after excluding those eight interventions administered automatically through the tax code, information components are included in 41 of the remaining 59 reviewed programs. At least one program administered in each of our listed administrative entities includes an information component. However, among those programs implemented by WC agencies, less than half incorporate some sort of information-based component.

Exhibit 5-1: Prevalence of Information Components, by Administrative Context

Administrative Context	Number of Reviewed Programs (Excluding Tax Code Programs)	Number with Information Components
Employer program (public or private)	8	6
Medicaid	6	4
Other	3	2
Private Disability Insurer	10	9
SSA Demonstration	5	4
Vocational Rehabilitation	6	5
Workers' Compensation Agency	17	8
Workforce system	4	3
Total	59	41

Note: The total in the second column is less than 68 because we excluded the eight interventions administered through the tax code.

The rest of this chapter discusses several specific types of information components: Coordination (Section 5.1), Counseling (Section 5.2), and Technical Assistance (Section 5.3).

Researchers have previously attempted to specify the duties fulfilled and competencies required by those individuals responsible for delivery of what we consider information-related program components (Shaw et al., 2008; Pransky et al., 2010). Based on our reading of that research and review of programs, we

identified three approaches to information-related components: coordination, counseling, and technical assistance.

Through case coordination, program administrators facilitate communication among stakeholders engaged in the SAW/RTW process. Counseling is a broad approach that includes program navigation and referral services often delivered by case managers and benefits counselors, and we use technical assistance to describe those services often delivered by industry experts (e.g., "rehabilitation engineers") to employers, such as a job analysis or consultation on the use of assistive technologies. We discuss examples of each approach in the sections below.

5.1 Coordination

The conceptual framework for SAW/RTW programs presented in Section 2.1 illustrates the complex interaction between several stakeholders engaged in the SAW/RTW process. For a single individual, the process of returning to regular work following an injury or illness may require input from each stakeholder. Accordingly, we treated case coordination—defined as the facilitation of communication and agreement between these stakeholders—as an information-based component of SAW/RTW programs. We discuss several examples in detail here.

In the context of programs implemented through Workers' Compensation systems, the state of Washington sets an important example of the potential for coordinating services for workers. The State Department of Labor and Industries funds and operates the workers' compensation program in Washington State. 16 The single-payer system and medical provider network that serves all claimants creates an integrated system in which to offer return to work services to a large proportion of workers' compensation claimants. Under this centralized administration of WC, Washington coordinates several return to work services offered to WC claimants, including the Stay at Work program, the Preferred Worker Program, the Early Return to Work program, and the Centers of Occupational

Employer Best Practices: A worker will likely seek a range of health care services after an illness or injury. Frequent contact with the employer about the treatment protocol, expected timeline, and the employee's functional capacity for performing the job can avoid complicated human resources challenges (Job Accommodation Network, 2013). While sharing medical information between an employer and a medical provider will in many cases be prohibited by HIPAA, employers can share information about transitional duties and job requirements with the employee, who can then communicate with health care providers to ensure that medical providers are informed and can support the worker's return to work.

Health and Education (COHE). We describe all of these programs in more detail in Appendix A. These programs offer a complementary set of services whereas SAW/RTW systems in other states may be more fragmented.

With regard to COHE, Washington's mandatory state fund for WC insurance provides the state with a mechanism to affect care coordination and occupational health best practices to promote return to work. The COHE-affiliated health providers offer care coordination from Health Service Coordinators to workers' compensation claimants along with access to best practices in occupational health. The

Washington is one of four states (others are North Dakota, Ohio, and Wyoming) that has what is called a monopolistic WC program. In these states, employers must obtain WC insurance from a compulsory state fund or, in OH and WA, self-insure. In other states, employers can also obtain WC insurance from private insurers.

coordinator collaborates with employers and medical providers to ensure that providers follow best practices to maximize the chance the worker will stay at work or return to work. The coordinator develops a return to work plan in conjunction with the health provider, worker, employer and the state WC claims manager. The COHE program also features data systems to promote communication between the coordinator, employer, and health care provider, performance indicators, and dissemination of occupational health best practices. The COHE model generally encourages coordination of SAW/RTW services throughout each COHE's broader community, sometimes through organized discussions between local employers and labor representatives about approaches to facilitating injury prevention and disability management; occupational health best practices delivered by COHE-affiliated health providers; regular health provider training and performance feedback; health provider incentives; and community outreach.

North Dakota's Return to Work program emphasizes the importance of central case coordination across several stakeholder interests. The state employs Medical Case Managers and contracts with registered nurses located on-site at medical facilities. Both of these positions are able to serve as a liaison between workers, employers, medical providers, and the state's claims adjusters to coordinate transitional work opportunities and support the recovery process.

Perhaps the most common approach to coordination services involved only the employer and the injured worker. In many programs and interventions, case coordinators, such as those designated in Montana's Stay at Work/Return to Work program, facilitate a transitional work arrangement with the employer at the time of injury. Among the interventions implemented directly by employers, the employer designated an employee to fill the coordinator role. Delaware implements such a program for the state's employees, and the program synthesis identified comparable interventions from the private sector at both Boeing and Duke University.

5.2 Counseling

Closely related to the coordination services described above, the counseling services described here focus less on facilitating communication between stakeholders and more on serving the person with a work disability. Many of the programs and interventions in the program synthesis include services delivered by

a case manager, rehabilitation counselor, return-towork coordinator, or another similarly-titled position to assist the worker to navigate program services, access available entitlements, select third-party treatment options, and several other decisions during the recovery process.

Counseling services were common in late-stage interventions directed to SSDI beneficiaries. Returnto-work interventions targeted to these individuals often operate through work incentives incorporated into the benefit eligibility or payment rules. For example, SSA's Work Incentives Planning Assistance, Benefit Offset National Demonstration, and Promoting Opportunity Demonstration programs Employer Best Practices: Early contact with the affected worker, as soon as possible following the onset of injury or illness, allows an employer to assess the circumstances and develop a plan to assist the worker that is tailored to the unique circumstances. Early contact can help the injured worker feel a connection with the workplace (New York State Workers' Compensation Board, n.d.). Early contact also facilitates a rapid start to the RTW process, which can in turn increase the chances that the worker eventually returns to work.

all rely heavily on information-based return-to-work intervention. Certified Work Incentives Counselors

inform beneficiaries of the work incentives available to them and counsel on planning their work and earnings activity to encourage return to work.

Likewise, Kentucky's SGA Project demonstration and the Individual Placement and Support (IPS) model of supported employment rely on counselors to assist VR customers or individuals with severe mental illness to access and effectively plan for entitlements for which they are eligible.

In another context, private disability insurers incorporate counseling services into SAW/RTW programs delivered directly to their beneficiaries. These insurers commonly counsel beneficiaries through referrals to third-party service providers. For example, Cigna's Absence Prediction and Prevention Program identifies individuals at the highest risk of work absence due to disability and connects them with coaches and nurse advocates that will make referrals to preventative disease management and vocational stay-atwork programs. In an interesting partnership, United Healthcare and Unum, a private disability insurance firm, work together to identify similarly high-risk beneficiaries common to both firms. When one of these beneficiaries files for a short-term disability claim with Unum, its disability specialists deliver over-thephone counseling on RTW services before making a referral to a nursing specialist at United Healthcare for additional counseling on treatment decisions and management of the disabling condition.

5.3 **Technical Assistance**

Like coordination and counseling services, technical assistance can take several forms. In fact, we could characterize benefits counseling to workers as a form of technical assistance. However, for the purposes of this synthesis, we use technical assistance to refer to services often targeted to employers or service

providers, such as members of the workforce system, in need of SAW/RTW assistance.

Among those programs that include a technical assistance service, state VR agencies operated three retention programs: Alabama's Retain a Valued Employee program, Arkansas' Stay at Work/Return to Work program, and South Carolina's Job Retention Services initiative. In these three state programs, technical assistance experts—sometimes called "rehabilitation engineers"—assist employers with a wide array of disability management services, including job assessments and analyses to support transitional work arrangements, site assessments for modification options, and training on correct use of assistive technologies.

Relative to other agencies with an employmentfocused mission, VR agencies often work with

Employer Best Practices: Employers can take steps to collect information about how an injury or illness has affected a worker's residual functional capacity. This information can help employers make timely transitions in work assignments or work accommodations to promote retention of the worker. A worker's ability to work should be assessed in terms of his or her functional capacity, functional impairment, as well as any medical restrictions. Put another way, all parties should know what the worker is able to do, what she or he is not able to do, and what she or he should not do because it will exacerbate the medical condition (American College of Occupational and Environmental Medicine, 2006).

individuals in need of a more intensive set of services to facilitate recovery among individuals with more severe disabling conditions. For that reason, we might expect VR agencies to more frequently include technical assistance strategies to assist employers with hiring individuals in greater need of accommodation. However, these kinds of assistance services were not unique to VR. In North Dakota's Preferred Worker Program, operated by the state's WC agency, the state will conduct on-site job analyses and ergonomic assessments at an employer's request to assist with the placement of a preferred worker

into transitional employment. In addition, Washington's Early Return to Work program incorporates a range of different assistance strategies, including safety-related consulting to assist employers with preventing future workplace injuries and risk management to assist employers with understanding how claims affect their premiums and workers' compensation experience factor.

Among private disability insurers, The Standard's Workplace Possibilities initiative appears to be a particularly well-developed technical assistance effort. Through this initiative, The Standard publishes white papers, success stories, and case studies for its policyholders. It also operates two "Workplace Possibilities Centers" in Oregon and New York, where policyholders can browse simulations of different accommodations options.

Finally, in one of the unique approaches to encouraging return to work, DOL's Disability Employment Initiative makes technical assistance its primary approach to improving return-to-work outcomes among customers with disabilities served by the workforce system. With Disability Employment Initiative funding, Disability Resource Coordinators work directly with local American Job Centers to ensure that individuals with a disability can effectively access [all] available services and that center staff have the support they need as they provide these services.

6. **Medical Management**

Injuries and illnesses that affect an individual's ability to work are inherently medical conditions. In response, some SAW/RTW programs manage the medical treatment of that condition. Accordingly, this chapter considers the fourth of the program components listed in Section 2.4: "medical management."

The medical management components covered in this synthesis exclude the medical treatment itself. While we acknowledge that medical treatment protocols such as pain management for lower back pain or psychiatric counseling for mental health conditions can affect SAW/RTW outcomes, they fall outside the scope of this effort and are not included. Instead, medical management in the context of SAW/RTW programs refers to attempts to facilitate or improve upon the delivery of medical care with a focus on occupational health in the context of a SAW/RTW process to promote employment retention.

In all, 18 (27 percent) of the interventions identified in our review include a medical management component. With regard to interactions with other classification dimensions, we categorized almost all of these programs as early-stage. Compared to other programs, those that included a medical management component tend to target individuals with mental health conditions and injuries or illnesses that were not work-related. As expected, these programs were also more likely to involve stakeholders from the health care community, including the worker's attending physician or other medical professionals. In the sections below, we discuss the different approaches to involving health care providers in a SAW/RTW program.

We describe two basic approaches to improving medical management of debilitating injuries and illnesses: (1) direct engagement with the medical provider on the part of the program staff and (2) encouraging injured workers to take up health care services.

6.1 **Direct Engagement with Medical Providers**

Many interventions rely on input from a worker's attending physician when developing a SAW/RTW plan. Programs that rely on transitional or alternative work arrangements commonly ask physicians to review, revise, and approve a worker's work plan to ensure the transitional or alternative work aligns with the worker's medical limitations. This was the case among transitional work plans administered in both the private and public sectors, all of which are included in the list below:

- Washington Stay at Work
- Washington Preferred Worker Program
- Johns Hopkins Early Return to Work Program
- University of Michigan Work Connections
- Centers of Occupational Health and Education
- Montana Stay at Work/Return to Work
- Rhode Island Temporary Disability Partial Return to Work
- CIGNA Stay at Work
- Georgia Return to Work

- Hawaii Return to Work
- New York Workplace Safety and Loss Prevention Incentives
- Unum Stay at Work
- Unum Transitional Return to Work

From publicly available information, we found it difficult to determine the intensity of the physician approval process. In many cases, we cannot easily gauge the extent to which the physician's input is central to the development of the transitional work plan. We highlight a few notable efforts here. For example, Boeing offers facility tours to medical providers at locations across the country to educate physicians on the nature of the company's various job duties. North Dakota's Return to Work program contracts directly with registered nurses located on-site at health care facilities to assist with case coordination and physician engagement.

Washington's COHE program directly engages physicians to a much greater degree than the typical medical management program. The COHE model goes well beyond the straightforward process of soliciting physician input into the transitional work process. Medical providers in a local community affiliate with a COHE and become members of a stakeholder community dedicated to case coordination across all stakeholders engaged in a particular SAW/RTW case. Through this affiliation, COHEs incentivize participation among affiliated providers in the COHE case coordination activities. COHEs also provide its affiliates with guidance on best practices in occupational health, including trainings for medical providers and opportunities to participate in pilot projects for innovative treatment options.

6.2 **Expanding Worker Engagement with Health Care Providers**

In some cases, workers require medical treatment to facilitate their return to work. As noted above, we do not include medical treatments in our review of SAW/RTW programs. However, we do include those SAW/RTW programs that encourage take-up of health care services on the part of individuals with a disability. In this section, we discuss some of those program components, including efforts in the private sector to treat occupational conditions in-house and efforts to expand access to health care services.

Examples from the private sector suggest that large firms and employers in the health care industry may be best positioned to manage directly the medical needs of injured workers. For example, Boeing's Health Services Clinics treat employees on location, offering immediate treatment and follow-up for on-the-job injuries and some non-occupational injuries. From the health care sector, Johns Hopkins Hospital implemented an early return to work program for staff under the hospital's self-insured workers' compensation program. The program allowed for early reporting of injuries, close follow-up, and evaluation and correction of potentially hazardous work environments. Unlike many other employers, Johns Hopkins is able to take advantage of the resources available at the hospital, including occupational physicians that assess injured workers functionalities, industrial hygienists that identify appropriate accommodations, and nursing case managers.

For program designers who either cannot or do not need to manage the health care services for injured workers, another approach to encourage more take-up of occupational health care services is to expand access to health care services. In Chapter 4, we discussed expanded health insurance coverage as a form of financial incentive to work. However, in the context of our "medical management" category of program components, expanding health care coverage is a SAW/RTW strategy, not as an approach to

incentivize return to work but rather because of its potential to prevent the onset of a disability that would lead to an absence from work. The programs discussed below sought to achieve this by improving access to healthcare and providing targeted health care services to address the identified risk for disability. 17

In our review, we identified several such programs implemented in the public sector, such as the Demonstration to Maintain Independence and Employment interventions implemented in Hawaii, Minnesota, Kansas, and Texas. Each of these programs offered participants a variety of benefits intended to promote employment among workers with physical or mental impairments that may affect their ability to work. While each program's services differed, they generally included provisions that expand access to health care services. Program provisions often reduced out-of-pocket health care costs by subsidizing insurance premiums, lowering co-payments, or eliminating deductibles. Some offered participants access to new medical services, such as additional physical therapy, psychotherapy, or home health visits. Programs also helped participants to navigate or access existing health care services, through the provision of transportation to medical appointments or case management to assist with service selection and coordination. By generally providing participants with greater access to health care services, the programs expect to prevent the onset of a disabling condition that would trigger an absence from work.

¹⁷ A third motivation for expanded health insurance coverage would suggest that employer-provided health insurance is a job retention strategy. While the magnitude of such an effect is debated, there is documentation that tying an individual's health insurance to his/her employer induces "job lock," or a disincentive to leave that job (Gruber and Madrian 2002; GAO 2011).

Employment Services and Training

This chapter considers the fifth of the program components listed in Section 2.4: "employment services and training." Programs that facilitate return to work among the unemployed commonly incorporate employment services and training approaches. These kinds of program components can vary widely in intensity, from relatively low-intensity job search assistance, which may include one-on-one work with a specialist to prepare resumes and improve interviewing skills, to occupational skills training that typically requires more time and effort on the part of the participant.

A complete review of these services is well beyond the scope of this synthesis but is available elsewhere (e.g., Barnow and Smith, 2015). In this chapter, we characterize the extent to which employment services and training are included as components in our list of SAW/RTW programs.

In all, 18 (27 percent) of the programs identified in our review include an employment services or training component. In this chapter, we review those programs along each of the other five classification dimensions listed in Section 2.2, providing additional detail about the different approaches used to incorporate an employment services and training component.

Administrative Entity. Among those SAW/RTW programs that included an employment service or training component, six were operated by state WC agencies, four through SSA Demonstrations, four through the workforce investment system, and the remainder through other administrative contexts.

Considering those six programs implemented by WC agencies, four programs set aside funds to reimburse employers or workers for expenses related to skills training to support alternative or transitional work. Only two include the direct provision of employment services, such as job search assistance. Exhibit 7-1 lists those provisions.

Exhibit 7-1: **Training Provisions in Programs Operated by Workers' Compensation Agencies**

Program	Employment Service or Training Component
California Supplemental Job Displacement Benefit	Employee reimbursement for educational retraining or skill enhancement
Connecticut Jobs that Work	Employment services and jobs search assistance
Florida Reemployment Services Program	Employment services and jobs search assistance and training
Washington State Stay at Work	Employer reimbursement for training fees or materials (e.g., tuition, books, or supplies), up to \$1,000 per claim
Oregon Employer-at-Injury Program	Employer reimbursement for training fees or materials (e.g., tuition, books, or supplies), up to \$1,000 per claim
Oregon Preferred Worker Program	Employer reimbursement for training fees or materials (e.g., tuition, books, or supplies), \$1,000 per use, up to \$2,000

Our review suggests that SAW/RTW initiatives implemented by WC agencies do not commonly include employment services and training. Even programs that otherwise appear similar across states do not consistently include an employment services component. For example, while Oregon's Preferred Worker Program includes a reimbursement for training services, those Preferred Worker Programs operated in North Dakota and Washington do not.

Unsurprisingly, those SAW/RTW programs administered within DOL's workforce investment system do incorporate some form of employment or training services. While the Department employs and encourages myriad strategies for supporting employment among persons with a disability, several of DOL's more recent initiatives emphasize a career pathways approach. ODEP's Pathways to Careers Demonstration Project funded community colleges to implement and test new strategies to assist youth with disabilities to enter high-skill employment. Additionally, the fifth, sixth, and seventh rounds of DOL's Disability Employment Initiative explicitly supported efforts on the part of American Job Centers to partner with existing career pathways programs available from local partners. 18

Timing. Across our entire review of programs, we identified seven late-stage interventions targeted specifically to people with disabilities and SSDI beneficiaries. Of those, six include some form of employment services and/or training components, described in Exhibit 7-2. The details of these components vary. Three include some form of job search assistance, but these demonstrations also relied on work-based learning and connections to a wide array of employment services and training.

Employment Services and Training Components of "Late-Stage" Exhibit 7-2: Interventions

Program Name	Administrative Context	Employment Service or Training Component
Kentucky's SGA Project Demonstration	Vocational Rehabilitation	Individualized employment plan and job search assistance
Ticket to Work	SSA Demonstration	Funds to pay for services delivered by Employment Networks ¹
Accelerated Health Insurance/Benefits	SSA Demonstration	Career planning and job search assistance
Youth Transition Demonstration	SSA Demonstration	Work-based learning experience
Transitional jobs	SSA Demonstration	Work-based learning experience and job search assistance
Onondaga Pathways to Careers Demonstration Project	Workforce System	Work-based learning and tutoring

¹ For more information on Employment Networks, see here: https://www.ssa.gov/pubs/EN-05-10065.pdf

Overall, our classification suggests that as a SAW/RTW strategy, employment services and training components are more common in late-stage interventions and programs. Program designers seem more inclined to incorporate these components when the goal of the program is to facilitate return to work among those individuals with weaker connections to the labor force.

Stakeholders Involved. As expected, the program components included in this chapter almost always involve direct provision of services to a worker or employee. Among those SAW/RTW programs that also engage with an employer, the process by which this occurs usually takes one of two forms. The first involves a reimbursement for training expenses (such as those listed in Exhibit 7-2 above). Second, we identified two programs that offer on-the-job training and work experience through either a subsidized

Disability Employment Initiative, Accessed at: https://www.dol.gov/newsroom/releases/eta/eta20141764

EMPLOYMENT SERVICES AND TRAINING

(Transitional Jobs Demonstration) or supported employment model (IPS Supported Employment). These kinds of programs can take several forms, but they typically begin by assisting participants to find a job often a low-skilled or entry-level position—and then work closely with employers to support that opportunity. The supports may include wage subsidies (in the case of many transitional jobs programs), case management, benefits planning, or psychological counseling, all of which are intended to facilitate long-term employment. Some of these services may be time-limited, as is often the case for wage subsidies, but some programs offer supportive services indefinitely. The IPS Supported Employment model offers time-unlimited supports to address any problems that may lead to unemployment.

Other Dimensions. With regard to the relationship of the injury or illness to work and the type of disabling condition, programs that used employment and training services generally adhered to standard patterns. They apply to individuals with a broad array of disabling conditions and circumstances behind the onset of injury or illness. However, in the context of serving individuals with severe mental illness, programs may look to provide intensive employment supports. Our review of programs includes the IPS Supported Employment Model, which attempts to connect such hard-to-employ individuals to job openings with participating employers. The program model offers intensive support and psychological counseling to the individual to promote job retention.

8. **Key Findings and Next Steps**

Stay-at-Work/Return-to-Work programs can encompass a wide range of interventions operated across multiple systems. Using a systematic search of academic and non-academic literature and websites, we identified 68 distinct programs that fall within this broad concept of SAW/RTW.

We classified each of the 68 programs along several dimensions, including the timing of each program and the types of service components that comprise each program. Most of these programs are early interventions, i.e., they assist workers who become ill or injured before application for SSDI. Forty-one (60 percent) programs included an information component, while 25 (37 percent) included a financial incentive; 26 (38 percent) included an accommodation component; 18 (27 percent) included employment services or training components; and 18 (27 percent) incorporated a medical management component.

Exhibit A-1 identifies each component included in the reviewed programs. Interestingly, only a little more than half of programs (39 out of 68, or 57 percent) incorporate more than one of the five components. Nearly every intervention (64 out of 68) included either an employer-provided accommodation, financial incentive, or information component, but most of those (38 out of 64, or 59 percent) included only one of the three components. Given the prevalence of these three program components, we might have expected more overlap. It appears that many interventions are designed to emphasize one primary approach to SAW/RTW.

The exception is the medical management component, which, in the programs in the synthesis, is always used in conjunction with other program components. Of the 18 programs that included a medical management component, 10 also included employer-provided accommodations and 14 included an information component. The balance of this section discusses the key findings from our review and synthesis of SAW/RTW programs and interventions before concluding with a summary of the next steps for this project.

8.1 Findings from Review and Synthesis

- The approach taken by most WC agencies involves incentivizing employers to hire or retain a worker with a disability through a job accommodation or transitional/alternative work arrangement. For example, three Preferred Worker Programs, implemented in Washington, North Dakota, and Oregon, all offer employers a wage reimbursement and relief from WC premiums or future claims costs in return for hiring a qualifying worker.
- The most notable exception to the typical approach taken by WC agencies is COHE, implemented in Washington. As discussed above, COHEs offer a wide range of case coordination and medical management services to injured workers, employers, and local medical professionals. Washington's monopolistic WC state fund facilitates the implementation of COHE. On a more limited basis, North Dakota attempts to engage more extensively with local medical providers through its Return to Work program, and like Washington, North Dakota is also a "monopolistic" WC state.
- Most (60 percent) SAW/RTW interventions include some form of information, technical assistance, case management, or case coordination. Assisting injured workers with navigation of post-injury services is a core activity of the SAW/RTW process in current practice. In contrast, less than half of those interventions implemented by WC agencies incorporated an information-based component. It is

unclear why this is the case, and the finding may be an anomaly attributable to the few SAW/RTW programs administered in that context.

- While SAW/RTW programs often engage with workers' attending physicians to obtain approval for accommodation plans, our review identified relatively few interventions that prioritize ongoing and substantial engagement with health care providers. We believe that one obstacle to medical management interventions can be the regulatory restrictions imposed by HIPAA that restrict physicians from sharing health information about workers with third parties including employers. Under an exemption afforded to WC insurers and their agents, the COHE program overcomes these HIPAA-related barriers, but for other models outside of the WC system, HIPAA restrictions may pose challenges for implementing a medical management program component. 19
- Most efforts to develop best preparatory practices for implementation of SAW/RTW services approach the issue from the perspective of the employer (see Appendix C). A more comprehensive definition from the field, attentive to other stakeholders and contexts for program implementation, might incorporate a broader set of practices and interventions. Our framework outlined in Section 2.1 describes how SAW/RTW programs fit into such a broader concept.

8.2 **Interviews with Experts**

While our interviews with experts in the federal government yielded minimal additions to our list of programs to be included in our synthesis, we did obtain helpful guidance on possible settings for a future SAW/RTW demonstration.

Representatives from the Rehabilitation Services Administration recommended that public and private employers' Employee Assistance Programs could be a focus for SAW/RTW initiatives. They also suggested exploring connections between state VR programs and Employee Assistance Programs particularly in the State of Vermont, where the state VR programs partners with a private organization called Invest EAP to provide employers with confidential personalized counseling, organizational and management consultation, training, and resource information to create welcoming workplaces for all workers.

Rehabilitation Services Administration officials also suggested that we review state VR plans to identify those states that are taking advantage of flexibility available through Workforce Innovation and Opportunity Act Section 412. This permits state VR programs to serve individuals who are employed but who are in immediate risk of losing a job because of a disability even if the state has an order of selection in place.²⁰ In our synthesis, we included retention-focused initiatives from state VR programs in Alabama, Arkansas, and South Carolina. We will continue to explore this set of options.

When we asked officials from DOL's Employment and Training Administration to consider another potential venue for future SAW/RTW interventions, they suggested that although the role of the workforce system in SAW/RTW intervention is not clear, it should be considered as an implementation option, particularly among workers who become separated from work because of illness or injury. Other

Disclosures for Workers' Compensation. Accessed at: https://www.hhs.gov/hipaa/forprofessionals/privacy/guidance/disclosures-workers-compensation/index.html

Workforce Innovation and Opportunity Act. Accessed at: https://www.congress.gov/113/plaws/publ128/PLAW-113publ128.pdf

DOL experts suggested that we consider whether new types of outreach or targeting from the workforce system could create opportunities for existing workforce services to address SAW/RTW needs. One DOL expert suggested exploring whether predictive models used in the Unemployment Insurance system to predict benefit exhaustion could be adapted for employers or service providers to identify workers who would benefit most from SAW/RTW initiatives.

8.3 **Next Steps**

This synthesis of SAW/RTW programs and interventions is the first step in this study. Equipped with knowledge of the field as it stands today, the study team will next assess the evidence base for the field of SAW/RTW programs, i.e., not merely what programs exist, but also the evidence for their effectiveness. We discuss evidence available for the 68 programs identified in the program synthesis in Appendix D to this report. Together, the synthesis of programs and evidence as to their effectiveness will complete the knowledge development phase of the project.

From that point, the team will complete several analyses of extant administrative data sources to explore different issues relevant to the design and implementation of an SAW/RTW demonstration. For example, we will develop a set of likely pathways by which an injured individual might progress from the point of injury to application for SSDI. In addition, we will examine the characteristics of SSDI applicants to develop a set of profiles for target populations most likely to benefit from SAW/RTW services.

Finally, we will use the knowledge developed under those tasks to formulate a set of evaluation design options.

Appendix A: Description of Reviewed SAW/RTW Programs

Exhibit A-1: Description of Programs Reviewed for SAW/RTW Synthesis

Name	Program Administrative Entity	Accommodation	Subsidies	Information	Medical Management	Employment and Training Services
Boeing SAW/RTW Program	Employer program (public or private)			✓	✓	
Delaware Return to Work	Employer program (public or private)	✓		✓		
Duke University Return to Work program	Employer program (public or private)	✓		✓		
Georgia Return to Work	Employer program (public or private)	✓			✓	
Hawaii Return to Work	Employer program (public or private)	✓		✓	✓	
Johns Hopkins Early Return to Work Program	Employer program (public or private)	✓		✓	✓	
Labor for America Assisted Reemployment Program	Employer program (public or private)		✓			
University of Michigan Work Connections	Employer program (public or private)	✓		✓	✓	
Demonstration to Maintain Independence and Employment, Hawaii	Medicaid		✓	✓	✓	
Demonstration to Maintain Independence and Employment, Kansas	Medicaid		✓	✓		
Demonstration to Maintain Independence and Employment, Minnesota	Medicaid		✓	✓	✓	
Demonstration to Maintain Independence and Employment, Texas	Medicaid		√	✓	✓	
Medicaid Work Incentive, Utah	Medicaid		✓			
South Dakota Medical Assistance for Workers with Disabilities	Medicaid		✓			
Delaware Assistive Technology Initiative	Other	✓		✓		
IPS Supported Employment	Other			✓		✓
Temporary Partial Disability Payments	Other		✓		✓	

Name	Program Administrative Entity	Accommodation	Subsidies	Information	Medical Management	Employment and Training Services
Aetna Abilities Plan	Private Disability Insurer		✓			
Beacon Mutual Insurance SAW/RTW	Private Disability Insurer			✓	✓	✓
Cigna Absence Prediction and Prevention Program	Private Disability Insurer			✓		
Cigna Stay at Work	Private Disability Insurer	✓		✓		
CIS Return-to-Work Program	Private Disability Insurer	✓		✓		
MetLife RTW plan	Private Disability Insurer		✓	✓		
The Standard Workplace Possibilities	Private Disability Insurer			✓		
Unum Stay at Work	Private Disability Insurer	✓		✓	✓	
Unum Transitional Return to Work	Private Disability Insurer	✓	✓	✓	✓	
Unum/United Healthcare Referral Project	Private Disability Insurer			✓		
Accelerated Health Insurance/Benefits	SSA Demonstration		✓	✓	✓	✓
Ticket to Work	SSA Program					✓
Transitional jobs	SSA Demonstration			✓		✓
Work Incentives Planning and Assistance	SSA Program			✓		
Youth Transition Demonstration	SSA Demonstration			✓		✓
Delaware Employer Tax Credit for Hiring Individuals with Disabilities	Tax code		✓			
Iowa Assistive Device Tax Credit	Tax code		✓			
Iowa Income Tax Benefit for Employers Who Hire Persons with Disabilities	Tax code		√			
Louisiana Employment of Certain Disabled Individuals Deduction	Tax code		√			
Maryland Disability Employment Tax Credit	Tax code		✓			
New York Disabilities Employment Tax Credit	Tax code		✓			

Name	Program Administrative Entity	Accommodation	Subsidies	Information	Medical Management	Employment and Training Services
Tennessee Jobs Tax Credit for Hiring Persons with Disabilities	Tax code		✓			
Work Opportunity Tax Credit	Tax code		✓			
Alabama Retain A Valued Employee	Vocational Rehabilitation Agency			✓		
Arkansas Stay at Work/Return to Work	Vocational Rehabilitation Agency			✓		
Kentucky and Minnesota SGA Project Demonstration	Vocational Rehabilitation Agency			✓		✓
Maryland WorkABILITY Loan Program	Vocational Rehabilitation Agency	✓				
South Carolina Job Retention Services	Vocational Rehabilitation Agency			✓		
Vocational Rehabilitation and Employment Program	Vocational Rehabilitation Agency			✓		√
California Reimbursement Program	State Workers' Compensation Agency	✓				
California Supplemental Job Displacement Benefit	State Workers' Compensation Agency					✓
Connecticut Jobs that Work	State Workers' Compensation Agency	✓		✓		✓
Florida Reemployment Services Program	State Workers' Compensation Agency					✓
Massachusetts Qualified Loss Management Program	State Workers' Compensation Agency	✓				
Montana Stay at Work/Return to Work	State Workers' Compensation Agency	✓		✓	✓	
New York Workplace Safety and Loss Prevention Incentive Program	State Workers' Compensation Agency	✓		✓	✓	
North Dakota Preferred Worker Program	State Workers' Compensation Agency	✓	✓	✓		

Name	Program Administrative Entity	Accommodation	Subsidies	Information	Medical Management	Employment and Training Services
North Dakota Return to Work	State Workers' Compensation Agency			✓		
Ohio Transitional Work Bonus	State Workers' Compensation Agency	✓				
Ohio Transitional Work Grants	State Workers' Compensation Agency	✓		✓		
Oregon Employer-at-Injury Program	State Workers' Compensation Agency	✓	√			✓
Oregon Preferred Worker Program	State Workers' Compensation Agency	✓	✓			✓
Texas Return to Work Assistance for Small Employers	State Workers' Compensation Agency	✓				
Washington State Early Return to Work	State Workers' Compensation Agency	✓		✓		
Washington State Preferred Worker Program	State Workers' Compensation Agency	✓	✓		√	
Washington State Stay at Work	State Workers' Compensation Agency	✓	√		✓	✓
Washington State Centers of Occupational Health and Education	State Workers' Compensation Agency			✓	√	
Disability Employment Initiative	Workforce system			✓		✓
Job Corps	Workforce system					✓
Onondaga Pathways to Careers Demonstration Project	Workforce system			✓		✓
WeCARE	Workforce system			✓		✓

Exhibit A-2: Description and More Information on Programs Reviewed for SAW/RTW Synthesis

Name	Link for More Information	Description
Employer Programs (publi	ic or private)	
Boeing SAW/RTW Program	http://dmec.org/wp-content/uploads/2013/02/@Work-Magazine May-2015.pdf	Boeing Health Services clinics provide health services for employees, offering immediate treatment and follow-up for on-the-job injuries and some non-occupational injuries. Boeing offers facility tours to medical providers so as to educate physicians on the nature of their patients' jobs and Boeing's on-site services. The company's Vocational Counselors identify RTW options within the firm. After an injury, employees can participate in a Progressive Work Simulation exercise under supervision from an athletic trainer and therapist. The simulation allows employees to practice better body mechanics, exercises, and work tasks to encourage recovery and return to work.
Delaware Return to Work	http://ben.omb.delaware.gov/disability/documents/rtw-guidelines.pdf?ver=0429 https://ben.omb.delaware.gov/disability/rtw-std.shtml	For the benefit of state employees covered by the state's internal program, a RTW Coordinator assists individuals either before, during, or after receipt of Short-Term Disability. They assist with developing an RTW plan with employer at injury, acquiring assistive technology, and otherwise facilitating RTW.
Duke University Return to Work program	https://hr.duke.edu/policies/workplace-health- safety/returning-work	Duke's Limited Work Program ensures that injured staff with temporary work restrictions are provided employment consistent with their restrictions. A staff member will be provided suitable employment by his/her department for up to 90 days. Through Duke's Alternative Work Program, a staff member who is not provided suitable employment or remains unable to return to work in their original department will be eligible for placement in an alternative position. All staff participating in the Alternate Work Program will be evaluated by the Rehabilitation Coordinator after 60 days and 90 days in their new positions to ensure suitable placement.
Georgia Return to Work	http://doas.ga.gov/assets/Risk%20Management/RTW %20Publications%20and%20Forms/RTW returntw.pd <u>f</u>	The goal of the program is the safe return of state employees to transitional or regular employment as soon as possible. This is available for both occupational and non-occupational injuries. Each agency is provided guidance on implementing an RTW program that offers an employee access to transitional duties that are approved by his or her physician. This could include a flexible schedule to permit attendance at medical/therapy appointments or an assignment to a special project that provides duties suited to reduced capacities.

Name	Link for More Information	Description
Hawaii Return to Work	https://dhrd.hawaii.gov/wp- content/uploads/2012/10/0902001.pdf	State employees who are injured due to a work-related accident or disease may be provided temporary light-duty job assignments and shall be provided priority of placement when they cannot return to their original job. A claims manager, with input from a physician's review of functional capacities, will initiate light-duty placement efforts. If necessary, the claims manager can request a job profile of requirements for a light-duty position. As soon as practicable after the injury occurs, the employees' personnel officer schedules a meeting with the employee to explain this program, the employee's options, and rights.
Johns Hopkins Early Return to Work Program	https://journals.lww.com/joem/Abstract/2000/12000/A Facilitated_Early_Return_to_Work_Program_at_a.1 0.aspx	The Johns Hopkins Hospital and Associated Schools of Medicine initiated an Early Return to Work Program in 1992. The program is a component of the Johns Hopkins Self-Insured Workers' Compensation Program's comprehensive managed care initiative, which includes early reporting of injuries, close follow-up, and evaluation and correction of potentially hazardous work environments.
Labor for America Assisted Reemployment Program	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	DOL Office of Workers' Compensation Programs provides temporary reimbursement for a percentage of wages to non-federal employers who hire individual receiving benefits under Federal Employees' Compensation Act. Up to 75 percent of paid salary in first year of employment, 50 percent in second year, and 25 percent in third year.
University of Michigan Work Connections	http://www.workconnections.umich.edu/about/	Work Connections is an integrated disability management program developed by the University of Michigan to help employees and supervisors when an employee experiences an injury or illness that prevents working. Case managers coordinate the services of nurses, therapists, physicians and other health care professionals. Work Connections will arrange for entry into transitional employment at the university until the employee is able to resume pre-injury job duties.
Medicaid Programs		
Demonstration to Maintain Independence and Employment, Hawaii	https://www.mathematica-mpr.com/our-publications- and-findings/projects/demonstration-to-maintain- independence-and-employment-data-analysis-dmie	The Demonstration to Maintain Independence and Employment (operated from 2007-2011) provided both health care coverage and employment assistance to workers before their condition gets to the point where they are qualified to receive federal disability benefits. The demonstration targeted working adults (age 18-62) with diabetes. Services included medication therapy management provided by pharmacists, individualized life-coaching services, and secondary support services to help address issues related to diabetes management.

Name	Link for More Information	Description
Demonstration to Maintain Independence and Employment, Kansas	https://www.mathematica-mpr.com/our-publications-and-findings/projects/demonstration-to-maintain-independence-and-employment-data-analysis-dmie	The Demonstration to Maintain Independence and Employment (2007-2011) provided both health care coverage and employment assistance to workers before their condition gets to the point where they are qualified to receive federal disability benefits. The demonstration targeted working adults (age 18-64) considered high-risk for health insurance. Services included reduced cost of health services, expanded health care coverage for vision and dental, and case management.
Demonstration to Maintain Independence and Employment, Minnesota	https://www.mathematica-mpr.com/our-publications- and-findings/projects/demonstration-to-maintain- independence-and-employment-data-analysis-dmie	The Demonstration to Maintain Independence and Employment (2007-2011) provided both health care coverage and employment assistance to workers before their condition gets to the point where they are qualified to receive federal disability benefits. The demonstration targeted working adults (age 18-60) with serious mental illness. Services included reduced cost of health services, expanded health care coverage for dental, a wellness navigator, and employment supports.
Demonstration to Maintain Independence and Employment, Texas	https://www.mathematica-mpr.com/our-publications- and-findings/projects/demonstration-to-maintain- independence-and-employment-data-analysis-dmie	The Demonstration to Maintain Independence and Employment (2007-2011) provided both health care coverage and employment assistance to workers before their condition gets to the point where they are qualified to receive federal disability benefits. The demonstration targeted working adults (age 21–60) with either severe mental illness or behavioral health diagnoses. Services included reduced cost of health services, expanded mental health services, case management, and employment-related supports.
Medicaid Work Incentive, Utah	https://medicaid.utah.gov/medicaid-work-incentive-program http://www.workabilityutah.org/healthcare/mwi.php	This policy allows Medicaid beneficiaries to work and earn more than 100 percent of the FPL while still maintaining Medicaid eligibility. To maintain Medicaid coverage while working, a beneficiary must pay a Medicaid Work Incentive premium. Once earnings exceed 250 percent of the Federal Poverty Level, a beneficiary is no longer eligible for Medicaid.
South Dakota Medical Assistance for Workers with Disabilities	https://dhs.sd.gov/guardianship/docs/Medical%20Assistance%20for%20Workers%20with%20Disabilities%20(DSS).pdf	The Medical Assistance for Workers with Disabilities program is designed to be an incentive for people with disabilities to return to work or remain working. The Medical Assistance for Workers with Disabilities program allows people with disabilities to earn more than traditional Medicaid limits while retaining Medicaid coverage. Medical Assistance for Workers with Disabilities beneficiaries are required to work, and the total countable income limit for the program is 250 percent of the federal poverty guideline.

Name	Link for More Information	Description
Other Programs		
Delaware Assistive Technology Initiative	http://www.dati.org/aboutus/index.html	Delaware Assistive Technology Initiative connects Delawareans who have disabilities with the tools they need, improving access to assistive technology for all Delawareans with disabilities. Delaware Assistive Technology Initiative operates Assistive Technology Resource Centers, where individuals can engage with specialists to learn about AT options or loan/exchange different assistive technologies before they purchase.
IPS Supported Employment	https://ipsworks.org/index.php/what-is-ips/	IPS is a model of supported employment for people with serious mental illness. Employment specialists systematically visit employers, selected based on the job seeker's preferences, to learn about their business needs and hiring preferences. IPS programs use a rapid job search approach to help job seekers obtain jobs rather than assessments, training, & counseling. Employment specialists attach to 1 or 2 mental health treatment teams. Employment specialists help people obtain personalized, understandable, and accurate information about their Social Security, Medicaid, and other government entitlements.
Temporary Partial Disability Payments	http://www.dlt.ri.gov/tdi/pdf/tdiPartialRTW.pdf	The Temporary Disability Insurance Partial Return to Work Program allows an individual collecting TDI to return to work on a partial basis (reduced hours) without entirely ending their TDI benefits. This program facilitates transition for individuals to return to their normal working hours while continuing their recuperation. If a Qualified Health Care Provider determines that an individual is able to return to work at reduced hours and the employer has work available, the individual may be eligible to collect partial payments.
Private Disability Insurance	e Programs	
Aetna Abilities Plan	https://news.aetna.com/news-releases/aetna-offers-a-new-path-to-productivity-with-alternative-income-replacement-plan/	The Aetna Abilities plan is an income replacement plan. Designed for employers with robust return-to-work programs and strong commitments to employee health, employees receive an individually tailored action plan based on their circumstances. These can include a stay-at-work or return-to-work action plan, as appropriate. Employees who engage in activities that support their productivity and well-being will receive a higher benefit. Employers select the level of benefits available to their employees when they make their plan decisions.

Name	Link for More Information	Description
Beacon Mutual Insurance SAW/RTW	https://www.beaconmutual.com/Pages/Employers/Employers-Claims-Services.aspx	This private workers' compensation insurer in Rhode Island offers SAW/RTW services to policyholders. Registered nurses—referred to as Nurse Case Managers—ensure appropriate medical care to assist the injured workers. Ergonomists conduct job analyses and consult employers and employees on accommodation options. For those who need, Beacon offers vocational services including job search assistance and transferable skills analysis.
Cigna Absence Prediction and Prevention Program	https://www.cigna.com/newsroom/news-releases/2011/cigna-program-cuts-disability-absences-by-15-percent-among-high-risk-individuals	Using its proprietary predictive model to analyze medical, disability, pharmacy and other data, Cigna identified individuals with a 10 percent or greater risk of missing work due to a disability in the coming year. Services include outreach and integrated support, including personal health coaching from a nurse advocate, as well as connections to other health support programs, such as lifestyle management, employee assistance, disease management and vocational stay-at-work programs.
Cigna Stay at Work	https://www.cigna.com/pdf/WorkplaceAccommodation Svc.pdf	CIGNA's vocational rehabilitation counselors assist employees to stay at work with "pre-disability" interventions. These services are designed to help individuals who may be struggling because of physical and psychological limitations associated with a progressive illness or condition and decrease their likelihood of applying for disability benefits. They collaborate with the employee, his or her health care professional and the employer, who all work together to secure workplace accommodations.
Citycounty Insurance Services (CIS) Return-to- Work Program	https://www.cisoregon.org/WorkersCompensation/Services	CIS is the provider of workers' compensation insurance to state and local entities in Oregon. The CIS Return to Work program offers members the following coverage/services: early medical treatment, RTW assistance, proactive case management, ergonomic evaluations, job safety analysis, safety training through the CIS learning center, coordination with state benefits, and a CIS incentive which supplements the state RTW funding to cover cost of retraining, purchasing adaptive equipment, etc.
MetLife RTW plan	https://www.metlife.com/business/benefit- products/group-benefits/return-to- work/index.html?WT.mc_id=vu1454#howwehelp	For certain policyholders, MetLife offers incentives up to 100 percent of pre-disability earnings, a rehabilitation incentive, a family care incentive, and a moving expense benefit. Rehabilitation and clinical consultants on staff can assist the employer and employee with RTW. The Health and Wellness Connection works with medical carriers to help the employer and employee get the most out of the overall benefit investment.

Name	Link for More Information	Description
The Standard Workplace Possibilities	http://workplacepossibilities.com/	The Workplace Possibilities program offers policyholders client nurses and vocational rehabilitation specialists to manage RTW processes. The Standard will provide guidance and consultation to policyholders on retention post-injury. They share white papers, success stories, and case studies. The Standard also operates two physical "Workplace Possibilities Centers," with simulations of ergonomic accommodations. These are located in Oregon and New York. These are available to policyholders at no cost.
Unum Stay at Work	http://www.unum.com/- /media/Unum/Home/UnumUs/Documents/FAQ/16- 04416_10-15%20FINAL.pdf?la=en	Unum is a private disability insurer, and under certain insurance policies, Unum will reimburse employers for the costs of securing a worksite modification for employees who are at risk of workplace absence.
Unum Transitional Return to Work	http://www.unum.com/- /media/Unum/Home/UnumUs/Documents/FAQ/16- 04416_10-15%20FINAL.pdf?la=en	Unum requires Short Term Disability Insurance beneficiaries to enter transitional employment with their employer at injury if medically appropriate. A liaison from Unum will work with a beneficiary's physician to determine if transitional work is medically appropriate, and if so, the liaison works with the employer to arrange for transitional work, which typically lasts 30 to 90 days. Unum will pay partial disability benefits for any hours that the worker cannot work during transitional employment.
Unum/United Healthcare Referral Project	http://dmec.org/wp-content/uploads/2013/02/@Work-Magazine_May-2015.pdf	Among employers who utilize both Unum and United Healthcare services, this is a collaborative effort between United Healthcare and Unum to speed up the process by which Short Term Disability claimants are identified as high-risk for disability and referred to health care providers for services. During the Short Term Disability claims process, an automated system identifies high-risk claimants, which triggers a process by which a Unum disability specialist follows up by phone to provide counseling on RTW services before handing the claimant off to a nurse at United Healthcare, who provides counseling on treatment decisions, case management, and long-term condition management.

Name	Link for More Information	Description
SSA Demonstrations		
Accelerated Health Insurance/Benefits	https://www.mdrc.org/project/accelerated-benefits-demonstration	Under current law, most SSDI beneficiaries are not eligible for Medicare until 29 months after the Social Security Administration has established the onset of their disability. To test whether providing immediate health care and related services leads to improved health and better return-to-work outcomes for newly entitled SSDI beneficiaries, SSA funded the Accelerated Benefits Demonstration from 2004-2011. Some AB participants also received medical care management for guidance on using the health plan, a three- to four-month behavioral support and program called the Progressive Goal Attainment Program, and employment services and benefits counseling.
Ticket to Work	https://www.mathematica-mpr.com/our-publications- and-findings/projects/evaluation-of-the-ticket-to-work- program	TTW increases beneficiaries' choice of employment-support providers by expanding the types of organizations that the Social Security Administration will pay to assist beneficiaries' work efforts. Before TTW, SSA funded only state vocational rehabilitation agencies to help beneficiaries. Now, it pays a wide array of public and private providers called employment networks, in addition to state vocational rehabilitation agencies.
Transitional jobs	https://www.acf.hhs.gov/sites/default/files/opre/tj_09_paper_embed.pdf	Transitional jobs programs provide temporary, wage-paying jobs, support services, and job placement help to individuals who have difficulty getting and holding jobs in the regular labor market. Although closely related to several other subsidized employment models that have been implemented or tested in the past, TJ programs are distinguished by their focus on very hard-to-employ populations and their emphasis on using the subsidized work experience to prepare people for regular unsubsidized jobs.
Work Incentives Planning and Assistance	https://www.ssa.gov/disabilityresearch/wipa_reports.htm	SSA funds more than 100 Work Incentives Planning and Assistance programs to provide SSDI and SSI beneficiaries with accurate information to facilitate a successful transition to work. Each program has Community Work Incentives Coordinators (CWIC) who: 1) provide in-depth counseling about benefits and the effect of work on those benefits; 2) conduct outreach efforts to beneficiaries of SSI and SSDI (and their families) who are potentially eligible to participate in federal or state Work Incentives programs; and 3) work in cooperation with federal, state and private agencies and nonprofit organizations that serve SSI and SSDI beneficiaries with disabilities

Name	Link for More Information	Description
Youth Transition Demonstration	https://www.ssa.gov/disabilityresearch/youth.htm	The purpose of the Youth Transition Demonstration (operated from 2001-2014) was to assist youths, aged 14 to 25, with disabilities to successfully transition from school to economic self-sufficiency. Participants were receiving Supplemental Security Income (SSI) or Social Security Disability Insurance benefits. Services included individualized work-based experiences, youth empowerment, family supports, system linkages, social and health services, and benefits counseling. Youth Transition Demonstration also provided waivers from SSDI program rules designed to allow participants to keep more of their earnings and encourage both savings and their continued education.
Tax Credit Programs		
Delaware state tax credit	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	This is a tax credit for employers who hire individual with disabilities referred by state VR program: 10 percent of employee's gross wages up to \$1500.
Iowa Assistive Device Tax Credit	https://tax.iowa.gov/expanded-instructions/other-refundable-credits	For small businesses that purchase, rent, or modify an assistive device, eligible employers may receive a credit on their state corporate income taxes of up to 50 percent of the first \$5,000 spent during the tax year on these items.
lowa state credit	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	This is a tax credit of 65 percent of wages paid in first 12 months (up to \$20k) for people with disabilities. Disability includes but is not limited to referral from state VR
Louisiana tax credit	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	This is a tax credit of 50 percent of gross wages during first four months of employment and 30 percent of gross wages during each subsequent continuous month of employment. Deduction for each qualified individual that an employer employs (up to 100 employees).
Maryland Disability Employment Tax Credit	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	This tax credit is for 30 percent of the first \$9,000 of wages paid during first 2 years of employment. A second credit covers up to \$900 to pay for childcare and transportation. Disabilities qualified include those certified by the state rehabilitation services or the U.S. VA.
New York disabilities employment tax credit	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	This credit is worth up to \$2,100 per person for their second year of employment (35 percent of first \$6,000 in wages). For individuals receiving vocational rehab services, a separate program (workers with disabilities tax credit program) provides tax credits for businesses who hire workers with developmental disabilities.
Tennessee state tax credit	https://www.askearn.org/topics/laws- regulations/employer_financial_incentives/	This is a one-time \$2,000 (part time) or \$5,000 (fulltime) credit for the employment of people with disabilities receiving state services directly related to their disability. Employment must result in net increase in number of people with disabilities employed by the employer.

Name	Link for More Information	Description
Work Opportunity Tax Credit	https://www.askearn.org/wp- content/uploads/docs/askearn_taxincentives_factshee t.pdf	Work Opportunity Tax Credit is a federal tax credit available to employers who hire and retain individuals referred from vocational rehabilitation with significant barriers to employment. There is no limit on the number of individuals an employer can hire to qualify to claim the tax credit. Employers generally can earn a tax credit equal to 25 percent or 40 percent of a new employee's first-year wages, up to a maximum.
State Vocational Rehabilita	ation Programs	
Alabama Retain A Valued Employee	http://www.rehab.alabama.gov/business- partners/products-and-services/employee-retention- disability-management	The Retaining A Valued Employee program has local disability management teams that include a business relations consultant, a rehabilitation counselor, and a rehabilitation engineer. The team assists with SAW/RTW through consulting and counseling services like job assessments, identification of accommodations, employee counseling, and comprehensive communication.
Arkansas Stay at Work/Return to Work	http://arcareereducation.org/services/arkansas- rehabilitation-services/access-accommodations/stay- at-work-return-to-work	SAW/RTW program staff assists employers with several areas related to disability management. This includes emotional counseling for employees; specialized vocational assessments of employees' abilities; job analysis and site assessments for modifications; assessment of options for transitional employment; individualized employee training regarding the correct use of assistive technology; and general ergonomic assessments and training to prevent injury or illness.
Kentucky and Minnesota SGA Project Demonstration	https://www.mathematica-mpr.com/our-publications- and-findings/publications/kentucky-substantial-gainful- activity-sga-project-demonstration-final-evaluation- report	The Kentucky Office of Vocational Rehabilitation developed a set of SGA Project innovations intended to improve employment outcomes of non-blind state VR participants receiving SSDI. These include faster pace of services and rapid client engagement, accelerated completion of the VR eligibility determination and the individualized plan for employment, financial and benefits planning from work-incentives coordinators, job placement services, and a coordinated team approach through which VR counselors, work-incentives counselors, and job placement specialists collaborate and function as a team.
Maryland Workability Loan Program	http://mdod.maryland.gov/mdtap/Pages/WorkABILITY -Loan-Program.aspx	Any Maryland resident with a disability can apply for a loan from the state to purchase equipment to start or maintain traditional employment, establish home-based work, start a small business, or purchase other employment-related equipment that assists in removing barriers to employment or maintain ongoing employment. All work-related equipment purchased through the WorkABILITY Loan Program must belong to the individual with the disability. Loans range from \$500 to \$60,000, with below-market interest rates. Recipients receive up to ten years financing on certain vehicles.

Name	Link for More Information	Description
South Carolina Job Retention Services	https://scvrd.net/job-retention-services-bs/	South Carolina's Vocational Rehabilitation agency offers residential substance abuse treatment and rehabilitation counseling. Their "rehabilitation engineers" provide consultation, individual assessment, and design and fabrication to assist customers stay at work and return to work. They conduct job-site evaluations to identify any problems that relate to worksite accessibility, and they can make recommendations for appropriate assistive technology and transportation modifications.
Vocational Rehabilitation and Employment Program	https://www.benefits.va.gov/vocrehab/	The Vocational Rehabilitation and Employment Program assists Veterans with service-connected disabilities to find and keep suitable jobs. A Vocational Rehabilitation Counselor will conduct an assessment, form an employment plan, and review labor market information. The counselor will provide ongoing counseling, assistance, and coordination of services, including job-seeking skills training, medical and dental referrals, adjustment counseling, payment of training allowance, and other services as required.
State Workers' Compensa	tion Programs	
California Reimbursement Program	https://www.dir.ca.gov/Chswc/Reports/2010/CHSWC_RTWReport.pdf	The Return-to-Work Program reimburses employers for expenses to modify the workplace to accommodate injured employees. It is available to private employers with 50 or fewer full-time employees that seek reimbursement of expenses to accommodate an employee with a work-related injury or illness. The subsidy amount is \$1,250 for a temporarily disabled worker and \$2,500 for a permanently disabled worker.
California Supplemental Job Displacement Benefit	https://www.dir.ca.gov/chswc/ReturntoWorkPage1.ht ml	California state funds cover education and training for workers who are eligible for permanent disability benefits and whose employer does not offer other work.
Connecticut Jobs that Work	http://wcc.state.ct.us/wcc/rehabemployer.htm	The state's services include work-site consultation from "rehabilitation engineers" at no cost to employers and financial incentives for employers to train their employees for alternative work. For workers who must transition to new employment, the agency offers vocational assistance including job search assistance and vocational counseling.
Florida Reemployment Services Program	https://www.myfloridacfo.com/Division/WC/Publication sFormsManualsReports/Brochures/WC- Reemployment-brochure.pdf	The program, run by the Division of Workers' Compensation, provides services to help injured workers obtain employment when their job-related injuries/illnesses prevent return to usual work. Services include vocational counseling, job-seeking skills training, resume writing, transferrable skills analysis, job search assistance, vocational education, and training and education.

Name	Link for More Information	Description
Massachusetts Qualified Loss Management Program	https://www.wcribma.org/mass/ProgramOverview/Qlmp.aspx	The program incentivizes private employers to hire a loss management firm to implement a loss management plan. Employers receive a credit against their workers' compensation premiums of up to 15 percent.
Montana Stay at Work/Return to Work	http://erd.dli.mt.gov/work-comp-claims/claims- assistance/saw-rtw	A designated rehabilitation counselor will manage the case and arrange for transitional employment with the employer of injury. Assistance is available up to \$2,000, to assist an employer in modifying the workplace or purchasing equipment required for the employer to provide transitional employment.
New York Workplace Safety and Loss Prevention Incentive Program	https://labor.ny.gov/workerprotection/safetyhealth/Links/CR%2060%20Incentive%20Pg.shtm https://labor.ny.gov/formsdocs/wp/sh929.pdf	The New York State Department of Labor's Workplace Safety and Loss Prevention Program offers a credit of 2-4 percent of an employer's insurance premium in return to establishment and maintenance of a RTW program. The program must be approved by the state and must include components, such as an individualized work plan for each employee, efforts to communicate with all parties, and opportunities to accommodate a return to pre-injury work or a transition into alternative work.
North Dakota Preferred Worker Program	https://www.workforcesafety.com/employers/return-to-work/preferred-worker-program	The program encourages the re-employment of injured workers and offers cost-saving payments to employers participating in the program. The benefits for employers include a premium exemption, wage reimbursement, reimbursement for worksite modifications, and a claims cost exemption. The employer of injury is not eligible for program participation with its own employees unless the employer of injury has identified permanent alternate work for the injured employee. Alternate work is considered permanent work that is provided to the employee that is outside of the preinjury position and requires the employee to perform work duties in another role.
North Dakota Return to Work	https://www.workforcesafety.com/employers/return-to-work/services	The state contracts with registered nurses located on-site at medical facilities to assist with coordinating care, to act as a liaison between the worker, employer, medical provider, and claims adjuster at WSI, and coordinate transitional work. The state also employs registered nurses on staff as Medical Case Managers to handle claims that involve potentially catastrophic or medically complex injuries. Medical Case Managers work with the worker, employer, claims adjuster, and medical provider to assess, plan, coordinate, and implement the options and services needed to support the worker in the recovery process and help them return to work.

Name	Link for More Information	Description
Ohio Transitional Work Bonus	https://www.bwc.ohio.gov/employer/programs/TransitionalWork/TWBonusDescription.asp	Employers with an approved transitional work plan may receive a back-end bonus for using the plan to return injured workers back to work. Eligible employers submit evidence that the employer operates a transitional work plan. Employers submit proof to demonstrate successful use of their program by eligible injured workers. The state calculates an employer's performance bonus based upon the successful use of the program. The maximum bonus is 10-percent of the employer's pure premium.
Ohio Transitional Work Grants	https://www.bwc.ohio.gov/employer/programs/TransitionalWork/TWGrantsDescription.asp	Ohio's Transitional Work Grant Program is designed to help employers develop a transitional work program. Employers may apply for funds to help them contract with an accredited transitional work developer to create a customized transitional work program.
Oregon Employer-at-Injury Program	http://wcd.oregon.gov/rtw/Pages/eaip.aspx	The Employer-at-Injury Program assists employers to create transitional work opportunities for injured employers, through either job modification or assignment to alternative work. The state provides financial assistance in the form of wage subsidies and reimbursement for related expenses, including worksite modification, assistive technologies, and education/training expenses for employees.
Oregon Preferred Worker Program	http://wcd.oregon.gov/rtw/Pages/pwp.aspx	The Preferred Worker Program incentivizes employers to hire qualified Oregon workers who have permanent restrictions from on-the-job injuries and who are not able to return to their regular employment because of those injuries. Incentives include premium exemptions, claims cost reimbursement, wage subsidies, employment purchases, and worksite modifications.
Texas Return to Work Assistance for Small Employers	http://www.tdi.texas.gov/wc/rtw/documents/rtwguide.pdf	The Division of Workers' Compensation reimburses employers for expenses incurred for workplace modifications, such as equipment, tools, furniture or devices. These costs assist an injured employee to stay at work or return to work. An employer with between two and 50 employees with workers' compensation insurance coverage may be eligible to receive up to \$5,000 for qualified expenses.
Washington State Early Return to Work	http://www.lni.wa.gov/ClaimsIns/Insurance/Injury/Light Duty/Ertw/Default.asp	Through the Early Return to Work program, several different kinds of consultants offer technical assistance to employers. This may include vocational assistance, guidance on how a workers' compensation claim affects an employer's "experience factor", or safety consulting on preventing future worker injuries. The program also offers funds to cover the costs of employers' job modifications.

Name	Link for More Information	Description
Washington State Preferred Worker Program	http://www.lni.wa.gov/ClaimsIns/Voc/BackToWork/PrefWkr/Guides/default.asp#1	Washington State may certify a worker with permanent medical restrictions as a "preferred worker." This certification enables an employer to receive a subsidy when it hires the worker for a medically-approved, long-term job. Subsidies may include financial protection against subsequent claims, premium relief, bonus payment for continuous employment, and reimbursement for 50 percent of the base wages paid to the preferred worker and some of the cost of tools, clothing, and equipment the worker needs to do the job.
Washington State Stay at Work	http://www.lni.wa.gov/Main/StayAtWork/#1	The program reimburses employers for some of their costs when they provide temporary, light-duty jobs for injured workers while they heal. Eligible employers can be reimbursed for 50 percent of the base wages they pay to the injured worker and some of the cost of training, tools or clothing the worker needs to do the light-duty or transitional work.
Washington State Centers of Occupational Health and Education	http://www.lni.wa.gov/ClaimsIns/Providers/ProjResearchComm/OHS/default.asp	COHEs work with medical providers, employers, and injured workers in a community-based program designed to ensure timely, effective, and coordinated services for injured workers. COHEs improve injured worker outcomes and reduce disability by training providers and coordinating care.
Workforce System Program		
Disability Employment Initiative	https://dei.workforcegps.org/about	The Disability Employment Initiative comprises three primary components: cooperative agreements, technical assistance to the grantees and the public workforce system, and evaluation of the grantees' activities to measure their outcomes and impact on both the individuals and the system. The goal is to improve outcomes of youth and adults with disabilities who are unemployed, underemployed, and/or receiving Social Security disability benefits. The Disability Employment Initiative funds the creation or appointment of Disability Resource Coordinators to help ensure that job seekers with disabilities access services they need. They ensure that staff have the support they need to provide services to customers with disabilities.
Job Corps	https://www.jobcorps.gov/	Job Corps is designed for economically disadvantaged youth facing education or employment barriers and provides all enrollees with an integrated package of work-focused supports including general education, vocational training, soft skills development, and ultimately job placement. The program enrolls youth with medical limitations, and previous research has found positive, large, and significant impacts per participant on self-reported employment and earnings; further, the program significantly reduced their dependence on long-term disability benefits.

Name	Link for More Information	Description
ODEP Pathways to Careers Demonstration Project	https://www.dol.gov/newsroom/releases/odep/odep20 141736	ODEP awarded \$978,453 in grants to Onondaga Community College in Syracuse, New York and \$1,028,869 to Pellissippi State Community College as part of the Pathways to Careers: Community Colleges for Youth and Young Adults with Disabilities Demonstration Project. Grants support conduct pilot projects that research, develop, test and evaluate innovative strategies for providing inclusive education and career development services to youth with disabilities between the ages of 14 and 24. The project was intended to help community colleges prepare youth with disabilities with the necessary skills for jobs in high-growth, high-demand industries.
WeCARE	http://www.fedcap.org/content/wecare	WeCARE, the New York City Human Resources Administration's Wellness, Comprehensive Assessment, Rehabilitation and Employment program, provides customized case management and referral services to cash assistance clients with medical and/or mental health barriers to employment. Case managers conduct comprehensive assessment and develop a treatment plan in order to make referrals to a range of appropriate services, including health resources; vocational rehabilitation; work-readiness training; job placement and retention; advocacy for federal disability benefits, and other services.

Appendix B: Tabulations of Programs by Classification Dimension

Exhibit B-1: Number of Programs, by Program Component

Program Model	Number of Programs
Accommodation (Chapter 3)	26
Financial Incentives for Employers and Workers (Chapter 4)	25
Information (Chapter 5)	41
Medical Management (Chapter 6)	18
Employment Services and Training (Chapter 7)	18

Note: Total does not sum to 68, because a single program could include more than one component.

Exhibit B-2: Number of Programs, by Administrative Context

Administrative Context	Number of Programs
Employer program (public or private)	8
Medicaid	6
Private Disability Insurer	10
SSA demonstration	5
State Vocational Rehabilitation agency	6
State Workers' Compensation agency	18
Tax code	8
Workforce system	4
Other	3
Total	68

Exhibit B-3: Number of Programs, by Timing

Timing	Number of Programs
Early	61
Medium	0
Late	7
Total	68

APPENDIX B: TABULATIONS OF PROGRAMS BY CLASSIFICATION DIMENSION

Exhibit B-4: Number of Programs, by Type of Disability

Type of Disability	Number of Programs
Broad	64
Mental Health	3
Other	1
Total	68

Exhibit B-5: Number of Programs, by Relation of Injury to Work

Type of Injury/Illness	Number of Programs
All	41
Work-related	23
Other	4
Total	68

Exhibit B-6: Number of Programs, by Stakeholders Involved

Stakeholders Involved	Number of Programs
Employee	55
Employer	41
Attending Physician	14
Other Medical Professional	8
Other	7

Note: Total does not sum to 68, because a single program could include more than one component.

Appendix C: Elements of Employer-Based SAW/RTW Programs

What can employers do to lay the groundwork for assisting workers who become ill or injured? In the process of developing the search terms and classification dimensions for our synthesis of programs, we identified several sources that examine these kinds of preparatory practices that enable employer-based SAW/RTW programs to "get off the ground." Chapters 3 through 7 of this synthesis describe the implementation of existing SAW/RTW programs and their approach to intervention after the onset of an injury or illness. However, the SAW/RTW field also offers helpful guidance on practices that employers should have in place prior to the onset of injury or illness to facilitate SAW/RTW efforts.

SAW/RTW programs include three pre-injury/illness elements that employers should establish: defining essential functions and usual duties of a particular job; creating a team to implement a SAW/RTW plan; and developing a process for communication and case management.

Define the Essential Functions and Usual Duties of a Particular Job. Establishing the essential functions and usual duties of a particular job allows employers to identify the potential for job modification or accommodation should a worker experience an illness or injury. Under guidance from the U.S. Equal Employment Opportunity Commission, "essential functions are the basic job duties that an employee must be able to perform, with or without reasonable accommodation."21 To develop the essential functions for each job, an employer should produce a comprehensive description of the activities, demands, and environmental conditions involved with the job can include details such as specific motions, postures, and their frequencies. Delineating the fundamental purposes and demands of a particular job will facilitate a Return to Work plan and will allow employers to identify quickly what modifications to the job are possible, and not possible to perform the functions of the job (California Commission on Health and Safety, 2010). Employers should codify this process by creating a "Job Activity Analysis" for each position within the organization, which can be kept on hand and updated regularly (Georgia State Board of Workers' Compensation, n.d.).

Establish a Team to Implement a SAW/RTW Plan. Employers can make SAW/RTW a priority by designating a team to develop and implement a SAW/RTW program, which can foster expectations for employees and managers that SAW/RTW will be supported. This team becomes the champion for the program plan who would communicate with all stakeholders (such as the employer's management team and department leaders) to ensure the plan's policies and practices are understood and implemented (New York State Workers' Compensation Board, n.d.). This program team also could establish procedures to guide the employer when training supervisors about the required processes, assisting the injured worker to navigate the health care system, and making job accommodations or other adjustments to retain the worker. For any given employer, involving the president, CEO, or owner of the organization, as well as members from human resources, safety officers, risk managers, and benefits coordinators will help to establish the credibility and priority for the SAW/RTW plan (Georgia State Board of Workers' Compensation, n.d.).

Establish a Process for Communication and Case Management. Staff communication and training are critical to establishing a SAW/RTW program and aid in ensuring practices and policies are understood, implemented uniformly, and monitored. Employers should incorporate training on SAW/RTW policies

²¹ The ADA: Your Responsibilities as an Employer. Accessed at: https://www.eeoc.gov/facts/ada17.html

APPENDIX C: ELEMENTS OF EMPLOYER-BASED SAW/RTW PROGRAMS

with new employees during their new hire orientation. In addition, they should conduct periodic review of the training with all employees and establish written materials to explain the SAW/RTW program that can be posted in the workspace (Georgia State Board of Workers' Compensation, n.d.). Employers should also take steps to make sure that all employees are informed of their rights and obligations under the SAW/RTW policy, including potential job modifications in the event of injury and recommendation to share medical information on job-related limitations with the employer. Supervisors and managers should be trained on how to respond to subordinates reporting the onset of illness or injury, as well as on how to understand and react to possible work modifications for the employee.

Appendix D: Stakeholder Incentives

This appendix reviews the incentives of stakeholders in the Stay-at-Work/Return-to-Work (SAW/RTW) process and the extent to which those incentives encourage or discourage employment. Specifically, it examines the incentives of:

- The worker;
- Employers;
- Physicians and the medical system;
- Employment programs;
- Federal income supports, such as Social Security Disability Insurance (SSDI) and Supplemental Security Income (SSI); and
- Other insurance programs that provide income support including private long-term disability insurance, temporary or short-term disability insurance, and workers' compensation.

The worker

Individual workers with work disabilities choose whether to persist at their current job, to seek a new job, or to leave the workforce, in response to constraints imposed by their employer, their impairment, and other factors. Some workers may be eligible for temporary income supports while recovering or finding a new position. Eligibility for these programs depends on insurance coverage or other factors, and some workers do not have access to any sort of temporary income support.

When workers make decisions about their work activity, they may react to the incentives and opportunities offered under the three main options – continuing to work for their previous employer, finding a position with a new employer, and exiting the workforce. They may also consider incentives arising from opportunities for health insurance, services that can help them adjust to a new set of abilities, and implications of family and other relationships as they contemplate their work decisions.

Staying at work

In many cases, remaining with their current employer is the most seamless way to continue working. A worker who is temporarily unable to do their job as before work disability onset can remain engaged with their employer in one of two ways:

- 1. Remaining in the same position with employer accommodations, or;
- 2. Finding an alternate position with the same employer.

Employers vary in their leave policies, as well as their ability and willingness to provide alternate assignments and accommodations. The options available to different workers employed by the same firm will therefore depend on the workers' characteristics. Employers' choices are discussed in the next section.

Returning to work

Workers who do not remain employed by previous employers may seek out new employment, either immediately or after a period of recovery. This may allow workers to find a job that is a better match for their new functional capacity.

These workers may be actively searching for work, or may consider themselves temporarily unable to work. During this period workers may rely on programs that offer insurance against temporary income loss. Such programs make it easier for workers to make ends meet while out of work, but this also lessens their incentive to return to work quickly.

Some workers are covered by short-term disability insurance (STDI) offered by a state, their employer, or purchased individually. STDI programs offer cash benefits for a period of time while a worker recovers. While they are primarily established to protect against wage loss, not to affect returns to work, access to STDI coverage generates incentives that can affect return to work. STDI programs may make it easier to apply for SSDI or SSI benefits by making it easier to wait for a determination. They may slow returns to work by providing income while the individual is not working. They could also improve the likelihood that a worker returns to work by delaying applications to SSDI or SSI until STDI benefits have elapsed, at which point some workers will have recovered or adjusted to new abilities, or by encouraging the worker to think of their exit from work as temporary. Income from STDI could also potentially help workers remain ready to work. Empirically, more generous STDI appears to increase applications for long-term benefits (Stepner, 2019).

Specific components of STDI programs can also affect the choices and incentives workers face. Some programs offer partial benefits for those who are ready to transition back to work but are not able to return to their previous level of earnings. Partial benefits may encourage faster return to work or more engagement with the employer, but might also lengthen the time until a worker returns to their previous level of earnings. The net effect of partial payments is unknown. Other programs provide funding for accommodations to allow workers to continue in their previous jobs. Workers who are covered by STDI programs that provide funding for accommodations may be more likely to be offered accommodations by their employer, as doing so is less costly for the employer than would otherwise be the case.

Unemployment insurance (UI) provides an alternate source of income support for individuals with a work disability that lose their job. It is only available to those who are not working or working at low levels, but are looking for work in some capacity. Although UI has traditionally focused on dislocated workers, UI modernization efforts in recent years have made the program more relevant to workers who experience work-limiting illnesses and injuries. Specifically, many states offer UI benefits to workers who leave their previous jobs for health reasons, and three states (Illinois, Massachusetts, and Montana) allow workers to claim UI while seeking part-time work if they have documented health reasons for doing so (Callan, Lindner, & Nichols, 2015; Lindner & Nichols, 2012; McHugh et al. 2002).

If an injury occurs on the job or an illness is work-related, workers typically are eligible for medical care and cash benefits (called indemnity payments) through the state's workers' compensation (WC) program. In general, WC claims cover three types of benefits: 1) medical only when an injury does not involve time out of work; 2) temporary total disability benefits when an injury or illness prevents a worker from working for a period of time and 3) permanent benefits, either permanent partial or permanent total disability benefits (McLaren, Baldwin, and Boden, 2018).

Workers receiving temporary or permanent WC benefits have less incentive to return to work than do those who do not receive income support while out of work. However, benefits are generally less than lost wages, and temporary benefits are often time-limited. While estimates published in the 1990s found that higher benefit levels increase both benefit duration and the rate of WC claims, more recent evidence suggests that claim rates are not very responsive to benefit levels, and are lower in more recent data (Krueger, 1990; Meyer, Viscusi, & Durbin, 1995; Bronchetti & McInerney, 2012). If benefit levels influence claims and duration of benefits, it suggests that employers' and insurers' incentives to speed the return to work process might conflict with claimants'. Employers may take several steps to try and counter the workers' disincentives to return to work such as not allowing vacation and sick time to accrue during the absence, holding the job open for a defined period of time, setting proactive return to work policies, and communicating with workers during the absence. WC insurers can also implement programs to improve the attractiveness of returning to work. Some of these programs operate through incentives to employers to offer the worker an easy return to work. Others facilitate work by offering coordinated services or tailored accommodations. And still others make return to work more financially beneficial to the worker, such as by paying partial benefits if the worker earns less than they did previously.

Exiting the Workforce

Some workers who experience work disabilities will exit the workforce. These might be workers whose injury or illness is especially severe and results in a permanent disability, or those who are unable to remain with their employer and become disconnected from work over a period of time. Workers who exit the workforce can apply for Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI). SSDI offers cash benefits and, after a waiting period, Medicare coverage. SSI offers a lower level of benefit than does SSDI and immediate Medicaid coverage. Both programs use the same definition of disability²², but SSDI is available only to workers who meet the program's work history requirements, while SSI is available only to those who meet stringent income and asset tests. Although benefits are lower than earnings would be, even after taking the disability into account (Meyer & Mok, 2013), they have a high degree of certainty after they are granted.

Applying for SSDI/SSI benefits can be a long, difficult experience with lasting consequences. For those who applied to SSDI in 2005, it took 2.9 months on average for an initial decision, and many claimants whose claims are initially denied chose to appeal, resulting in an average total decision time of 13.5 months (Autor, Maestas, Mullen, & Strand, 2017). Before a benefit eligibility decision is made, claimants are unable to work at substantial levels, as doing so would be proof that they were able to perform substantial gainful activity (SGA) and thus would not be eligible for benefits. During this time, they may also lose connections to the workforce, experience financial distress, and see their health decline (Autor et al., 2017, Deshpande, Gross, & Su, 2019, Prenovitz, 2018). Some will even die while waiting for a decision or appeal - about 10,000 in 2017, roughly 0.4 percent of applicants (Romig 2018).

Some workers are also eligible for private long-term disability benefits. Such private benefits make remaining out of the workforce for a longer period of time more attractive, as they provide some level of income replacement. For workers who need more time to return to work than short-term disability benefits allow, but are eventually able to return to work, the income support provided by private long-

²² The law governing SSA's disability programs defines disability as the inability to perform any substantial gainful activity by reason of any medically determinable physical or mental impairment(s) which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months.

term disability benefits can make it easier to forgo applying for SSDI. On the other hand, these private long-term benefits can make it easier to apply for federal disability benefits, as they provide income support while waiting for a decision. Private disability insurers will also often encourage and assist with application (SSA Office of the Inspector General, 2014).

Once workers exit the labor force, re-entering is rare, especially for those who receive SSDI or SSI benefits. In 2018, about 0.6 percent of disabled workers receiving SSDI benefits had their benefits terminated due to work (SSA, 2019a). However, many have earnings at some point after benefit award. Stapleton and Liu (2010) examine a cohort of SSDI beneficiaries who entered the program in 1996 and find that over the 10 years that followed program entry, nearly 30 percent worked in at least one year, and a small but nontrivial share (nearly 7 percent) spent time off the disability benefits rolls after finding work (Stapleton and Liu, 2010).

All workers

Some needs and services are relevant to workers regardless of whether they remain in the workforce, including medical care and assistance adjusting to new functional capacity. While these are available to both those in and out of work, they carry incentives that may affect decisions to SAW/RTW.

Health Insurance

Workers who have health insurance through their employer may have a strong incentive to remain in their job to maintain coverage. Other sources of health insurance coverage lessen this "job lock" (see Madrian, 1994 for a general introduction to the concept, or Maestas, Mullen and Strand, 2014 for an exploration of job lock in the context of disability). Workers who separate from a job can continue to receive employersponsored health insurance benefits through the Consolidated Omnibus Budget Reconciliation Act (COBRA), though the individual must pay the entire premium plus up to 2 percent of the premium amount in administrative costs. This often results in a higher premium paid by the individual compared to when they were employed because employers typically pay for a portion of health insurance premiums for employees.²³ Additionally, workers can receive insurance coverage through a spouse's employer, purchase insurance in the individual market, or, depending on their income and family structure, enroll in Medicaid. These last options are much more attractive and broadly available since the passage of the Affordable Care Act, but options vary by state.

Those who are awarded SSDI benefits also qualify for Medicare coverage after a 24-month waiting period, and those who are awarded SSI benefits qualify for Medicaid immediately.

Resources to adjust

Workers who are trying to remain in the workforce, but unable to remain in the current job after experiencing a work disability, can also access programs that offer training in new kinds of work or new ways of doing the work they previously did. While American Job Centers offer services to all workers, the Vocational Rehabilitation (VR) system offers training and job placement resources tailored to the needs of those with work-limiting impairments. Since the Workforce Innovation and Opportunity Act (WIOA) was enacted in 2014, VR agencies in certain states are explicitly allowed to serve workers who

²³ See https://www.investopedia.com/articles/insurance/11/intro-cobra-health-insurance.asp. Accessed September 10, 2019.

are at risk of losing their job, rather than only those who were not working. Thus, workers no longer have to leave work in order to obtain VR services.

However, many VR agencies have limited resources and are unable to meet the demands of all VR applicants. In a given year, about half of all VR agencies operate under orders of selection, which limit services to those with the most severe impairments. As discussed in a later section, VR agencies have incentives to prioritize SSDI and SSI beneficiaries. Capacity constraints combined with this incentive mean that workers may have an easier time accessing VR services after leaving the workforce than while trying to avoid exiting.

Workers choosing whether to stay at work, leave work temporarily, or leave the workforce entirely are influenced by the set of real options they face, as well as the incentives to take each option. Both options and incentives vary across individuals in meaningful ways, as do individual preferences and beliefs about the future. Because of this variation, there is no single path to SAW/RTW, and no single policy that would address all needs.

Family and other Relationships

Workers' family status and other relationships can also influence decisions. Some workers can rely on the earnings of a spouse or partner to partially replace lost earnings, or receive employer-sponsored health insurance through a spouse. Workers with children have greater access to some public supports, notably Medicaid and SNAP. Those with young children might also consider leaving work and taking up childcare duties rather than working while paying for childcare. More generally, some workers may also be able to rely on family members or other networks for support, while others may have a network that relies on them. Those that are able to rely on their networks may be able to wait longer before returning to work than those who are not.

Employers

Employers play a significant role in determining whether workers stay at or return to work. The employer at the time of injury or illness plays a particularly important role, as they already have a relationship with the worker and may have legal obligations to them.

Employer at Injury

The worker's employer at the time of injury or illness decides whether and to what extent to accommodate the worker's needs for time off, as well as changes to work duties or the work environment. Depending on worksite size and employee job tenure, the Family and Medical Leave Act may require the employer to provide 12 weeks of unpaid, job-protected leave. However, only about 60 percent of privatesector workers are covered by the law (Klerman et al., 2012). Similarly, some forms of flexibility are mandated by the Americans with Disabilities Act (ADA). Some states have passed laws that require more generous leave, make leave available to more workers such as those who have been employed for less than a year by their current employer.

Employers deciding what to provide to an ill or injured worker, beyond what is legally-mandated, weigh the costs and benefits of retaining the worker rather than replacing them with a new hire. Costs of retaining the employee include the actual cost of any needed leave or accommodation(s), as well as the time and resources needed to determine needs and coordinate changes. These in turn depend on the nature of the employee's work, how soon and to what extent they can still perform it, and whether the employer

has open positions for which the employee would be suitable. These costs also depend on the presence of programs that pay for or facilitate accommodations.

For example, the ADA National Network provides technical assistance to employers seeking to comply with ADA requirements, and some states provide employers with tailored assistance, such as Alabama's Retaining a Valued Employee (RAVE) program. Other examples are the Job Accommodation Network (JAN) that ODEP operates, a source of free, expert and confidential guidance on workplace accommodations and disability employment issues. ODEP also operates the Employer Assistance Resource Network on Disability Inclusion (EARN), which helps employers recruit, hire, retain and advance people with disabilities. In addition to hosting webinars and other events, EARN also maintains a website, AskEARN.org, which provides information on: recruiting and hiring; retention and advancement; laws and regulations; creating an accessible and welcoming workplace; and federal contractor requirements. Many states also provide financial incentives for employers to implement accommodations for individuals with a work-related injury or illness through Workers' Compensation programs.

For the employer, the benefit of retaining an employee depends on how favorably the employee's skills and performance compare to a replacement worker and the costs of finding and training a suitable replacement. In a review of studies of the costs of turnover, Boushey and Glynn (2012) found that the costs of replacing workers average about 20 percent of the workers' salary, but that costs are higher for workers with more specialized skills and for complex jobs. Gould-Werth, et al., (2018) conducted indepth interviews with 14 employers in Arkansas to explore factors that influence whether employers provide accommodations to, and ultimately retain, employees with health problems. They found that employee tenure and work performance influenced employer's efforts to retain workers after an illness or injury, with longer tenured employees and stronger performers more likely to be retained. In addition, the type of work performed influenced whether employers retained workers. Employers reported that workers with more physically active jobs were more challenging to accommodate and retain.

Some employers may also find that choices about retaining employees affect employee morale and effort for other employees in the organization. If employees value an environment in which the employer's policies and practices offer support for retaining employees should illness or injury occur, they may be willing to exert additional effort, or to remain at a job even if it pays slightly less than alternatives. How likely and how attractive employers see this option depends on company culture as well as labor market conditions. A company with a family-like culture would likely approach this differently than would one with a greater focus on the individual.

Employers may also be concerned that workers who have experienced a work-limiting disability will need more time off, have higher costs for health insurance, or have a higher likelihood of future injury or illnesses or future WC claims. In many contexts, considering these factors is illegal. Nevertheless, it may be difficult for employees to prove that they have been discriminated against, especially if the job modifications they requested are non-standard. In addition, even if these costs are small in reality, employers need only believe the costs to be large or risky for them to weigh heavily in their decisionmaking.

Employers of workers with work-related conditions

In most cases, employers have an incentive to encourage workers who experience workplace illnesses or injuries that are compensable through the WC program to remain at work, as fewer and lower-cost WC

claims improve the employer's experience rating that determines their WC insurance premiums.²⁴ Firms vary in the degree to which they bear the costs of their employees' WC claims, and there is evidence that workers at firms that self-insure, and thus face the greatest incentives to encourage return to work, have better return to work outcomes (Seabury et al. 2012). It is common for employers to offer various job accommodations to workers injured on the job, including curtailing work time, offering more breaks from work, changing job duties, or changing workspace or equipment to help the workers remain at work (Savych & Thumula, 2018). At the same time, employers may not want employees to return to work until they are able to work at their pre-injury level of productivity, as an employee who has returned to work receives their wage or salary from the employer rather than being paid by the insurer.

Some WC agencies also have explicit policies that incentivize employers to hire or retain workers with disabilities. Second injury funds, which cover benefits for future WC claims, may also lessen employers' concerns that a claimant is particularly prone to future work-related injuries or illnesses.

Other Employers

If a worker is unable to continue working for the employer at injury, he or she may seek out a job with another employer. Other employers face similar incentives to those the employer at injury faces. However, rather than retaining an employee in whom they are already invested, other employers are deciding whether to hire an employee who has experienced a work disability rather than hiring a worker who has not. Hiring a worker who is returning to work after an injury or illness may require some level of accommodation or job customization. In particular, changing jobs may make it possible for employees to seek out positions that are a better match for their current functional capacity than their previous positon would have been. Some of the costs of any needed accommodations may be offset by public programs that offer training, technical assistance, or reimbursement, much as in the case of the employer at injury discussed above.

Some employers might be better able to meet the needs of workers with work disabilities than are others. This might be true because of the nature of the work, or because the employer has invested in making its workstations, policies, and culture accommodating to a variety of needs. Employers might choose to take these actions if they believe that doing so would help them hire talented workers, or simply as a matter of principle.

Physicians and the Medical System

In general, work is not an outcome for which physicians are explicitly incentivized, nor is it their primary professional goal or a topic on which most are trained (Denne, Kettner, & Ben-Shalom, 2015). While positive medical outcomes can facilitate work, it is also possible that physicians will pursue courses of treatment that are not conducive to work, for example by prescribing pain medications rather than pursing alternate treatments. They may also discourage work, out of concern that work might worsen the condition or be stressful or physically demanding. In some cases, physicians might simply neglect to mention work. It is also possible that physicians may think they are acting in the best interests of the

²⁴ Employers either pay premiums for WC insurance or self-insure. Premiums are experience rated according to employees' hours of work, industry classification, and recent experience, but the degree of experience rating varies depending on firm size, and insurance structure, with very small employers facing no experience rating at all.

patient by encouraging them to apply for SSDI or other types of benefits, even when the patient could work.

Payment models also create incentives and influence physician behavior. While these incentives are not explicitly related to work, they may have implications for SAW/RTW. To the extent that medical recovery facilitates work, or that work facilitates recovery, physicians under outcomes-based payment systems might have incentives that are more compatible with their patients staying at or returning to work. However, a physician who believes that work will hinder recovery would be less likely to encourage work under such a system. Meanwhile, physicians in fee-for-service systems may provide more care over a longer period than those under capitation systems, which could hinder work.

Exceptions to this rule demonstrate how incentives for medical professionals could look different. In the Centers of Occupational Health and Education (COHE) program, which operates in Washington State's Workers' Compensation System, medical professionals are paid to follow occupational health best practices, such as timely submission of paperwork to the WC program and developing a return to work plan that incorporates physical limitations. The program also offers case coordination, information on the therapeutic value of work and occupational best practices, and facilitates communication between the worker, employer, and physician to promote return to work. (Wickizer et al., 2011, Wickizer et al. 2004, Wickizer et al., 2001). On average, WC patients served under COHE had 19.7 percent fewer disability days than a comparison group of WC claimants in Washington state who were not served under COHE, as well as lower disability and medical costs and a higher likelihood of being back at work one year after injury (Wickizer et al. 2011). However, it is unclear to what extent this difference is caused by the program, rather than correlational. Eight states are currently developing programs along the general lines of this model under Phase 1 of the Retaining Employment and Talent after Injury/Illness Network (RETAIN).

Employment Programs

Vocational Rehabilitation (VR) and the workforce system can provide services to assist workers in learning new skills, adapting to limitations, and finding jobs. The VR system serves those who have a physical or mental condition that is a "substantial impediment to work" and are found to be able to benefit from VR services. Some services are particularly tailored to the needs of workers with disabilities, such as training in assistive technology.

Vocational Rehabilitation

VR agencies are not, in general, funded based on the clients' outcomes, or even on the number of clients they serve. The exception to this rule is SSDI and SSI beneficiaries. SSA provides either costreimbursement or outcomes-based payments to VR agencies for services provided to beneficiaries. VRs are, however, constrained in how they can use their funding. Under WIOA, VR agencies are required to earmark 15 percent of their funding for pre-employment transition funding for youth. If defined in their state plan, they are also explicitly allowed to serve those who are currently working, rather than only those who are seeking assistance finding a job. VR agencies that expect to be unable to serve all those who seek services are required to establish an order of selection that prioritizes those with the most severe impairments. In an average year about half of state VR agencies are under an order of selection.²⁵

²⁵ https://yourtickettowork.ssa.gov/state-vr-agencies/vr-basics.html

As a result of these policies, VR agencies have incentives to serve those who already receive SSDI or SSI benefits, and may be required to prioritize services to those with the most severe impairments and/or youth. Individual VR agencies can also set their own policies for how services are delivered, and may have performance goals such as following up quickly on initial phone calls (Sevak, Kehn, Honeycutt, & Livermore 2017, Sevak, Martin, Livermore, Honeycutt, & Morris, 2017).

Workforce System

Workers who do not need or qualify for specialized services from VR can access the broader workforce system, offered primarily through American Job Centers (AJCs). Although historically separate from VR, AJCs have made efforts to serve the needs of workers with disabilities, implementing the Disability Program Navigator position and forming partnerships with VR agencies. Like VR, the workforce system has relatively weak incentives relative to SAW/RTW. AJCs are funded based on state and local characteristics, with requirements to prioritize certain groups including persons with disabilities, single mothers, and veterans (Zuidema, B., 2017). They are not systematically evaluated based on outcomes or service levels, although individual AJCs or states can set their own performance targets and systems to monitor and pursue.

Social Security Disability Benefits

SSDI and SSI provide cash benefits and, after a 24-month waiting period in the case of SSDI, medical coverage, to workers who are unable to earn at substantial levels due to a serious medical condition, and meet other eligibility requirements. SSDI is funded by employer and employee payroll taxes through the Social Security Trust Fund, while SSI is funded through general funds.

Like other benefit providers, SSA has an incentive to encourage beneficiaries to work if they are able to, in order to lower benefit obligations. SSA offers a number of programs designed to help beneficiaries return to work. These include individualized information on how benefits and work interact, provided by the Work Incentives Planning and Assistance (WIPA) program, as well as access to Ticket to Work, which allows beneficiaries to receive employment services from a broader array of providers than would otherwise be available. SSA also offers special rules for beneficiaries transitioning back to work, often described as work incentives. These include the Trial Work Period, Extended Period of Eligibility, extended Medicaid eligibility (1619b) and Property Essential to Self-Support.²⁶

SSA also has an interest in diverting potential or future applicants by helping them to stay attached to the workforce. SSA has limited scope to directly interact with individuals who have not yet applied to the program. Instead, it has partnered with other agencies to design and evaluate programs like RETAIN. SSA also crafts policies to discourage other programs from shifting costs to SSDI and SSI, and to adjust benefits to prevent "double dipping." For example, the FY 2020 Congressional Justification (SSA, 2019b) suggests implementing an offset for concurrent UI and DI payments, which lowers an individual's SSDI benefit by the amount of their UI benefit. The Justification also advocates removing the ability of state WC systems to implement similar offsets (referred to as reverse offsets in which WC benefits are lowered to account for SSDI benefits), to allow SSA to implement a uniform SSDI offset (where SSDI benefits are lowered to account for WC benefits).

²⁶ For more information on SSA's work incentives see SSA's Red Book (Social Security Administration, 2020).

Other Insurance Programs

Short-Term Disability Insurance

Workers may receive benefits from state-run or state-mandated short-term disability insurance (STDI) in five states (California, Hawaii, New Jersey, New York, and Rhode Island) and Puerto Rico. Family and Medical Leave programs passed by Massachusetts, Washington, and the District of Columbia in recent years also provide income replacement for workers temporarily unable to work due to health conditions.²⁷ Employers in other states can choose to offer private STDI as a benefit, and workers can purchase individual policies. Roughly 41 percent of private-sector workers have short-term disability insurance coverage from some source (DOL/Bureau of Labor Statistics, 2018).

Short-term disability insurance is provided by state funds, private insurance companies, or self-insuring employers. These insurers have an incentive to encourage SAW/RTW to limit benefit duration. Earlier sections of this report identify numerous programs operated by private STDI providers that are intended to speed return to work. These programs included wage reimbursement for employers who retained workers, reimbursement or assistance with accommodations, and partial payment options for workers who were ready to return to work but at a lower level of earnings. However, the STDI provider's liability is short-lived, generally on the order of a few months to a year. If it is not possible for the worker to resume work within this time-frame, it may no longer be profitable to the STDI provider to invest resources to encourage return to work.

Long-Term Private Disability Insurance

Some workers have access to long-term private disability insurance (LTDI), either through their employer or purchased individually. Often, LTDI will take over when short-term disability policies end. LTDI programs have an incentive to minimize payments given their level of promised coverage. This can be accomplished in two ways. First, the insurer could help claimants to return to work, where they are no longer classified as disabled by the insurance policy so no longer receive benefits. Second, the insurer could encourage them to apply to SSDI, where LTDI obligations generally decrease if the SSDI claim is allowed. Although our review found several examples of strategies used by private disability insurers to encourage or assist workers receiving short-term benefits to stay at or return to work, they did not find policies focused on workers receiving long-term benefits. Instead, private insurers appear to focus on shifting long-term benefit recipients to SSDI, often hiring third party representatives to assist claimants in submitting a complete application (SSA Office of the Inspector General, 2014).

Workers' Compensation

WC insurers have an incentive to encourage and facilitate workers returning to work, in order to shorten the time that benefits are paid. Most states have maximum benefit durations, but benefits may cease if the medical provider releases the worker to return to work or if the worker reaches maximum medical improvement and may qualify for permanent disability benefits.

The state administrative agency for WC is responsible for monitoring that employers have WC insurance, receiving notifications of claims and updates from workers and employers, and adjudicating claims that

²⁷ In Hawaii and New York, nonexempt employers are required to provide STDI benefits for their employees by either purchasing private insurance or self-insuring. California, New Jersey, and Rhode Island operate public state STDI programs that cover the vast majority of the workforce.

are disputed. The state agency is thus interested in making sure that the claims are paid according to state law. In states with monopolistic state funds, the state acts as an insurer and so also has an interest in reducing the costs of WC claims by encouraging workers to return to work as quickly as possible. These states have greater opportunities to coordinate the actions of employers, medical providers, and claimants. These states also are better positioned than other states to leverage employers' incentives, and to facilitate communication with medical providers and to encourage them to apply occupational health practices that may help claimants return to work.

Conclusion

When workers experience work-limiting health conditions, they make decisions about how to alter their work lives in response. Some will remain in their previous jobs, some will find different positions with the same employer, and some will find a position with a new employer. Some will leave work temporarily while recovering, developing new skills, or finding a new position that fits their new functional capacity. Others will exit the workforce and may apply for federal disability benefits. Workers' decisions depend in part on the options and incentives they face, which are in turn influenced by the incentives faced by stakeholders and programs that could assist them.

Enumerating these incentives reveals several places where incentives may be missing, weak, or misaligned. The incentives suggest potential opportunities to improve SAW/RTW outcomes by changing incentives, and highlight situations where otherwise promising policies might be difficult to implement or unlikely to achieve their desired effects. For example, physicians have opportunities to affect choices soon after an injury or illness occurs, but have little incentive to do so. Policies that rely on physicians" interest in supporting their patients' work may struggle, but those that successfully introduce such an incentive might be more promising. An understanding of the incentives of the various stakeholders is an important starting place for developing SAW/RTW interventions and evaluation design options to build evidence.

Appendix E: Evidence for Programs Identified in the Program Synthesis

This appendix describes evidence available regarding the programs identified in the program synthesis. Of the 68 programs included in the program synthesis, only 11 have been evaluated in studies reporting direct evidence of impacts. Of these, six are not early interventions. Specifically, 1) Work Incentives and Planning Assistance (Livermore, Prenovitz, and Schimmel 2011), 2) Ticket to Work (Livermore, Mamun, Schimmel, and Prenovitz 2013), 3) Accelerated Health Insurance/Benefits (Michalopoulos et al. 2011), 4) the Youth Transition Demonstration (Fraker et al. 2014), 5) the Mental Health Treatment Study (Frey et al. 2008), and 6) the Kentucky and Minnesota SGA Project Demonstrations (Sevak, Kehn et al. 2017; Sevak, Martin et al. 2017) involve current disability beneficiaries, and we excluded them from this review. The next paragraphs discuss the other five programs from the program synthesis that have been evaluated.

Evidence for Washington State's Centers of Occupational Health & Education (COHE) model is available for two pilot studies and a full-scale evaluation (Wickizer et al. 2011). The COHE program serves workers' compensation claimants, providing financial incentives to medical providers to encourage use of occupational health best practices and a health services coordinator to enhance care coordination and communication between claimant, employer, and healthcare providers. While we consider the evaluation to be highly relevant because it uses a broad state-wide sample of workers' compensation claimants, we rated it as weak evidence. We rate the evaluation as providing weak evidence because it uses a difference-in-difference design and does not establish baseline equivalence (that is, participants are demonstrably different than non-participants). We therefore cannot conclude that differences in outcomes can be ascribed to the intervention. The evaluation examined work disability status, number of disability days, disability cost per claim, and medical costs per claim over a one-year period after the workers' compensation claim filing. The study reports that COHE participants were less likely to be off work, experienced a reduction in disability days of nearly 20 percent, and a reduction in total disability and medical costs of \$510. We expect that further evidence will illuminate what portion of the large reported impacts are due to the causal impact of the programs (and perhaps, which program features included in the overall model) and which are due to selection.

Evidence for the Johns Hopkins Early Return to Work Program (Bernacki 2000) does not report return to work or stay at work outcomes, nor does it report applications or receipt of federal disability benefits. The program was initiated in April 1992 in the Johns Hopkins Hospital and Associated Schools of Medicine, Hygience and Nursing. The program involved employee and supervisor training and iob accommodations as well as an industrial hygienist trained in ergonomics to help accommodate employees with work restrictions. The study examined the program over a 10-year period and compared the number of lost workday cases and restricted duty days before and after the program was initiated.

A large body of evidence supports the **Individual Placement and Support (IPS)** model of Supported Employment and we include these studies in the meta-analysis in the Evidence Review report. The findings include large positive impacts reported on attainment of competitive employment for individuals with mental illness. In the Individual Placement and Support model, supported employment teams work in conjunction with mental health clinical staff to coordinate services. The employment specialist on the Individual Placement and Support team works with the program participant to learn about his or her

APPENDIX E: EVIDENCE FOR PROGRAMS IDENTIFIED IN THE PROGRAM **SYNTHESIS**

employment goals and preferences. The participant and employment specialist develop an employment plan and begin to look for jobs in the community as soon as the participant expresses interest. Employment specialists provide people with coaching, resume development, interview training, and onthe-job and other support. Employment specialists also build relationships with employers that offer jobs that are consistent with client preferences.

We also identified some evidence for two programs offering financial incentives described in the program synthesis. These financial incentive programs are the federal Work Opportunity Tax Credit and the Rhode Island Temporary Disability Insurance Partial Return to Work Program. In the latter case, the evidence is not directly related, as described below.

The federal Work Opportunity Tax Credit is available to employers who hire and retain individuals referred from vocational rehabilitation with significant barriers to employment. Employers can claim the credit for all qualifying employees hired in a tax year, and the credit is generally worth 25 percent or 40 percent of a new employee's first-year wages, up to a maximum. We found only one study attempting to estimate the effect of WOTC on employment; we attribute the dearth of studies to the fact that it is difficult to identify persons who are qualified employees under this program. The one study we found focuses on welfare recipients in Wisconsin. Hamersma (2008) found that the WOTC improves short-run employment over a six-month period by six percent, but after one year there is no significant difference in employment. ²⁸ Hamersma reports that employer participation in the program is low and cites the following possible reasons: lack of information, high transaction costs relative to benefit, and difficulty identifying qualified workers (perhaps because workers are not willing to report their eligibility). Most firms that make use of the WOTC are large employers that hire many low-skilled workers and typically qualify for more than \$100,000 in credits annually (GAO 2002).

Another example of financial incentives described in the program synthesis is the **Rhode Island** Temporary Disability Insurance Partial Return to Work Program, which allows an individual collecting TDI to return to work on a partial basis (reduced hours) without entirely ending the Temporary Disability Insurance benefits. Five other states operate temporary disability insurance programs, but only Rhode Island offers partial return to work without complete loss of benefits (DOL Temporary Disability Insurance pamphlet). The purpose of Rhode Island Partial benefit is to facilitate transition for individuals to return to their normal working hours while continuing their recuperation. We did not find a study evaluating the effect of the temporary disability insurance partial return to work program on employment or application to Social Security Disability Insurance.

Despite no evidence on long-run employment, the WOTC results in nine percent higher earnings. GAO (2001) reported that employers do not appear to dismiss employees to increase tax credits in the next year.

References

- American College of Occupational and Environmental Medicine. (2006). Preventing needless work disability by helping people stay employed. Journal of Occupational and Environmental Medicine, 48(9), 972-987.
- Autor, David H. and Mark G. Duggan. (2006). "The Growth in The Social Security Disability Rolls: A Fiscal Crisis Unfolding." Journal of Economic Perspectives, 20(3, Summer), 71-96.
- Autor, D.H., Maestas, N., Mullen, K.J., Strand, A. (2017). Does Delay Cause Decay? The Effect of Administrative Decision Time on the Labor Force Participation and Earnings of Disability Applicants, Working Paper, Retrieved from https://economics.mit.edu/files/10336
- Barnow, B. S., & Smith, J. (2015). Employment and training programs (No. w21659). National Bureau of Economic Research.
- Ben-Shalom, Y. (2016). Steps States Can Take to Help Workers Keep Their Jobs after Injury, Illness, or Disability. Washington, DC: Mathematica Policy Research.
- Ben-Shalom, Y., Bruns, S., Contreary, K., & Stapleton, D. (2017). Stay-at-Work/Return-to-Work: Key Facts, Critical Information Gaps, and Current Practices and Proposals. Washington, DC: Mathematica Policy Research.
- Bernacki EJ, Guidera JA, Schaefer JA, Tsai S. A facilitated early return to work program at a large urban medical center. Journal of Occupational and Environmental Medicine. 2000 Dec 1;42(12):1172
- Boushey, H., and Glynn, S.J., (2012). There Are Significant Business Costs to Replacing Employees. Washington DC. Center for American Progress.
- Bronchetti, E.T., and McInerney, M., 2012. Revisiting Incentive Effects in Workers' Compensation: Do Higher Benefits Really Induce More Claims? *ILR Review*. 65(2), 286-315.
- Bound, J., Lindner, S., and Waidmann, T. (2014). "Reconciling Findings on the Employment Impact of Disability Insurance." IZA Journal of Labor Policy, 3: 11.
- Bourbonnierre, A.M. & Mann, D.R. (2018). Benefit Duration and Return to Work Outcomes in short term disability insurance programs: evidence from temporary disability insurance programs. Journal of Occupational Rehabilitation, 28(4), 597-609.
- Callan, T., Lindner, S. & Nichols, A. (2015). Unemployment Insurance Modernization and Eligibility. Washington, DC: The Urban Institute.
- Carruthers, M. (2015). "Return to Work Best Practices." Disability Management Employer Coalition. @Work. 7(2).
- Correia, P. & Alpren, H. (2016). Summary of Key Results From The 2014 and 2015 U.S. Group Disability Market Survey. Retrieved from http://media.genre.com/documents/surveylhgdmarketsum1606-en.pdf
- Denne, J., Kettner, G., Ben-Shalom, Y (2015). The Role of the Physician in the Return-to-Work Process Following Disability Onset. Washington, DC: Mathematica Policy Research.
- Deshpande, M., Gross, T., & Su, Y. (2019). Disability and Distress: The Effect of Disability Programs on Financial Outcomes. NBER working paper 25642.
- Ekman, L. (2015). "Automatic Enrollment in Private Disability Insurance Protections and Benefit Requirements Necessary to Ensure Value for Workers." Accessed at: https://www.cbpp.org/sites/default/files/atoms/files/10-21-15di.pdf

- Fraker T, Mamun A, Honeycutt T, Thompkins A, Valentine EJ. (2014). Final report on the Youth Transition Demonstration evaluation, Washington, DC: Mathematica Policy Research.
- Frey WD, Azrin ST, Goldman HH, Kalasunas S, Salkever DS, Miller AL, et al. (2008). The mental health treatment study. Psychiatric Rehabilitation Journal 31:306–12. [DOI: 10.2975/31.4.2008.306.312
- GAO. (2011). "Health Care Coverage: Job Lock and the Potential Impact of the Patient Protection and Affordable Care Act." Washington, DC: Government Accountability Office.
- Georgia State Board of Workers' Compensation. "Model Return to Work Program." Accessed at: https://sbwc.georgia.gov/sites/sbwc.georgia.gov/files/imported/SBWC/Files/erwm.pdf
- Gould-Werth, A., Morrison, K., Ben-Shalom, Y. (2018). Employers' Perspectives on Accommodating and Retaining Employees with New Health Problems. Washington DC: Mathematica Policy Research, Center for Studying Disability Policy. Available at https://www.mathematicampr.com/events/csdp-webinar-030118.
- Gruber, J., & Madrian, B. C. (2002). Health insurance, labor supply, and job mobility: a critical review of the literature (No. w8817). National Bureau of Economic Research.
- Gubits, D., Geyer, J., Hoffman, D., Croake, S., Kattel, U., Judkins, D., Bell, S., & Stapleton, D. (2017). "BOND Implementation and Evaluation: 2015 Stage 2 Interim Process, Participation, and Impact Report." Submitted to the Social Security Administration. Cambridge, MA: Abt Associates, and Washington, DC: Mathematica Policy Research, 2017.
- Hamersma S. The effects of an employer subsidy on employment outcomes: (2008). A study of the work opportunity and welfare-to-work tax credits. Journal of Policy Analysis and Management: The Journal of the Association for Public Policy Analysis and Management. (3):498-520.
- Hunt, H. A., & Dillender, M. (2017). Workers' Compensation: Analysis for Its Second Century. Kalamazoo, MI: WE Upjohn Institute for Employment Research.
- Institute for Research on Labor and Employment. (2010). "Helping Injured Employees Return to Work: Practical Guidance Under Workers' Compensation and Disability Rights Laws in California." Prepared for the California Commission on Health and Safety and Workers' Compensation.
- International Association of Industrial Accident Boards and Commissions (IAIABC). (2016). Return to Work: A Foundational Approach to Return to Function. Accessed at: https://www.iaiabc.org/images/iaiabc/Return-to-Work Foundational-Approach-to-Return-to-Function Final.pdf
- International Social Security Association. (2013). ISSA Guidelines on Return to Work and Reintegration. Geneva: ISSA.
- Job Accommodation Network. (2013). "Return-to-Work Programs." Accommodation and Compliance Series. Office of Disability Employment Policy.
- Job Accommodation Network. (2019). Workplace Accommodations: Low Cost, High Impact. Morgantown, WV: Job Accommodation Network. Available at https://askjan.org/publications/Topic-Downloads.cfm?pubid=962628
- Klerman, J.A., Daley, K., & Pozniak, A. (2012). Family and Medical Leave in 2012: Technical Report. Cambridge, MA: Abt Associates.
- Krueger, A.B. (1990) Incentive Effects of Workers' Compensation Insurance. Journal of Public Economics, 41(1), 73-100.

- Lax, M. (2015). Not Quite a Win-Win: The Corporate Agenda of the Stay at Work/Return to Work Project. NEW SOLUTIONS: A Journal of Environmental and Occupational Health Policy, 25(1), 4-24.
- Lindner, S. & Nichols, A. (2012). How do Unemployment Insurance Modernization Laws Affect the Number and Composition of Eligible Workers? Washington, DC: The Urban Institute.
- Livermore G, Mamun A, Schimmel J, Prenovitz S. (2013). Executive Summary of the Seventh Ticket to Work Evaluation Report. Mathematica Policy Research.
- Livermore G, Prenovitz S, Schimmel J. 2011. Employment-Related Outcomes of a Recent Cohort of Work Incentives Planning and Assistance (WIPA) Program Enrollees. Mathematica Policy Research. Washington DC. 2011 Sep 19.
- Madrian, B. (1994). Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock? The Ouarterly Journal of Economics, 109(1), 27-54.
- Maestas, N., Mullen, K.J., & Strand, A. (2013). Does Disability Insurance Receipt Discourage Work? Using Examiner Assignment to Estimate Causal Effects of SSDI Receipt. American Economic Review 103(5), 1797-1829.
- Maestas, N., Mullen, K.J., & Strand, A. (2014). Disability Insurance and Health Insurance Reform: Evidence from Massachusetts. American Economic Review Papers and Proceedings, 104(5), 329-335.
- McHugh, R., Segal, N.E., & Wenger, J.B. (2002). Laid Off and Left Out: Part-Time Workers and Unemployment Insurance Eligibility—How States Treat Part-Time Workers and Why UI Programs Should Include Them. New York, NY: National Employment Law Project.
- McLaren, C. F., Reville, R. T., & Seabury, S. A. (2010). How effective are employer return to work programs?. Santa Monica, CA: RAND.
- McLaren, C.F., Baldwin, M.L., & Boden, L.I. (2018). Workers' Compensation Benefits, Costs, and Coverage – 2016 Data. Washington DC: National Academy of Social Insurance.
- Meyer. B.D. & Mok, W.K.C. (2013). Disability, Earnings, Income and Consumption. NBER Working Paper 18869.
- Meyer. B. D., Viscusi, W.K., & Durbin, D. L. (1995). Workers' Compensation and Injury Duration: Evidence from a Natural Experiment. American Economic Review, 85(3), 322-340.
- Michalopoulos C, Wittenburg D, Israel DA, Schore J, Warren A, Zutshi A, Freedman S, Schwartz L. (2011). Impacts on health and employment at twelve months. Technical report, MDRC.
- New York State Workers' Compensation Board. "Return to Work Program." Accessed at: http://www.wcb.ny.gov/content/main/ReturnToWork/RTW Handbook.pdf
- ODEP. (2018). S@W/R2W Research & RETAIN Demonstration Projects. Accessed at: https://www.dol.gov/odep/topics/Stay-at-Work-Return-to-Work.htm
- O'Leary, P., Boden, L. I., Seabury, S. A., & Ozonoff, A. (2012). Workplace injuries and the take-up of Social Security disability benefits. Soc. Sec. Bull., 72, 1.
- Pransky, G., Shaw, W. S., Loisel, P., Hong, O. N., & Désorcy, B. (2010). Development and validation of competencies for return to work coordinators. Journal of Occupational Rehabilitation, 20(1), 41-48.
- Prenovitz, S. (2018). What Happens When you Wait? Effects of DI Wait Time on Health and Well-Being. Working Paper. Retrieved from https://sarahprenovitz.files.wordpress.com/2018/11/dionhw april2018 short-2.pdf

- Promoting Opportunity Demonstration. (2018). Accessed at: http://podssa.org/
- Reville, R., Schoeni, R. (2004). "The Fraction of Disability Caused at Work." Population Studies Center Research Report No. 04-551. University of Michigan.
- Romig, K. (2018). Budget Agreement Funding Could Reduce Social Security Disability Backlog. Center on Budget and Policy Priorities. Available at, https://www.cbpp.org/blog/budget-agreement-fundingcould-reduce-social-security-disability-backlog
- SSA Office of the Inspector General (2014). Claimant Representatives at the Disability Determination Services Level. Audit Report A-01-13-13097. Baltimore, MD: Social Security Administration.
- Savych, B. & Thumula, V. (2018). Comparing Outcomes for Injured Workers in Pennsylvania, 2017 Interviews. WC-18-45. Cambridge MA: Workers Compensation Research Institute.
- Seabury, S., McLaren, C., Reville, R., Neuhauser, F., & Mendeloff J. (2012). Workers' Compensation Experience Rating and Return to Work. Policy and Practice in Health and Safety, 10(1), 97-115.
- Sevak, P., Kehn, M., Honeycutt, T., & Livermore, G. (2017). Minnesota Substantial Gainful Activity (SGA) Project Demonstration: Final Evaluation Report. Washington, DC: Mathematica Policy Research.
- Sevak, P., Martin, F., Livermore, G., Honeycutt, T., & Morris, E. (2017). Kentucky Substantial Gainful Activity (SGA) Project Demonstration: Final Evaluation Report. Washington, DC: Mathematica Policy Research.
- Shaw, W., Hong, Q. N., Pransky, G., & Loisel, P. (2008). A literature review describing the role of return-to-work coordinators in trial programs and interventions designed to prevent workplace disability. Journal of Occupational Rehabilitation, 18(1), 2-15.
- [SSA] Social Security Administration. (2017). The 2017 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. Accessed at: https://www.ssa.gov/oact/tr/2017/tr2017.pdf
- [SSA] Social Security Administration. (2019a). Annual Statistical Report on the Social Security Disability Insurance Program, 2018. Washington, DC: Office of Retirement and Disability Policy, Office of Research, Evaluation, and Statistics.
- [SSA]Social Security Administration (2019b). FY 2020 Budget Request, Justification of Estimates for Appropriations Committee. Retrieved from https://www.ssa.gov/budget/FY20Files/FY20-JEAC 2.pdf
- [SSA] Social Security Administration. (2019). The 2019 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds. Accessed at: https://www.ssa.gov/oact/tr/2017/tr2019.pdf
- [SSA] Social Security Administration (2020). Red Book: A Summary Guide to Employment Supports for People with Disabilities Under the Social Security Disability Insurance (SSDI and Supplemental Security Income (SSI SSA Publication No. 64-030, January 2020, ICN 436900Programs.
- Stapleton, D., and Liu, S. (2010). How Many SSDI Beneficiaries Leave the Rolls for Work? More Than You Might Think. Washington, DC: Mathematica Policy Research.
- Stepner. M. (2019). The Long-Term Externalities of Short-Term Disability Insurance. Working Paper. Retrieved from https://files.michaelstepner.com/short_term_di_externalities.pdf

- Sung, D., Lore, H., & Magill, K. (2017). Improving Occupational Healthcare Delivery to Support Workers' Compensation Return to Work: Building on Evidence-Based Practice from Washington State's Centers of Occupational Health & Education (COHE) Experience. U.S. Department of Labor, Office of Disability Employment Policy, IMPAQ International, LLC.
- U.S. General Accounting Office (GAO). (2001). Work Opportunity Tax Credit: Employers do not appear to dismiss employees to increase tax credits. Report to the Chairman, Subcommittee on Oversight, Committee on Ways and Means, House of Representatives. (GAO-01-329). Washington. DC: U.S. General Accounting Office. Retrieved April 10, 2018. From https://www.gao.gov/new.items/d01329.pdf.
- U.S. General Accounting Office (GAO). (2002). Business tax incentives: Incentives to employ workers with disabilities receive limited use and have an uncertain impact. Report to Congressional Committees. (GAO-03-39). Washington, DC: U.S. General Accounting Office. Retrieved April 10, 2018, from https://www.gao.gov/new.items/d0339.pdf.
- U.S. Department of Labor, Bureau of Labor Statistics. (2018). Insurance benefits: Access, participation, and take-up rates. Retrieved from https://www.bls.gov/ncs/ebs/benefits/2018/ownership/civilian/table16a.htm.
- Wickizer, T.M., Franklin, G., Plaeger-Brockway, R., & Mootz, R.D. (2001). Improving the Quality of Workers' Compensation Health Care Delivery: The Washington State Occupational Health Services Project. Milbank Quarterly, 79, 5-33.
- Wickizer, T.M., Franklin, G., Mootz, R.D, Fulton-Kehoe, D., Plaeger-Brockway, R., Rylie, D., Turner, J., Smith-Weller, T., (2004). A Communitywide Intervention to Improve Outcomes and Reduce Disability Among Injured Workers in Washington State. Milbank Quarterly, 82, 547-567.
- Wickizer, T.M., Franklin, G., Fulton-Kehoe, D., Gluck, J., Mootz, R., Smith-Weller, T., Plaeger-Brockway, R. (2011). Improving Quality, Preventing Disability, and Reducing Costs in Workers' Compensation Healthcare: A Population-based Intervention Study. Medical Care, 49:12, 1105-1111...
- Zuidema, B. (2017). Guidance on Services provided through the Adult and Dislocated Worker Programs under the Workforce Innovation and Opportunity Act (WIOA) and the Wagner-Peyser Act Employment Service (ES), as amended by title III of WIOA, and for Implementation of the WIOA Final Rules. Retrieved from https://wdr.doleta.gov/directives/attach/TEGL/TEGL 19-16 acc.pdf