



**RETAIN** Retaining Employment  
and Talent After  
Injury/Illness Network



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# The Retaining Employment and Talent After Injury/Illness Network (RETAIN) Demonstration: Evaluation Findings One Year After Enrollment

## Executive Summary

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## Executive Summary

Each year, millions of workers in the United States leave the labor force, at least temporarily, because of a medical condition or illness (Ben-Shalom et al. 2021; Hollenbeck 2015). Many of these workers fall through critical cracks in the social support system and exit the workforce permanently. Affected workers and the federal and state governments all stand to gain from the implementation of strategies that help people stay at work or return to work following an injury or illness (Ben-Shalom and Burak 2016).

The Retaining Employment and Talent After Injury/Illness Network (RETAIN) demonstration was a collaborative effort by the U.S. Department of Labor (DOL) and the Social Security Administration (SSA) to help workers stay in the labor force after they experience an injury or illness. The goal of RETAIN was to implement and test programs that used early-intervention stay-at-work/return-to-work (SAW/RTW) strategies with adult workers who had recently experienced the onset or worsening of an injury or illness that challenged their ability to work.<sup>1</sup> In Phase 1, which began in 2018, DOL awarded funds to eight state agencies to develop and pilot test programs to help those who experience a potentially disabling condition stay at work or return to work. In Phase 2, which began in 2021, DOL competitively selected five of these states (Kansas, Kentucky, Minnesota, Ohio, and Vermont) to fully implement such programs (named RETAINWORKS, RETAIN Kentucky [RETAIN KY], Minnesota RETAIN [MN RETAIN], Ohio RETAIN [OH RETAIN] and Vermont RETAIN [VT RETAIN], respectively). The five RETAIN programs began enrolling participants in late 2021 and early 2022 and continued enrollment for evaluation purposes through mid-May 2024.

Under contract to SSA, Mathematica conducted an independent evaluation of the RETAIN programs. The overarching goal of the evaluation was to build evidence on the effectiveness of early intervention SAW/RTW strategies in helping people with an injury or illness stay connected to work, avoid entry into SSA's disability programs, and experience better health and economic well-being. The evaluation had several components, including rigorous assessments of the programs' implementation and their impacts on enrollee outcomes in the months immediately following enrollment and in the first year after enrollment.

This report presents findings from participation, impact, and benefit-cost analyses for each of the five RETAIN programs. Each RETAIN program used a random assignment study design, such that some enrollees were in a treatment group that could use RETAIN services and the others were in a control group that could use limited or no services besides those typically available in the community. The report findings cover a one-year follow-up period and are based on Mathematica's analysis of programs' enrollment and service use data, state unemployment insurance (UI) wage records, SSA program data, a follow-up survey of RETAIN enrollees that Mathematica conducted about 12 months after enrollment, and program cost data. The one-year follow-up period reflects data availability, evaluation timing, and a time horizon over which impacts on key outcomes such as SSDI applications could be expected to emerge. An earlier report (Patnaik et al. 2025) summarized impacts on service use, employment, and health outcomes based on an early follow-up survey that Mathematica conducted about two months after enrollment.

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<sup>1</sup> Stay-at-work (SAW) strategies seek to avert job interruption by supporting continued work with appropriate adjustments. Return-to-work (RTW) strategies support re-entry to work following an interruption.

## A. RETAIN program model

The RETAIN program model builds on an SAW/RTW intervention (Washington State’s Centers for Occupational Health and Education [COHE]) that prior research has found to be associated with reductions in the likelihood of being out of work and on disability during the first year after injury or illness and the likelihood of entry into permanent work disability status over eight years (Wickizer et al. 2011; Wickizer et al. 2018).<sup>2</sup> Although COHE focused on people with work-related injuries or illnesses, RETAIN expanded the intended population to reach workers that might be less likely to receive SAW/RTW supports in the absence of RETAIN. The additional populations included those with non-work-related injuries if they were in the labor force when the injury or illness first occurred, or when an existing condition had worsened and began to challenge their ability to work. The RETAIN cooperative agreements specified minimum eligibility criteria for all the programs: to be eligible, individuals needed to have a health condition that was either new or recently exacerbated, be in the labor force at the onset of the condition and not be receiving or have a pending application for Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI) benefits.

The RETAIN programs followed a core program model (Exhibit ES.1). Medical provider and RTW coordination services were central components of the model that DOL and SSA expected all five programs to provide to all treatment enrollees. Other components of the model could vary by program or treatment enrollees’ needs. RETAIN treatment enrollees were eligible to use RETAIN services for up to six months. States had to enroll 80 percent of enrollees within three months of the onset or worsening of the primary health condition that had the potential to limit continued employment or labor force participation. Ideally, states would begin providing services to treatment enrollees immediately upon enrollment.

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<sup>2</sup> Many SAW/RTW programs operate in the private sector, including programs run by workers’ compensation and disability insurers and, in many markets, third-party administrators that manage absence and disability for large, self-insured employers. RETAIN was premised on the observation that many workers “fall through the cracks” because their cases are not workers’ compensation cases and they lack private disability coverage, or they are covered but receive little proactive support (see, for example, Stapleton et al. 2015).

**Exhibit ES.1. RETAIN program model**

Service category	Program component	Definition
<b>Medical provider services</b>		
	Training medical providers	Programs deliver training on occupational medicine best practices and alternatives to opioids for pain management.
	Offering financial compensation or other incentives to medical providers	Programs offer incentives for medical providers to use occupational medicine best practices and alternatives to opioids for pain management.
<b>RTW coordination services</b>		
	Coordinating return-to-work services	Programs coordinate the delivery of medical and employment services to participants, including developing and implementing an RTW plan. An RTW coordinator usually leads the coordination of RTW services.
	Communicating among parties involved in return-to-work plan	Program staff communicate with other parties (such as the participants' employers) about their plan or ability to return to work. This communication should occur early in delivering RETAIN services to support the participant in returning to work as soon as possible.
	Monitoring treatment enrollees' progress	Programs track and monitor the participants' medical and employment progress.
<b>Other SAW/RTW services</b>		
	Supporting workplace-based interventions	Programs offer services to facilitate the participants' return to work. This might include modifying their duties and adjusting their schedules, tasks, and physical worksites.
	Retraining or rehabilitating enrollees	Programs offer or connect participants to retraining or rehabilitation services when participants can no longer perform their primary jobs or suitable alternate work.

Source: The U.S. Department of Labor's RETAIN Funding Opportunity Announcement.

**B. RETAIN programs**

In each state participating in Phase 2 of RETAIN, the lead agency worked with a consortium of partners, such as state or local workforce development entities, healthcare systems, and medical provider networks, to implement its RETAIN program. Each program was also free to specify (within the bounds of the cooperative agreement requirements, as described in the previous section) the organizational structure, service area, eligible population, recruitment approach, and experimental study design (Exhibit ES.2).

**Exhibit ES.2.** RETAIN programs and their key features

Program	Key partners <sup>a</sup>	Service area, eligible population <sup>b</sup> and referral sources
RETAINWORKS (Kansas RETAIN)	<p><b>Lead agency:</b> Kansas Department of Commerce</p> <p><b>Healthcare partners:</b> Ascension Via Christi, Stormont Vail Healthcare, University of Kansas Medical Center, Kansas Clinical Improvement Collaborative</p> <p><b>Workforce partners:</b> All five local workforce development boards in Kansas, Kansas Business Group on Health, Kansas Society for Human Resource Management</p>	<p><b>Service area:</b> Entire state (105 counties)</p> <p><b>Eligible population:</b> Adults who are employed or seeking employment and have a work- or non-work-related injury or illness</p> <p><b>Referral sources:</b> EMR reports, medical providers, local workforce development area staff, employers, self-referrals</p>
RETAIN Kentucky (RETAIN KY)	<p><b>Lead agency:</b> Kentucky Department of Workforce Investment, Office of Vocational Rehabilitation</p> <p><b>Healthcare partners:</b> University of Kentucky HealthCare, University of Louisville Health</p> <p><b>Workforce partners:</b> University of Kentucky Human Development Institute, Council of State Governments, Kentucky Chamber of Commerce</p>	<p><b>Service area:</b> Entire state (120 counties)</p> <p><b>Eligible population:</b> Adults who are employed or seeking employment and have a non-work-related injury or illness</p> <p><b>Referral sources:</b> Office of Vocational Rehabilitation, targeted online advertising, healthcare partners, workforce partners, employers, self-referrals</p>
Minnesota RETAIN (MN RETAIN)	<p><b>Lead agency:</b> Minnesota Department of Employment and Economic Development</p> <p><b>Healthcare partners:</b> Mayo Clinic, HealthPartners TRIA</p> <p><b>Workforce partners:</b> Workforce Development, Inc.</p>	<p><b>Service area:</b> Entire state (87 counties)</p> <p><b>Eligible population:</b> Adults who are employed or seeking employment and have a work- or non-work-related injury or illness</p> <p><b>Referral sources:</b> EMR reports, mass email campaigns to Mayo Clinic patients, targeted online advertising, medical providers, employers, self-referrals</p>
Ohio RETAIN (OH RETAIN)	<p><b>Lead agency:</b> Ohio Department of Job and Family Services</p> <p><b>Healthcare partners:</b> Bon Secours Mercy Health</p> <p><b>Workforce partners:</b> Local workforce development boards, Opportunities for Ohioans with Disabilities, Ohio Bureau of Workers' Compensation</p>	<p><b>Service area:</b> Three regions in Ohio, encompassing the cities of Youngstown, Toledo, and Cincinnati</p> <p><b>Eligible population:</b> Adults who are employed or seeking employment and have a non-work-related injury or illness</p> <p><b>Referral sources:</b> EMR reports, medical providers, employers, self-referrals</p>
Vermont RETAIN (VT RETAIN)	<p><b>Lead agency:</b> Vermont Department of Labor</p> <p><b>Healthcare partners:</b> OneCare Vermont</p> <p><b>Workforce partners:</b> Vermont Workforce Development Division, HireAbility Vermont, Invest EAP, Vermont Chamber of Commerce</p>	<p><b>Service area:</b> Entire state (14 counties)</p> <p><b>Eligible population:</b> Adults who are employed or seeking employment and have a work- or non-work-related injury or illness</p> <p><b>Referral sources:</b> Self-referrals through web-based pre-screening tool available at primary care practices and other locations in the community, referrals from clinicians and partners</p>

<sup>a</sup> This list is not comprehensive; see Keith et al. (2024) for complete information on program partners.

<sup>b</sup> The cooperative agreements specified minimum eligibility criteria: (1) having a health condition that was either new or recently exacerbated, (2) being in the labor force at the onset of the condition, and (3) not receiving or having a pending application for disability benefits from SSA.

EMR = electronic medical record.

Each program included the core components of the RETAIN program model. However, each state proposed its own approach to each component and developed its own logic model. The RETAIN states differed in how they implemented services and supports to account for differences in their intended populations and the services available to support program outcomes (Keith et al. 2024). Not all services that are part of the RETAIN model were provided directly by the RETAIN program—some were provided by other programs or agencies following a referral from RETAIN.

### C. RETAIN evaluation and study design

The federal sponsors of the RETAIN demonstration and other interested parties, such as state workforce agencies, disability advocates, and researchers, want to know whether and how the RETAIN programs achieved their goals, and whether the benefits of each program outweighed its cost. The RETAIN evaluation was designed to build evidence on the effectiveness of the RETAIN programs in helping people with an injury or illness stay connected to work, avoid entry into SSA’s disability programs, and experience better health and economic well-being. Mathematica designed the RETAIN evaluation with several components to document how the five states implemented their RETAIN programs and whether they were able to achieve their goals of improving enrollees’ outcomes (Berk et al. 2021). These components include process, participation, impact, and benefit-cost analyses.

The evaluation drew on a mix of quantitative and qualitative methods. It used multiple data sources, including RETAIN program documents, RETAIN enrollment and service use data, interviews with treatment enrollees and program staff, two enrollee follow-up surveys (at approximately 2 months and 12 months after enrollment), a survey of medical providers in one state, and state and federal administrative data.

The evaluation’s impact analyses relied on an experimental design in which Mathematica randomly assigned enrollees or clusters of enrollees to either a treatment or a control group. Enrollees in the treatment group had access to RETAIN services, whereas the control group had access to limited or no RETAIN services.<sup>3</sup> In four states (Kansas, Kentucky, Minnesota, Ohio), random assignment occurred at the individual level. In Vermont, Mathematica randomly assigned primary care practices into treatment and control groups. For each program, the use of stratified random assignment should have resulted in two groups of enrollees with similar characteristics at the time of enrollment. With a treatment and control group that are broadly similar in initial characteristics, the evaluation can attribute any differences in the outcomes of these groups to the effects of the programs.

Earlier in the evaluation, an **early assessment report** (Keith et al. 2023) described the initial implementation of the RETAIN programs through June 2022. A **process analysis report** (Keith et al. 2024) assessed each RETAIN program’s implementation and service delivery from the beginning of program operations through June 2023. This assessment occurred midway through the 48 months of program operations funded under the Phase 2 grants and about 20 months into the enrollment period that began in October 2021 and ended in May 2024. The **early impact report** (Patnaik et al. 2025) examined the

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<sup>3</sup> Kentucky’s RETAIN program offered an expedited version of RTW coordination services to control enrollees for up to three hours within a two-week period. In the other four programs, control enrollees were not eligible for any RETAIN RTW coordination services. VT RETAIN provided enrollees a resource inventory of services available in the community that they could independently seek out and use.

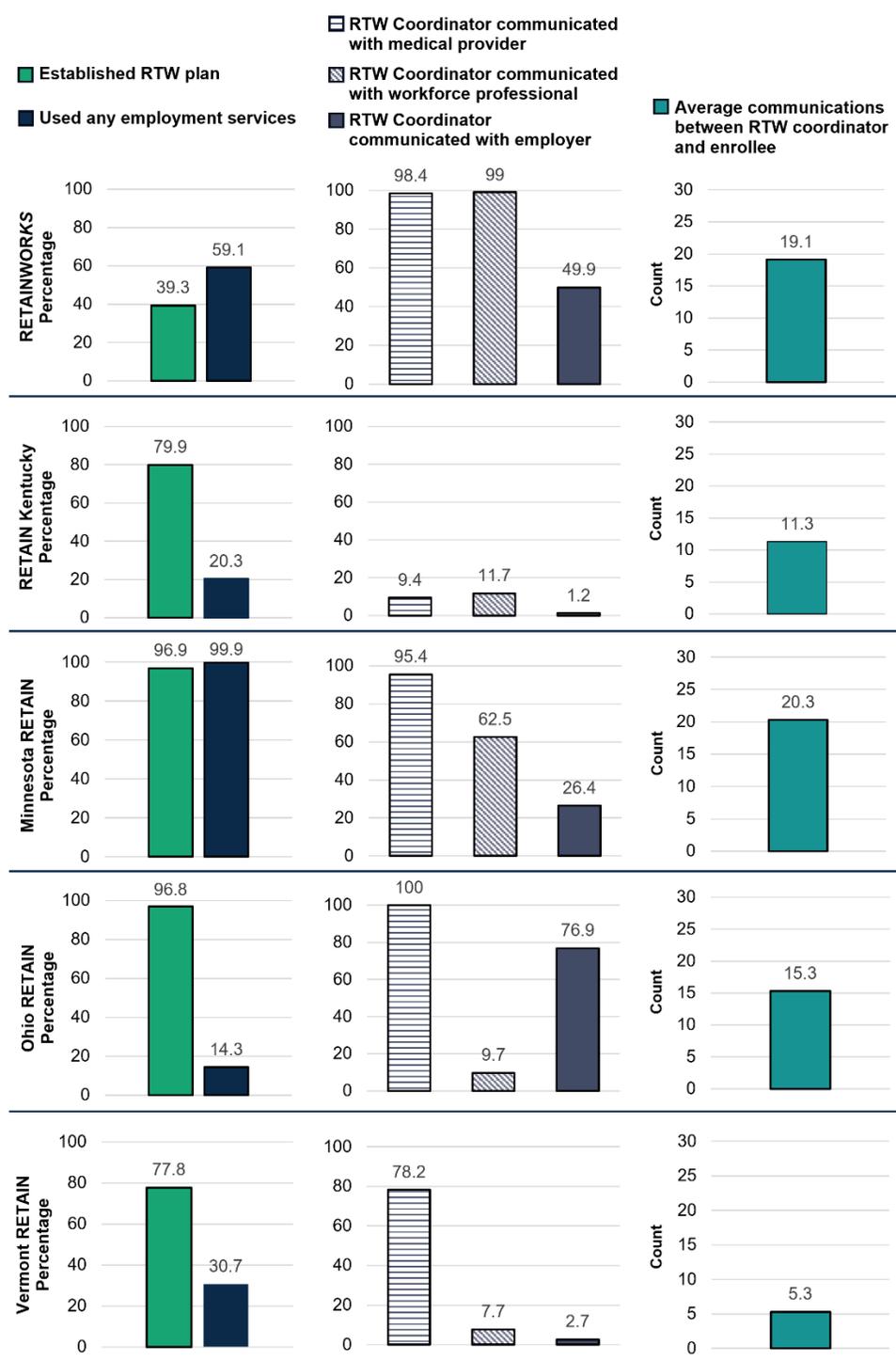
impacts of RETAIN programs on short-term outcomes, including enrollees' use of SAW/RTW services and their work- and health-related outcomes.

The **final evaluation report** (this document) presents findings from analyses of program participation, impacts on enrollee outcomes one year after enrollment, and benefits and costs during that period. For the program participation analysis, we examined program service use data to report on the characteristics of treatment enrollees and patterns of their service use during the six months they were eligible for RETAIN services. Next, for the one-year impact analysis, we assessed each RETAIN program's impact on enrollee outcomes after confirming that the random assignment designs had resulted in treatment and control groups with broadly similar characteristics. We examined each program's impact on intermediate-term outcomes, including (1) employment and earnings outcomes based on state wage records, (2) SSDI and SSI applications and benefits based on SSA program data, and (3) work- and health-related outcomes as reported in the one-year follow-up survey of enrollees. Finally, for the benefit-cost analysis, we estimated the benefits and costs of each RETAIN program during the first year from different perspectives: treatment enrollees, the federal government, the state government, and their combined perspectives.

### **D. Key findings from the one-year evaluation**

**Program participation.** The five RETAIN programs successfully identified and enrolled workers experiencing new or worsening health conditions and connected them to SAW/RTW supports. Programs' service use data indicate that nearly all treatment enrollees developed an RTW plan and most had repeated contact with an RTW coordinator during the six-month service window (Exhibit ES.3).

**Exhibit ES.3.** RTW plan establishment, use of employment services, and communication patterns, by program



Source: RETAIN service use data for treatment enrollees.

Note: Treatment enrollees were eligible to use services for up to six months. Employment services could be job retention services (including help with accommodations), job training and job search services, or other employment services.

RTW = return-to-work.

Engagement was strongest in RETAINWORKS and MN RETAIN, which featured frequent communication among enrollees, coordinators, and medical providers and relatively high use of employment-related services (for example, workplace accommodations, job search assistance, and training). OH RETAIN delivered the core coordination elements—near-universal establishment of an RTW plan, frequent contacts between enrollees and their coordinator, and high levels of communication between coordinators and medical providers and employers—but treatment enrollees had limited connection with the workforce system and relatively low use of employment services. RETAIN KY and VT RETAIN achieved relatively high rates of RTW plan completion but had relatively low use of employment services and limited communication with employers and workforce professionals. The core program model’s most consistent contribution across the programs was ensuring workers received communication and support with RTW planning.

**Impacts on enrollee outcomes.** Impacts on employment and earnings varied across states, with RETAINWORKS producing clear evidence of favorable impacts and promising signs for two other programs (MN RETAIN and RETAIN KY) (Exhibit ES.4).

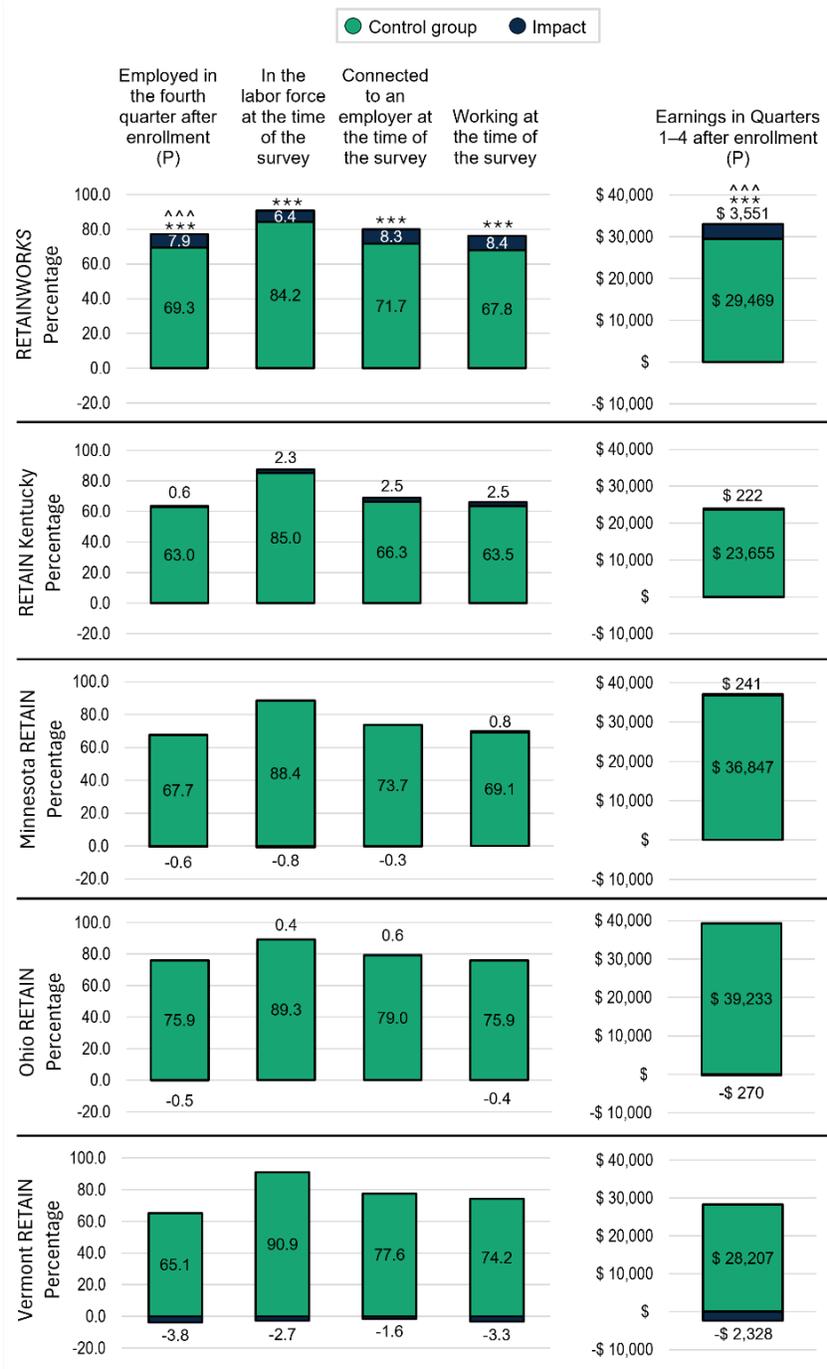
RETAINWORKS generated significant gains in employment and earnings in the first year for treatment enrollees relative to control enrollees. In other states, we did not find evidence of positive impacts on these outcomes within the one-year follow-up period. However, patterns of positive point estimates for the impact on earnings in MN RETAIN suggest that impacts could emerge over time as participants stabilize in the labor market. Further, while RETAIN KY did not impact labor market outcomes overall, it had favorable impacts on such outcomes for some subgroups of enrollees.

RETAINWORKS is the only program that had an impact on SSA program participation; the program reduced applications for SSDI among treatment enrollees compared with control enrollees (Exhibit ES.5). The other four programs had no impact on applications for SSDI and/or SSI benefits within the one-year follow-up period. The pattern of these findings is consistent with the pattern of impacts on employment and earnings. No program significantly reduced the share of enrollees who received any SSDI or SSI benefits or the average payment amounts received in the 12 months following enrollment.

In one program, we found evidence of modest impacts on household economic well-being (Exhibit ES.6). VT RETAIN treatment enrollees reported receiving more Supplemental Nutrition Assistance Program benefits and housing assistance compared with control enrollees. The VT program also increased the share of enrollees who reported their household receiving private short- or long-term disability payments at the time of the one-year survey.

Three programs (RETAINWORKS, MN RETAIN, and VT RETAIN) had large, favorable impacts on enrollees’ self-reported health outcomes at the time of the one-year follow-up survey (Exhibit ES.7). RETAINWORKS reduced the proportion of treatment enrollees reporting that pain interfered with their ability to work. MN RETAIN treatment enrollees reported less pain interference and fewer poor mental health days compared with their control counterparts and they were also more likely to rate their health as at least fair (that is, fair, good, very good or excellent). VT RETAIN treatment enrollees were more likely to report that their health was very good or excellent compared with control enrollees; however, there is suggestive evidence that treatment enrollees were more likely than control enrollees to report a recent prescription of opioids.

**Exhibit ES.4.** Impacts on employment and earnings, by RETAIN program



Source: RETAIN enrollment data; one-year follow-up survey; state unemployment insurance wage records.

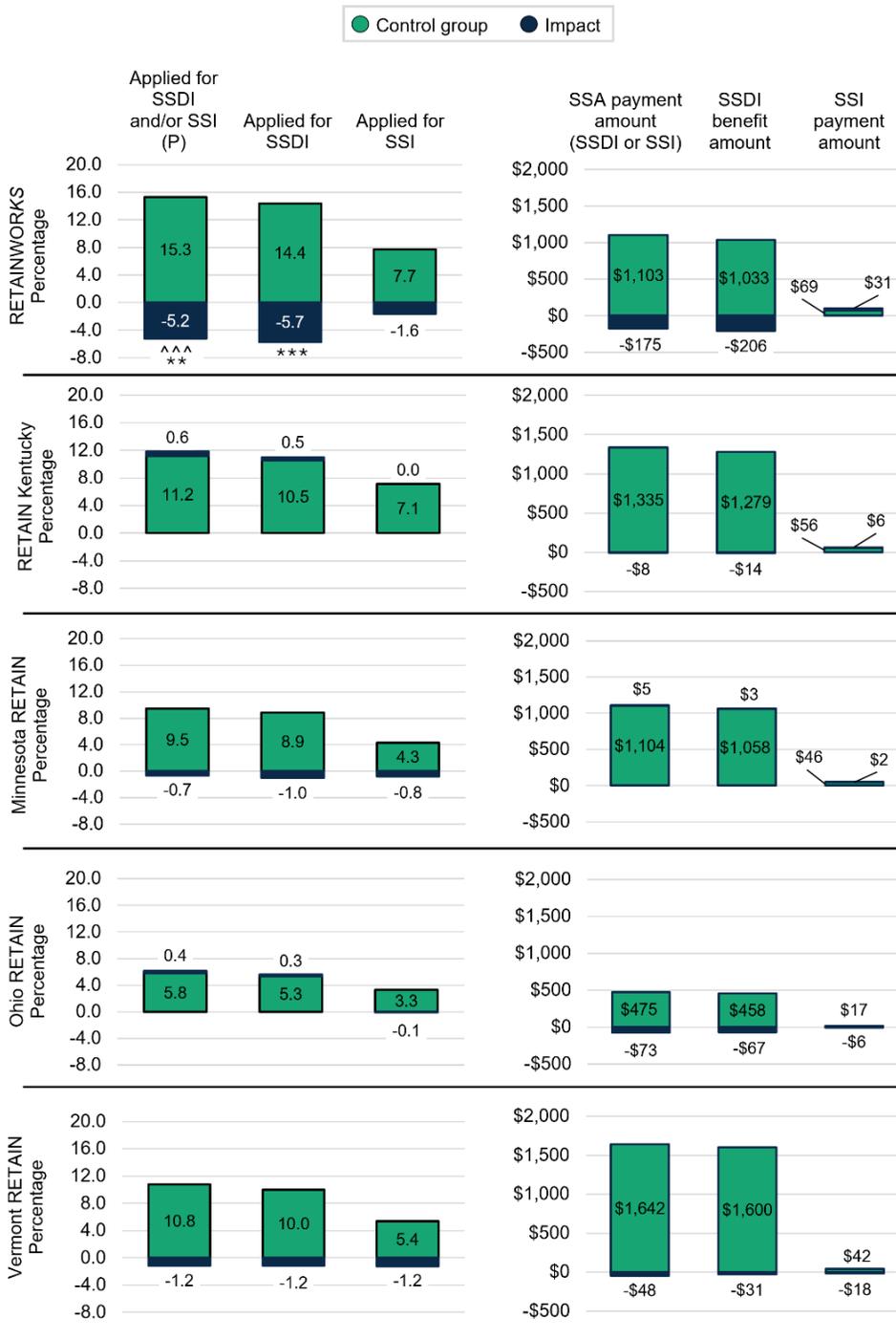
Note: This exhibit shows the regression-adjusted means for the control group (the estimate of the counterfactual) and the regression-adjusted estimates of programs' impacts. We tested statistical significance of impacts using a two-tailed test for all outcomes; for primary outcomes we additionally used a one-tailed t-test.

\*/\*\*/\*\*\* Impact estimate is significantly different from zero ( $p$ -value is less than .10/.05/.01) using a two-tailed t-test.

^/^^/^^^ Impact estimate is significantly greater than zero ( $p$ -value is less than .10/.05/.01) using a one-tailed t-test. This test was only conducted for primary outcomes.

(P) = primary outcome.

**Exhibit ES.5.** Impacts on SSA program participation, by RETAIN program



Source: RETAIN enrollment data; SSA data.

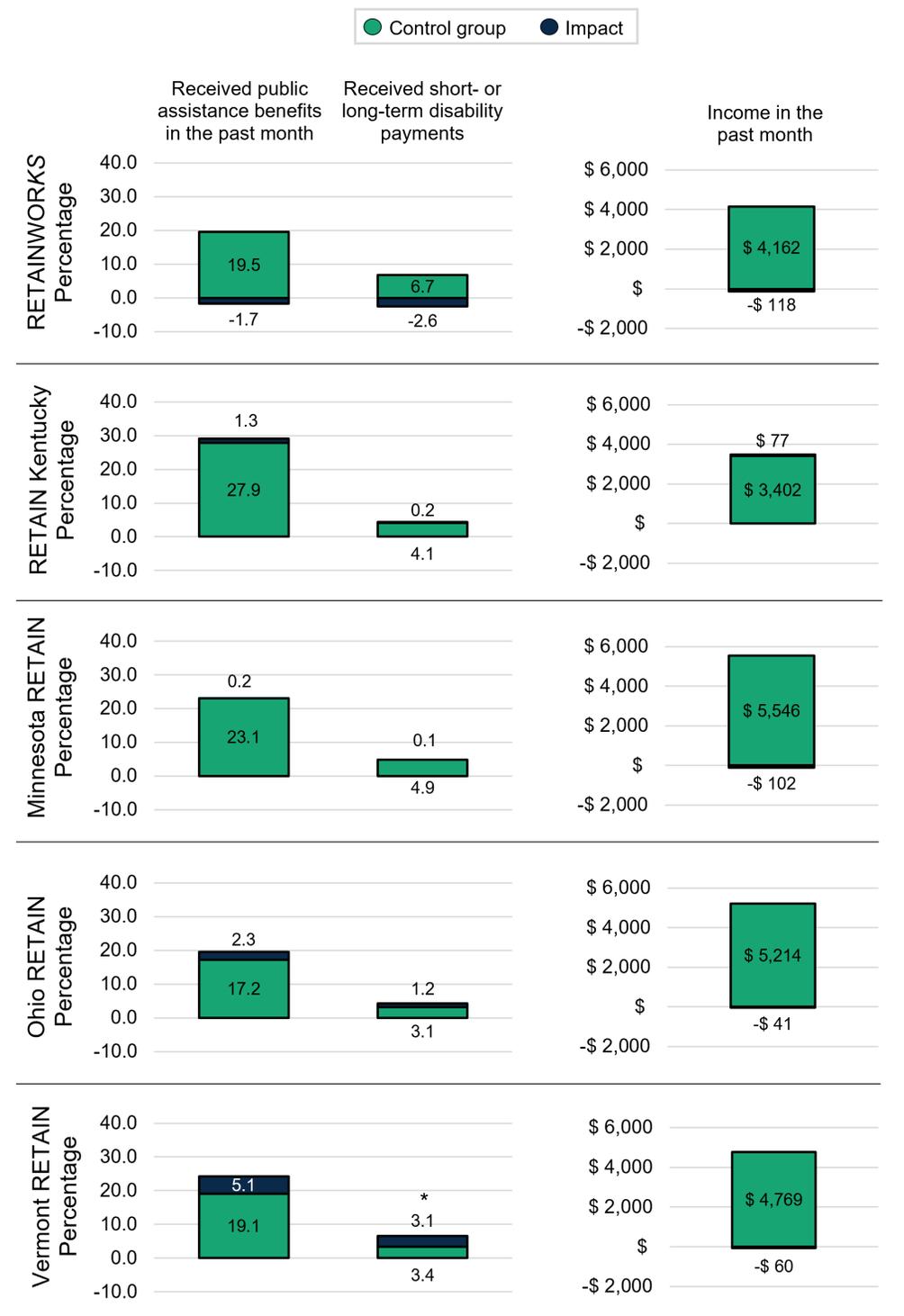
Note: This exhibit shows the regression-adjusted means for the control group (the estimate of the counterfactual) and the regression-adjusted estimates of programs' impacts. We tested statistical significance of impacts using a two-tailed test for all outcomes; for primary outcomes we additionally used a one-tailed *t*-test.

\*/\*\*/\*\* Impact estimate is significantly different from zero (*p*-value is less than .10/.05/.01) using a two-tailed *t*-test.

^/^^/^^^ Impact estimate is significantly less than zero (*p*-value is less than .10/.05/.01) using a one-tailed *t*-test. This test was only conducted for primary outcomes.

(P) = primary outcome.

**Exhibit ES.6.** Impacts on household economic well-being, by RETAIN program

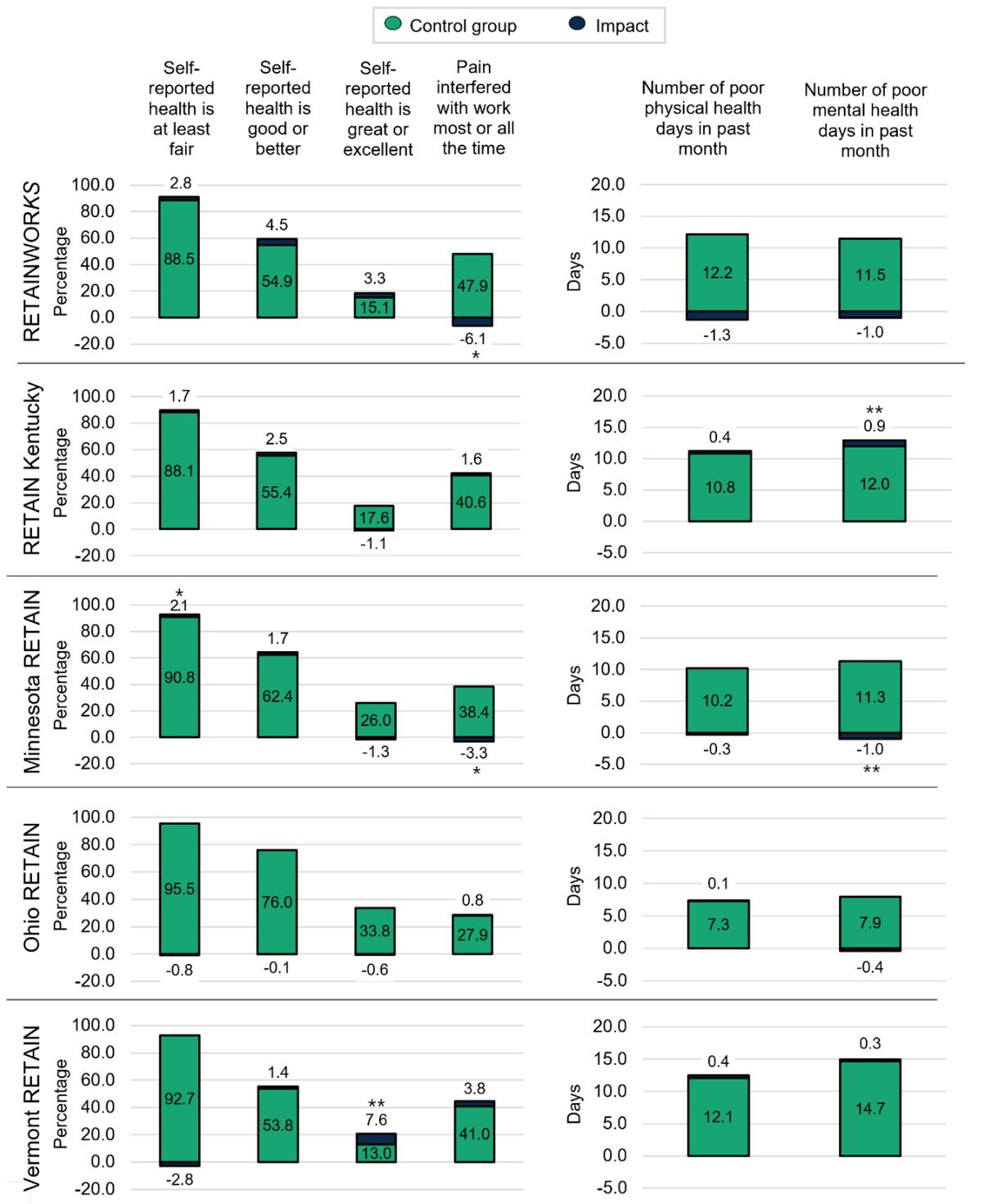


Source: RETAIN enrollment data; one-year follow-up survey.

Note: Public assistance benefits refer to benefits from the Supplemental Nutrition Assistance Program, housing assistance, or unemployment insurance programs. Short or long-term disability benefits refer to private disability insurance benefits.

\*/\*\*/\*\*\* Impact estimate is significantly different from zero ( $p$ -value is less than .10/.05/.01) using a two-tailed  $t$ -test.

**Exhibit ES.7.** Impacts on enrollees' self-reported health, by RETAIN program

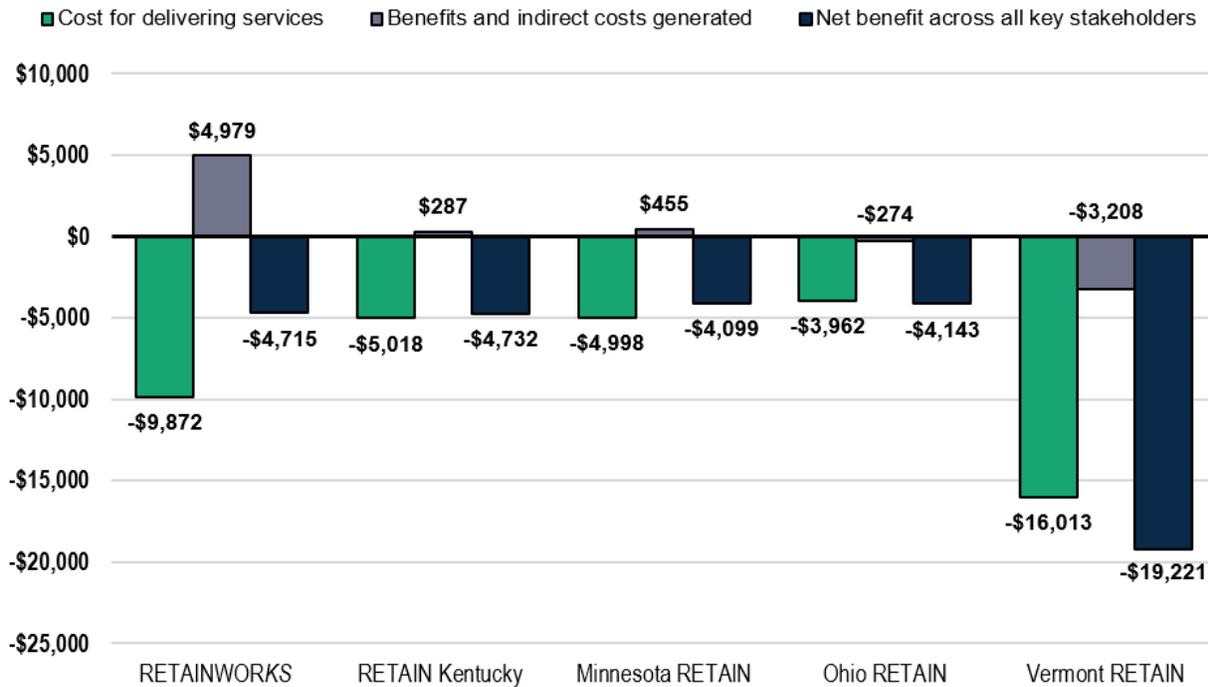


Source: RETAIN enrollment data; one-year follow-up survey.

\*/\*\*/\*\* Impact estimate is significantly different from zero ( $p$ -value is less than .10/.05/.01) using a two-tailed t-test.

**Benefits and costs.** In all programs, the estimated costs of delivering services exceeded the estimated monetized benefits observed within the first year after enrollment (Exhibit ES.8), reflecting the up-front investment in services and the limited time frame for benefits to accrue during the one-year follow-up period.

**Exhibit ES.8.** RETAIN programs’ benefits and costs in the one-year follow-up period



Source: Author calculations.

Note: We considered key stakeholders to be treatment enrollees and the federal and state government. Cost for delivering services refer to direct costs programs incur as part of service delivery. Indirect costs refer to those that result from the program having an impact on enrollee outcomes. Net benefits are benefits minus costs, expressed as dollars per enrollee, inflation-adjusted to 2024 dollars, and discounted to 2024 present values.

The estimated cost of delivering program services per treatment enrollee ranged from about \$4,000 in OH RETAIN to more than \$16,000 in VT RETAIN. We estimated program costs for a steady state period when programs were not in the start-up stage nor winding down. For each program, the costs per treatment enrollee in the first year after enrollment exceeded the benefits generated when looking across the combined perspectives of treatment enrollees and state and federal governments. In RETAINWORKS, RETAIN KY, and MN RETAIN, treatment enrollees experienced a net benefit in the first year whereas the federal government did not; interestingly, in all programs, the state government experienced a small net benefit per treatment enrollee in the first year. Notably, these estimates do not account for some benefits that cannot be monetized, such as any favorable impacts on enrollees’ health, and do include some program costs incurred because programs were participating in a federal grant and evaluation.

Program benefits could continue to accrue in the future while the costs of service delivery were incurred up front, and at least two programs are expected to break even within a reasonable time frame. In supplemental analyses, we estimated that RETAINWORKS is likely to become cost neutral within five years after enrollment, whereas MN RETAIN is expected to do so sometime between 10 and 20 years after

enrollment. For the other three programs to achieve cost neutrality within 20 years of enrollment, the annual impact on earnings would need to be substantially more favorable than the point estimate from the first year. The required growth in earnings impacts to achieve cost neutrality 20 years after enrollment is plausible for RETAIN KY and OH RETAIN.

**Considerations for interpreting findings.** When considering the one-year evaluation findings, there are important study features that affect our interpretation of the findings and the generalizability of the results.

- **Study considerations affecting interpretation of findings.** First, in some states, the service contrast between treatment and control enrollees was muted either because the control group had access to similar services (RETAIN KY) or because initiatives like statewide marketing campaigns (VT RETAIN) or provider training (RETAINWORKS, OH RETAIN, and VT RETAIN) potentially improved outcomes for control enrollees as well. Second, two programs (RETAINWORKS and VT RETAIN) enrolled significantly fewer people than their original targets; the smaller-than-expected sample sizes reduce our ability to detect impacts. Hence, it is possible there were some positive or negative impacts on enrollee outcomes that we could not detect. Third, some outcomes might be measured with error either due to missing data or self-reports that are subject to recall error, differences in interpretation, and potential response bias. In addition, service use data might be inconsistent across programs due to differences in data recording procedures or service definitions. Fourth, the one-year follow-up period is likely insufficient to capture the full benefits of SAW/RTW interventions because enrollees may have slower recovery trajectories and many SSDI and SSI applicants had not yet received determinations.
- **Study considerations affecting generalizability of the results.** First, implementation variation across programs limits the ability to draw conclusions about the overall RETAIN model. Although all five programs were designed to follow the core RETAIN model, they differed in their eligibility criteria, recruitment sources, enrollee composition, and operational details, which likely influenced their impacts. Second, favorable labor market conditions during much of the study period likely supported employment retention and earnings growth for all enrollees, narrowing observable treatment–control differences. Although this environment provides a strong test of RETAIN’s value under favorable conditions, effects may differ in weaker labor markets, when job loss risks are higher and SAW/RTW supports may be more critical. Finally, the documented program costs might overstate the resources required to implement the program in different circumstances (for example, without the data collection and reporting requirements of a federal demonstration and independent evaluation); further, the per-enrollee costs of program delivery might change with scaling and duration if many costs are fixed.

## E. Implications for policy, practice, and research

The findings from the one-year evaluation of the RETAIN programs offer some valuable insights for policy, practice, and research.

**Encouraging and enabling timely, intensive intervention is likely critical to the success of SAW/RTW programs.** The RETAIN model was built on evidence that workers with newly acquired injuries or health conditions are more likely to remain in the labor force if they receive well-targeted support

within the first few weeks of onset (Ben-Shalom et al. 2018). Consistent with this, the RETAIN programs that engaged workers soon after an injury or illness—before prolonged detachment from the labor market—showed the strongest impacts on employment and health. At the same time, some treatment enrollees reported during interviews that they were too early in their recovery for the program to support their return to work, and program staff noted that some employers expressed concerns about workers' compensation liability if employees returned too soon and reinjured themselves. In addition, subgroup analyses revealed a pattern in some programs of more favorable impacts on labor market outcomes if enrollees had not been working the week before enrollment. More research is needed to determine the optimal timing of intervention, which likely varies by type of condition, work status, and nature of the pre-injury job.

**Best practices for SAW/RTW programs should emphasize strong cross-system coordination between healthcare and workforce systems, paired with direct connections to employment-related services.** The programs that most effectively aligned these systems—RETAINWORKS and MN RETAIN—saw higher service uptake and more favorable one-year impacts on enrollee outcomes. In contrast, programs that were well integrated into either the healthcare system or the workforce system, but not both (such as RETAIN KY, OH RETAIN, and VT RETAIN), were less successful in producing promising impacts during the one year after enrollment. These findings suggest that effective SAW/RTW programs require intentional and active partnerships across systems rather than relying primarily on one of these systems with light or no connections to the other.

**A multipronged approach might help SAW/RTW programs effectively engage employers in planning.** Except for OH RETAIN, employer engagement was limited in the RETAIN programs. Yet, the findings from RETAINWORKS suggest that workplace modifications and employers' willingness to offer accommodations could be a key facilitator of job retention, highlighting the need for effective strategies to engage employers. To help employers see the value of SAW/RTW programs, these programs might need to design effective promotional campaigns and build strong partnerships with local business boards. Another advantage of closely collaborating with the workforce system, as discussed above, is that workforce staff tend to have experience engaging and effectively communicating with employers.

**SAW/RTW programs should consider opportunities for more precise targeting of their services to maximize benefits for workers and society.** Differences in program impacts by worker characteristics suggest that some subgroups may gain more than others from timely support. For example, in some programs, individuals with non-musculoskeletal conditions and those who had been out of work for more than a week at enrollment experienced larger one-year impacts on employment and earnings. If policymakers are interested in maximizing the return on investment of taxpayer dollars, they could encourage RETAIN-like programs to prioritize such subgroups and develop appropriate screening and triage tools.

**A broader and longer-term perspective on the cost-effectiveness of SAW/RTW programs would more accurately capture their value for workers and the government.** Because program costs are typically front-loaded while benefits—such as increased earnings and reduced SSDI expenditures—emerge gradually but can persist, the one-year evaluation window might not fully capture the net benefits of SAW/RTW programs. The evaluation findings also point to the critical role of health improvements as a

pathway to employment; accounting for the inherent value of health improvements and the implied long-term fiscal benefits would provide a more accurate representation of the value of RETAIN-like programs. Finally, some RETAIN programs likely had system-level spillovers that benefited all enrollees but muted outcome differences between treatment and control enrollees. The systems change efforts, including strengthened partnerships, provider training, public outreach campaigns, and closer collaboration between public and private organizations, might have generated benefits to society that are not captured in the enrollee-level impacts nor reflected in the benefit-cost models used for this evaluation. If so, the estimated net benefits might understate the value generated by the program because they do not capture the value of positive systems transformation.

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