Helping Workers Who Develop Medical Problems Stay Employed: Expanding Washington’s COHE Program Beyond Workers’ Compensation

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ABSTRACT

This is one of three policy action papers prepared in Year 3 of the Stay-at-Work/Return-to Work Policy Collaborative, an initiative funded by the Office of Disability Employment Policy in the U.S. Department of Labor.

Each year, millions of workers in the United States lose their jobs or leave the workforce because of a medical condition. Keeping them in the labor force could help them stay productive, maintain their standard of living, and avoid dependency on government programs. In this report, we discuss one option: expanding a successful case coordination system developed for Washington workers with medical conditions that are job-related, and therefore compensable under workers’ compensation, to the same workers when they experience conditions that are not compensable under workers’ compensation. We examine the feasibility of such an expansion and how to conduct a pilot test.
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### Glossary of Acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACA</td>
<td>Affordable Care Act</td>
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<tr>
<td>AJC</td>
<td>America’s Job Center</td>
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<td>CMS</td>
<td>Centers for Medicare and Medicaid Services</td>
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<tr>
<td>COHE</td>
<td>Center of Occupational Health and Education</td>
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<td>DDS</td>
<td>Disability Determination Service</td>
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<td>DOL</td>
<td>U.S. Department of Labor</td>
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<td>DSB</td>
<td>Department of Services for the Blind</td>
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<td>DVR</td>
<td>Department of Vocational Rehabilitation</td>
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<tr>
<td>ESD</td>
<td>Employment Security Department</td>
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<tr>
<td>FMLA</td>
<td>Family and Medical Leave Act</td>
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<td>FPL</td>
<td>Federal poverty level</td>
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<td>HCA</td>
<td>Health Care Authority</td>
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<td>HIE</td>
<td>Health Insurance Exchange</td>
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<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
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<tr>
<td>HWD</td>
<td>Healthcare for Workers’ with Disabilities</td>
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<tr>
<td>ICC</td>
<td>Interclass correlation</td>
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<tr>
<td>IRB</td>
<td>Institutional Review Board</td>
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<tr>
<td>L&amp;I</td>
<td>Department of Labor and Industries</td>
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<tr>
<td>LTDI</td>
<td>Long-term disability insurance</td>
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<tr>
<td>MBI</td>
<td>Medicaid Buy-In</td>
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<td>MCP</td>
<td>Managed Care Pilot</td>
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<td>MDI</td>
<td>Minimum detectable impact</td>
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<tr>
<td>MPN</td>
<td>Medical Provider Network</td>
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<tr>
<td>OHMS</td>
<td>Occupational Health Management System</td>
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<tr>
<td>PCP</td>
<td>Primary care physician</td>
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<tr>
<td>PGAP</td>
<td>Progressive Goal Attainment Program</td>
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<tr>
<td>SSDI</td>
<td>Social Security Disability Insurance</td>
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<tr>
<td>SSI</td>
<td>Supplemental Security Income</td>
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<td>STDI</td>
<td>Short-term disability insurance</td>
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<td>UI</td>
<td>Unemployment insurance</td>
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<td>VR</td>
<td>Vocational rehabilitation</td>
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<tr>
<td>WC</td>
<td>Workers’ compensation</td>
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<td>WHBE</td>
<td>Washington Health Benefit Exchange</td>
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I. INTRODUCTION

Millions of American workers leave the labor force every year, at least temporarily, because of the onset of significant health conditions (Hollenbeck 2015). Only some of the conditions are caused by work, but all of them disrupt the workers’ ability to perform their jobs for some period of time. Without steady earnings, these workers and their families often face economic hardship. Some end up losing their jobs and qualifying for public programs, such as Social Security Disability Insurance (SSDI), Supplemental Security Income (SSI), Medicare, and Medicaid. These workers, their families, their employers, and taxpayers could all potentially gain substantial net benefits from initiatives that help such workers stay in the labor force (Ben-Shalom and Burak 2016). The challenge for policymakers is determining how to design, test, implement, and finance initiatives that will reduce job loss, increase workforce retention, and benefit all stakeholders.

In this report we present and discuss one option: adapting a program that has improved functional outcomes and increased workforce retention among workers’ compensation (WC) claimants to make it available to workers with medical conditions that were not caused by work. The Centers of Occupational Health and Education (COHE) program was established by the public WC fund in the State of Washington to:

1. Establish a set of independent organizations to facilitate collaboration among providers, employers, labor organizations, and the WC fund to optimize medical and employment outcomes for workers with compensable conditions;
2. Implement near the outset of disabling episodes a set of best practices in multi-stakeholder communications and coordination that protect against adverse secondary consequences and needlessly prolonged work disability; and
3. Ensure systematic adherence to these best practices by creating billing codes to document their occurrence as well as financial incentives and data analysis capability to track and give feedback to participants on actual activities and outcomes.

In its essence, COHE was designed to address the many behavioral bottlenecks that can stand in the way of achieving optimal medical recovery and return to work outcomes for WC claimants; the intent is to ensure maximally effective use of services and supports that were available in the absence of COHE, not to provide fundamentally new services and supports.¹ Pilot testing that began in the early 2000s has demonstrated that COHE substantially reduces lost work time and long-term disability for WC claimants while more than paying for itself through lower WC expenditures.

COHE services are not currently available to workers with conditions that are not compensable under WC—that is, when the condition is not attributable to work activities (hereafter termed “non-compensable” conditions). The purpose of this paper is to explore whether and how Washington’s COHE program could be adapted in ways that would lead to similar beneficial effects for workers in the state who have non-compensable conditions.

¹ See the discussion of these bottlenecks in Contreary and Perez-Johnson (2016).
At first glance, the potential value of providing COHE support for workers with non-compensable conditions seems high. A significant back sprain is a significant back sprain, no matter where it occurred or who is paying the associated costs. The medical and non-medical issues that, if ignored, can lead to preventable long-term work disability are the same no matter what caused the condition. The three key participants—worker, medical practitioner, and employer—are also the same.

However, adapting COHE to meet the needs of workers with non-compensable conditions would not necessarily result in similar successes. Uncertainty arises because the professional services and financial supports currently available to workers with non-compensable conditions are quite different from those available under WC, especially in Washington, where the WC support system is highly integrated. Except in the case of self-insured employers, a single entity, the state’s Department of Labor and Industries (L&I), is responsible for managing WC medical and wage-replacement benefits, and all benefits are financed by employer premiums. Furthermore, the WC system provides a number of incentives to employers to support return-to-work efforts.

In contrast, the system of supports for workers with non-compensable conditions is highly variable and fragmented. Employers may or may not have a financial stake in the outcome. Most workers—especially those in low-wage jobs—are not covered by employer-sponsored sick leave or disability benefits programs.² When they cannot work, those who are not covered stop receiving a paycheck. Financial distress may ensue and paying for services that are not covered becomes especially problematic. Not all workers have health insurance, and those who do generally do not receive any individualized advice about or assistance with navigating the healthcare system unless they have catastrophically expensive conditions. Health insurance plan designs do not often cover costs of the specific services needed to maximize functional recovery and expedite return to work. Workers without disability coverage must seek rehabilitation or other services from public programs or purchase them from the private sector on their own.

Under these circumstances, workers can feel intense and urgent pressure to return to work before they are medically ready, or to seek replacement for lost wages via SSDI rather than pursue return to work. Therefore, any effort to extend COHE support to workers with non-compensable conditions must give some consideration to how well COHE supports will work within the broader support system for such workers, and whether some non-COHE aspects of that broader system should be modified.

Because COHEs success depends on its integration with the larger support system for the worker, our assessment of the feasibility of making COHE supports available for non-compensable conditions devotes considerable attention to differences between the support system for non-compensable conditions and the current WC system. We suggest changes to the support system for non-compensable conditions that seem essential for COHE to succeed within that system, consider how COHE services themselves would have to be modified for workers

² In March 2015, an estimated 65 percent of workers outside the federal government had paid sick leave, 37 percent had short-term disability benefits, and 33 percent had long-term disability benefits (U.S. Department of Labor, 2015, Tables 16 and 32). For workers in the lowest wage quartile, these percentages are 34, 16 and 8 percent, respectively. The median number of days for workers with sick leave is 6 (Table 35).
with non-compensable conditions, and consider other changes that are less critical but might increase the success of an initiative to expand COHE.\(^3\) We also develop preliminary plans for a pilot test.

During a visit to Washington in May 2016, we found a great deal of support for the idea of making COHE services available to workers with non-compensable conditions. Leaders of major stakeholder organizations—the Association of Washington Business, the Washington State Labor Council, L&I, the state’s Workforce Training and Education Coordinating Board, the Department of Vocational Rehabilitation (DVR), the Employment Security Department (ESD), and the COHEs—indicated they would back such an endeavor, at least conditionally. The success of the COHE initiative under WC is an important reason for that interest. Importantly, it began with a collaborative design and testing effort involving most of these same stakeholders. We did not have sufficient opportunity to consult with leaders in the health insurance industry or healthcare delivery systems, but there are good reasons to believe they would support such an expansion, as will be explained later in this report. Even so, the support of any stakeholder group hinges on the details of the initiative. Hence, a goal of this report is to provide a starting point for collaborative design and testing of a specific initiative—one that, if sufficiently successful, would pave the way for scaling up the program and making incremental improvements thereafter.

In Chapter II, we provide background on the WC system in Washington, as well as the services and supports that are currently available to Washington workers when their conditions are non-compensable. In Chapter III, we consider the design of a system that would make COHE supports available to Washington for significant non-compensable conditions and its integration with the broader support system to workers when they have such conditions. In Chapter IV, we present a preliminary design for a test of COHE for non-compensable conditions—a test that would start with developing more details for a pilot system; measuring the impacts of the pilot system on outcomes for workers, employers, and public programs; supporting a cost-benefit analysis; and setting the stage for scaling up and further developing a statewide system. We conclude in Chapter V with suggestions for next steps.

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\(^3\) We also explored the feasibility of developing a single, integrated system to support workforce retention for all workers with significant medical conditions, whether compensable under WC or not. In concept, such a system would ensure that workers receive timely, evidence-based assistance to support workforce retention, regardless of the cause of the condition, but financing would be dependent on the cause. The consensus among the expert consultants is that it is not practical to establish such an integrated system in the foreseeable future. We, therefore, focus on a separate system for non-compensable conditions.
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II. BACKGROUND

In this chapter, we present summary information on the WC system in Washington, the COHE system and the supports that COHEs provide to WC claimants and other stakeholders, findings from the COHE pilot, and services and supports available to workers in Washington when they have non-compensable conditions.

A. WC in Washington

WC in Washington pays for medical care necessary to treat compensable conditions as well as cash payments to partially replace any lost wages (Wickizer et al. 2011). There is a three-day waiting period for indemnity payments, after which the worker is eligible to receive untaxed indemnity payments in the amount of 60 to 75 percent of lost wages, up to a limit, conditioned on the number of his or her dependents. Washington, similar to three other states (Ohio, North Dakota, and Wyoming), requires all employers to participate in a state WC fund unless the employer self-insures for WC. Approximately 350 large employers, whose employees represent one-third of the state’s workforce, opt to self-insure. The rest participate in the state fund, which is operated by L&I. References to WC in the remainder of this report pertain to the Washington L&I fund unless otherwise indicated.

Employers that participate in the L&I fund must pay risk-rated premiums that are based on their employees’ hours of work, industry classification, and recent experience. They have the option of deducting a portion of the tax from their workers’ pay checks. Risk-rating increases the employers’ incentive to support timely return to work by their WC claimants.

When a worker for an employer with L&I coverage experiences an event in the workplace, the worker may choose to first use any available healthcare provider. Since 2013, however, the worker must transfer to a provider in the L&I Medical Provider Network (MPN) after the first visit. The initial healthcare provider helps the worker file a claim (report of accident) with L&I. L&I may reject the claim, in which case the worker may appeal. Most appeals are settled through mediation process, but some are ultimately settled in court.

Each claim is assigned to an L&I claim manager, who has responsibility for the overall management of the claim. The claim manager works with a multidisciplinary team of clinical, vocational, and other staff to adjudicate the claim; authorize medical, wage loss, and other benefits; assess the needs of the injured worker; and develop a plan to ensure maximum recovery of function. About 15 percent of claims are rejected and, of those allowed, about 25 percent are of sufficient severity to result in compensation for lost wages.

Employers covered by L&I stand to gain from a number of incentives when they support an employee’s return to work. The first is an incentive that is common in WC: employer premiums are rated by the employer’s past WC experience. There is also an incentive for the employer to keep the worker on full salary rather than pay indemnity benefits. The L&I Stay at Work program offers to pay 50 percent of the base wage of a claimant for up to 66 days, limited to

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$10,000 over 24 months, if the employer provides light-duty or transitional work to a claimant not yet able to return to full work. L&I will also: provide vocational and return-to-work consulting services; pay up to $3,900 for special training, tools, or clothing required for the claimant to return to work; and pay up to $5,000 for modifications at the work site. If a worker cannot return to a job at his or her pre-injury wage (updated for wage gains during the interim period), but returns to work at a lower wage, L&I compensates for loss of earning power with payments of up to 80 percent of the difference. L&I also offers, under the Preferred Work Program, incentives to employers to hire workers who are unable to return to their past work, and provides safety training and consulting services to employers.

L&I also funds the COHE program. As will be described further in the next section, COHE provides a complementary set of return-to-work supports for workers who choose COHE-affiliated physicians. COHE was developed in 2002 following the Managed Care Pilot (MCP). L&I launched MCP in the 1990s to control growth in medical costs and improve return-to-work outcomes. MCP showed that using managed care arrangements to organize care through an occupational medicine model could save medical costs, reduce worker disability, and improve return-to-work outcomes, but workers in the pilot were dissatisfied with the requirement that they use designated provider networks for care (Cheadle et al. 1999; Kyes et al. 1999; Wickizer et al. 2001 and 2004). L&I launched the COHE pilot in 2002 in an effort to address worker dissatisfaction with the loss of choice under the MCP while still achieving the lower costs and better return-to-work outcomes observed under MCP. As will be described further, the COHE pilot demonstrated that cost savings and better return-to-work outcomes could be achieved without imposing restrictions on provider choice, and it expanded to statewide coverage by 2013.

B. COHEs

The COHEs are private entities that contract with L&I to (1) foster community efforts to improve medical and workforce retention outcomes for workers with compensable conditions by engaging with providers, employers, labor organizations, and the public insurance fund and (2) deliver on a case-by-case basis coordination services designed to ensure that each WC claimant receives evidence-based healthcare and other services in a timely manner and avoids pitfalls that lead to avoidable long-term work disability. In this section, we provide brief descriptions of: (1) the existing COHE institutions, (2) the healthcare providers that work with the COHEs, (3) the qualifications and duties of the health service coordinators (HSCs) who provide COHE services to individuals, (4) the process of case coordination, (5) COHE activities to strengthen the community support system that are not specific to individual cases, and (6) findings from the COHE evaluation.6

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6 In general, employees of self-insured employers do not have access to COHE services, but many of their employers offer other return-to-work services and supports. One of the current COHE organizations has experimented with offering services to self-insured employers.


1. Current COHE organizations and their relationship to L&I

There are six COHEs, each covering a substantial region of the state.\(^7\) Two of them are regional COHEs that work with multiple health systems within their regions. The COHE Community of Eastern Washington, established in 2003, is operated by St. Luke’s Rehabilitation Institute in Spokane and serves a 19-county area. The COHE Alliance of Western Washington, established in 2013, is operated by CHI Franciscan Health, a Catholic Health Initiative health system that serves most of western Washington. Each enrolls providers inside and outside its own health system. The other four centers are institutional in nature: they are operated by large medical systems and exclusively or primarily work with providers within their own systems. The health systems are the University of Washington (UW) Medicine Valley Medical Center in Renton (established as a COHE in 2002), the UW Medicine Harborview Medical Center in Seattle (established as a COHE in 2007), the Everett Clinic in Everett (established as a COHE in 2007), and Group Health Cooperative, with facilities at many locations throughout the state (established as a COHE in 2013 and currently being acquired by Kaiser-Permanente).

The COHEs conduct their work under contract to L&I. The contracts cover staffing requirements, occupational health best practices, organizational leadership, provider education, care coordination service specifications, clinical information system use, and financial terms. L&I pays the COHEs for care coordination on a fee-for-service schedule, and makes an additional fixed administrative payment per claim to cover the costs of services other than care coordination.

2. MPN providers’ affiliation with COHE

Providers in the MPN are not required to affiliate with a COHE and use COHE services, and most do not. In 2016, of the approximately 24,000 providers in the MPN, about 3,000 are COHE providers. Because WC claimants may choose any MPN provider, use of COHE services is determined by whether or not the claimant chooses a COHE-affiliated provider. The extent of COHE affiliation among providers varies substantially across regions, so the extent to which WC claimants receive COHE services also varies across regions. In the first quarter of 2016, the percentage of WC claims that were initiated with COHE providers ranged from 88 percent in the region with the highest percentage of COHE-affiliated providers in MPN (64 percent) to 14 percent in the region with the lowest provider percentage (7 percent). Variation in provider participation reflects the history of COHE establishment across regions and seems likely to decline in the future. The COHE organizations encourage providers to sign up to use COHE services if they treat a large volume of WC claimants. A representative of a COHE we visited indicated that many of its affiliated physicians specialize in occupational medicine. Providers receive incentive payments for filing the L&I Report of Accident Form in a timely manner (see below) and otherwise benefit from the COHE resources—most notably, from the support of the HSC assigned to each claim.

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\(^7\) For more detail, see [http://www.lni.wa.gov/ClaimsIns/Providers/ProjResearchComm/OHS/default.asp](http://www.lni.wa.gov/ClaimsIns/Providers/ProjResearchComm/OHS/default.asp).
3. **Health Service Coordinators**

HSCs are a cornerstone of the COHEs. In general, they have at least a bachelor’s degree, some training or experience in relevant fields, and organizational, information technology, and interpersonal skills that are important for their jobs. They deliver both individual case services and broader educational support for providers and other stakeholders, as described in the next two sections.

4. **COHE case services**

The HSC works directly with injured workers, employers, healthcare providers, and other program participants to coordinate care and return-to-work activities for injured workers. The HSC is responsible for managing a caseload of claims from an assigned group of COHE-affiliated providers. Claim coordination activities include ensuring forms are received and complete; contacting injured workers, employers, providers, L&I staff, and other stakeholders to help with the return-to-work process; and identifying barriers to returning to work and resources to resolve them.

Two physician-completed forms are important to the case services provided by the HSCs. Incentives paid to physicians when they complete the forms timely are a component of the COHE innovation. First, when a worker chooses a COHE-affiliated provider, the provider helps the worker initiate the WC claim by filing an L&I Report of Accident Form. The accident form triggers a report to the employer. One leader of an employer organization said employers appreciate the timely reporting of the worker’s status because they gain a sense of when the employee is likely to return, which allows them to plan for the absence and the return. L&I also requires the provider to complete and submit an L&I Activity Prescription Form if there are work restrictions. This form is designed to communicate the worker's ability to participate in work activities, activity restrictions, and the provider's treatment plans. The completed documents are an important source of information for the HSC and for communications between all stakeholders. The L&I case manager also uses this information for determining whether the worker is eligible for cash benefits and in reviewing requests for prior authorization for services that require such authorization to be covered by L&I.

The COHE assigns an HSC to every claim filed by a COHE-affiliated provider. For each claim, the primary function of the HSC is to monitor progress, identify issues, and facilitate communication between providers, the worker, the employer, and the L&I case manager. The HSC uses L&I’s Occupational Health Management System (OHMS) to monitor claims.

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8 One COHE we visited provided the following minimum qualifications for an HSC: bachelor’s degree or equivalent; three years of experience in direct patient care, return-to-work coordination, occupational healthcare, or the equivalent; ability to make presentations to professional and non-professional audiences; computer skills with proficiency in Word, Excel, and PowerPoint; experience in community outreach/organizing, data management and tracking, communication with or facilitation of diverse groups with equanimity/balance; and two years of experience training in a healthcare delivery system or training in a healthcare environment. Preferred qualifications include: bilingual in English and Spanish; master's degree; experience or certification as a vocational counselor, nurse case manager, accredited case manager working with injured workers in an industrial insurance system or healthcare setting, or equivalent certification or experience in a healthcare setting (such as a physical therapist or occupational therapist); and experience or demonstrated skill in data management and tracking, and in oral and written communication with healthcare professionals as well as patients.
information, determine if assistance is warranted and, if so, what assistance is appropriate. OHSM gives the HSC access to reports from providers, the L&I claims manager, the employer, and the worker. The HSC looks for indicators for claims that are likely to be long-term, or claims not progressing as anticipated. Either might benefit from the HSC’s facilitation. The OHMS creates a risk score based on a checklist of potential medical, administrative, patient, workplace, or other barriers to return to work. Some items in the checklist are automatically populated from other sources. Examples include indication of time loss, legal representation on claim, history of three or more providers on the claim, primary language not English, and prior claims. The HSCs can also add any risk factors they deem necessary. A COHE we visited also gives its providers a checklist the provider can fill out and submit to trigger HSC involvement and a conference to develop a coordinated plan.

At a COHE we visited, HSCs intervened in only 22 percent of new claims received after the initial screening. That low percentage reflects the large number of claims for relatively minor conditions that require routine medical treatment only, few of which result in 10 or more days of work loss.

When the HSC identifies a need for facilitation, she or he typically contacts one of the parties involved (worker, provider, L&I, and employer) to obtain more information and discuss next steps. The other parties involved may also initiate a request for the HSC’s assistance. In general, the HSC:

- Helps ensure that treatment follows best practice guidelines.
- Works directly with the provider(s), worker, employer, and L&I claims manager to develop an appropriate return-to-work plan (including partial work when warranted); manages expectations; provides technical assistance; supports access to other L&I resources; responds to questions; and documents the case.
- Makes recommendations about using physician specialists (subject to L&I utilization review).
- Provides access to physician advisors. These clinical experts are available to mentor providers, provide consultation, and accept referrals from COHE providers. Our understanding is that providers vary in their use of these services; some are reluctant to consult with unfamiliar advisors. Providers in institutional COHEs may be more likely to do so because the advisors are in their own institution.

One COHE we visited provided the following information about staffing: it employs 12 full-time equivalent staff, including 9 HSCs. These staff review approximately 215 cases per month, but most require no HSC action and are closed quickly. The minority that require follow-up are usually followed for up to 12 weeks, but are often closed earlier. The HSC may continue to assist on cases that remain open, up to 26 weeks (six months). If the WC claim remains open at the end of the COHE period (no more than six months) the HSC typically makes a recommendation for post-COHE recovery and return-to-work services. An HSC is typically providing active support to approximately 60 cases at any time.
5. **COHE support for providers and other stakeholders**

The COHEs also conduct activities that are not specific to individual claims, but are designed to improve workforce retention practices by all stakeholders in the community. Most notably, COHEs help to develop and pilot emerging best practices and provide technical assistance to help providers implement them. Three current examples are:

- Training physical and occupational therapists in use of the Progressive Goal Attainment Program (PGAP), an activity coaching/motivational intervention;
- Development and use of the Functional Recovery Questionnaire (FRQ) and Interventions (FRI), a six-question screening tool to identify workers at high risk for long-term disability, with a follow-up protocol initiated by HSCs to develop and execute an intervention plan that includes components such as PGAP, advisor referral, and functional recover interventions; and
- Three pilot projects concerning four new best practices for workers requiring surgery.\(^9\)

The HSCs also provide outreach and training to participating stakeholders including: initial orientation for new healthcare providers, clinics, and support staff; annual ongoing education for providers; and outreach to business and labor groups.

6. **Findings from the evaluation of COHE for WC claimants**

L&I contracted with UW’s School of Public Health to conduct an independent evaluation (Wickizer et al. 2011). The COHE pilot was conducted in Renton (UW Medicine, Valley Medical Center of Puget Sound) and Spokane (St. Luke’s Rehabilitation Institute). The evaluation is based on claims filed between July 2004 and June 2007, after each center had two years to establish itself. In essence, the evaluation estimated impacts as differences in mean outcomes for claimants served by COHE-affiliated physicians and mean outcomes for contemporaneous claimants served by other physicians in the same catchment area after subtracting out differences in mean outcomes for claimants served by the same two groups of physicians in the period prior to COHE’s establishment.

Over the 12-month evaluation period, the intervention led to reductions in: disability days, labor force exits, total WC costs, and entry into SSDI. COHE reduced lost work days by 20 percent and reduced the number of WC claimants out of work and receiving cash benefits as of the end of month 12 by 21 percent. For back sprain cases, COHE reduced lost work days by 30 percent and the number of claimants out of work and receiving cash benefits at month 12 by 37 percent. COHE reduced total WC expenditures per claim by $412, or by about 12 percent of what average costs per claim would have been in the absence of COHE. The point estimate for the reduction in medical costs per claim, including the costs of COHE services, is $145. Longer-term savings are almost certainly higher because of the 21 percent reduction in workers remaining out of work and receiving cash benefits at month 12, but by how much is not known. L&Is actuaries consistently find that lifetime costs of WC claims for workers whose first attending provider is a COHE provider (“COHE claims”) are lower than those for other workers.

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(“non-COHE claims”) after adjustment for case mix: about 15 percent ($3,000) lower for claims initiated in fiscal year (FY) 2014.\(^\text{10}\) Preliminary analysis also suggests that COHE eventually reduced SSDI entry among COHE pilot participants by 26 percent in the eight years after filing their WC claim (Franklin et al. 2015).

C. Services and supports for Washington workers with non-compensable conditions

Workers who experience non-compensable conditions have access to a variety of services and supports, but in varying degrees, and they usually must navigate through them on their own. All such workers have some level of access to healthcare, and most have health insurance. Some workers also have private short-term disability insurance (STDI) or long-term disability insurance (LTDI) or both. Workers can potentially obtain state VR services, unemployment benefits, and employment and training services from state agencies. They may also apply for SSDI benefits.

1. Health insurance

Health insurance is an especially important consideration for any system under which COHE services would be available to workers with non-compensable conditions. There are two reasons for that. First, many of the services that such a worker would require are likely to be covered health services. Second, COHE services are not currently covered by health plans, but potentially could be. Health plan coverage of COHE services might be attractive to insurers and their employer and worker customers if they pay for themselves through reductions in other healthcare costs and lost work time.

Washington’s implementation of the Affordable Care Act (ACA) Medicaid expansion and Health Insurance Exchange (HIE) in 2014 substantially reduced the uninsured rate for the state’s working-age population. In 2014, an estimated 88 percent of Washington adults ages 18 to 64 were insured, up from 84 percent in 2013.\(^\text{11}\) The insurance rate for workers in households with incomes that are between 138 percent of the federal poverty level (FPL)—the effective income limit for the Medicaid expansion—and below 400 percent of the FPL are of special relevance to the financing of services for relatively low-wage workers. For 2014, the estimated insurance rate was lowest for those with incomes between 138 and 149 percent of the FPL (85 percent), increasing to 93 percent for those with incomes between 300 and 399 percent of the FPL (Kreidler 2016). Although many in this income range remain uninsured, the percentages are considerably higher than the estimates for 2013 (58 and 85 percent, respectively).

Washington created its own HIE, the Washington Health Benefit Exchange (WHBE), an independent state organization that operates under a board appointed by the governor and legislative caucuses. WHBE operates an online enrollment platform called Washington

\(^{10}\) This is based on the simple average of quarterly statistics for 2013 quarter 3 (Q3) through 2014 Q2, provided by L&I. The statistics exclude claims that started with an inpatient hospitalization of four or more days and also exclude Harborview COHE claims.

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Healthplanfinder. Individuals and small employers (50 or fewer employees) can purchase coverage through the exchange. The two insurers that offered plans in all or almost all counties of Washington in 2015 and are expected to continue to do so are of special interest for the purposes of any future demonstration: LifeWise Health Plan of Washington and Premera Blue Cross.\(^\text{12}\) It is also important to note that residents with household incomes below the Medicaid expansion standard (effectively 138 percent of FPL) may enroll in Apple Health, the state’s Medicaid program, and the state offers a Medicaid Buy-In (MBI) program for workers with disabilities—Healthcare for Workers’ with Disabilities (HWD). As in other states’ MBI programs, HWD allows workers with qualifying disabilities (equivalent to the eligibility criteria for SSDI) and incomes that would otherwise disqualify them for Medicaid to pay a sliding scale premium to enroll in Medicaid. This could be an attractive option for a subset of workers with new non-compensable conditions: ones with medical conditions that meet SSDI eligibility criteria, have incomes within the qualifying income range, and need the home and community-based services that are covered by Medicaid, but not by other insurers, in order to stay in the labor force.\(^\text{13}\)

Washington’s Health Care Authority (HCA), which is responsible for Medicaid, recently launched the Healthier Washington initiative, aimed at improving healthcare outcomes for all Washington residents. With support from the Center for Medicare and Medicaid Innovation, HCA is collaborating with private and local organizations to build healthier communities by integrating physical and behavioral health services in a manner that focuses on the whole person, and changing payment systems to reward quality over quantity.\(^\text{14}\) Although these efforts could have positive effects for workers who experience non-compensable illnesses or conditions, there is no specific effort targeted at workers with such conditions or at making employment an important health outcome.

Workers with STDI and LTDI coverage usually are enrolled in employer group plans, and sometimes in labor organization plans. We do not have specific information about plans in Washington, but our expectation is that, as is true nationwide, large employers and employers of highly skilled workers are much more likely to offer coverage than medium and small employers. Such employers are also more likely to be self-insured for health insurance and WC.

2. Vocational rehabilitation services

Vocational rehabilitation (VR) services are provided by Washington’s DVR.\(^\text{15}\) As in other states, the federal Rehabilitation Services Administration provides approximately 80 percent of DVR funding each year; the balance comes from the state. Individuals are eligible for services if they have a significant impairment that interferes with their ability to work, and they require VR services to obtain or maintain employment. When resources are limited, the DVR must give


\(^{13}\) See https://www.dshs.wa.gov/esa/community-services-offices/apple-health-workers-disabilities-hwd-program.

\(^{14}\) The upper MBI income limit in Washington is 220 percent of the FPL.

\(^{15}\) A separate Department of Services for the Blind (DSB) serves those with profound visual impairments.
priority to those with the most significant impairments under established order of selection rules, but Washington is not currently under order of selection. Although DVR can serve workers who already have jobs, the vast majority of DVR customers are not employed; they are attempting to enter the labor force or re-enter it after a long absence. DVR is not actively offering services to workers who have just experienced a condition that might lead to prolonged absence from the labor force.

3.  Unpaid leave

The federal Family Medical and Leave Act entitles all workers to up to 12 weeks of unpaid medical leave. The state does not require employers to provide paid leave of any sort, but some of the major municipalities do. For instance, Seattle requires all firms to provide accrual of paid sick leave at a rate of between 1 hour per 40 hours worked and 1 hour per 30 hours worked, and to accumulate total hours between 40 and 72, depending on the size of the firm (the lowest requirements are for small firms).16 Many employers, especially large ones, offer some paid leave as an employee benefit even when they are not required to do so.

4.  Unemployment benefits

Washington’s ESD provides unemployment benefits to qualified workers who are unemployed, but individuals who have ceased working because of a medical condition are generally not eligible unless a physician certifies that they can resume work. To be eligible, unemployed workers must: meet minimum work history requirements, be looking for work, and have been laid off for a reason other than misconduct. Unemployment benefits are financed by a payroll tax on employers, which is experience-rated.

Two unemployment benefit provisions are of special note because they suggest the potential for a new provision to accommodate workers who must miss or reduce work because of a medical condition, but intend to return to or scale up work once their condition improves. The first is that the looking-for-work requirement can be waived for workers on temporary layoff if the employer plans to rehire the worker (or a group of workers) on a specific date within eight weeks. A related provision allows for shared work when the employer temporarily reduces hours of permanent employees due to inadequate workloads rather than choosing to lay off some and keep others full time. Again, the employees need not look for work. As will be discussed in the next section, these provisions could provide models for a “medical” unemployment benefit.

5.  Other return-to-work services

ESD also administers a variety of employment and training programs, none of which is targeted specifically at workers who have left work due to a medical condition. ESD is also an active partner in WorkSource, a public-private partnership to help workers find jobs and pursue

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career training. WorkSource provides many services online and operates 60 centers around the state.\textsuperscript{17}

6. Workforce Board

Washington’s Workforce Training and Education Coordinating Board (Workforce Board) has high-level responsibility for planning and coordinating state efforts to develop and maintain the workforce. Its scope includes DVR, the employment and training programs administered by ESD, and many employment and training programs administered by other agencies. The Workforce Board would have to play an important planning and oversight role in any effort to expand COHE services to workers with non-compensable conditions.

\textsuperscript{17} WorkSource Center is Washington’s name for America’s Job Center (AJC). Starting in 2015, ESD has undertaken an effort to make AJC services accessible to more adults with disabilities, under a Disability Employment Initiative grant from the U.S. Department of Labor.
III. FEASIBILITY OF PROVIDING COHE SERVICES TO WORKERS WITH NON-COMPENSABLE CONDITIONS

We believe that: (1) the COHE organizations can, in principle, deliver services to workers with non-compensable conditions with only modest and quite feasible changes relative to how they deliver services to WC claimants; and (2) integrating the services into the rest of the support system for workers with non-compensable conditions is possible, but more challenging. Integration into the support system is complicated because the various components of that system (outlined above) are not viewed or managed as a system. That stands in sharp contrast to the public WC system, which is managed by a single state entity that is wholly responsible for program administration and financing, L&I. That feature of the WC system greatly facilitated development and integration of COHE within the system.

COHE services for workers with non-compensable conditions would have to be integrated into the activities of key stakeholders within the highly fragmented non-compensable system, at two levels: the individual-case level and the community level. Several public and private stakeholders are responsible for various pieces of the system and there is no system in place to support routine communication between stakeholders on individual cases or at the community level. Therefore, at least some changes to the system will be necessary to make effective use of COHE services for workers with non-compensable conditions. Modest changes to aspects of COHE other than those that are system-related will also be necessary to make COHE services for such workers as effective as they are for WC claimants.

In this section, we focus on the integration of COHE services into the support system for workers with off-the-job conditions, as summarized in Table III.1. The 11 headers in the table identify important features of the current L&I system for WC claimants. The first 9 refer to features that are not specific to COHE; the last 2 refer to COHE features. The bullets in the left column for each header (and under the heading at the top for WC) provide information about that feature under the WC system, consistent with the more detailed information in the previous chapter. Most of the bullets in the right column under each feature identify the elements of the support system for workers with non-compensable conditions that we think would have to be changed to effectively integrate COHE services into that system. The remaining bullets, each labeled Option, indicate other system changes that might increase the effectiveness of COHE services for workers with non-compensable conditions, and they might not be feasible. Whether or not an option, each bullet on the right side indicates a change that would bring the support system for workers with non-compensable conditions more in line with the L&I system for WC claimants.

A. Administration and integration

Perhaps the most challenging part of integrating COHE into the support system for workers with non-compensable conditions is to get stakeholders to recognize that it is, in fact, a system and it will be necessary to create a minimal management infrastructure sufficient to support the integration of COHE. This will require designating a state agency as the lead. It will also require that the agency develop a collaborative relationship with other state agencies that are already involved in providing support to workers with non-compensable conditions, as well as with private sector stakeholders (most notably industry and labor organizations and healthcare...
## Table III.1. Summary of modified support system for non-compensable conditions compared to system for conditions compensable under WC

<table>
<thead>
<tr>
<th>Public WC system for compensable conditions</th>
<th>System for non-compensable conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Administration and integration</strong></td>
<td><strong>System for non-compensable conditions</strong></td>
</tr>
<tr>
<td>• Department of Labor &amp; Industries (L&amp;I)</td>
<td>• ESD</td>
</tr>
<tr>
<td></td>
<td>• Collaboration: Workforce Board, HCA, DVR, L&amp;I</td>
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<tr>
<td><strong>Advisory board</strong></td>
<td></td>
</tr>
<tr>
<td>• WC Advisory Committee</td>
<td>• New board with representation from private and public sector employers, labor, affected state agencies, health care providers</td>
</tr>
<tr>
<td>• Advisory Committee on Healthcare Innovation and Evaluation</td>
<td></td>
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<tr>
<td><strong>Financing</strong></td>
<td></td>
</tr>
<tr>
<td>• Employers, via payroll tax to L&amp;I</td>
<td>• Workers and employers, via premiums to health insurers</td>
</tr>
<tr>
<td></td>
<td>• Federal and state funds for VR</td>
</tr>
<tr>
<td></td>
<td>• Medicaid</td>
</tr>
<tr>
<td></td>
<td>• <strong>Option</strong>: Payroll tax</td>
</tr>
<tr>
<td></td>
<td>• <strong>Option</strong>: Targeted federal funding</td>
</tr>
<tr>
<td><strong>Healthcare providers</strong></td>
<td><strong>Primary care and specialist physicians in health plan</strong></td>
</tr>
<tr>
<td>• L&amp;I MPN</td>
<td>• Provider seeks payment for each encounter and typically:</td>
</tr>
<tr>
<td>• Many specialists in occupational medicine</td>
<td>• Files claim with health insurer</td>
</tr>
<tr>
<td>• Initiate WC claim (covers entire episode)</td>
<td>• Bills patient in full or for balance</td>
</tr>
<tr>
<td>• Paid by L&amp;I for completion of Report of Accident, Activity Prescription Form, and phone calls/emails to employer and payer</td>
<td>• Paid by health insurer for completion of Activity Prescription Form and telephone calls/emails to COHE, employer, or payer</td>
</tr>
<tr>
<td><strong>Rehabilitation, long-term services, assistive devices, accommodations, other services</strong></td>
<td><strong>WorkSource assists with retraining, finding new jobs</strong></td>
</tr>
<tr>
<td>• Provided or purchased by L&amp;I or employer</td>
<td>• Other items provided or purchased by VR, Medicaid, worker, employer or non-governmental community organization/charity</td>
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<tr>
<td></td>
<td><strong>COHE case services</strong></td>
</tr>
<tr>
<td>• Receives notice of new claim after report of injury is sent to L&amp;I by physician</td>
<td>• Receives notice of worker absence from supervisor or absence management system</td>
</tr>
<tr>
<td>• Return-to-work expertise and support provided to employer via COHE and VR experts within L&amp;I</td>
<td>• COHE provides simple return-to-work expertise and support to supervisor, and refers to ESD and DVR if needed</td>
</tr>
<tr>
<td>• L&amp;I may temporarily subsidize wages after return to partial duty</td>
<td>• <strong>Option</strong>: Return to work wage subsidies</td>
</tr>
<tr>
<td>• Risk-rated premiums</td>
<td>• <strong>Option</strong>: Health insurance premium discount</td>
</tr>
<tr>
<td></td>
<td>• <strong>Option</strong>: Unemployment tax rate invariant to use of medical unemployment benefit (see cash benefits)</td>
</tr>
<tr>
<td><strong>Employer supports and incentives</strong></td>
<td><strong>Cash benefits to worker</strong></td>
</tr>
<tr>
<td>• Receives notice of new claim after report of injury is sent to L&amp;I by physician</td>
<td>• Eligible for 12 weeks of unpaid leave</td>
</tr>
<tr>
<td></td>
<td>• Spotty access to paid leave, especially if a worker with low skills</td>
</tr>
<tr>
<td>• Return-to-work expertise and support provided to employer via COHE and VR experts within L&amp;I</td>
<td>• <strong>Option</strong>: Time-limited wage-replacement benefit designed to support workforce retention</td>
</tr>
<tr>
<td>• Onsite return to work productivity support</td>
<td><strong>Information system and tools</strong></td>
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<td></td>
<td>• COHE has access to</td>
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<td></td>
<td>• WC claim management information system</td>
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<tr>
<td></td>
<td>• OHMS</td>
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<td></td>
<td>• Alternate method for reliably/timely alert to COHE re: occurrence of new disabling episodes</td>
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<tr>
<td></td>
<td>• Situation information system modeled after OHMS, with controlled access for communications with all stakeholders</td>
</tr>
<tr>
<td><strong>System navigation support</strong></td>
<td><strong>COHE community services</strong></td>
</tr>
<tr>
<td>• Medical practitioners, WC claims manager and COHE HSC</td>
<td>• Recruitment of and relationship building with referral sources and other system participants, including health insurers and other state agencies as well as employer and labor groups</td>
</tr>
<tr>
<td></td>
<td>• Medical practitioners, health insurer and COHE HSC</td>
</tr>
<tr>
<td></td>
<td>• New stakeholders include health insurers and other state agencies as well as a wider range of medical specialists AND mental health practitioners</td>
</tr>
<tr>
<td></td>
<td>• There may be no employer or payer involved.</td>
</tr>
<tr>
<td></td>
<td>• Otherwise same as under WC</td>
</tr>
<tr>
<td></td>
<td>• Otherwise same as under WC</td>
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<tr>
<td></td>
<td>• HSC:</td>
</tr>
<tr>
<td></td>
<td>• Monitors case activity</td>
</tr>
<tr>
<td></td>
<td>• Instigates/facilitates communications with all stakeholders, focuses on solutions, keeps process moving forward</td>
</tr>
<tr>
<td></td>
<td>• Recommends actions as issues arise</td>
</tr>
<tr>
<td></td>
<td>• <strong>Education of stakeholders on value of workforce retention support and best practices</strong></td>
</tr>
<tr>
<td></td>
<td>• Recruitment, training, feedback, and mentoring for medical/mental health practitioners</td>
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</tbody>
</table>
systems). We have suggested ESD, because its mission is most consistent with the primary objective the initiative: to enhance the job security of Washington workers. The Workforce Board should be involved because it is a partnership between labor, business, and government dedicated to serving the common goals of state workers and employers in a collaborative fashion. DVR and HCA should be involved because they are responsible for programs that sometimes provide services to workers with non-compensable medical conditions. L&I must be involved because of the need for some coordination between the WC system and the system for non-compensable conditions, partly because providers, employers, and workers will be involved with both systems and partly because there will be disputes or uncertainty concerning whether a case is a job-related condition or non-compensable. In addition, L&I could potentially provide workers with non-compensable conditions and their employers with VR services that L&I already provides for WC claimants.18

Whether it is ESD or another agency, the lead agency’s mix of responsibilities would be quite different from the mix of L&I’s responsibilities for WC. It would primarily lead the organization of the system and support collaboration among stakeholders, not directly provide services to workers and, as will be discussed further below, would be responsible for financing only a small share, at most, of the support provided to workers.

B. Advisory board

In addition to working with other stakeholders on a day-to-day basis, the lead agency will need a mechanism to achieve consensus among stakeholders on strategic issues, comparable to the advisory boards that serve this purpose for the WC system. During our site visit, many stakeholders in the current COHE system commented that a key to its success is that it came from, and continues to be, a collaborative effort of all stakeholder groups. Employers and labor organizations alike recognized that some WC claimants were receiving inadequate or inappropriate care and experiencing unnecessarily long work absences or, in some cases, leaving the labor force—outcomes that both groups saw as undesirable

Our recommendation is to convene an advisory group for the new system early, in preparation for a pilot test (see Chapter IV), then keep this group in place as the pilot is completed and, presuming success, the system is scaled up. This suggestion is partly based on past COHE development experience and partly on clear statements from business and labor representatives indicating that a well-designed expansion of COHE, to encompass non-compensable conditions, would be welcomed. We suggest that the Workforce Board convene this group initially, as it already convenes representatives of labor and industry to address state workforce issues. The responsibility for convening the group could be transferred to the lead agency for the new program once the program becomes permanent.

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18 We also considered an alternative under which L&I would be the lead agency. Conceptually, this seems attractive because L&I could leverage the systems already in place for WC claimants. L&I staff indicated, however, that the agency would have to surmount many technical difficulties to administer the two similar, yet substantially different systems, and believe it would be better to designate another agency as the lead for the non-compensable system.
C. Financing

Our expectation is that long-term financing would come from multiple sources. It appears that a substantial share of these funds could be generated by reallocating available funds because of the savings that the new services are expected to produce. The system will also require some funds from new revenue sources.

We think it would be reasonable to have health insurers pay for COHE services, following a fee structure similar to L&I’s model for COHE. That reflects the nature of the services and a finding from the original COHE pilot that the introduction of COHE paid for itself through lower medical costs. The same may or may not be true in the non-compensable arena, and is an issue that should be addressed in any pilot (see the next section).

Services or supports provided by EDI, DVR, or HCA (see below) under existing programs could be included under budgets for those programs. That would likely require an increase in funding for those programs or could possibly be funded out of existing funding sources for those programs. Still, allocations of funds to those budgets would, we assume, have to increase, or the agencies would have to scale back other services they finance. Because these programs are funded in part by the federal government, any federal effort to encourage this initiative should consider targeted expansion of funds for these programs. Waivers to existing programs might be required in some instances. Our expectation is that funding for any services provided by L&I would have to come from some source other than the public WC fund.

Any additional funds required to support the program could reasonably be sought from the programs and stakeholders that are likely to benefit most. The programs we expect to save the most are SSDI and Medicare, both federal. Small increases in state payroll taxes on employers and workers would probably be appropriate, as both groups will presumably benefit a great deal, but such increases are unlikely to occur without more definitive evidence of the benefits. It would also be reasonable to fund some services that are specific to a case through fees charged to workers or their employers, but relying primarily on such fees could lead to financing problems, exacerbate financial hardship, and result in sub-optimal use of services. Gaining a better understanding of the benefits and costs for each stakeholder group should be an important goal of any pilot (see Chapter IV).

The crowding out of WC and private disability benefits is a substantial financial risk to the new system. That is, workers who under the current system receive workforce retention support from L&I, self-insured employers, or private disability insurers might start to receive services under the new program instead. The result might be a shift in financial responsibility from existing benefits to the new program with little or no change in workforce retention for the workers. The administrators of the new program will need to work with L&I to ensure that services provided to workers with compensable conditions are supported by the public WC fund. Consideration must also be given to rules and regulations that govern employers who are self-insured for WC and private disability insurance. Such rules and regulations could require the insurer or employer to either provide adequate workforce retention support themselves or to pay a fee so their covered workers can use the new program. If health insurers fund the COHE services for non-compensable conditions, they would also play an instrumental role in preventing crowd out. They would be obliged to pay only for services provided to their covered workers,
and could consider, on a case-by-case basis, whether the services should be covered under another benefit that is available to the same workers. Insurers already have a great deal of experience in such “coordination of benefit” activities.

D. Healthcare providers

Physicians who serve workers with non-compensable conditions are less likely than physicians who serve workers with compensable conditions to specialize in occupational medicine. Workers with non-compensable conditions are most likely to see primary care physicians (PCPs) initially, then be referred to specialists, if necessary. Hence, an expansion would likely require that the COHEs recruit and train many PCPs, particularly those who primarily treat working adults. To maximize effectiveness, it would be desirable if health systems, insurers, employers, labor organizations, and public service advertisements were to encourage workers to use COHE-affiliated physicians.

Our assumption is that COHE-affiliated providers would initiate COHE services through the health insurance claims process and completion of an Activity Prescription Form, similar to the process under WC. It would be necessary to develop eligibility criteria for this purpose. Eligibility might depend on the nature of the medical condition (some conditions will not require substantial time off from work or involve no risk of work disability; others clearly require separation from work for longer than six months), whether the condition is compensable under WC or other insurance. Moreover, the consent of the worker to share information with the employer or other stakeholders is needed for COHEs to operate effectively.

E. Other services

Some workers will require rehabilitation, vocational counseling, accommodations, or assistive devices to return to work. In principle, these could be provided by DVR and funded by DVR’s annual federal grant, with state matching funds. Workers with sufficiently low incomes might find that they could obtain some such services and supports by enrolling in the Medicaid Buy-in program. Another option would be to expand the VR services provided to WC claimants and their employers by L&I. We do not have good information on the extent to which L&I provides such services to WC claimants in support of efforts to return to work.

F. Employer supports and incentives

Because employer cooperation is vital for workforce retention efforts to be successful, the WC system has several features to foster such cooperation. This is notably absent in the case of many workers with non-compensable conditions—especially those with the fewest skills who are most easily replaced. Furthermore, such support seems critical for COHE services to succeed, because an important function of the COHEs is to align the efforts of employers with those of other stakeholders. We think the system must include, at minimum, a mechanism for reporting to the employer as well as ways of providing return-to-work expertise and support to the employer, similar to that provided by L&I for employers of WC claimants. Other options could also be considered, but they will add considerably to the cost, and the extent to which they would be critical to the success of COHE is not known. Two options could be modeled after L&I incentives for WC cases: wage subsidies for workers not able to fully resume their past duties, and incentives built into employer health insurance premiums. Also, new unemployment
insurance benefits paid to a participating worker, if adopted (see below), should have little or no effect on unemployment taxes paid by the worker’s employer.

**G. Cash benefits**

Without any changes to the current system, the cash benefits that workers with non-compensable conditions receive before full return to work will vary considerably from person to person, and will be quite different from those available to WC claimants. All will be eligible for 12 weeks of unpaid leave, and some will be eligible for paid leave for varying lengths of time (by using accrued paid sick leave or vacation). It seems likely that those with the fewest skills are the least likely to receive cash benefits, and they will be most likely to experience financial hardship. For such workers especially, the absence of a cash benefit may discourage him or her from purchasing services needed to return to work, and may encourage returning to work too quickly, applying for unemployment benefits, applying for welfare benefits (especially if he or she is a parent), or pursuing SSDI and SSI benefits rather than returning to work.

A new, carefully designed, short-term medical wage-replacement benefit could potentially be made available to workers who, with the cooperation of their providers and employer, establish and follow an approved plan to return to work. The specified contingencies are important because a cash benefit designed primarily to compensate the worker for lost wages, without such contingencies, could undermine the workforce retention goal of the new program by making it easier for workers to stay out of the workforce for prolonged periods, inviting misuse and abuse (moral hazard), and inflating program costs. In WC, cash benefits are provided primarily for equity reasons, not to hasten return to work, and the effect of moral hazard on absence from work is a major concern. WC insurers invest considerable administrative effort to limit its effects. It is possible, perhaps even likely, that the absence of any cash benefit for workers with non-compensable conditions might make providing COHE services more effective in increasing workforce retention than they are under WC. It is also possible that a cash benefit designed primarily to support workforce retention, rather than for equity reasons, might do so.

One option is to introduce a partial wage-replacement benefit to workers who are expected to recover and fully return to work within 12 weeks (the FMLA time limit), but who need time to recover; it would not be intended to provide a benefit bridge during the five-month SSDI waiting period. Following private STDI practices, the duration of the cash benefit could be based on established recovery guidelines for the worker’s condition. The treating physician’s activity prescription, which COHE-affiliated physicians would be required to complete, would serve as the physician’s recommendation for how long the payment period should last. Extension of the benefit beyond 12 weeks—perhaps up to 26 weeks—would be contingent on a clear plan for return to work by the end of that period. We have explored whether such a benefit could be an option under a state’s unemployment insurance (UI) benefit, but it appears that a change in federal law would be required to allow a state to add such an option.\(^\text{19}\)

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\(^{19}\) This statement is based on a discussion with staff in the U.S. Department of Labor’s Employment and Training Administration. Current federal law requires UI recipients to be able to work.
Evidence to support the requirement that workers receiving a cash benefit establish and follow a return-to-work plan comes from a recent U.S. Department of Labor demonstration, although it is indirect. That study found that when job-entry assistance requires a worker to follow a well-developed and approved return-to-work plan, developed with a professional counselor, rather than allowing the worker to use available job-entry assistance without such a requirement, better employment outcomes are achieved (Perez-Johnson et al. 2011). VR experts at L&I or DVR could work with the worker, employer, and providers to develop the plan, and the COHEs could have an instrumental role in monitoring progress and the adherence of the worker and other parties to the plan. Ultimately, the program administrator could withdraw cash benefits if it becomes apparent that the worker is not making adequate progress toward returning to work. The worker would always have the option of applying for SSDI benefits, and the record of treatment and effort to return to work while receiving the temporary wage-replacement benefit could be used as part of the SSA’s medical eligibility determination.

The temporary wage-replacement benefit could also incorporate re-entry incentives in the payment structure. Washington’s shared work program provides a model for this: when the worker is ready for partial return to work, the wage-replacement benefit could be converted to a wage supplement. This would be similar to the Stay at Work compensation available to Washington WC claimants who return to work but for fewer hours per week than before. Rhode Island’s statewide temporary disability insurance program has a similar feature (Ben-Shalom 2016).

Even if a temporary-wage replacement benefit has the features described above, the potential for misuse and abuse could remain high. A waiting period that is longer than the comparable waiting period for WC benefits (three days) should be considered, to further guard against moral hazard.

The wage-replacement benefit described above could be viewed as a major step toward paid medical leave. To control costs, it would be necessary to limit use to the purpose intended—to ensure that workers with medical conditions that might lead to long-term exit from the labor force receive the care and other services they need to return to their jobs in a timely manner. Under WC, the three-day waiting period serves that purpose; a longer period might be desirable for non-compensable conditions. Importantly, the benefit would not be available to those with conditions so severe and long lasting that there is no chance they will return to work within the required time limit; instead, the expectation is that such workers would qualify for SSDI after the five-month SSDI waiting period.

**H. Information system and tools**

HSC access to important, but restricted, information is integral to the success of the COHEs in WC. Importantly, WC insurers and their agents are exempted from the Health Insurance Portability and Accountability Act (HIPAA) provisions that restrict physician sharing of medical information with employers and other interested parties without the worker’s consent. Health information may be disclosed to certain stakeholders without the worker’s consent, but only to the extent that the information disclosed is needed to accomplish the WC purpose, as required by 20

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State law or other law. HSCs have access to claim information via the OHMS, described earlier. OHMS goes beyond providing access to information by including tools that help HSCs efficiently perform their work. Importantly, our understanding from discussions with L&I is that HIPAA issues have been a major obstacle to past unsuccessful L&I efforts to pilot extension of COHE services for self-insured employers and their workers. Without a change in HIPAA, it seems likely that disclosure of medical information to the COHE or any other parties will only be allowed with the consent of the worker. That may limit the usefulness of a COHE expansion for some types of cases for which workers are least willing to disclose information (importantly, those involving mental health), or for cases where the worker is unwilling to disclose.

The absence of similar systems to support workers with non-compensable conditions is a significant barrier to COHEs becoming successful when a condition is non-compensable, and HIPAA adds significantly to the challenge of overcoming this barrier. It will be necessary to develop information systems that allow HSCs to access information from providers and other stakeholders as well as to limit the HSC’s access to medical information without the consent of the worker. Further, this system will have to be integrated in various ways with systems that are already in place. We do not have enough information about the information technology environment inside or outside WC to make more specific recommendations. Considerable effort will be required to review those systems, the functional requirements of a new system, and the design and implementation of a system that will meet those requirements.

I. System navigation support

Whether a condition is compensable under WC or not, workers ultimately must take on much of the responsibility for navigating the care system. Usually the worker makes the decision to seek medical care or other assistance on his or her own, and must make decisions about care and tend to the myriad of details that require follow-up. The WC system supports the worker’s navigation through the system in many ways, beginning with educating employers, workers, healthcare providers, and other stakeholders about the system. Healthcare providers and their staffs help the worker initiate the WC claim. If the worker uses a COHE-affiliated provider, the COHE HSC can play an important assistive role.

For COHE services to be maximally effective for non-compensable conditions, other stakeholders must provide navigation assistance to workers—to encourage them to seek care from affiliated providers and give accurate information about the program and how it can help. The lead agency for the new system will have the ultimate responsibility for garnering stakeholder assistance in providing program navigation. The COHEs’ community services, described below, can be an important piece of this effort.

J. COHE case services

The services provided by COHE HSCs to workers with non-compensable conditions could be essentially the same as those WC claimants now receive, but some details might need to change. For instance, the criteria for selecting cases for follow-up action could be more restrictive: COHE resources could focus more on preventing unnecessary exit from the workforce rather than reducing lost work time in all cases. For two practical reasons, however, our sense is that the criteria should be the same. First, it would be complicated for HSCs to use two sets of criteria. Second, many cases that end in long-term job loss and exit from the labor
force start out as cases that are expected to result in near-term return to work. Hence, much of an HSC’s time is spent reviewing cases for potential problems, and taking action in only a small minority of those reviewed.

Some changes in COHE services may be necessary because some medical conditions that are common in non-compensable cases are uncommon or non-existent in WC cases. Examples of conditions uncommon in WC cases that are more common in non-compensable cases and likely to disrupt work include diabetes, cancer, and significant psychiatric issues. The COHE approach to promoting quality healthcare and reducing lost work time could work well for many significant conditions that are uncommon in WC, but that might require adapting the existing system. There are also non-compensable conditions that might prompt a worker to visit a medical provider but that require little or no time off from work. COHE-affiliated providers could be trained to not file reports for such cases, in order to avoid burdening the COHE system.

Health Insurance Portability and Accountability Act (HIPAA) restrictions relating to the sharing of medical information with employers and other stakeholders could create barriers to the success of COHE services for non-compensable conditions. WC has HIPAA exemptions regarding the sharing of medical information about WC claimants with employers and other stakeholders, and claimants have protections against misuse of information by their employers. If no legislative or regulatory changes are made to the HIPAA rules, COHEs would only be able to share information about a worker with a non-compensable condition if the worker provides consent. Worker consent to share certain information with employers and other stakeholders might have to be a condition for an individual to be eligible for COHE services. The extent to which the worker allows information sharing could potentially be limited to that which the employer or other stakeholder needs to support workforce retention. Consideration should be given to establishing protections against employer or other stakeholder misuse of any shared information.

K. COHE community services

Those familiar with the COHE under WC told us that COHE services aimed at educating and building relationships at the community level have been vital to the success of COHE. The COHEs have active provider relations staff and medical directors who recruit, train, mentor, and provide feedback to COHE member physicians and other providers, as well as respond to their complaints and questions. The COHEs also have staff charged with maintaining good relations with local employers and handling problems as they arise. All stakeholders must have a basic understanding of system objectives, how the system works to achieve those objectives, and their expected behavior.

Modest changes to the services currently offered would be required to support a system for non-compensable conditions. Health insurers and other state agencies would be added to the COHEs’ stakeholder list, and training and technical assistance on best practices would have to cover specific issues that arise when dealing with medical conditions that are rare or non-existent within WC. The COHEs might be especially effective in helping health insurers change their payment policies and utilization review procedures in ways that promote workforce retention.
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IV. PRELIMINARY DESIGN FOR A PILOT TEST

There is broad support in Washington among stakeholder groups for the notion of expanding workforce retention services and supports for workers with significant non-compensable medical conditions. But the level of actual support that will emerge when the time comes will depend on the specific design of the expanded system and evidence of its effectiveness and costs. Because the success of the original COHE pilot was instrumental to stakeholder support for COHE within the WC system, it would be attractive to conduct a pilot test of an expansion. The pilot would start with a collaborative effort to specify the services and supports that would be provided under the pilot system, continue with steps to implement the new system, then proceed to a rigorous, formal test.

The federal government has substantial programmatic and fiscal interest in providing technical and financial support to such an effort. Federal program waivers might be required (for example, for Medicaid to pay for long-term care services provided to some workers) and, if successful, the pilot will reduce expenditures for some federal programs (SSDI, SSI, and Medicare), possibly increase or reallocate expenditures for some federal-state programs (UI, VR, and Medicaid), and increase participant contributions to federal income and payroll taxes. Finally, a successful pilot could serve as a model for other states. Although Washington might have sufficient interest to proceed on its own, there is little chance of that happening because of the investment required, the uncertainty about whether federal agencies would cooperate, and competing priorities for state revenues.

In the remainder of this section, we discuss the questions that a pilot would be designed to address; consider institutional involvement in the test; describe options for the design of the system to be tested and how it would be administered; summarize what appears to be the most practical approach to implementing a pilot system in a manner that would support rigorous impact estimates; consider the use of administrative, survey, and qualitative data needed to support the evaluation; provide a sense of the sample sizes that would be required to ensure that the evidence generated is useful to decision makers; summarize the many components of a full evaluation; and suggest a time table and report schedule.

A. Questions for the pilot test evaluation

The planners of the pilot test must consider the questions to be addressed so that the pilot and its evaluation can be designed in a manner that will answer those questions. In Table IV.1, we present five sets of questions for consideration.

21 Administratively, the pilot would generate new information that SSA and the Washington Disability Determination Service (DDS) could use to support SSDI and SSI eligibility determinations for participants who eventually apply to these programs—a record of the medical and employment services provided by all parties, and of the workers’ efforts to stay in the labor force. Individuals who plan the pilot could work with SSA and the DDS to ensure that information of value to the disability determination process is captured and available for disability determination purposes. Sharing the information with SSA could occur only with the worker’s consent.
### Table IV.1. Preliminary questions for the pilot test

#### Design questions
- What is the pilot system’s design?
- Did the system stakeholders work collaboratively to design a system with the desired characteristics (Section III)?
- Will the design support the test of (1) COHE services combined with the minimal changes to the non-compensable support system to support COHE activities, and (2) the same innovations plus one or more of the optional services? If so, how?
- To what extent does the design use or modify elements of processes or systems that are already in place versus requiring the development of new processes or systems?
- What opportunities and problems were encountered during the design process? How were they resolved? What are the expected consequences for system function, performance, and costs? How did the pilot address the HIPAA privacy rules and other barriers to information sharing?

#### System questions (administration, processes, functionality, and fidelity to design)
- What is the design of the administrative structure to support the test and pilot services, its processes, and their functions?
- How much time and effort was required to implement the pilot system to the point that it is considered fully functional, including recruitment and training of providers?
- Once fully functional, how does the system compare to the design? In what ways does it exceed or fall short of the design?
- To what extent do workers with access to the pilot system, along with their employers and service providers, actually use system services and supports? What are the likely consequences for impacts?
- What are the perceptions of representatives from each of the major stakeholder groups on the strengths and weaknesses of the new system and its value to them?

#### Impacts on short- and long-term outcomes for workers, employers, and public programs
- How do the outcomes for workers with non-compensable conditions with access to the pilot system differ from those for comparable workers without access? Short-term outcomes of interest for workers include: services received; out-of-pocket expenditures for services; health; lost work time; and income over the first six months. Long-term outcomes of interest include wage income and other compensation; taxes paid; SSDI and SSI application and award; benefits received; income from other sources; substance abuse; housing (including homelessness); and criminal justice outcomes (illegal activities, arrests, and incarceration).
- How do short- and long-term outcomes for employers differ from what they would be in the absence of the pilot system? Short-term outcomes include: lost work time; hiring temporary or replacement workers. Longer term outcomes include: expenditures for accommodations or other employment supports; and premiums for group health insurance, UI, and WC.
- How do federal and state program utilization, expenditures, and tax revenues differ from what they would be in the absence of the pilot program in the short- and long-term? Programs of interest include SSDI, SSI, Medicare, Medicaid, the Supplemental Nutrition Assistance Program, and VR. Taxes include federal and state income and payroll taxes.

#### Costs and benefits
- What are the costs and benefits of the new system to society as a whole and to each of the stakeholder groups?
- To what extent can costs and benefits be assigned a monetary value? What is that value?
- How large are the net monetized benefits (monetized benefits minus monetized costs) to society and to each stakeholder group?
- How sensitive are the net benefit estimates to uncertainty about the size of the monetary values of individual component costs and benefits?

#### Scale up
- What lessons have been learned about how the program should be designed, implemented, and administered?
- What could we expect the impacts to be on key outcomes statewide? On cost and benefits to stakeholders?
- How should the administrative infrastructure be designed?
- What roles should stakeholder representatives have in program monitoring and governance?
B. Institutional involvement in the pilot test

A number of institutions should be involved in the test. Ideally a large number of organizations would be chosen to maximize lessons for a statewide system, but practical considerations favor using a more limited number of organizations. Table IV.2 presents our suggestions for institutional involvement.

Table IV.2. Potential roles for institutions in the pilot test

<table>
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<tr>
<th>Workforce Board</th>
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<tbody>
<tr>
<td>• Lead planning</td>
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<tr>
<td>• Convene stakeholder advisory group(s), including business, labor, health systems and professionals, health insurers, ESD, DVR, HCA, L&amp;I, and any other agencies or organizations that will be involved.</td>
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<table>
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<tr>
<th>ESD</th>
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<tr>
<td>• Lead responsibility for pilot implementation and management</td>
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<td>• Lead development of pilot information systems</td>
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<table>
<thead>
<tr>
<th>Other state agencies</th>
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</thead>
<tbody>
<tr>
<td>• Roles similar to those outlined in Table III.1</td>
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<table>
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<tr>
<th>COHEs</th>
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<tr>
<td>• EDI contracts with one or more COHEs to participate in the pilot on a competitive basis</td>
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<tr>
<th>Health insurers</th>
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</thead>
<tbody>
<tr>
<td>• A small number of large insurers, covering large numbers of workers in the target population</td>
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<tr>
<td>• Participating insurers expected to pay for COHE services</td>
</tr>
<tr>
<td>• Option: Premera incorporates COHE services in the employer group plan that it sells to the employer members of the Washington Business Association</td>
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<table>
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<tr>
<th>Health systems (hospitals and associated clinics and group practices)</th>
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<tbody>
<tr>
<td>• Engage only a small number of major healthcare systems in the pilot test—systems serving large numbers of workers with coverage from participating health insurers</td>
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</table>

It is not necessary for all of the COHEs to participate in the test. Consideration should be given to inviting proposals from each of the two regional, non-institutional COHEs because our discussions with leaders at both of them during our site visit indicate each wants to participate, at least in principle, and one (the COHE Community of Eastern Washington) has pilot experience. We have not discussed participation with leaders at the institutional COHEs; one or more would likely be interested and perform well. A practical advantage of working with an institutional COHE is that all of the COHE-affiliated physicians in the pilot would be within the same institution’s health system; a drawback is that the evaluation findings would not apply to workers who obtain care outside of the COHE’s institution. We note that the original COHE pilot also included one institutional COHE, the UW Medicine Valley Medical Center in Renton.

C. Pilot features

We envision that the pilot design would (1) limit eligibility to workers who meet criteria that can be assessed from administrative data; (2) test COHE services combined with the minimal changes needed to integrate COHE services into the support system as necessary to support workforce retention; and (3) enable independent testing of one or more of the “optional” features of a permanent system, as outlined in Section III.
1. Eligibility criteria

As implied by the description of the institutional roles for the pilot that are indicated above, eligibility for the pilot would be limited to workers with non-compensable conditions who have health insurance under the participating health plans, routinely receive care from the participating health systems, and receive care in areas that are served by the participating COHEs. To limit potential conflicts with services provided by private disability insurers, we suggest only including workers whose employers obtain WC coverage from L&I, even though that coverage will not otherwise be relevant to treatment for their non-compensable condition. Some employers with L&I coverage for WC likely have private disability insurance coverage, and further consideration should be given to how they should be included in the pilot, if at all. In addition to meeting these coverage criteria, the worker would only become a candidate for enrollment in the pilot by seeking initial care for a non-compensable condition from a provider that is participating in the pilot. Provider staff could screen for additional eligibility criteria.

For efficiency reasons, some workers who meet coverage requirements and use COHE-affiliated physicians should not be eligible for COHE services because there is no expectation that COHE services, as currently available, would help them return to work more quickly. No expectation of benefit arises when, at the outset, the condition is very likely to be resolved without substantial work loss, or when the condition is such that return to even transitional work within six months is not realistic. In addition, for cost reasons, it would be reasonable to restrict COHE services to workers with conditions for which current COHE services are well designed. Other conditions could be added after the pilot demonstrates success with the included conditions. The most notable of these are significant musculoskeletal/soft tissue conditions. It also seems important to include chronic conditions for which quality care, self-care, or coordination with the employer are vital for returning to work, including cardiovascular, endocrine, sensory, and psychiatric conditions.

COHE-affiliated physicians could be asked to conduct an initial screen for medical eligibility. The pilot will require a system that can automatically alert physician staff that an incoming patient meets insurance coverage criteria to participate in the pilot system, most likely based on the insurance plan and group number on the worker’s health insurance card. For each eligible case, provider staff could complete an electronic checklist to determine eligibility automatically. There is reason to be concerned that physicians will learn to manipulate administration of the screen to achieve a desired answer, and that could result in non-uniformity of eligibility across physicians and excess costs. An alternative that alleviates the risk of this occurring and that is commonly used in such research is for the provider staff to conduct a very limited screen then immediately call an independent screener to complete the screening process.

2. Pilot services

All workers who meet eligibility criteria and enroll in the pilot will be eligible for healthcare services covered under their health plan, subject to usual utilization review, if any. That is, there would be no change in the status quo with regard to covered services. In addition, those who enroll via COHE-affiliated providers will be eligible for COHE services as well as for assistance in obtaining services that are not covered by their health insurance, but are available and might be needed to support return to work.
The COHE(s) participating in the test would need to expand their network(s) of COHE-affiliated providers, partly for capacity reasons, but also because workers with non-compensable conditions are less likely to use the physicians in the COHEs’ current networks, many of whom specialize in workers’ compensation cases. Our assumption is that most workers will use PCPs. Hence, the COHE(s) would need to identify, recruit, and train PCPs who are likely to serve workers eligible for the pilot.

For pilot purposes COHE-affiliated providers (those that have been recruited by the COHEs for the pilot test) would require access to a special management information system, similar to L&I’s OHMS. The provider would complete an electronic enrollment form (similar to the WC claim) and an Activity Prescription Form, with help from the physician’s staff when needed. That would result in the assignment of a COHE care coordinator to provide monitoring and coordination services similar to those provided by HSCs under the current system for compensable conditions. Enrollment would also trigger reporting to the health insurer. The provider would also ask for consent to report to the employer, following the rules that would be developed for the pilot. The health insurer would compensate the physician for timely completion of reports, as under the current WC system.

Some workers, or their employers, will need VR services or technical support to return to work, perhaps during a limited-duty transition period, similar to the services L&I provides to some WC claimants and their employers. Workers in the pilot could try to obtain such services on their own, but we believe that this sort of assistance should be included with the supports workers who use COHE services receive. That is partly because such services are important to workforce retention for many workers and partly because one function of the HSCs is to support coordination between the providers of such services, the worker, the employer, and the healthcare provider. We suggest giving DVR, L&I, and Medicaid the task of developing a relatively simple system for this purpose, focused on facilitating access to VR services that are already available rather than building capacity to provide additional services. The COHE could educate stakeholders about the services, in general, and guide individuals who need them.

3. Optional support

As discussed in Section III, several optional features for the non-compensable system might substantially improve workforce retention outcomes in a system that features COHE services. These include incentives for employers who facilitate return to work as well as time-limited wage-replacement payments for workers following an approved return-to-work plan.

Because such supports are likely to be expensive and their contribution to workforce retention hard to predict, we would not recommend including them as part of the pilot system for all pilot subjects with access to COHE services. Instead, we would recommend that the designers of the pilot test the previously described services as a “basic package” and consider also testing one or more “enhanced” packages—packages that add options to the basic package.

4. Federal Agency Approval and Cooperation

The extent to which a pilot would require the approval of federal agencies, as well as their cooperation in other ways, depends on the specifics of the design. Under any design, it will be necessary to obtain the approval of an Institutional Review Board (IRB) because the research
involves human subjects. Among other things, the IRB will consider whether the plan for the pilot is compliant with the HIPAA Privacy Rule and, if not, whether it can waive specific provisions of the Privacy Rule for the purposes of the research, while still protecting the interests of the participants.22 Because the exchange of health information is critical to what COHEs do, the pilot designers will need to consider whether to build in provisions to meet the Privacy Rule or seek a waiver.

Our expectation is that the state VR and Medicaid programs, administered by DVR and HCA, respectively, would provide support for VR and home and community-based services for pilot participants who are eligible for COHE services. To be able to legally provide supports under existing programs in the absence of a waiver, these agencies would presumably need to verify that the workers are eligible for the programs, but existing program rules and the eligibility determination processes may delay or prevent delivery of critical services to some workers. The designers of the pilot will need to consider whether they should seek a waiver from these rules to support the pilot. Funding will be a major consideration, as well, because program funds to support eligible pilot participants will be competing with funds these programs use to support other groups. From the perspective of implementing the pilot successfully, it would be best to obtain both waivers and funding from the federal agencies that support state VR and Medicaid programs, the Rehabilitation Services Administration in the U.S. Department of Education and the Centers for Medicare and Medicaid Services (CMS) in the U.S. Department of Health and Human Services.

We have suggested that the state’s Employment Security Department might be the most suitable lead agency for the pilot and a permanent program, and have also suggested that the state’s Workforce Board play a major governance/coordination role, some of their activities may require approval, or a waiver, from the U.S. Department of Labor (DOL). Pilot provisions that are related to incentives for employers, worker protections under federal labor laws (for instance, FMLA), or employee benefits are also likely to be of interest to DOL and may require review or waivers.

Although SSA programs (SSDI and SSI) will likely realize savings from the pilot, it is unclear that any waivers from these programs will be required. Workers in the pilot may apply for SSDI and SSI benefits, and some may actually receive awards during the six-month period where the participant might be receiving COHE services. Medical care and substantial work during this period could affect SSDI/SSI eligibility. The pilot’s designers should consider whether to request waivers about how information from the activities of participants eligible for COHE services will be used in the disability determination process. In addition, we recommend obtaining SSA’s advance approval of the pilot’s informed consent form, which should include permission to use SSA administrative data for the evaluation. SSA’s cooperation in providing the data as the evaluation proceeds will also be critical to its timely completion.

The pilot’s design also needs to comply with the ADA and other federal laws that protect workers from discrimination by employers. Although our expectation is that the pilot’s design will not violate the ADA or other anti-discrimination laws, to be safe the pilot’s designers will

22 See https://privacyruleandresearch.nih.gov/irbandprivacyrule.asp.
need to seek support from experts in this area and should also consider obtaining a review from EEOC.

Given the substantial programmatic and financial interests of the federal agencies, it would be helpful to convene an interagency group to support the pilot. Agency representatives in this group could: provide guidance to the designers; ensure that the interests of relevant federally-funded programs are well served; and help seek the technical and financial support they may need from their agencies.

**D. Evaluation design**

In this section, we describe an approach to the evaluation design and pilot implementation that we think is feasible and would provide rigorous estimates of the impacts.

1. **Experimental design**

   To provide credible estimates of impacts on outcomes, the evaluation must compare the outcomes of workers who use pilot COHE services to outcomes for a comparison group; the latter’s outcomes provide the estimate for what the participants outcomes would have been if they and their providers did not have access to COHE services—so-called “counterfactual” outcomes. The gold standard for such a comparison is a randomized “experiment,” under which some subjects are randomly assigned to the pilot program (“treatment”) and others are assigned to services as usual (“control”); that latter constitutes the comparison group. If faithfully executed, the evaluators and others can be confident that statistically significant differences between mean outcomes of treatment and control subjects can be attributed to the impact of the pilot program on the mean outcomes for treatment subjects.

   Experimental designs most commonly involve random assignment of individual volunteers, but some randomly assign “clusters” of individuals to treatment or control because of circumstances that make it more practical to assign clusters than individuals. A cluster could be a classroom of students, all subjects residing in a specific area, or all customers who visit a store on a day of the month. The evaluation compares outcomes for all subjects in clusters randomly assigned to treatment to those for all subjects in randomly assigned control clusters.

   For the proposed pilot, a clustered random design, based on physicians or small groups of physicians groups within a small number of large health systems, seems more feasible than individual random assignment. The design is illustrated in Figure IV.1. Working with health system management, the pilot implementers would ask small “units” of physicians—physicians in a unit share staff, space, and equipment and back each other up—to volunteer to participate in the study, then randomly assign them to treatment or control. All workers with eligible conditions who seek care from the treatment physicians would become the treatment subjects, and all those with eligible conditions who seek treatment from control physicians would become control subjects. The alternative, random assignment of individual worker volunteers, would
likely have unacceptable consequences for conducting the study and interpreting the findings.²³

Under random assignment of physician units, a cluster is defined as all eligible workers treated by the same physician unit during the pilot period.²⁴

²³Because use of COHE is inextricably linked to use of COHE-affiliated physicians, individual random assignment would limit the study to workers willing to be randomly assigned to a physician rather than being able to choose their own. That would fly in the face of an important value among Washington workers: physician choice. As noted in the background section, that is why L&I pursued developing and testing COHE rather than opting to scale up a pilot managed care initiative that had been successful in many ways. Another problem with individual random assignment in this context is that the pilot must enroll subjects when they first present themselves to a provider. Any delay in enrollment due to recruitment and completion of an informed consent process would interfere with the fidelity of the services and the intention of providing services immediately. In some instances, subjects might be incapable of completing the informed consent process when they first seek treatment. A third reason is that some physicians and their staff would serve both treatment and control subjects, making it difficult to ensure that control subjects are not somehow receiving the treatment (that is, it would be difficult to avoid crossover effects).

²⁴It is important to recognize that, under this design, no effort should be made to steer workers toward either treatment or control providers. Instead, workers should use their usual providers. One potential threat to the design is that information about the new supports will become available in the community and members of the community will be more likely to guide workers who are seeking care toward the treatment providers. That could result in systematic differences between treatment and control workers in the pilot, introducing possible bias in the impact estimates. Hence, it will be important for the pilot to take steps that discourage or limit referrals that are based on knowledge of that some providers have access to COHE services and others do not.
We also considered a design that would follow the rigorous approach used to evaluate impacts in the original COHE pilot test. That design also clustered workers into treatment or comparison groups, based on the worker’s choice of provider, but was not experimental. Although it is attractive in many respects, that design is impractical for the proposed pilot because of requirements for data from the pre-pilot period that were readily met in the original COHE pilot, but are not practical here. Data collection for other credible non-experimental comparison group designs is no more feasible than for the suggested experimental design (using physician clusters), but such designs lack the rigor needed to assure stakeholders that differences between program participants and comparison group subjects are due to the program rather than unobserved confounding factors.

2. Implementation

Implementation of the clustered experimental design requires several steps: defining the population of provider units and recruiting them to the study, assigning them to treatment and control, determining which patients meet study eligibility criteria, and obtaining consent to access data from those who are eligible.

Implementation of the pilot would be greatly facilitated by gaining cooperation of one or more large healthcare systems, each with many facilities spread over a wide area. Each system would have to cooperate with the evaluation to: define its provider units; ensure the units’ cooperation; provide information to support a random assignment process; notify each unit of its treatment/control status; facilitate the training that every unit will need to support data collection; and facilitate the COHE training that the treatment units will need. Any institutional COHEs that participate in the pilot would presumably use their own healthcare systems for this purpose. Both regional COHEs serve providers in multiple healthcare systems. Their ability to obtain the cooperation of the health systems for the pilot will be critical to the pilot’s success.

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25 The evaluation of the original pilot relied exclusively on L&I administrative data, covering claims from the years just before implementation of the pilot system as well as years after the pilot system was fully implemented, including data for all WC claimants in the pilot’s catchment area regardless of whether they received treatment from COHE-affiliated or other physicians. The L&I data include information about baseline characteristics of cases and many outcomes of interest, such as lost work days, indemnity payments, and medical costs. To conduct an analogous evaluation of the new pilot, it would be necessary to obtain comparable data from sources outside of L&I’s purview. Baseline data would have to come from medical records, and data for key outcomes would have to come from medical records, health insurance records, UI wage records, DVR records, and SSA administrative data. Obtaining access to such records, including access to identifiers to match records across data sets, is probably not feasible without the consent of the individuals themselves, and that would be unobtainable for the period before implementation of the pilot system.

26 For instance, a non-experimental design that compares workers using COHE-affiliated physicians to workers using non-COHE physicians and matched on observed baseline characteristics would be more feasible. The major difference between this design and the cluster experimental design described in the text is that the two groups of physicians in the experimental design would be determined by a random assignment process. Whether or not physicians are randomly assigned, the evaluators would need to solicit permission for data access from workers treated by both types of physicians, and the physicians or their staffs would facilitate requests for permission. In the non-experimental design, physicians who agree to participate in the COHE program are likely to differ in systematic, unobserved ways from those who agree only to facilitate requests for data access, and those differences are likely to have an unmeasurable effect on difference in outcomes.
Each participating health system will have to provide information about provider units that are candidates for random assignment, such as the number and characteristics of working-age patients treated in a recent period, along with organizational characteristics. The system must also provide assurances that each unit will participate, whether assigned to treatment or control, and that might require a process of soliciting agreement and excluding units that refuse. The evaluators will use the characteristics to define the universe of participating units and group them into relatively homogenous strata (subgroups) on the basis of the characteristics, develop a random assignment process that uses the strata to help ensure that treatment and control units are comparable to each other, as a group, and representative of all eligible units.

The evaluators will have to develop a system to identify which patients served by each of the study’s provider units should be included in the study, based on the anticipated eligibility criteria for the new program. At minimum, these will likely include enrollment in a participating group plan, current employment (including those on medical leave), and first visit for the condition that is the reason for the visit.

We anticipate an enrollment protocol under which a unit receptionist would conduct an initial, limited check of study eligibility criteria (for example, insurance, employment status, and reason for visit) and then, for those who meet the initial criteria, offer the opportunity to enroll in the study by calling an intake specialist at a centralized number, from a private place. Each subject could be offered a gift card to complete the process (not contingent on the outcome). The intake specialist would complete the screening and informed consent process. If the study includes one or more follow-up surveys, the intake specialist would provide information about the surveys during the interview, including any payments for interview completion. Those who agree to participate would sign a form and return it the receptionist. If the patient is seeking treatment at a COHE-affiliated provider unit, the receptionist would inform the unit’s providers that the patient is eligible for COHE services. Depending on the specifics of the pilot system design, the provider, COHE staff, or pilot administrative staff would notify subjects of their eligibility for non-COHE components of the pilot system.

Staff and managers in all participating units would have to be trained on the enrollment process. Physicians and other medical staff in the control offices should be alerted to the study, but there is no obvious need to provide more training to staff in those offices. The medical staff in treatment offices would have to be trained on COHE services and how to use them, and should also become cognizant of other components of the system available to their enrolled patients. We assume that the appropriate COHE would lead the training of medical staff in the treatment units. Our expectation is that physicians and their staff would be compensated for time spent in training.

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27 We suggest using a centralized enrollment specialist for efficiency reasons and to ensure uniformity of enrollment across units.

28 If desired, this system would support random assignment of subjects to multiple combinations of pilot system components (treatment “arms”), including arms that include cash incentives or other supports, but not COHE services. Some subjects could be assigned to receive all components, others just the COHE component, and still others just the non-COHE components. Although this framework would be very appealing from the perspective of the information it would generate about the importance of different components in determining outcomes, it could also make the informed consent process substantially more challenging because at least some enrollees will be randomized to a final arm after they have agreed to enroll.
E. Sample sizes

The pilot must include sufficient provider units and workers to ensure that the evaluation can give stakeholders the information needed to inform decisions about scaling up the new program. This is a complex issue that cannot be fully addressed without additional information. As illustrated in Appendix A.1, however, the number of provider units and workers in each group must be substantial—possibly on the order of 50 provider units assigned to each group and 5,000 to 10,000 workers per group (100 to 200 per provider). We acknowledge that these are large numbers. To put them into perspective, the evaluation of the initial COHE pilot for WC included almost 47,000 WC claimants served by 275 COHE-affiliated providers once the COHEs were established, and a somewhat larger number of claimants who were served contemporaneously by other providers.

When thinking about the cost of a pilot of this size, it is important to keep in mind that there will be no additional costs of services provided to control subjects, and many of the services treatment subjects receive—especially healthcare—would be provided in the absence of the COHE services. Further, there is an expectation that the COHE services will partially or fully pay for themselves through a reduction in healthcare costs for treatment subjects. The pilot services may increase the use of non-medical services by treatment subjects, but additional costs for these services seem likely to be small when compared to healthcare costs. The bulk of the costs associated with the pilot are likely to be for designing it, setting up and operating the administrative structure, collecting data, and completing the evaluation.

It is possible that impacts will be sufficiently large that they can be detected with sample sizes smaller than those indicated. The pilot could initially enroll smaller numbers of physician units and workers than the preliminary analysis of sample sizes suggest, then expand the sample sizes only if initial impact estimates indicate that the larger samples will add sufficient value to the evaluation to justify their cost and the longer timetable.

F. Evaluation data

Most, or perhaps all, of the data for the evaluation can come from administrative records. Subjects will need to agree when they enroll to the use of their administrative data exclusively for research purposes. The evaluation could also benefit from collecting survey data from treatment and control subjects, at intake, and in one or more follow-up surveys. In addition, to assess fidelity and address process issues, the evaluation team would need to collect qualitative data via structured phone interviews of those involved in the pilot. We provide additional information about the collection of data to support the evaluation in Appendix A.2.

G. Timetable and reports

The time it will take for stakeholders to organize and make the decisions and commitments needed to move forward with the pilot is indeterminate. Once commitments are made, it will likely take at least 24 months to create teams to implement and evaluate the pilot; complete the design of the pilot, the evaluation, and data collection instruments, protocols, and usage agreements; modify administrative systems to support the pilot; identify the population of provider units and randomly assign them to treatment and control; expand COHE capacity; and obtain approvals from an appropriate institutional review board. Enrollment at each unit can
begin as soon as training is complete, but the evaluation should take into account the likelihood that full impacts will not emerge until the treatment providers and COHE staff have gained experience delivering services to the treatment subjects. The experience of the existing COHEs ought to reduce the length of that period relative to its length in the initial pilot.

Ideally, once the pilot program is implemented, it will continue until the state is ready to scale it up. Instead of viewing the pilot test as lasting for a fixed period, those who are charged with making decisions about the pilot should consider a more dynamic, rapid-cycle approach: enrollment and outcomes for treatment and control subjects would be tracked and compared on a monthly basis and reported in monthly “snapshot reports” or on a project website. The evaluation could report on program operations a few months after enrollment begins. A full evaluation report, including an initial cost-benefit analysis, could be completed after 12 months of data have been collected from a sufficient number of enrollees to produce meaningful impact estimates. It is difficult to predict how long would be necessary. It would be worthwhile to follow subjects in administrative records for at least 24 months after they enroll, continue the snapshot reports, and eventually report on longer-term impacts.

Stakeholders are likely to want to make decisions about continuation and scaling up of the program based on 12-month findings and before the longer-term findings are known. Overwhelming positive 12-month findings might make it easy for stakeholders to move rapidly forward with scale up, but findings might be more nuanced, prompting a more cautious approach to scale up. Planning for additional analysis and reporting after the report on the 12-month findings can occur after findings start to emerge and the nature and timing of stakeholder information needs become apparent.

If the pilot more or less follows the timetable above, pilot evaluation findings will start to emerge approximately 36 months after commitments are made to move forward with the pilot. Sufficient information may emerge to make initial decisions about scale up by month 48, but it could take longer, depending on the nature of the results.

**H. Pilot costs**

The cost of conducting a full-fledged pilot of the type described above is dependent on many specifics that would have to be fleshed out. We have developed preliminary estimates for a range of costs based on our past experience with many similar projects, published information from the original COHE pilot, and two sets of assumptions. For both the low and high cost scenarios, we assume: a one-year effort for a contractor to convene stakeholders, develop the design further and implement services to the point of enrollment; 12-month service costs per treatment worker are the same as under the original COHE pilot after adjustment for medical cost inflation; either 10 or 20 percent of those expenses are a cost to the demonstration, and the rest are paid by a health insurer, existing state programs, or the worker (for health insurance co-payments and deductibles); one follow-up web or phone survey (at 6 months after study enrollment) with 80 percent response or greater; follow-up via administrative records for 12 months; qualitative data collection to assess fidelity of program implementation and identify problems and potential improvements; and two major reports (interim and final) and related briefings. Neither scenario includes costs for following subjects longer than 12 months or reporting on the findings of longer-term follow-up, but those costs would be very low relative to total costs, and any decision
to follow subjects for a longer period would likely be conditioned on the 12-month results. Assumptions specific to the two scenarios and the cost estimates appear in Table IV.3.

Table IV.3 Preliminary estimates for pilot demonstration costs

<table>
<thead>
<tr>
<th></th>
<th>Low-cost pilot</th>
<th>High-cost pilot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician units</td>
<td>100</td>
<td>150</td>
</tr>
<tr>
<td>Treatment groups</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Workers per treatment group</td>
<td>5,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Marginal service cost per treatment worker</td>
<td>$300</td>
<td>$600</td>
</tr>
<tr>
<td>Marginal service costs for treatment</td>
<td>$1,500,000</td>
<td>$12,000,000</td>
</tr>
<tr>
<td>Design, implementation and evaluation</td>
<td>$9,500,000</td>
<td>$17,000,000</td>
</tr>
<tr>
<td><strong>Total costs</strong></td>
<td><strong>$11,000,000</strong></td>
<td><strong>$29,000,000</strong></td>
</tr>
</tbody>
</table>

Total estimated costs range from $11 million to $29 million. The range of assumptions about physician units, treatment groups, workers per treatment group and service cost per treatment worker directly translate into a broad range for service costs of between $1.5 and $12 million. The assumptions also affect design, implementation and evaluation costs, but in a less than proportional way; they primarily affect implementation costs (which include recruitment and training for physician units), enrollment costs, and survey costs.

Because there are many issues to be addressed about the design and implementation of a full-fledged pilot demonstration, our recommendation would be to first pursue a much shorter, less expensive proof of concept pilot. Under a proof of concept pilot, one or more of the existing COHEs could be asked to plan and start delivering COHE services to a few hundred workers with non-compensable conditions who are served by: 1) a physician unit that already provides COHE services under WC; and 2) a newly recruited and trained physician unit. The goals of the proof of concept pilot would be to:

- Further identify the practical problems with implementation outside of WC;
- Identify solutions to the problems to the extent feasible;
- Ensure that stakeholders are supportive of the services as implemented;
- Refine the design for a full demonstration; and
- Support efforts to obtain financial and administrative support for a full demonstration.

A proof-of-concept pilot would likely take 12 months to complete, but would substantially increase the chances of obtaining support for a full demonstration and likely shorten the period and resources required to design and implement the full demonstration. The cost of a proof-of-concept pilot would likely be on the order of $1.25 to $1.5 million, including enrollment of 2 providers and service delivery to 100 to 300 workers. A critical assumption for this estimate is that the existing information system could be used to support the proof-of-concept pilot.
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V. NEXT STEPS

With this report, we provide an assessment of the feasibility of integrating COHEs into Washington’s support system for workers with conditions that are not compensable under WC and that put them at risk of exiting the labor force and entering SSDI. We have outlined how COHE services could be integrated into the support system for such workers and suggested several options that could also be considered (Chapter III). We have also described how a pilot program for workers with non-compensable conditions could be developed and tested (Chapter IV). As with the pilot test of the COHE program under WC, a successful test outside of WC would provide the evidence base that stakeholders will need to establish a permanent program and scale it up.

Ultimately, it will be up to leaders of stakeholder groups in Washington’s public and private sectors to pursue developing any system that seeks to make COHE services available for conditions that are not compensable under workers’ compensation. As indicated, we found considerable enthusiasm for the idea among key leaders during our site visit, but that is far from a commitment to coalesce and move forward. Although state leaders might eventually initiate an effort without external encouragement and support, they are much more likely to do so in the near future if the federal government and/or foundations encourage them to move forward.

The federal government is the missing stakeholder. Given the significant fiscal benefits to the federal government of increasing workforce retention of workers with significant medical problems—especially reductions in SSDI and Medicare expenditures—and increases in income and payroll tax revenues, the federal government has a considerable financial stake in conducting a pilot (Ben-Shalom and Burak 2016). Federal agencies also have oversight and regulatory responsibilities for federal-state programs that would likely participate in the pilot. The federal government’s stake in a pilot in Washington goes beyond Washington’s borders. A successful test would spur development of comparable programs in other states that, together, could go a long way toward addressing the fiscal problems SSDI and Medicare.

Although this paper has focused on the idea of making COHE-style services available to workers who are similar to those covered by the Washington WC system, but whose conditions are not compensable, we would be remiss to not point out that the lessons from COHE apply to other important groups of workers as well. The most obvious examples are workers compensation claimants in the three other states that, like Washington’s, are public: North Dakota, Ohio, and Wyoming. It is certainly possible that these systems could realize substantially better outcomes for their WC claimants and reduce their WC costs by adopting a COHE system. To the extent that private WC insurers are not already providing similar services, they and their covered workers and employers might well benefit from adoption of COHE services. The same may be true for large employers that are self-insured for WC and offer both health insurance and private disability benefits to their employees. In fact, many such large employers already invest in integrated disability management efforts designed to ensure maximal recovery from illnesses and injuries, and optimal return to work, and may be using care coordination services similar to those provided by COHE. Not all of them do, however. State
governments are an important example. We are only aware of one state, Delaware, which provides service coordination to employees that experience an off-the-job significant injury or illness.

Ultimately, COHE-style coordination/quality improvement services may be most effective in terms of reduced labor force exit and SSDI entry where they are likely the most difficult to implement—for workers with non-compensable conditions who may have health insurance, but do not have support from a private disability insurer or an employer’s disability management vendor. These workers must navigate a fragmented service system on their own—an environment where behavioral bottlenecks to the delivery of optimal evidenced-based services are likely to be rampant. Because COHE services are designed to remove such bottlenecks, we are cautiously optimistic that they can be as or even more effective in this environment than they are inside the Washington WC system. The challenges of implementing COHE services in this environment are, however, substantial.

29 In 2015, 81 percent of state and local employees had employer-provided health insurance (U.S. Department of Labor 2015, Table 9), with the state paying 87 percent of the worker’s premium, on average (Table 10). A substantial minority also had short- and long-term disability insurance coverage—24 and 35 percent, respectively (U.S. Department of Labor 2015, Table 16).
REFERENCES


APPENDIX A

EVALUATION SAMPLE SIZES AND DATA
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A. Sample sizes

The pilot must include sufficient provider units and workers to ensure that the evaluation can give stakeholders the information needed to inform decisions about scaling up the program. This is a complex issue that cannot be fully addressed without additional information. We can, however, illustrate how the number of provider units and workers in each group is related to the size of impacts that the evaluation will be able to detect with a reasonably high level of confidence.

Table A.1 shows how estimated minimum detectable impacts (MDIs) for two important outcomes—the percentage employed at 12 months and mean medical costs over 12 months—vary with assumptions about the total number of randomly assigned provider units and the number of workers in each demonstration arm. The MDI estimates are the smallest impacts that the pilot will be able to detect with 80 percent confidence using the usual significance level in statistical tests (5 percent). The analysis, which uses the method described by Schochet (2008), requires an assumed value for a measure of the extent to which the provider units themselves account for variation in individual outcomes, the interclass correlation (ICC); the larger the ICC, the higher the MDI (that is, the less likely the pilot would detect an impact of a given size). We chose two ICC values, based on past experience. The method also requires assumptions for what the mean outcomes will be for the control group; in the case of variables other than percentages, like medical costs per claims, it also requires an assumption about the standard deviation. Our assumptions are based on considering findings from the original COHE pilot, and appear in the header of Table A.1. To calculate the impacts, we started with baseline year sample means and standard errors for these two outcomes from COHE provider sample for the original COHE evaluation, shown in the header of Table A.1 (from Table 3 in Wickizer et al. 2011).

The MDI values in the table illustrate how MDIs vary with the number of physician units participating in the pilot (COHE and non-COHE combined), the number of participants in each arm, and a range of ICC values (from 0.10 to 0.25). For illustration purposes, we consider configurations with 50 and 100 physician units (with half in each group) and from 500 to 4,000 workers in each arm (treatment or control).

As can be seen from the MDI estimates for employment status, it will be possible to detect fairly modest impacts on employment. For instance, with 50 provider units (25 COHE and 25 non-COHE), and 6,000 workers treated by each type of unit, the MDIs range from 4.2 to 5.7 percentage points, depending on the value of the ICC. The estimates also illustrate the value of increasing the number of provider units from 50 to 100, holding the number of workers treated by each type of unit constant. With 100 units and 6,000 workers treated by each type of unit, the MDIs range from 3.6 to 4.5 percentage points (versus 4.2 to 5.7 with 50 units). Thus, the number

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30 For illustration purposes, we assume that, in the absence of the new program, only 80 percent of the workers would be employed at 12 months, mean medical costs would be $3,259, with a standard deviation of $8,947. The assumptions about the mean and standard deviation of medical costs is based on WC claimants who were served by the original COHE pilot providers in the period before the pilot started. We considered using the same group’s employment rate at 12 months, 96 percent, but elected to use the lower 80 percent figure instead. The closer the figure is to 50 percent, the larger is the MDI, so this choice increased the MDIs for this outcome; that is, it leads to a more conservative estimate. We also suspect that workers with non-occupational conditions are less likely to stay attached to their employers than similar workers with similar occupational conditions, because of WC.

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of provider units and number of workers in each arm would not need to be exceptionally large to detect modest, but important impacts.

**Table A.1. Estimated MDIs for employment status at 12 months and medical costs**

<table>
<thead>
<tr>
<th>Total provider units</th>
<th>Workers per arm</th>
<th>Employment status at 12 months (mean = 80.0)</th>
<th>Mean medical costs in first 12 months (mean = $3,259, standard deviation = $8,947)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ICC = 0.01</td>
<td>ICC = 0.025</td>
</tr>
<tr>
<td>50</td>
<td>3,000</td>
<td>5.9</td>
<td>7.3</td>
</tr>
<tr>
<td>50</td>
<td>6,000</td>
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<td>5.3</td>
</tr>
<tr>
<td>50</td>
<td>9,000</td>
<td>3.5</td>
<td>4.4</td>
</tr>
<tr>
<td>50</td>
<td>12,000</td>
<td>3.4</td>
<td>4.3</td>
</tr>
<tr>
<td>100</td>
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</tr>
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<td>3.6</td>
<td>4.5</td>
</tr>
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<td>9,000</td>
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<td>3.4</td>
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<tr>
<td>100</td>
<td>12,000</td>
<td>2.6</td>
<td>3.3</td>
</tr>
</tbody>
</table>

The MDI estimates for medical costs per claim over the first 12 months are much less encouraging. Impacts for medical costs are notoriously difficult to detect when variation in costs per case is high, as is likely to be true. Therefore, with 50 units and 6,000 workers per unit, the estimated MDI for this outcome ranges from $944 to $1,265, or between 29 and 39 percent of mean costs—about twice the size of the estimated impact on medical costs from the original COHE pilot. Doubling the number of units and holding the number of workers constant yields lower MDIs: from $808 to $1,002, or 25 to 31 percent of the assumed control group mean.

Although the number of provider units and workers per arm would ideally be sufficient to yield lower MDIs for medical costs per claim, achieving that ideal may not be feasible because of costs, the availability of provider units, interest in obtaining the first useful results from the pilot in a reasonable time frame, and other reasons. It is important to recognize that the MDIs for many other outcomes of interest will be smaller as a percentage of their control mean—closer to those for employment status than those for medical costs per claim. Further, the ability to detect impacts on medical costs can be improved by trimming outliers (for example, due to high-cost procedures that are rare) or focusing on utilization of medical services rather than costs, thereby eliminating price as a source of variation.

There is considerable value to increasing the number of provider units, for two reasons. One is the favorable effect of on MDIs, holding workers per arm constant, demonstrated above. The second is speed: the more provider units, the faster workers will be enrolled in the study. To illustrate, with 50 provider units, 6,000 workers per arm, and two arms, the average unit would have to enroll 240 workers. We do not know how long that would take, but can imagine that many small units would not see that many candidates for the study in 12 months. Doubling the number of units to 100 would reduce the average per unit to 120, and doubling again, to 200,
would reduce it to 60. These advantages must be weighed against the practical issue of working with healthcare systems to identify provider units and costs.

**B. Evaluation data**

1. **Administrative data**

Administrative records from several sources will be needed for the evaluation, including: study intake records; medical records; health insurance claims; UI wage and benefit records; SSA records; and records from DVR, Medicaid, or any other entity that provides assistance to substantial numbers of workers in the pilot study. Data use agreements that allow the evaluators to use personally identifiable information to match records across databases at the individual level will be necessary, and study enrollees will have to provide permission for access and matching as they enroll.

The intake and medical records will contain baseline information on study subjects. The medical records will also contain information on healthcare utilization and subsequent diagnoses. Insurance claims will include expenditure information. UI wage records would provide quarterly data on wages and weekly data on UI benefit payments. SSA records would provide information on applications and awards for SSDI and SSI benefits. DVR, Medicaid, and any other program records would include information on enrollment, utilization, and expenditures for those programs. With permission from enrollees, the evaluation could access another source of earnings data via SSA—Internal Revenue Service records of annual earnings. These would be a useful supplement to UI wage records, as the latter do not capture the earnings of Washington residents who are self-employed, employed in other states, or work in a few occupations that are not covered (for example, church employees). Workers in jobs not covered by UI could be excluded from the study at intake, but even if they are, some enrolled subjects might later work in excluded jobs.

Outcomes captured in administrative records can potentially be followed for years after study enrollment. As with the original COHE pilot, it would make sense for the evaluation to initially focus on outcomes over the first 12 months after enrollment, but to include provisions in data agreements that would allow evaluators to follow subjects for many more years. This is particularly important for SSDI and SSI outcomes. Impacts on applications for SSDI and SSI may materialize within 12 months of enrollment, but impacts on awards are likely to take longer because of SSA’s often lengthy disability determination process, including appeals after a denial. Reductions in expenditures for SSDI, SSI, and eventually Medicare are a potentially important source of public savings from the pilot program, realized over many years. Hence, it is important to follow subjects as long as needed to project future program savings a reasonable level of confidence.

2. **Surveys**

A rich evaluation could be completed using administrative data, but collection of outcome data not captured in administrative records could provide additional valuable information on service use and user satisfaction, health and function, formal employment outcomes, informal employment or other activities, household income, and other family/social outcomes. There would also be some value to adding questions to the screening interview that are not needed for screening purposes. Funders of the evaluation will need to weigh the value of the information
gained against the likely considerable cost of fielding the surveys in a manner that will yield high response rates. To reduce costs, follow-up surveys could be conducted via internet, with reminders sent by email and telephone interviews offered as an option. Gift cards or other rewards for responding to follow-up interviews will help ensure high response rates.

3. Qualitative data

To address numerous process questions, evaluators will need to collect qualitative data from those implementing the demonstration. Such data are typically collected by pre-arranged structured interviews of individuals, via telephone, or in person. A structured interview differs from a survey in that the interviewer follows a topic protocol and encourages the interviewee to answer questions in his or her own words and probes further on each topic as warranted, rather than asking narrowly defined, multiple-choice questions. The purpose is to gain a better understanding of how the pilot program was implemented, challenges encountered and how they were addressed, and information about how the program is working from the perspective of stakeholders. It would not produce information that is representative of the experiences of all subjects or other stakeholders. Focus groups of stakeholders (for example, of the services HSCs provided to pilot subjects) can also be used in situations where group dynamics might lead to insights that otherwise would be overlooked.
Improving public well-being by conducting high quality, objective research and data collection

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