



Washington State Department of  
Labor & Industries

# **Comprehensive Catastrophic Care Management Project**

*2016 Report to the Legislature*

December 2016

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# Executive Summary

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## Introduction

The Department of Labor & Industries (L&I) is pleased to provide this report to the legislature on implementing requirements of the 2016 supplemental budget.<sup>1</sup> This proviso funds a pilot project in which L&I partners with an experienced firm or firms to manage care for catastrophically injured workers. It also includes contact requirements intended to ensure that catastrophically injured workers receive the highest quality care and timely and effective claim resolution.

L&I is required to report on the progress of the pilot project beginning in December 2016 and continuing annually through December 2019 or the last December following termination of the contracts by the firm(s) or department. This is the first report.

For the purposes of this report and for consistency in the future, a catastrophic injury is defined as:

- a work-related injury for which L&I assumes responsibility,
- an injury that requires hospitalization within 24 hours, and
- an injury that requires at least 4 consecutive days of hospitalization (w/in 24 hours of injury).

L&I receives fewer than 250 catastrophic claims annually.

In 2014, L&I submitted to the legislature an “L&I Catastrophic Claims Gap Analysis.” This report described L&I’s analysis of the care of catastrophically injured workers, and noted both key strengths and gaps in care. It identified gaps and potential countermeasures in three areas: communication and coordination, data systems, and access to care.

Throughout 2015-2016, L&I developed and began implementing a five-point comprehensive catastrophic care management plan to improve the care of Washington’s most severely injured workers. The goals of the plan are to:

- 1 Increase use of **external case management** services for catastrophic claims.
- 2 Create an **internal L&I referral team** to medically manage catastrophic claims.
- 3 Improve outcomes and quality of care and prevent disability for injured workers through **catastrophic care coordination**.
- 4 Establish **Centers of Excellence** for catastrophic injuries.
- 5 Conduct retrospective and prospective evaluations of catastrophic care management.

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<sup>1</sup> 2ESHB 2376, section 217(8)

## 2016 progress

In 2016, L&I made the following progress toward meeting the goals of the comprehensive catastrophic care management plan:

- L&I partnered with five established case management firms with experience in catastrophic injury management. These firms provide case management and life care planning services to catastrophically injured claimants.
- L&I formed a dedicated group of experienced claim managers and occupational nurse consultants to handle catastrophic claims. This small team manages catastrophic claims and provides increased expertise and improved communication. L&I expanded existing technology systems to provide for catastrophic claim tracking and management. Based on proviso funding, L&I also hired an occupational nurse and a medical program specialist to coordinate with the referral team, oversee case management assignment, and coordinate with the evaluation team at the University of Washington.
- L&I engaged with internal and regional staff to more clearly identify and define care coordination roles. The team is mapping both the current internal and external care coordination processes.
- The first Center of Excellence was established in February 2016 for Amputations at Harborview Medical Center. Referrals to the center began in July 2016. L&I is working with Harborview Medical Center to establish a second Center of Excellence for burn care.
- To better understand trends in return to work and disability for those with catastrophic injuries, L&I conducted a rigorous retrospective analysis of past cases that met the current case definition of a catastrophic claim. In addition, a prospective evaluation of catastrophic case management provided by the contracted firms is required by the proviso. L&I and the University of Washington have entered into a contract for this evaluation which is expected to begin in late 2016.

## 2017 goals

L&I expects to continue making significant progress on the comprehensive catastrophic care management plan in 2017:

- L&I's team of claim managers and occupational nurse consultants will continue to manage catastrophic claims.
- All catastrophic claims will be reviewed by the dedicated occupational nurse consultant for appropriate referral to one of the five external case management firms.
- L&I will evaluate care coordination provided by case management firms to identify areas of strength or deficiencies that need to be further addressed.
- L&I expects to develop additional Centers of Excellence specializing in specific types of catastrophic injuries.
- The prospective evaluation work will continue to enroll catastrophically injured workers and to track their claims and progress.

# Introduction

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Washington's workers' compensation system provides benefits to workers who are injured on the job or who suffer from an occupational disease. It pays for medical treatment and partial wage replacement, and provides disability benefits.

Appropriate clinical input on workers' compensation claims is critical to ensure that injured workers receive timely, appropriate medical care and avoid unnecessary or harmful treatment. The Department of Labor & Industries (L&I) is recognized as a national leader in health policies and strategies that guide workers to evidence-based care and keep our medical costs and growth below national trends.

In February 2014, L&I began evaluating the care of catastrophically injured workers to ensure they were receiving the highest quality, evidence-based services available to help them heal and return to work. L&I currently receives fewer than 250 catastrophic claims annually (down from a high of 415 in 2007).

In its evaluation, L&I identified needs for improved service in three areas:

- communication, care coordination, and planning;
- data systems; and
- access to evidence-based medical (EBM) care.

In 2016, the legislature passed the 2016 supplemental budget which funds a pilot project to manage care for catastrophically injured workers. This bill requires L&I to partner with one or more experienced case management firms to ensure these workers receive the highest quality care and timely and effective claim resolution.

The project will focus on ensuring well-coordinated medical management of catastrophically injured workers' care and treatment through a comprehensive catastrophic care management plan. It will address gaps identified in L&I's Catastrophic Claims Gap Analysis that can be managed within L&I resources. This project will also provide a more integrated and formalized role for L&I staff with clinical expertise in the medical management of catastrophic claims so that L&I can ensure the highest quality health outcomes and reduce disability and time-loss for catastrophically injured workers.

## Project goals

To help ensure Washington's most severely injured workers receive the highest quality care available, L&I conducted an analysis of catastrophic claims. The analysis identified gaps in three areas: communication and coordination, data systems and access to care.

L&I's Catastrophic Care Management plan includes five goals for addressing these gaps:

- Increase use of external **case management services** for catastrophic claims.
- Create an **internal L&I referral team** to medically manage catastrophic claims.

- Improve outcomes and quality of care and prevent disability for injured workers through **catastrophic care coordination**.
- Establish **Centers of Excellence** for catastrophic injuries.
- Conduct a **retrospective and prospective evaluation** of catastrophic care management.

This report summarizes the progress L&I made in meeting the project goals through October 2016.

# Progress and Achievements in 2016

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This section of the report describes actions L&I took from January through October 2016 to achieve the goals of the proviso contained in the 2016 supplemental budget, and explains outcomes.

To improve the care of Washington's most severely injured workers, L&I developed and began implementing the comprehensive catastrophic care management plan. The following describes L&I's achievements in each of the plan's five goal areas.

## EXTERNAL CASE MANAGEMENT

The first goal area is to expand the use of external nurse case managers, which is being done. The Catastrophic Claims Gap Analysis shows that between 2005 and 2011, 5.3 percent of catastrophic claims were assigned a nurse case manager. We expect that additional catastrophic claims can be aided by management services. L&I plans to assign more catastrophic claims, as deemed appropriate by the assigned occupational nurse consultant, to receive case management services.

In 2015, L&I submitted a Request for Proposals (RFP) seeking case management firms with which to partner. The RFP encouraged providers to bid using an outcomes model rather than the traditional model of paying an hourly rate. L&I received bids from and awarded contracts to five established companies: three companies using an hourly rate model, and two companies using an outcome-based model. L&I began partnering with these five case management firms in 2015 and 2016.

L&I initially makes the first referral to one of the five contracted firms; however, if they're unable to take the referral, the agency then refers to one of the non-catastrophic nurse case managers, as shown in Figure 2 on page 8.

### Hourly rate case management

L&I began referring cases to three hourly rate firms – Rainier, Coventry, and Stubbe and Associates – in February 2016. L&I's occupational nurse consultant assigns work activities to the firms' nurse case managers.

### Outcomes-based case management

L&I began referring cases to the first outcomes-based firm, Qualis Health, in August 2016. This contract, focusing on spinal injuries and traumatic brain injuries, is managed as follows:

- Qualis provides care management for a fixed case rate until the worker reaches maximum rehabilitation. Maximum rehabilitation means the injured worker:
  - Is discharged to appropriate long-term placement (for example, home or a residential facility) after completing rehabilitation;
  - Has achieved vocational goals or has a vocational plan in place; and,

- Has a life care plan established where appropriate.
- Desired outcomes are established in five areas:
  - The ultimate expected level of recovery at the end of rehabilitation (after approximately 18 months)
  - Functional recovery milestones measured at discharge and at six, 12 and 18 months after discharge
  - Successful achievement of all the transitions identified in the patient care plan (for example, transition from a long-term care facility to home)
  - Evaluation for mental health services and receipt of appropriate services
  - Patient and family satisfaction
- If the desired outcomes are not achieved at maximum rehabilitation or by 18 months following discharge, L&I and Qualis Health will evaluate the case to determine the reasons the outcomes were not met, establish next steps, and assess a financial penalty.

L&I began referring cases to the second outcomes-based firm, Paradigm, in October 2016. This contract, focusing on catastrophic injuries of all types that have higher injury severity scores, is managed as follows:

- Paradigm provides case management based on an individual outcome plan until the selected outcome is achieved. The price for each plan is developed by Paradigm. The five potential outcomes that can be selected are physiologic stability, physiologic maintenance, residential integration, community integration, or capacity to return to work.
- Paradigm manages the case until the outcome is achieved for the agreed-upon price, unless the plan is terminated early for reasons listed in the contract (for example, substantial, documented noncompliance by the injured worker, preventing Paradigm from medically managing the case).

## L&I REFERRAL TEAM CLAIM MANAGEMENT

The second goal area is to create an internal team to medically manage catastrophic claims. L&I has established a dedicated group of experienced claim managers and occupational nurse consultants to handle catastrophic claims, and has expanded existing technology systems to track and manage the claims.

### Before the project

Before changes were made as a result of this project, L&I was notified of catastrophic claims by email, with no way to monitor them beyond the general systems in place for all claims. Like most other claims, catastrophic claims were assigned to claim managers (CMs) based on the worker's address and the CM's experience level, with no way to take into account the unique needs of these seriously injured workers. There was no tracking mechanism to help proactively manage the worker's care and address care coordination, medications and discharge planning. In addition, when a claim transferred to a different unit and claim manager, the occupational nurse consultant (ONC) also changed, resulting in a

loss of continuity. The ONC might not have been aware of a catastrophic claim until informed by a claim manager. There were also no standards specific to catastrophic claims regarding assigning the claim to a nurse case manager (NCM).

## **Since the project**

L&I now uses a centralized system to track and proactively monitor catastrophic claims, and a catastrophic “flag” is being built into the claim management system. Catastrophic claims are assigned to a specific, dedicated catastrophic team, comprised of three experienced CMs and one ONC. The team oversees and manages newly identified catastrophic claims. The ONC is now notified of the catastrophic claim at the same time as the dedicated CM. This allows the ONC to take action immediately after being notified, and to monitor the case so that coordination of expected length of hospital stay and discharge planning may occur as needed. Upon initial assignment of the catastrophic claim, the ONC reviews the claim and assigns a nurse case manager to work directly with the injured worker in their community, if needed.

Having a catastrophic team helps claim managers receive and process claims faster so that services can be authorized faster.

## **What difference does this make?**

An example of the difference this approach can make to an individual catastrophically injured worker is a 17-year-old high school junior who had his dominant right arm amputated while running a meat grinder. There were many issues involved in this claim, but because of the dedicated team and the more systematic process, the injured worker was back to school within a month of the injury and was fitted for a prosthetic. Additionally, because of the more efficient notification process, L&I staff was able to immediately start an investigation into the issue of a minor running a meat grinder and being paid under the table.

## **Catastrophic referral data**

Figure 1 shows the types of catastrophic claims that have been referred to L&I’s dedicated catastrophic team based on injury type as of October 2016. More than half are “multiple trauma,” meaning multiple injuries such as more than one broken bone. The next most frequent injury type is traumatic brain injury. As of October 26, 2016, 150 open catastrophic claims are being tracked in L&I’s Occupational Health Management System. Over the past year, L&I has closed 12 claims, which are not accounted for in Figure 1. As claims are resolved, they will be removed from these statistics. Tracking includes monitoring patient discharges, transfers to other health care facilities, and return to work.

**Figure 1: Open catastrophic claims by injury type as of October 26, 2016**

Estab. Date	Major Burn	Spinal Cord Injury	Amputation	Traumatic Brain Injury	Multiple Trauma	Other	Total
10-15	2			3	6		11
11-15		1		3	8		12
12-15					9		9
01-16	1	1		3	5		10
02-16		3	1	1	3	1	9
03-16	1	1	1	4	5	4	16
04-16				1	8		9
05-16	1			1	8		10
06-16	1	1			9	4	15
07-16	1		1	3	2	1	8
08-16	1	1		2	4	1	9
09-16	3			2	11	5	21
10-16		1			6	4	11
<b>Total</b>	<b>11</b>	<b>9</b>	<b>3</b>	<b>23</b>	<b>84</b>	<b>20</b>	<b>150</b>

Figure 2 shows the number of catastrophic referrals assigned to a nurse case manager by month, beginning in February 2016 when referrals for catastrophic case management began. Of the 108 open claims since February 2016, over half, or 63 claims, have been assigned to a nurse case manager. Some catastrophic claims don't require assignment of a nurse case manager, such as those in which the injured worker is clinically stable and an injury care plan is in place. Some claims may be assigned a nurse case manager later if current medical information is not complete or claim allowance is still an issue.

**Figure 2: Catastrophic nurse case management assigned by month referred**

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Number of catastrophic referrals	9	16	9	10	15	8	9	21	11
Number of catastrophic referrals assigned*	8	11	4	6	11	5	4	10	4
Coventry	2	6	1	0	2	2	0	4	2
Rainier	0	1	0	3	2	0	2	3	0
Stubbe	3	1	1	3	7	3	1	3	1
Non-catastrophic CM	3	3	2	0	0	0	0	0	0
Qualis	N/A	N/A	N/A	N/A	0	0	1	0	0
Paradigm**	N/A	1							

\*Unassigned referrals include the following: catastrophically injured workers determined by an ONC to not need a catastrophic case manager at the moment; deceased injured workers; cases in which more information is needed about the claim; or claims that are still under determination

\*\*Referrals to Paradigm started in October.

## CATASTROPHIC CARE COORDINATION

The third goal area identified for improvement is to improve outcomes and quality of care for workers through increased care coordination. Staff at L&I's headquarters and regional offices worked together to identify catastrophic care coordination roles. The internal team mapped the current care coordination process and identified coordination services for which L&I currently pays. These include care coordination provided by internal staff, external nurse case managers, service coordinators for centers of occupational health and education, and care coordinators for centers of excellence. L&I staff reviewed the interactions between the existing and newly developed roles to identify any additional or remaining gaps in service.

Staff identified discharge planning difficulties and discussed them with various stakeholders, including health care providers throughout Washington. Discussion on this topic continues.

L&I will also be evaluating care coordination as part of ongoing continuous quality improvement to identify gaps or overlap.

## CENTERS OF EXCELLENCE

L&I's fourth goal area is to establish Centers of Excellence to proactively monitor, evaluate, consult on, and track catastrophically injured workers. The aim of Centers for Excellence is to assure continuity in care, especially long-term care that is often needed but not planned for, and where coordination between an informed specialist and a community provider is necessary. L&I is committed to leveraging current providers of world class trauma and rehabilitative services in Washington to be Centers of Excellence for catastrophic injuries.

The first Center of Excellence was established in February 2016 with the Center of Excellence for Amputations at Harborview Medical Center. L&I began referring cases to the center in April 2016. Standard referral criteria and processes continue to be implemented through summer 2016 for both new claimants and those with claims already in the system. L&I is negotiating with Harborview Medical Center to establish a second Center of Excellence in burn care.

Centers of Excellence (COEs) support five L&I goals for catastrophically injured workers with amputee-related needs covered by Washington State industrial insurance:

1. Assure access to collaborative, evidence-based clinical services and expertise for all injured workers with major amputations covered by Title 51.
2. Provide necessary specialty care across care environments and throughout the life of the claim.
3. Use brief, validated instruments<sup>2</sup> to collect and analyze baseline and outcomes data to support disability prevention, return to work, and improvement in function/quality of life.

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<sup>2</sup> Instruments to be used include a variety of scales specific to injury type, as well as the Patient Health Questionnaire (PHQ-9) and the Community Integration Questionnaire.

4. Develop, promulgate, and maintain evidence-based guidance for medical necessity/utilization of interventions, benefits, and services required by amputees, including prosthetics and other durable medical equipment.
5. Support and maintain exchange of information required by the insurer to make equitable and timely adjudicative decisions.

The COEs must meet high standards, including national recognition for leadership in research, training and practice. Center physician leaders must be board-certified in physical medicine and rehabilitation, and have both statewide and national recognition as leaders and experts in their relevant field (for example, publications, expert panel participations, faculty appointments, research participation or quality improvement participation). The COE must have the capacity to provide expert services by physicians, a multi-disciplinary team, or other health care professionals to respond to the complex challenges of a referral and for post-consultation care coordination, planning, and services. These services may include tracking, program evaluation, outcomes review, and analysis.

COEs commit to provide timely, coordinated access to patient-centered, appropriate team-based, multi-disciplinary services. These services focus on comprehensive assessment, expert analysis and evidence-based treatment for work-related amputations. They are actively measured, monitored and adjusted to achieve key clinical targets such as return to work.

## EVALUATION OF CATASTROPHIC CASE MANAGEMENT

L&I's fifth and final goal is to conduct a prospective evaluation of catastrophic case management provided by the contracted firms. Before developing the evaluation plan, L&I conducted a rigorous retrospective analysis of past cases that met the current case definition of a catastrophic claim to better understand trends in return to work and disability within this population.

L&I and the University of Washington (UW) have signed a contract for this evaluation and expect to begin enrolling injured workers in late 2016. The prospective component of the evaluation required extensive discussions between L&I staff and the UW research team. The contract clarifies and describes the agreed-upon procedures and evaluation methods. Evaluated outcomes will be measured using transparent, validated, publicly available instruments.<sup>3</sup> L&I will compare the patient-centered outcomes of this care management model with other strategies to improve care, and will publish the results to provide education about the best ways to achieve better outcomes for injured workers.

Because the evaluation involves human participants, the study application was submitted to the Institutional Review Board at the University of Washington for approval in July 2016.

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<sup>3</sup> Instruments to be used include a variety of scales specific to injury type, as well as the Patient Health Questionnaire (PHQ-9) and the Community Integration Questionnaire.

# Goals for 2017

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L&I expects to continue making significant progress on implementing the Comprehensive Catastrophic Care Management plan project and meeting the goals of the project in 2017.

- L&I's team of claim managers and occupational nurse consultants will continue to manage catastrophic claims.
- The five contracted external case management firms will continue to be assigned catastrophic claims as they occur.
- L&I will evaluate care coordination provided by case management firms to identify areas of strength and deficiencies that need to be further addressed.
- L&I expects to develop additional Centers of Excellence specializing in specific types of catastrophic injuries.
- The prospective evaluation project will continue to enroll catastrophically injured workers and to track their claims and progress.
- L&I will continue to work with the contracted external case management firms as they seek to manage care and improve outcomes for catastrophically injured claimants in appropriate cases. Firms will submit progress reports on case management processes and outcomes, and L&I will evaluate work products to ensure they meet the standards detailed in each individual case management contract.
- L&I will evaluate methods and approaches to care coordination provided by case management firms to determine which are most effective in improving outcomes for injured workers. This evaluation will focus on discharge planning, including identifying and documenting current processes, as well as proposing ways to improve this integral service. The evaluation will also identify any remaining deficiencies in care coordination that need to be addressed by the internal team.
- L&I will maintain its current internal referral team consisting of three claim managers, one occupational nurse consultant, and a medical program specialist. The team's goals are to enhance injured workers' experiences and improve the overall function of the case management firms and the larger project. L&I will continue to use the existing Occupational Health Management System to track claims. As needed, internal staff will work together to modify and improve this system to meet the evolving needs of this project.
- L&I expects to finalize and standardize referral criteria to the Center of Excellence for Amputees for newly injured workers, as well as for those already in the system. The center will continue to accept these claimants and to administer appropriate services. L&I will evaluate the services provided to determine effects on post-injury outcomes for these workers.
- L&I will finalize a contract and begin working with Harborview Medical Center for the Center of Excellence for Burns. This will involve standardizing referral criteria and implementing necessary processes. Once these steps have been completed, L&I will begin referring new and existing claims to this center.

- Other Centers of Excellence for specific injury types may be developed, depending on the needs of the project and the interest and capacity of appropriate health care facilities.
- L&I will work with the University of Washington research team throughout 2017 on the prospective evaluation of case management firms. L&I staff will communicate regularly with the research team regarding newly injured workers that meet the criteria to participate in the prospective evaluation. Case management firms will be required to deliver functional outcome measures at prescribed dates after injury, as specified in their contracts. These functional outcome measures will be used to better understand the effectiveness of the various case management firms, as well as the overall success of the project in improving injured worker outcomes.

# Conclusion

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L&I received funding through a budget proviso in the 2016 supplemental budget to develop, implement and evaluate the Comprehensive Catastrophic Care Management Project and improve outcomes for catastrophically injured workers. By increasing care coordination, establishing a dedicated internal team of experienced staff, partnering with experienced firms to manage care for catastrophically injured workers, establishing Centers of Excellence, and comparing worker outcomes achieved using these types of care, L&I expects to improve outcomes for catastrophically injured workers. L&I will use this information to identify best practices to continually improve worker outcomes.

In 2016, L&I began making significant progress toward the goals of the project. The department's achievements are the foundation for additional work in 2017 and beyond to reduce disability for injured workers by improving the medical care they receive.