

# **Comprehensive Catastrophic Care Management Pilot Project**

*2020 Report to the Legislature*

January 2021

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# Executive Summary

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## Introduction

The Department of Labor and Industries (L&I) is dedicated to helping injured workers heal and return to work. The quality of care and care coordination provided to catastrophically injured workers is a major factor in promoting healing, improving return to work outcomes, and preventing disability for these workers.

A 2016 supplemental budget proviso<sup>1</sup> approved by the Washington State Legislature funded a pilot project in which L&I was to partner with an experienced firm or firms to manage care of catastrophically injured workers. The proviso included requirements intended to ensure that catastrophically injured workers receive the highest quality care, as well as timely and effective claim resolution.

L&I is pleased to provide the fifth annual report on the progress of the pilot program from January through November 2020. As of June 2020, parties approved contract extensions through 2022. Reports on the program will continue annually through December 2022. The budget proviso also included funds for an evaluation of the nurse case management portion of the pilot, which was conducted by the University of Washington and is available online at <https://deohs.washington.edu/occepi/research>. The results of the evaluation are also summarized in this report.

### What is a catastrophic injury?

For the purposes of this report, the initial identification of a catastrophic injury begins with a work-related injury that:

- Is managed by L&I,
- Requires hospitalization within 24 hours, and
- Requires at least four consecutive days of hospitalization.

If the injury meets these criteria, the L&I clinical team does further medical review to determine if the injury meets the catastrophic designation, and then refers it to nurse case management. Cases that met catastrophic criteria but were deemed un-survivable were not referred for nurse case management. Cases that did not meet catastrophic designation and were not referred had injuries of lower severity.

### Comprehensive Care Management Plan

L&I follows a five-point Comprehensive Catastrophic Care Management plan to improve the care of Washington's most severely injured workers. L&I developed this plan in 2015 after identifying strengths and gaps in the care of these workers. Since then, the agency has determined that one of the plan's goals ("Improve outcomes and quality of care, as well as prevent disability for injured workers

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

through catastrophic care coordination”) represents the scope of the project. The remaining four goals, listed below, are in service to that overarching need:

- Increase use of **external nurse case management** services for catastrophic claims.
- Create an **internal L&I referral team** to medically manage catastrophic claims.
- Establish **Centers of Excellence** for catastrophic injuries.
- Conduct a **formal evaluation** of the catastrophic care management pilot

Building on strides made in 2019, L&I continued to make progress toward meeting the goals of the Comprehensive Catastrophic Care Management plan. Below are achievements made between January and November 2020 that fall into the scope of this report:

1. Increase use of **external nurse case management** services for catastrophic claims.
  - L&I continued the use of nurse case managers (NCMs) for workers recovering from catastrophic industrial injuries, ensuring effective care coordination as injured workers transition from acute care to the recovery phase.
  - The agency continued to work with and evaluate services provided by four contracted firms that provide NCM services to catastrophically injured workers.
  - With the initial catastrophic case management contracts ending, and anticipating a new phase of ongoing NCM, L&I released a request for information (RFI) on nurse case management best practices and five firms responded with detailed information.
  - L&I is developing a request for proposal (RFP) to solicit nurse case management services from NCM firms, ensuring the continuation of catastrophic care management for the foreseeable future.
  
2. Create an **internal L&I referral team** (clinical team) to medically manage catastrophic claims.
  - L&I’s clinical team continues to engage with key claims and payment personnel internally and with regional Occupational Nurse Consultants to provide the most efficient coordination.
  - The catastrophic team continues to standardize the ways in which durable medical equipment, housing, and vehicle modifications are provided to catastrophically injured workers to assist in reintegrating workers to home and community.
  - The L&I Therapy Services program continued to encourage injured workers’ participation in re-activation methods to aid in their recovery through a technique developed by the Progressive Goal Attainment Program® (PGAP, activity coaching). Between December 1, 2017 and November 30, 2020, 26 catastrophic claims were referred to PGAP. Twenty-six claimants have been assigned an activity coach, and 19 have attended an initial assessment. There have been 13 catastrophically injured workers who have completed the PGAP intervention.
  - The Office of the Medical Director (OMD) continues to work with the Occupational Health Management System (OHMS) information technology team to expand data collection, thus enabling improved catastrophic claim tracking and management.

3. Establish **Centers of Excellence** for catastrophic injuries.
  - L&I extended the contracts with the Centers of Excellence for an additional two (2) years, ensuring that workers have access to these services until 2022.
  - L&I continues to work with the Centers of Excellence for burns and amputations to assist catastrophically injured workers with these injuries, and to create a resource in Washington that provides care collaboration and specialty assistance to those affected by these types of industrial injuries.
  
4. Conduct a **formal evaluation** of catastrophic care management.
  - L&I contracted with the University of Washington (UW) to conduct a study to assess functional gains, community integration, and mental and social functioning of injured workers. Enrollment in the UW study ended October 31, 2018, and analysis was recently completed.
  - L&I received the completed UW study in October 2020. The study made the following general conclusions:
    - There is a high level of worker satisfaction with NCM services.
    - Workers who received NCM services had more severe injuries than workers who did not receive NCM services. There were no changes in the average duration of time loss or average health care costs after implementation of the NCM pilot for catastrophic injuries beyond the actual cost of NCM.
    - There was wide variation in the costs associated with various firms providing nurse case management.

## 2021 goals

L&I expects to continue making significant progress on the Comprehensive Catastrophic Care Management plan in 2021. Planned 2021 actions in each goal area are described below.

1. Increase use of **external nurse case management** services for catastrophic claims.
  - L&I will continue to assign nurse case management of catastrophic claims to contracted external NCM firms as appropriate.
  - L&I will review the findings of the UW study to identify areas of improvement and implement strategies and policies to overcome barriers to care.
  - L&I will continue to develop and refine how care coordination is assigned, in order to reflect best practices and ensure workers receive equitable, quality care regardless of their location.
  - L&I will apply lessons learned and the resources established within the catastrophic project to the larger industrial insurance community.
  
2. Create an **internal L&I referral team** (clinical team) to medically manage catastrophic claims.
  - The agency will continue to work with established ONC and regional staff in order to ensure early identification, encourage proactive intervention, and establish a robust care coordination plan.

- L&I will continue to use internal information technology tools, such as OHMS, to track referrals to the Centers of Excellence and to monitor and evaluate the progress of injured workers.
3. Establish **Centers of Excellence** for catastrophic injuries.
    - The agency will continue to work collaboratively and refer workers with burns and amputations to the Centers of Excellence
  4. Conduct a **formal evaluation** of catastrophic care management.
    - The agency will review and implement the findings of the UW catastrophic nurse case management evaluation to help determine how modifications to current practices can overcome gaps in care, as well as identify additional care collaboration needs that were not discovered during the pilot period.
    - Based on the findings of the study, the agency will identify data collection practices necessary for the continued improvement of the catastrophic care program.

# Introduction

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Washington's workers' compensation system provides benefits to workers who suffer from an occupational disease or work-related injury. It pays for medical treatment and partial wage replacement, and provides disability benefits.

The Department of Labor and Industries (L&I) is dedicated to helping injured workers heal and return to work. The quality of care provided to catastrophically injured workers is a major factor in promoting healing, improving return to work outcomes, and preventing disability for these workers. The 2016 supplemental budget passed by the Washington State Legislature funded a pilot project to manage care for catastrophically injured workers through a Comprehensive Catastrophic Care Management plan that ensures these workers receive the highest quality care and timely and effective claim resolution. The initial identification of a catastrophic injury begins with a work-related injury that:

- Is managed by L&I,
- Requires hospitalization within 24 hours, and
- Requires at least four consecutive days of hospitalization.

If the injury meets these criteria, the L&I clinical team does further medical review to determine if the severity of the injury meets catastrophic criteria, and if nurse case management is necessary.

The pilot project funded by the legislature aims to address gaps identified in a 2014 L&I evaluation of the care received by catastrophically injured workers (Catastrophic Claims Gap Analysis). It also provides a more integrated and formalized role for L&I staff with clinical expertise in the medical management of catastrophic claims to help L&I ensure the highest quality health outcomes and reduce disability and lost work days for catastrophically injured workers.

This report summarizes the progress made toward accomplishing the pilot project goals from January 1 through November 30, 2020, and identifies planned next steps for 2021.

# Progress and Achievements in 2020

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L&I has been systematically identifying and proactively monitoring catastrophic claims since 2015. Each year, L&I accepts about 95,000 claims. The department identified 27 of these claims as catastrophic during the 2020 reporting period of January 1 – November 30, 2020. All 27 were assigned to a nurse case manager in 2020.

Between October 1, 2015 and November 30, 2020, 477 claims submitted to L&I met the criteria for catastrophic injury. Of these, more than half (54 percent) were “multiple trauma,” meaning they involved significant injuries to more than one area of the body. The remaining injury types included brain injuries, major burns, spinal cord injuries, amputations, and “other” types of injury. The “other” category identifies claims not represented by the more prevalent injury types. Examples of “other” catastrophic injuries are severe respiratory distress caused by chemical exposure, anaphylaxis, internal organ damage, and single-limb injuries with significant tissue damage.

L&I’s process for determining whether a case is a catastrophic injury includes an initial medical review by the agency’s clinical review team. This team consists of a clinical nurse specialist, an associate medical director, five occupational nurse consultants, and a medical program specialist. The clinical review team identifies catastrophic claims within days of a worker’s hospitalization, and immediately assigns the case to a “catastrophic team” consisting of claim managers and Occupational Nurse Consultants (ONCs) who focus on these cases. As a result, communication about the claim, assessment of the worker’s needs, and needed medical services occur earlier and more consistently. Claims are proactively monitored with oversight by an L&I clinician until the injured worker returns to work or the claim is closed.

L&I follows a five-point Comprehensive Catastrophic Care Management plan to improve the care of Washington’s most severely injured workers. L&I developed this plan in 2015 after identifying strengths and gaps in the care of these workers. Since then, the agency has determined that one of the plan’s goals (“Improve outcomes and quality of care, as well as prevent disability for injured workers through catastrophic care coordination”) represents the broader objective of the project. The remaining four goals, listed below, are in service to that overarching need:

- Increase use of **external nurse case management** services for catastrophic claims.
- Create an **internal L&I referral team** to medically manage catastrophic claims.
- Establish **Centers of Excellence** for catastrophic injuries.
- Conduct a **formal evaluation** of the catastrophic care management pilot

This section of the report describes actions L&I taken from January 1 through November 30, 2020 to achieve the project goals.

## EXTERNAL NURSE CASE MANAGEMENT

The 2015 Catastrophic Claims Gap Analysis showed that between 2005 and 2011, L&I assigned nurse case managers (NCMs) to only five percent of identified catastrophic claims. In 2020, L&I assigned nurse case management to all catastrophically injured workers. The department has found that assigning NCMs to workers with catastrophic injuries can improve workers' experiences with both the department and their health care providers, which positively impacts their overall outcomes. Moving into 2021, L&I will continue to assign catastrophic claims to receive NCM services as deemed appropriate by the clinical review team.

L&I continues to use four of the five nurse case management firms that initially contracted with the department in 2015 and 2016. These four firms continued to function as defined in their contracts through 2020.

### Hourly rate case management

L&I refers catastrophically injured workers to two firms that bill based on an hourly rate – Rainier Case Management Inc., and Stubbe and Associates. Work activities are assigned to each firm's NCMs and are overseen by L&I's ONCs.

Between October 1, 2015 and November 30, 2020, Rainier Case Management, Inc. accepted 52 referrals, and Stubbe and Associates accepted 71 referrals.

### Outcomes-based case management

L&I refers catastrophically injured workers to two firms that bill based on case outcomes – Comagine Health and Paradigm Outcomes.

#### Comagine Health

Prior to 2020, Comagine Health was available to provide nurse case management solely for workers who suffered isolated spinal cord injuries and traumatic brain injuries and were receiving treatment at Harborview Medical Center. In June 2020, L&I and Comagine Health agreed to expand their services.

Comagine Health provides case management for a fixed case rate until the worker reaches "maximum rehabilitation," meaning the worker:

- Is discharged to appropriate long-term placement such as a home or residential facility after completing rehabilitation,
- Has achieved his or her vocational goals or has a vocational plan in place, and/or
- Has a life-care plan established when appropriate.

Achievement of desired outcomes is measured by:

- The ultimate expected level of recovery at the end of rehabilitation (approximately 18 months).

- Functional recovery milestones measured at discharge and at six, 12, and 18 months after injury.
- Successful achievement of all 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, if indicated.
- Patient and family satisfaction.

If the desired outcomes are not achieved at maximum rehabilitation or by 18 months following injury, L&I and Comagine Health evaluate the case to determine the reasons the outcomes were not met and to establish next steps.

As of November 30, 2020, Comagine Health has accepted a total of 10 referrals since the beginning of the pilot in 2015.

### **Paradigm Outcomes**

Paradigm Outcomes has generally received cases with higher-severity catastrophic injuries.

Paradigm provides case management based on individual outcome plans. Nurse case management continues until achievement of the outcomes agreed to by Paradigm and L&I. Outcomes are related to the following:

- Physiologic stability.
- Physiologic maintenance.
- Residential integration.
- Community integration.
- Capacity to return to work.

Paradigm formulates a price for each plan that includes case management; estimated medical expenditures during the contract period to achieve the proposed outcome; and a risk coefficient cost, which is a cost attributed to the amount of risk Paradigm assumes based on the outcome they propose. L&I has reserved the right to decline proposed outcome plans. If this occurs, Paradigm bills in accordance with a specialized fee schedule for time they worked on the case.

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, such as substantial, documented noncompliance by the injured worker that prevents Paradigm from medically managing the case.

As of November 30, 2020, Paradigm has accepted a total of 18 referrals since the beginning of the project.

In early 2020, L&I and Paradigm extended their nurse case management contract until July 3, 2022. This will allow for continued nurse case management for workers already receiving services from Paradigm. L&I and Paradigm agreed that no new referrals for case management will be made under the current contract, due to the likelihood that case management would continue to be needed beyond the contract end date. L&I cannot extend the current contract beyond July 3, 2022.

## Nurse case management referrals

Figure 1 shows referrals made by L&I to NCM firms from 2015-2020, the number of referrals accepted by the firms, and the average cost for each firm's services. For firms under the hourly-rate contract, the average length of nurse case management was 11 months. In outcome-based firms, NCMs have spent up to 42 months on cases. There was no significant increase from 2019 to 2020 in cost per claim for NCM services by firm and billing model.

**Figure 1: NCM firm referrals and costs from 2015-2020**

External Firm	Referred	Accepted	Average Length of NCM	Average NCM Costs	Average Cost to Assume Risk	Additional Costs Borne By
Stubbe	85	71	11 Months	\$12,700	NA	L&I
Rainier	71	52	11 Months	\$17,300	NA	L&I
Comagine	23	10	18 Months	\$53,700	NA	L&I
Paradigm	*34	18	28 Months	\$68,100 **\$13,300	***\$245,000	Paradigm

\*L&I declined the proposed case rate on 16 cases and reassigned them to another firm if NCM services were still necessary.

\*\* Refers to the average NCM cost to claim for work done by Paradigm on 11 declined cases over the initial 40 days. For the remaining five cases, Paradigm has not submitted bills.

\*\*\*This number now excludes NCM costs, which has resulted in a lower average than in 2018<sup>2</sup>.

## L&I REFERRAL TEAM CLAIM MANAGEMENT

L&I's catastrophic team, a dedicated internal team of experienced claim managers and occupational nurse consultants, handles catastrophic injury claims with the help of expanded technology systems that track and provide an information management tool for the claims.

### Changes resulting from the pilot project

Prior to this pilot project, email notification of a catastrophic claim was common practice, with no way to monitor these claims other than 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. There was no way to take into account the unique needs of these seriously injured workers, and no tracking mechanism to help proactively manage the worker's care or address care coordination, medications, and discharge planning. In addition, when a claim

<sup>2</sup> Comprehensive Catastrophic Care Management Project 2018 Report to the Legislature (<http://www.lni.wa.gov/Main/AboutLNI/Legislature/PDFs/Reports/2018/CatastrophicCareManagementReport.pdf>)

transferred to a different unit and CM, the ONC also changed, resulting in a loss of continuity. In addition, there were no specific standards for assigning catastrophic claims to NCMs.

Now, L&I uses a centralized system to track and proactively monitor catastrophic claims, and a catastrophic “flag” functions within the claim management system. The catastrophic team oversees and manages newly identified catastrophic claims, and the ONC and CM are notified of new claims at the same time. This allows the ONC to take immediate action and to ensure that coordination of expected length of hospital stay and discharge planning can occur in a timely manner. Upon initial assignment of the catastrophic claim, the clinical team reviews the claim and assigns a nurse case manager to work directly with the injured worker in their community, if needed.

The catastrophic team is in frequent contact with NCM firms to discuss cases and address any issues as they arise. The team meets weekly to address claim issues or concerns. L&I reviews nurse case management reports and functional assessments to ensure quality and timeliness. The agency continues to emphasize required reporting on functional status to ensure timely and consistent receipt of information. Functional assessments can pinpoint symptoms, guide treatment planning, inform decision-making, set baselines, and track patient progress.

### **What difference have these changes made?**

*A recent case highlights the way effective intervention mitigates potential barriers:*

*A worker sustained a serious work-related injury that resulted in paraplegia. The life-changing nature of this injury left the worker depressed, unmotivated, and feeling dependent and useless. The nurse case manager (NCM) L&I assigned to the case recognized this was impacting the worker’s well-being and recovery. To help this worker overcome these problems, the NCM found an experienced rehabilitation physical therapist, who made house calls. The NCM connected the therapist with the worker, and they scheduled regular appointments.*

*Since working with the therapist, the worker has become more engaged with and enthusiastic about his treatment and recovery. The worker learned to apply leg braces that allowed him to stand, and even to walk short distances with assistance. This increased the worker’s independence, which in turn improved his mood and allowed his confidence to improve. While there is no cure for paraplegia, there is a wide variability of independence. The NCM’s intervention, connecting the worker with a key therapist, turned this worker’s recovery and future function in a positive direction. The therapist helped the worker recognize the level of independence he could have with his injury, and improved his outlook on life.*

### **Catastrophic claim data**

Figure 2 shows catastrophic claims, by injury type, that were identified and referred to L&I’s catastrophic team from October 1, 2015 through November 30, 2020. Claims are shown by calendar quarter. Due to changes in the way data is processed, the numbers in this chart have been

redistributed between quarters and may look different from the chart numbers in previous reports; however, the total remains the same.

**Figure 2: Catastrophic referrals by primary injury type**

Quarter	Major Burn	Spinal Cord Injury	Amputation	Traumatic Brain Injury	Multiple Trauma	Other	Total
4Q15	6	1	0	9	28	1	45
1Q16	3	5	2	8	13	4	35
2Q16	2	1	0	3	26	4	36
3Q16	5	1	1	7	17	6	37
4Q16	1	3	0	34	20	6	33
1Q17	0	1	1	1	13	3	19
2Q17	2	5	3	5	16	7	38
3Q17	1	1	2	4	19	1	28
4Q17	2	2	1	3	20	3	31
1Q18	1	0	0	8	19	8	36
2Q18	2	4	3	1	12	5	27
3Q18	1	1	0	4	14	3	23
4Q18	1	1	1	1	9	3	16
1Q19	0	2	0	3	5	1	11
2Q19	1	2	0	2	7	0	12
3Q19	1	2	1	3	4	2	13
4Q19*	1	0	0	4	2	0	7
1Q20				3	4		7
2Q20		1	1	3	2		7
3Q20		2	1	1	3	2	9
4Q20			1		3		4
<b>Total</b>	<b>30</b>	<b>35</b>	<b>18</b>	<b>76</b>	<b>256</b>	<b>59</b>	<b>**474</b>

\*Numbers have been updated to reflect catastrophic injuries occurring in December 2019 that were not captured in the 2019 report, specifically three claims have been added to the 4Q19 total.

\*\*This table does not account for unknown/ undetermined injury types and fatalities, potentially resulting in a lower total for all catastrophic designations to date.

L&I’s clinical team carefully assesses new hospitalizations throughout Washington to ensure catastrophically injured workers are identified and appropriate claim management begins as soon as possible after injury. In 2019, the clinical team began assigning NCMs to all catastrophic cases for at least 90 days. This practice continues throughout 2020.

Figure 3 shows the total number of catastrophic claims received by L&I in 2020, and those that have been assigned to an external NCM firm. As of November 30, 2020, 100 percent (27 of 27) of catastrophic claims have received NCM services -- showing the success of L&I’s dedication to increasing NCM services in order to improve catastrophic care. In comparison, in 2016, 55 percent of catastrophic claims received NCM services; in 2017 and 2018, 33 percent received these services; and in 2019, 100 percent received these services.

**Figure 3: Catastrophic nurse case management assignment for January – November 2020**

<b>Number of catastrophic claims</b>	27
<b>Number of catastrophic claims assigned a NCM</b>	27
<b>Number of catastrophic claims not assigned a NCM</b>	0

## CATASTROPHIC CARE COORDINATION

L&I’s implementation of best practices in care coordination is well underway. Since the agency began mapping the various roles in care coordination throughout the care continuum and in different health care facilities, catastrophically injured workers are being identified sooner, which allows L&I to initiate best practice interventions more quickly. Reviewing each case helps identify service needs, which allows crucial resources such as nurse case management, Centers of Excellence, and activity coaching referrals to occur earlier for catastrophically injured workers.

Since completing a discharge planning gap analysis in 2017, L&I has continued working to:

- Provide a seamless transition from acute care to the recovery and community-based phase.
- Reduce emergency department visits after initial hospitalization
- Reduce hospital re-admissions.
- Improve worker satisfaction by reducing barriers to care.

L&I continues to work closely with the ONC field nurse team to establish contact with hospitalized workers in their areas. This has expedited both the care coordination process and discharge planning. Direct contact with workers and their medical providers has enabled L&I to make decisions that align with evidence-based best practices.

The L&I Therapy Services program has continued to encourage injured workers’ participation in activity coaching to aid in their recovery through a technique developed by the Progressive Goal Attainment Program® (PGAP). Between December 1, 2017 and November 30, 2020, 26 catastrophic

claims were referred to PGAP. Twenty-six claimants have been assigned an activity coach, and 19 have attended an initial assessment. A total of 13 workers designated catastrophic have completed PGAP intervention.

## **A broader application of lessons learned**

One of the major results of this project is the implementation of a clinical team that reviews and assesses new hospitalizations throughout Washington on a weekly basis in order to provide front line medical review and identify catastrophic workers as soon as possible. The clinical team has adapted their processes to serve as an early notification system for non-catastrophic claims, allowing the agency to identify and assist workers whose injuries do not meet catastrophic criteria, but require immediate attention. If assistance is necessary, the clinical team outlines concerns, identifies potential resources, and takes steps to gather additional medical documentation by utilizing a regional nurse in or near that worker's community. If the injury is a burn or amputation, the clinical team notifies the appropriate Center of Excellence of the referral for evaluation and care coordination.

Since 2016, the evolution of the catastrophic program has yielded improvements to the NCM referral and assignment process, even with claims that are not catastrophic but are potentially severe enough to benefit from NCM. These early interventions have a direct impact on a worker's chance of returning to work and on preventing long-term work disability.

## **Planning for the future**

In May 2020, the agency released a request for information (RFI) to local and national nurse case management firms with the intent of building a better understanding of best practices, and to find areas of possible improvement and refinement for the catastrophic program. Five nurse case management firms responded. Examples of the types of question posed in the RFI include:

- How have you ensured high quality and timely nurse case management services for catastrophically injured workers across geographically diverse regions like Washington?
- Please describe any innovations you support or have implemented, such as telehealth or tele-rehab services, to effectively provide nurse case management services for catastrophically injured workers.
- Are you currently using innovative payment or delivery models, or envision using them in the future? Please briefly describe each.

Responses to these questions allowed L&I to compare and evaluate practices surrounding payment policy, length of nurse case management assignment, and reporting requirements.

Overall, L&I found that our current practices align with the nurse case management community at large. We generally allow nurse case management assignment for a longer period of time than the average reported by these firms. Firms also reported a general trend towards utilizing telehealth, telemedicine, and telephonic nurse case management. L&I currently has temporary payment policies

in place through June 2021 allowing reimbursement for these services, and is developing innovative ways to permanently incorporate these reimbursement strategies .

L&I is drawing upon the answers these firms provided to the RFI to help inform a request for proposal (RFP) to be released in late 2020. The intent of the RFP is to develop new NCM contracts that incorporate a combination of lessons learned from the prior cycle and from industry best practices. L&I believes that the Comprehensive Care Management Pilot Project has made a significant impact on worker recovery, and is helping ensure we embed lessons learned as established standard practice.

## CENTERS OF EXCELLENCE

A Center of Excellence (CoE) must have the capacity to provide expert services by physicians, a multi-disciplinary team, and other health care professionals. These service providers must be able to respond to the complex challenges of referrals and provide post consultation care coordination, planning, and services. Services may include tracking, program evaluation, outcomes review, and analysis.

The Center of Excellence for Burn Care and the Center of Excellence for Amputation Care 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 must 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).

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 injuries. A primary aim of CoEs is to assure continuity of care – especially long-term care, which requires coordination between informed specialists and community providers. The centers actively measure, monitor and adjust care to achieve key clinical targets such as return to work.

### **Expanding CoEs' scope and influence**

L&I developed CoEs to assist catastrophically injured workers, but soon recognized that these services needed to be expanded to assist workers with burns and amputations that are not considered catastrophic. L&I and Harborview Medical Center have worked together to create a resource in Washington that is instrumental in providing care collaboration and specialty assistance to those affected by industrial injuries. The CoE for Burn Care was created in February 2017. As of November 2020, it has provided care for 117 catastrophically and non-catastrophically injured workers. The CoE for Amputation Care, also at Harborview Medical Center, has provided care for 53 catastrophically and non-catastrophically injured workers as of November 2020. See Figure 4.

## Figure 4: Center of Excellence care types and frequency

Figure 4 reflects number of Catastrophic and non-catastrophic workers referred to the Centers of Excellence between February 2017-November 2020.

Center of Excellence	Non-Catastrophic Injuries	Catastrophic Injuries
Burn Care	103	14
Amputation Care	32	*21

\*The number of catastrophic amputations shown in this table is higher than in Figure 2 because some amputations were classed as "multiple trauma" or "other" in Figure 2.

## EVALUATION OF CATASTROPHIC NURSE CASE MANAGEMENT (NCM)

Since 2016, L&I and the University of Washington have continued to work on a prospective study of catastrophic nurse case management provided by contracted firms. Before developing the evaluation plan, L&I conducted a rigorous retrospective analysis of past cases to understand trends in return to work and disability among catastrophically injured individuals. This four-year study concluded in 2020.

### Overview of the University of Washington Evaluation

The University of Washington delivered a final evaluation report to L&I in October 2020. The report included findings on worker satisfaction with NCM, worker recovery progress, and the impacts of NCM on medical costs and time loss. The report also included an economic analysis of outcome-based nurse case management, as well as a pre-post analysis.

The four major conclusions of the evaluation are:

- There is a high level of worker satisfaction with NCM services. Many of the workers who received NCM services had very severe, complex injuries. Comments from injured workers during study interviews indicated the workers greatly appreciated and benefitted from the assistance they received from NCM.
- Workers who received NCM services had more severe injuries than workers who did not receive NCM services.
- There were no changes in the average duration of time loss or in average health care costs after implementation of the NCM pilot for catastrophic injuries, beyond the actual cost of NCM. Most of the health care costs are incurred in the first few weeks after injury; therefore, it is unlikely that NCM would have a large impact on the total health care costs.
- There was wide variation in the costs associated with various firms providing nurse case management.

L&I has begun careful review and consideration of the analysis, findings, and conclusions in the report, and looks forward to applying this information to improve the care of catastrophically injured workers throughout Washington. The report is available to the public online at <https://deohs.washington.edu/occepi/research>.

# Goals for 2021

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L&I is committed to continuing to improve care for catastrophically injured workers and ensuring effective, timely claim management and resolution.

In 2021, L&I will continue to make progress on the Comprehensive Catastrophic Care Management plan and goals:

- L&I will continue to work with the four external NCM firms that are supporting injured workers with open referrals. Firms will continue to submit progress reports, and L&I will evaluate work products to ensure they meet contract standards and expectations. L&I will strive to make continuous improvements in NCM assignment, communication, and contracting.
- L&I will complete a new procurement and execute new contracts for NCM services in early 2021. New referrals will be made under these new contracts. One or more of the four NCM firms described above may respond to this new procurement, and may execute a new contract that enables them to receive new referrals in addition to continuing providing ongoing NCM services for injured workers referred to them under the earlier existing contract. The agency will work to incorporate lessons learned from the prior contracting cycle in order to retain established best practices and to improve the effectiveness of NCM services for injured workers.
- L&I will continue to work with both Centers of Excellence at Harborview Medical Center to provide high quality services to workers with catastrophic and serious, non-catastrophic burns and amputations
- L&I's internal catastrophic team will continue to manage catastrophic claims in ways that make it as easy as possible for workers and their significant others to understand the claims process and improve their overall care. L&I will continue to use its Occupational Health Management System (OHMS), a web-based computer system that provides front-end case-management tools, to review the medical resource needs of newly hospitalized catastrophically injured workers throughout Washington on a weekly basis. Internal staff will work together as needed to modify and improve this system to meet the evolving needs of this project.
- L&I regional occupational nurse consultants (ONCs) will continue to be a part of the catastrophic team. These ONCs will help monitor catastrophic claims in their regions and provide direct support by finding specialists and facilities to aid in workers' recovery.
- The L&I catastrophic team will continue to authorize and coordinate obtaining durable medical equipment, as well as home and vehicle modification, as soon as possible when the need is recognized. This practice has led to workers returning home and beginning the crucial rehabilitation and reintegration phases of recovery more seamlessly than before this process was initiated.

- L&I will complete review of the analysis, findings, and conclusions in the University of Washington evaluation report, and seek to make changes to policies and practices that will improve claims management and ultimately the care provided to catastrophically injured workers.

# Conclusion

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Appropriate clinical input on workers' compensation claims is critical to ensure that injured workers receive timely, appropriate medical care and avoid unnecessary treatment. L&I is a national leader in health policies and strategies that guide workers to evidence-based care and keep our medical costs and cost increases below national trends.

By increasing care coordination, establishing a dedicated internal team of experienced staff, collaborating 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 is consistently improving outcomes for workers with catastrophic injuries.

L&I's 2020 achievements are the foundation for additional work in 2021 and beyond to reduce disability for injured workers by improving the medical care they receive.