



# Ontario Life After Work Injury Study

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IWH Speaker Series  
Update: February 2, 2021

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# Update: February 2021

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## Presentation overview

- Summary of study objectives
- Study sample design
- Early findings
- Analysis plan in-progress

## **OLAWIS Project Team**

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C Severin, V Nadalin, C Orchard, K Dobson

# Key Questions

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What are the experiences of Ontario workers' compensation claimants after they are no longer actively engaged with the WSIB?

What specific factors are associated with positive and negative labour market and health recovery outcomes after workers are no longer receiving services from the WSIB?

Are there particular groups of workers who are most at risk for poor labour market and health recovery outcomes? What are the key modifiable factors associated with poor outcomes for people who have work related injuries or illnesses?

# Study sample design

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## **Exclusion**

Lost time claimants with wage replacement benefits 5 days or less  
(30% of claimants)

## **Sample Group 1: N=358**

Lost-time claimants with wage replacement benefits 5 days to 3 months.  
(54% of claimants)

## **Sample Group 2: N=374**

Lost-time claimants with wage replacement benefits 3 -12 months duration.  
(9% of claimants)

## **Sample Group 3: N=400**

Lost-time claimants with open/continuing/active claim 12-18-months post injury. Reasons for an open/continuing/active claim may include continuation of wage replacement benefits, enrolment in work reintegration program, ongoing entitlement for health care benefits or permanent disability award (NEL)  
(6% of claimants)

# Survey Content

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- Demographic characteristics
- Return-to-work with the at-injury employer
- Labour force participations at 18 months
- Interactions with healthcare providers
- Interactions with WSIB case managers
- Health and function
  - Physical health, including nature of injury
  - Mental health
  - Pain
  - Chronic conditions
  - Sleep quality
  - Opioid, cannabis and sedative use

# Return to Work and Employment Status

	Sample Group 1	Sample Group 2	Sample Group 3
Returned to work with the at-injury employer	93.6%	90.0%	85.3%
<b>Employment status 18 months after injury</b>			
Working with at-injury employer	64.2%	60.3%	60.0%
Working with a different employer	18.5%	17.9%	<b>9.6%</b>
Not currently working	17.2%	21.7%	<b>30.4%</b>

Sample Group 1: Lost-time claimants with wage replacement benefits 5 days to 3 months.

Sample Group 2: Lost-time claimants with wage replacement benefits 3 -12 months duration.

Sample Group 3: Lost-time claimants with open/continuing/active claim 12-18-months post injury.

# Reasons no longer working with At-Injury Employer

418 (37%) of 1,132 workers were no longer working with the At-Injury Employer at 18 months

## Reason for Separation from At-Injury Employer

### Voluntary

(worker chose to terminate employment)

Separation involved health-related concerns 150 (36.2%)

Separation did not involve health concerns 130 (31.4%)

### Involuntary

(employer terminated employment or contract ended)

Employer terminated 58 (14.0%)

No work available (contract ended) 76 (18.4%)

**Total 414 (100%)**

Reason for separation unclear: N=4

# Return-to-work, At-Injury Employer

	Overall Sample	Working with at-injury employer	Working with different employer	Not currently working
<b>Total</b>	1,132 (100%)	695 (61.4%)	178 (15.7%)	259 (22.9%)
<b>Offer of modified duty?</b>				
Yes	73.2%	78.5%	58.0%	69.3%
<b>Return to work experience?(1)</b>				
Not stressful	61.8%	66.7%	52.9%	49.9%
Stressful	38.2%	33.3%	47.1%	50.1%

(1) Claimants who returned to work with the at-injury employer (N=1,014)



# Financial difficulties during work absence

	Sample Group 1	Sample Group 2	Sample Group 3
No difficulties	61.8%	44.8%	44.8%
Minor / Concerning	23.5%	31.0%	25.9%
Very concerning / Serious	14.7%	<b>24.1%</b>	<b>29.3%</b>

Sample Group 1: Lost-time claimants with wage replacement benefits 5 days to 3 months.

Sample Group 2: Lost-time claimants with wage replacement benefits 3 -12 months duration.

Sample Group 3: Lost-time claimants with open/continuing/active claim 12-18-months post injury.

# Health status at 18 months post-injury

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- Important objective of the OLAWIS study is the measurement of claimant health status 18 months following work-related injury or illness
- Self-reported measures of physical health, mental health, perceived health status and the prevalence of chronic conditions
- Where possible, the health status of the OLAWIS cohort is compared to Ontario working adults in the Canadian Community Health Survey

# Self-rated health status

In general, would you say your health is:	Sample Group 1	Sample Group 2	Sample Group 3
Poor	4.0%	<b>6.7%</b>	<b>11.7%</b>
Fair	12.3%	<b>16.9%</b>	<b>20.8%</b>
Good / Very Good/ Excellent	83.7%	76.4%	67.5%

Sample Group 1: Lost-time claimants with wage replacement benefits 5 days to 3 months.

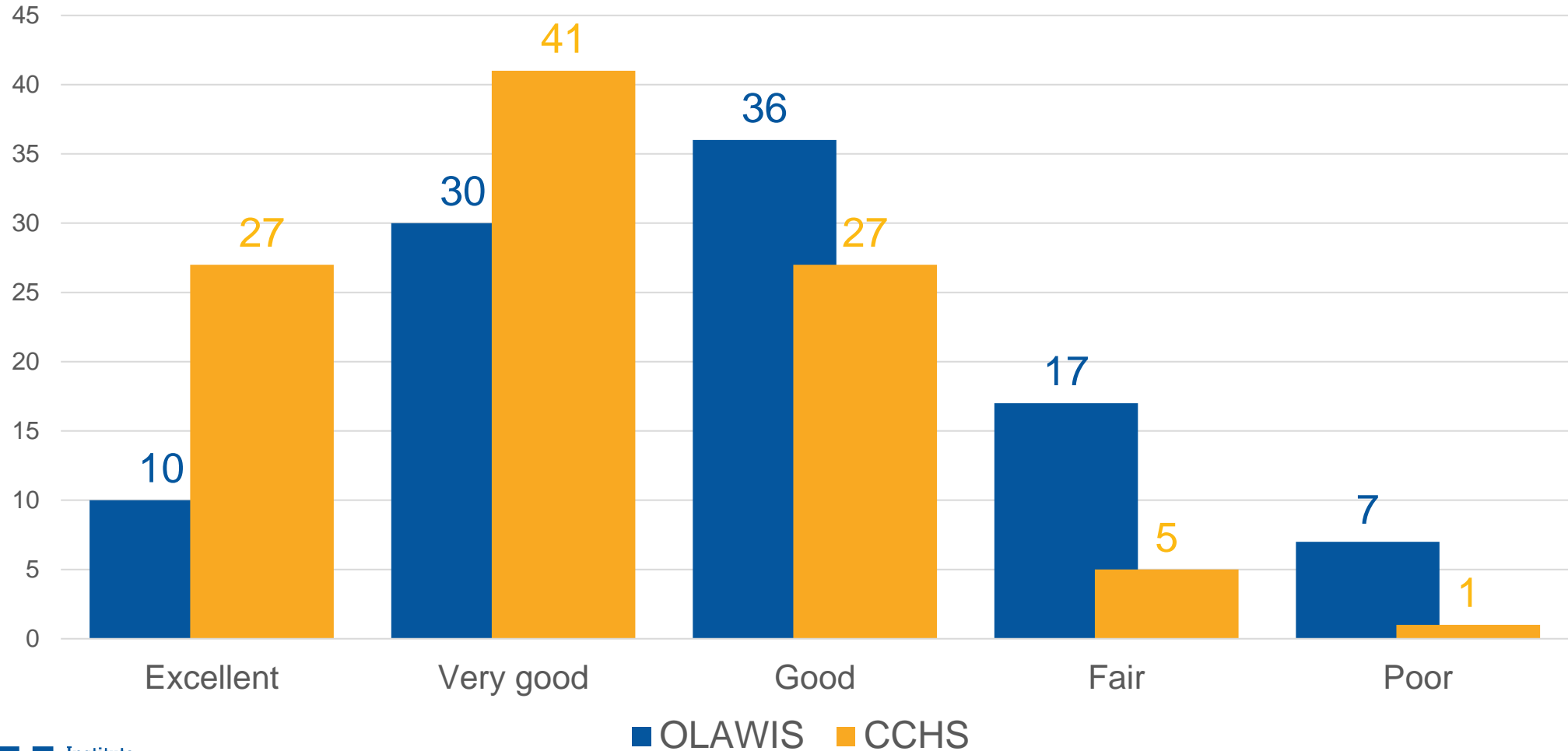
Sample Group 2: Lost-time claimants with wage replacement benefits 3 -12 months duration.

Sample Group 3: Lost-time claimants with open/continuing/active claim 12-18-months post injury.

# Self-rated health status

OLAWIS vs working adults, CCHS 2016

Percent of respondents: In general, would you say your health is:



# Sleep Quality

How often do you have trouble going to sleep or staying asleep?  
Would you say...

	CCHS	Sample Group 1	Sample Group 2	Sample Group 3
Never to sometimes	84.3%	66.1%	64.2%	50.4%
Most / All of the time	14.7%	<b>33.9%</b>	<b>35.8%</b>	<b>49.6%</b>

CCHS: Ontario working adults, Canadian Community Health Survey

Sample Group 1: Lost-time claimants with wage replacement benefits 5 days to 3 months.

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# Pain interfering with normal activities...

During the past four weeks, how much did pain interfere with your normal work?

	Sample Group 1	Sample Group 2	Sample Group 3
Not at all	31.3%	24.6%	11.7%
A Little / Moderately	49.7%	48.8%	42.0%
Quite a bit / Extremely	18.9%	<b>26.5%</b>	<b>46.0%</b>

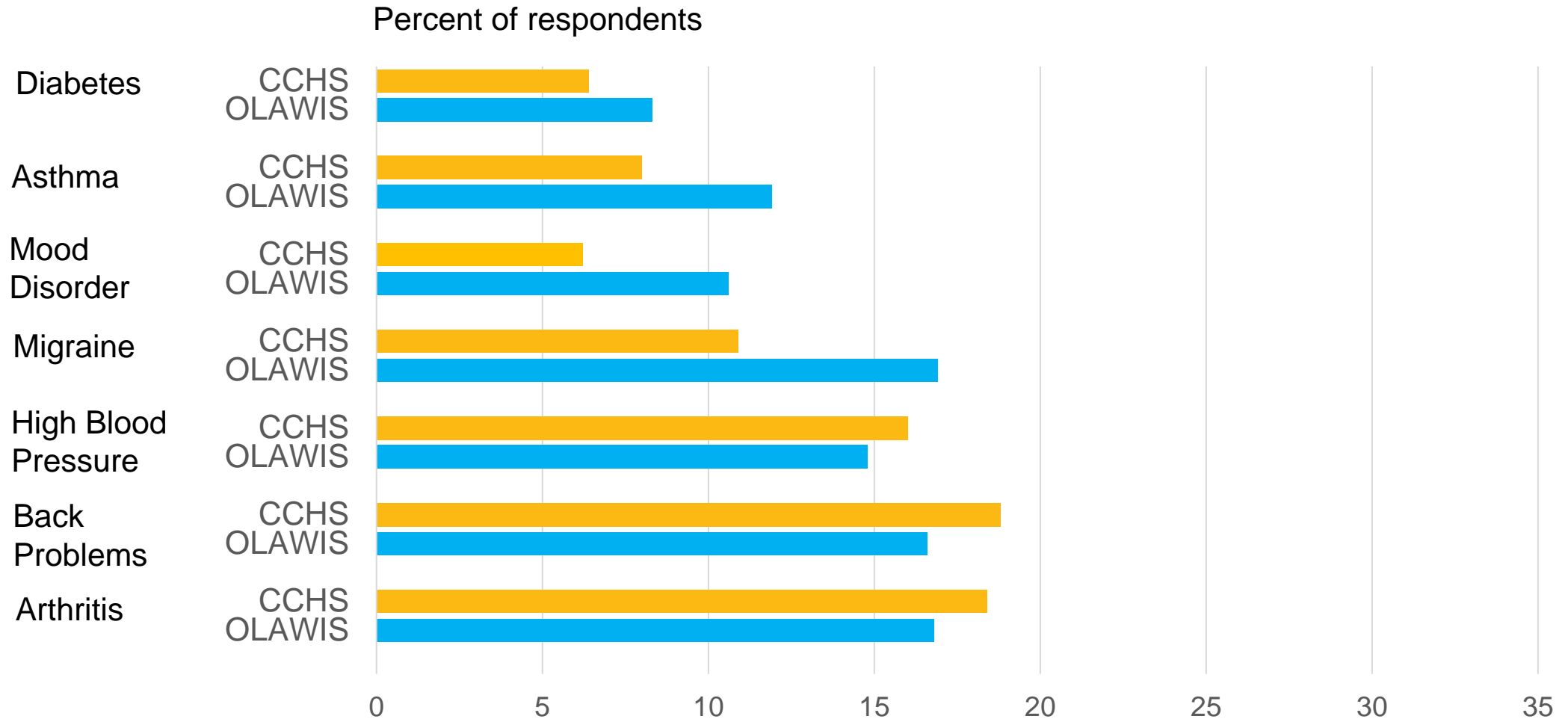
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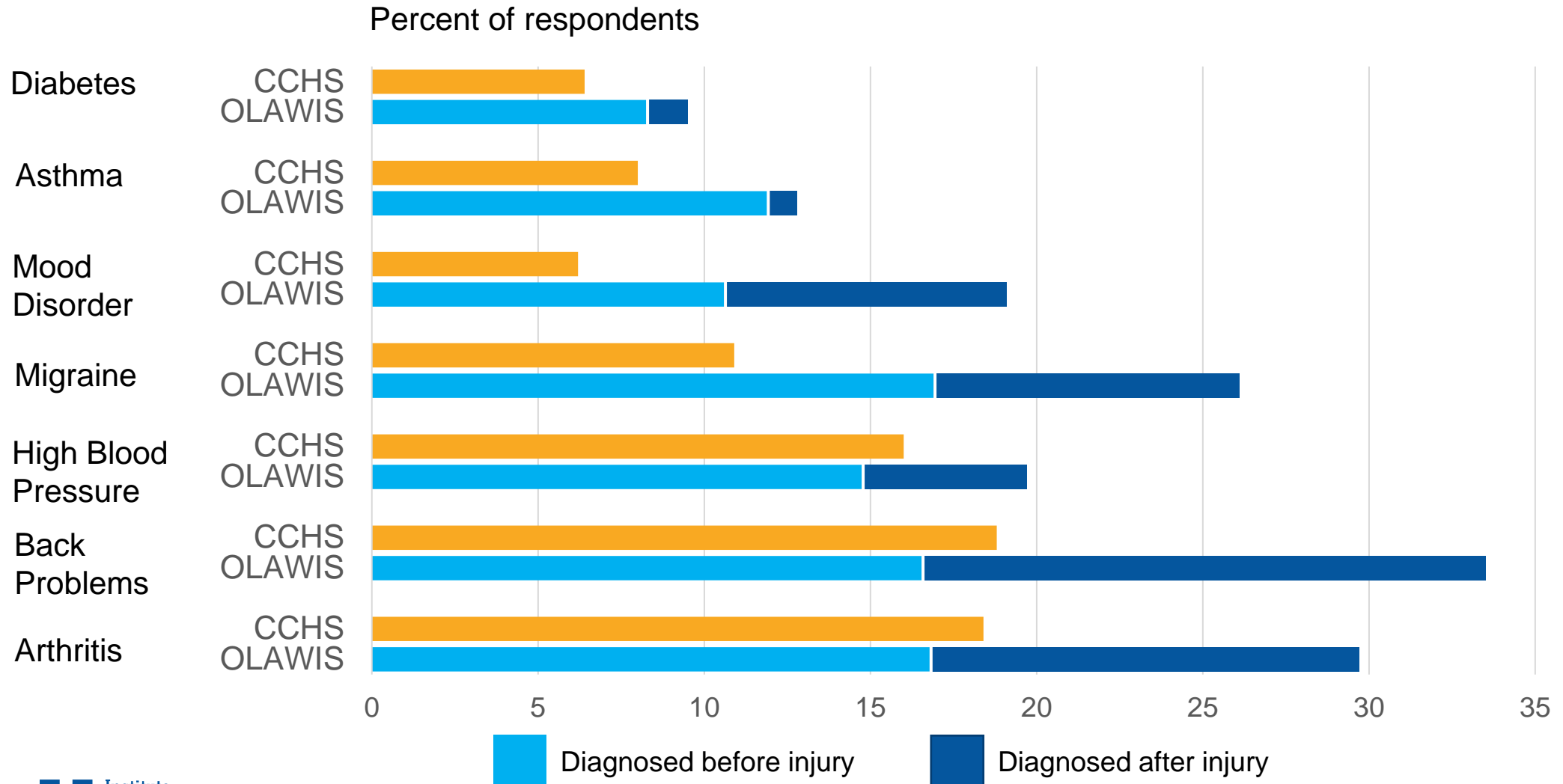
# Prevalence of physician-diagnosed chronic conditions

OLAWIS (Pre-Injury) vs working adults, CCHS 2016 (age-adjusted)



# Prevalence of physician-diagnosed chronic conditions

OLAWIS (18 months post-Injury) vs working adults, CCHS 2016 (age adjusted)





# Predictors of new chronic condition diagnosis, post-injury

OLAWIS (18 months post-Injury)

Multivariate logistic regression, weighted for sample group

Age		NS	
Sex		NS	
Nature of Injury	Head injury (ref: Abrasion)	<b>2.15</b>	<b>1.18 – 3.92</b>
	Fracture / Dislocation	NS	
	Musculoskeletal	1.50	0.98 – 2.31
	Other	<b>2.85</b>	<b>1.62 – 4.99</b>
	Missing	1.79	0.95 – 3.40
Pain	Quite a bit / Extreme (Ref: None / Moderate)	<b>2.46</b>	<b>1.73 – 3.48</b>
Current healthcare	Yes (ref: No)	<b>2.09</b>	<b>1.50 – 2.91</b>
Work Status	Unemployed (ref: employed)	<b>1.78</b>	<b>1.17 – 2.69</b>
Education	Some high school (ref: HS completed)	<b>2.89</b>	<b>1.54 – 5.40</b>

# Interpretation (preliminary)

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- The pre-injury prevalence of physician-diagnosed chronic conditions in the OLAWIS cohort was generally similar to chronic disease prevalence among Ontario working adults in the CCHS
- For a number of conditions, the incidence of chronic condition diagnosis in the 18 month period following injury is elevated in the OLAWIS cohort
- A (small) portion of the elevated incidence of chronic conditions may be attributed to enhanced case-finding during clinical treatment of work-related injury/illness
- The majority of the elevated incidence of chronic conditions may plausibly be attributed to conditions secondary to the work-related injury or illness

# Interactions with WSIB case managers

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## **Do poor case manager interactions increase the likelihood of experiencing a serious mental illness following a physical workplace injury or illness?**

Christa Orchard, Nancy Carnide, Peter Smith, Cameron Mustard  
In review, Journal of Occupational Rehabilitation

Poor mental health is a common occurrence among workers recovering from a work-related injury or illness.

This analysis estimates the association between adverse interactions with workers' compensation case managers and experiencing a serious mental illness 18-months following a workplace injury or illness.

Kessler Psychological Distress (K6) scores greater than 12, indicative of a serious mental illness, was defined as the outcome. The prevalence of high K6 scores at 18 months was 16.6%

# Interactions with WSIB case managers

## Quality of interpersonal interaction

*The case manager who I spoke to most recently...*

Treated me in a polite manner

Strongly agree /  
Agree

84.1%

Treated me with dignity and respect

80.0%

## Quality of information

*The case manager who I spoke to most recently...*

Provided me with the information I needed

70.2%

Was open and truthful in their communications with me

76.6%

Explained the process of returning to work carefully

63.9%

Regularly communicated useful information

57.9%

Understood my individual needs

60.0%

# Interactions with WSIB case managers

## Association of quality of case manager interaction with the likelihood of serious mental illness at 18 months

### Quality of interpersonal interaction

	N	%	Prevalence Ratio	95% Confidence Interval
High quality	374	37.6%	1.00 (ref)	
Good quality	439	44.1%	<b>2.01</b>	<b>1.18-3.44</b>
Low quality	92	9.2%	<b>3.57</b>	<b>1.81-7.06</b>
No case manager	91	9.1%	0.92	0.36-2.36

### Quality of information

High quality	301	30.0%	1.00 (ref)	
Good quality	465	46.4%	1.15	0.69-1.94
Low quality	139	14.4%	<b>2.58</b>	<b>1.30-5.10</b>
No case manager	91	9.1%	0.68	0.27-1.74

# Interpretation

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- The majority of claimants reported positive interactions with WSIB case managers
- For a minority of claimants, case manager interactions were reported to be negative. The association between poor case manager interactions and adverse mental health highlights the importance of open and fair communication with workers compensation claimants in ensuring timely recovery and return-to-work.
- Through program standards and training, the quality of case manager interactions is potentially modifiable.

# Some concluding observations

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- At 18 months following a work-related injury or illness, approximately 65% of lost-time claimants have ongoing employment with the at-injury employer. Among claimants no longer employed by the at-injury employer, approximately 35% identified health concerns.
- Based on the self-reported prevalence of chronic conditions, the health status of workers in the OLAWIS study was similar to working adults in Ontario. At 18 months following a work-related injury or illness, an important number of workers in the OLAWIS study reported poor physical or mental health.
- The OLAWIS study design, interviewing workers 18 months after a work-related injury or illness, is an important method for understanding the employment status and health status of lost-time claimants after they are no longer receiving services from the WSIB.

# Analytic workplan in 2021

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## **Claimant health and function**

Chronic condition incidence following work injury

Therapeutic cannabis use in the OLAWIS cohort

Predictors and correlates of persistent pain in the OLAWIS cohort

Case manager interactions and claimant mental health

## **Workplace return-to-work practices**

Workplace predictors of modified duty / accommodation offers.

Predictors of successful return to work

Differences in workplace accommodation practices across 10 economic sectors



# Cannabis use, past 12 months

	OLAWIS respondents	Canadian workers 2018
Used Cannabis in the past 12 months	29%	29%
Medical purpose for use, among current year users (1)	43%	31%

(1) OLAWIS respondents reporting cannabis use for the treatment of conditions arising from work-related injury or illness. Approximately 30% reporting use for medical purposes are using under medical prescription

# Additional work in progress

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**Understanding cannabis use and associated long-term recovery and return-to-work outcomes among Ontario workers following a work-related injury or illness.**

Carnide N, Smith PM, Furlan A, Mustard CA. CIHR, September 2020, \$485,776.

Re-interview OLAWIS cohort 36 months following work-related injury/illness (96% of OLAWIS cohort agreed to be re-interviewed)

Emphasis on understanding cannabis use.

Interviews commence February 2021.

# Additional work in planning

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## **Health and employment outcomes among lost-time claimants in the shadow cast by the COVID-19 emergency**

Mustard CA, Smith PM, Carnide N. In review, WSIB Grant Program, \$300,000

The study will recruit 700 Ontario workers with an accepted lost-time compensation claim in the pre-COVID-19 period (October 2019 to February 2020), who will be administered a detailed questionnaire approximately eighteen to twenty months following claim onset for their disabling injury or illness.

Health, economic, and labour market outcomes will be measured among this group of disabled workers, whose recovery and return-to-work occurred in the shadow cast by the COVID-19 emergency, and compared to an existing cohort of 1,100 workers disabled by a work-related injury or illness whose recovery and return-to-work occurred prior to the COVID-19 emergency.

# Thank you

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