Is the Return to Work Certificate of Recognition Program associated with improved outcomes?

Background
The early return of an employee to work after an injury is a key aspect of successful, sustainable return to work (RTW). Work is also in itself important to the well-being of individuals, and returning to work can speed up recovery and improve other areas of a worker's life that may have been affected by the injury. In addition, the shorter the duration of time off work, the lower the costs of wage replacement and claims management.

Programs are in place at some employers to support the RTW planning process. In BC, WorkSafeBC developed a voluntary program to encourage employers to develop and maintain a RTW program as part of the Partners in Injury and Disability Prevention Program. This program awards Certificates of Recognition (COR) to employers that have developed an occupational health and safety (OHS) management system and met established standards. Firms that have achieved an OHS COR may then apply for additional certification under the Return to Work Certificate of Recognition program (RTW-COR).

Certification for COR-RTW involves an audit designed and managed by a certifying partner, such as Energy Safety Canada or the BC Construction Safety Alliance. The auditor seeks information from documentation as well as interviews with employers, managers, and employees. Programs may be required to include employee training on the injury management program; tasks or positions available for modified or gradual RTW or a process to develop those tasks; a RTW coordinator; and/or a written management commitment to the RTW program (the requirements of certification vary by certifying partner).

RTW-COR certified firms can receive an additional 5% reduction in their workers’ compensation premiums, above the 10% discount for OHS-COR certification. However, the program has been closed to new entrants since 2012, though previously certified firms were able to continue in the program.

Previous Partnership for Work, Health and Safety (PWHS) research established that firms with OHS-COR certification have lower firm injury rates than similar but non-certified firms. It is not known if RTW-COR certification provides additional benefit. PWHS was engaged to examine the effect of the RTW-COR program.

Based on research presented in:
Specifically, we examined if:

1. Injured workers were more likely to experience **graduated RTW** at RTW-COR certified firms, compared to similar injured workers with comparable injuries at OHS-COR only firms.

2. Injured workers were more likely to experience sustained RTW at RTW-COR certified firms compared to OHS-COR only firms.

**Approach**

We used an observational research design. Certification is voluntary and firms self-select into the program. Because RTW-COR participating firms have chosen to become certified, they are different from firms that have not made this choice or have failed to qualify. This self-selection makes it challenging to assess whether participation has a “causal” effect (i.e., that any changes in injury rate are due to participation in the program and not due to other factors).

The relevant comparison group is injured workers from firms that have OHS-COR certification only. If RTW-COR is effective in improving RTW outcomes it would be due to incremental RTW programs and processes that are put in place, over and above that required for OHS-COR. However, the average RTW-COR firm is quite different than the average OHS-COR firm—larger and and more likely to be from different industries. Accordingly, we used a matched evaluation methodology to choose similar firms to make the two groups—RTW-COR and OHS-COR—more comparable.

Time loss claims from 2010 to 2016 were limited to employees at firms that were in sectors that had any RTW-COR firms. In addition, claims related to non-musculoskeletal disease and claims from employees that had more than one job were excluded.

Coarsened exact matching was used to find a comparison group among the injured workers at OHS-COR firms that were similar to the injured workers at RTW-COR firms. We matched according to injury year, injury severity, industry sector (at the four digit level), and firm size.

We used multilevel mixed-effects logistic regression to investigate the likelihood of injured workers experiencing graduated RTW (GRTW) at RTW-COR firms, compared to OHS-COR firms. We used discrete time mixed effect models to compare the odds of injured workers at RTW-COR firms returning to work in the first 365 days after injury to the odds of workers in similar circumstances returning to work at OHS-COR firms. The models were adjusted for occupation, wage, and age of the injured worker, severity of the injury, and size and sector of the firm. In addition, the discrete time models were adjusted where workers experienced GRTW.

**What we found: Likelihood of GRTW**

Injured workers with lost-time claims had 21% higher likelihood of experiencing GRTW at RTW-COR firms than workers at comparable OHS-COR firms.

**Across sectors**

Workers at RTW-COR firms in the hospitality, forestry, and construction sectors had 36 to 64% higher likelihood of experiencing GRTW than similar injured workers at similar OHS-COR firms. In the transportation sector, workers at RTW-COR firms had a lower, but not statistically significant, likelihood of GRTW. (See Figure 1.)
**Figure 1 | Likelihood of experiencing GRTW** for workers in RTW-COR certified firms, compared to workers in OHS-COR only firms, by sector, firm size, and time period, 2010-2016

Workers in RTW-COR firms had **lower odds** of GRTW than workers in OHS-COR firms

**Overall**
- All RTW-COR firms
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 21%

**Across sectors**
- Hospitality
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 41%

- Forestry
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 64%

- Transportation
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 33%

- Construction
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 19%

**Across firm sizes**
- <100 employees
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 20%

- 100-1,000
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 33%

- >1,000
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 36%

**Over time**
- 2010 to 2012
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 60%

- 2013 to 2016
  - Percent difference in odds of GRTW with 95% confidence interval
    - Overall: 30%

A percent likelihood below zero indicates that workers at RTW-COR firms are less likely to experience the outcome compared to workers at OHS-COR firms. A percent likelihood above zero indicates that workers at RTW-COR firms are more likely to experience the outcome. Where confidence intervals cross zero, the difference is more likely due to chance.

**Across firm sizes**
Injured workers in RTW-COR firms were more likely to experience GRTW than workers in OHS-COR firms of all sizes.

**Over time**
Time had an impact on the likelihood of a worker experiencing GRTW in RTW-COR vs OHS-COR firms, with a stronger effect observed in the 2010 to 2012 period than in 2013 to 2016. An injured worker had a 36% greater likelihood of experiencing GRTW in 2010 to 2012, decreasing to a 17% greater likelihood in 2013 to 2016.

**What we found: Sustained RTW**
The likelihood of sustained RTW was no greater for workers at RTW-COR firms than OHS-COR firms. (See Figure 2.)

**Across sectors**
Some variation in the likelihood of RTW was observed when stratifying by industry, but generally the results...
were similar, with the exceptions of the hospitality sector, where the likelihood of RTW on a given day was 18% higher for RTW-COR firms, and the forestry sector, where the likelihood of RTW was 9% lower. For both of these estimates, 95% confidence intervals covered zero and are more likely due to chance alone.

**Across firm sizes**

Injured workers at large (1,000 plus employees) RTW-COR firms had a 12% greater likelihood of RTW on a given day than workers at large OHS-COR firms. We found no differences in the likelihood in smaller firms.

**Over time**

There was no difference between RTW-COR and OHS-COR firms when comparing the likelihood of RTW in earlier and later time periods.

**What this means**

The RTW COR program has been successful in encouraging firms to offer GRTW to injured workers. However, GRTW is becoming more common over time in all COR-certified firms, thus the effect of RTW-COR has become attenuated over time.

Injured workers at RTW-COR firms generally do not RTW earlier than workers at OHS-COR firms. However, there is some variation by firm sector, and injured workers at large firms are more likely to RTW faster.

**In conclusion**

Overall, RTW-COR certification does not appear to provide any additional benefit on disability duration (time to RTW), compared to OHS-COR certification. Moreover, the benefit of RTW-COR on the likelihood of offering graduated RTW has diminished over time.

**More information**

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