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THE DISABILITY MANAGEMENT OF FIREFIGHTER INJURY CLAIMS: HOW DO WE MANAGE SUCH A UNIQUE SUBGROUP OF WORKERS

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OVERVIEW



What do we know?



What do we need to know?



What have we already identified?



What are the take away points?



What are the next steps



BACKGROUND:

HOW ARE FIREFIGHTERS UNIQUE?

- Unique work characteristics¹
 - High physical and psychological demands^{2,3}
 - Dangerous and unpredictable work environments^{1,2,4}
- Increased risk of injury and mental health issues^{2,5}
 - Higher than the general population



QUESTIONS GUIDING MY RESEARCH

- Do these unique characteristics affect the return to work process for first responders?
 - Lack of disability management research specific to firefighters
- Do we need to manage firefighter disability management claims differently than other claims?
 - Some firefighter claims are managed by general disability managers
 - Some firefighter claims are managed internally
 - What are the differences?





FIRST ROUND OF EVIDENCE

Predictors of return to work
and duration of time off work in
first responders

PREDICTORS OF RETURN TO WORK AND DURATION OF TIME OFF WORK IN FIRST RESPONDERS

- Methods:
 - First responder claims selected from large disability management database
- Statistical Analysis – Survival Analysis
 - Time to event analysis
 - Event = Return to work (RTW)
 - Time = Duration of time until RTW
 - Stepwise Cox proportional regression
 - Predictors of likelihood of RTW
 - Log-rank test
 - Predictors of the duration of time off work



POTENTIAL PREDICTORS

Return to Work

- Age
- Sex
- Years of service
- Diagnosis
- Claim and medical report lag
- RTW duties

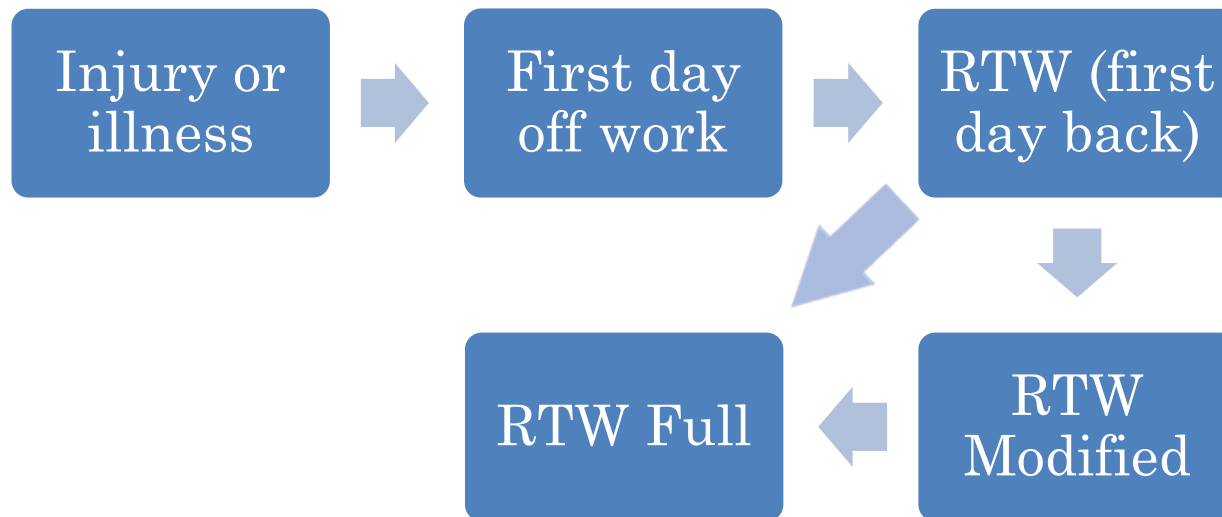
Duration of Time off Work

- Age categories
- Sex
- Diagnosis
- RTW duties



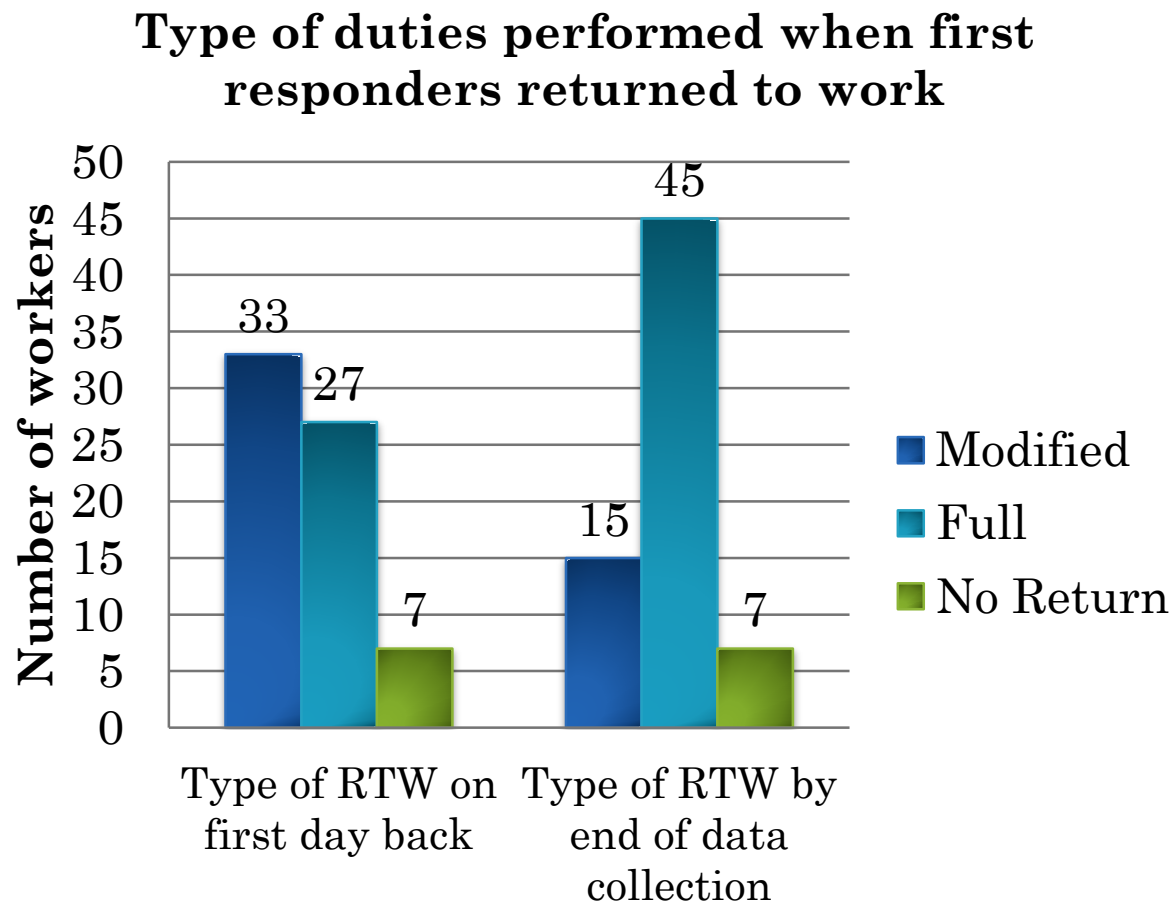
PRIMARY OUTCOME: RETURN TO WORK AND THE ASSOCIATED DURATION

- General RTW
 - Duration: first day off to first day back at work
- RTW Modified
 - Duration: first day off to first day performing modified work
- RTW Full
 - Duration: first day off to first day performing pre-injury duties



RESULTS: DESCRIPTIVE STATISTICS

- 67 first responders, only 12 were female
- 45 MSK injury claims, 22 mental health claims




RESULTS: PREDICTORS OF RTW

Increased Likelihood of RTW Outcomes

- MSK injuries
 - More likely to RTW compared those with mental health claims

Decreased Likelihood of RTW Outcomes

- Anxiety/stress claims
 - Least likely to return to work compared to all other claims
 - Claim / medical lag
 - Every day of lag results in an increased likelihood of not returning to work
 - Returning to modified work decreased the likelihood of returning to full duties
- 

RESULTS: PREDICTORS OF THE DURATION OF TIME TO RTW

	Median duration (days)	25% duration (days)	75% duration (days)
Duration of time off work based on the first day back to work (general RTW) (n=66)			
MSK injuries	43*	18	66
Mental health claims	80*	33	136
Duration of time until returning to modified work (n=39)			
MSK injuries	44**	18	66
Mental health claims	136**	33	136
Duration of time until returning to full duties (n=67)			
Modified work first	136**	66	221
RTW full without requiring modified work first	43**	23	98

*Log-rank test was significant at $\alpha < 0.05$; significant difference in the survival functions

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TAKE AWAY POINTS

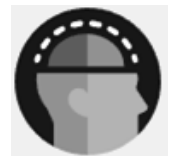


Avoid claim lag and medical report lag

- Quick and efficient communication between all stakeholders



MSK injuries and mental health claims need to be managed differently



Need to find accommodations for workers with mental health claims



First responders that returned to modified work first actually were less likely to return to their full duties

- Transition between modified and full duties is an important focus





SECOND ROUND OF EVIDENCE

Differences in disability
management claims between first
responders and other workers

DIFFERENCES IN DISABILITY MANAGEMENT CLAIMS AND THE RETURN TO WORK PROCESS OF FIRST RESPONDERS COMPARED TO HIGH AND LOW PHYSICAL DEMAND WORK

- Claim selection
 - All first responder claims
 - High physical demand work (HD) and low physical demand work (LD) claims
 - Based on job demand classification in the database
 - Age and sex matched, randomly selected
- Statistical Analysis – Differences between groups
 - Analysis of covariance
 - Duration of time off work
 - Chi Square
 - Duties performed: Modified work or full duties



RESULTS: DIFFERENCES IN THE NUMBER OF DAYS OFF WORK

- First responders returned to work sooner than HD workers
 - Mean difference=19.8 days
- First responders returned to work sooner than LD workers
 - Mean difference=23.0 days

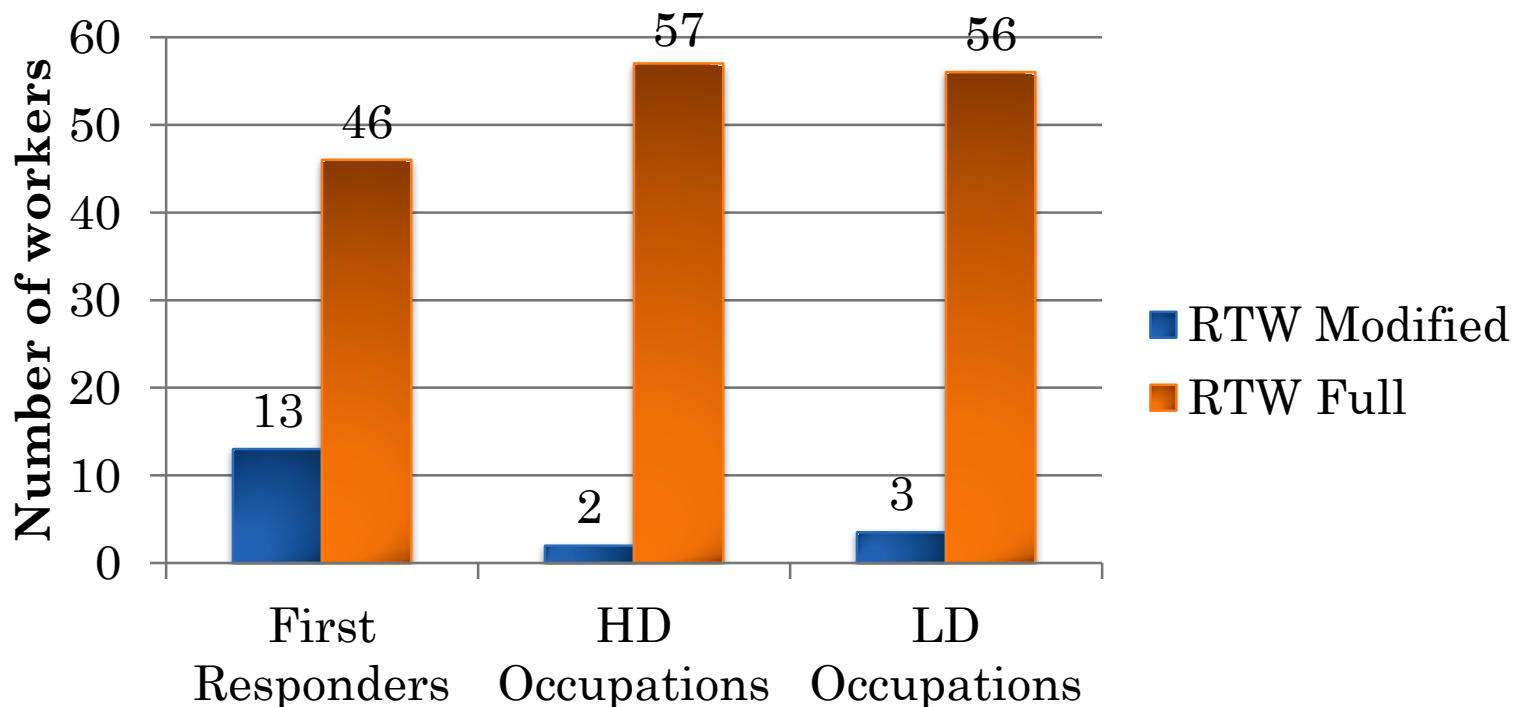
Adjusted mean number of days off work after ANCOVA

	Mean (days*)	95% Confidence Interval (days*)
First responders	33.6	26.3 – 42.8
High demand work	52.7	40.9 – 68.0
Low demand work	60.7	47.5 – 77.6

*Adjusted mean back-transformed from natural log units to original calendar day units

RESULTS: DIFFERENCES IN DUTIES PERFORMED BY THE END OF THE DATA COLLECTION PERIOD

- First responders were less likely to RTW full compared to HD workers (OR: 0.1) and LD workers (OR: 0.2)
 - First responders performed modified duties instead of transitioning to full duties



TAKE-AWAY POINTS

First responders RTW sooner compared to other occupations, but this may be associated with the availability of modified work

Positive Take-away Points



- Modified work is being made available for first responders
 - If modified work was not available, first responders would be off work for much longer

Major Concerns



- First responders return to work modified instead of returning to their full duties
 - Unable to make the transition due to the high demands of the work performed
 - Modified work can be seen negatively – strong desire to rescue⁶



CONCLUSION AND IMPLICATIONS

○ **The need for future research:**

- Why are first responders unable to transfer to their regular duties?
- How can we help promote the transition to regular duties?



CONCLUSION AND IMPLICATIONS

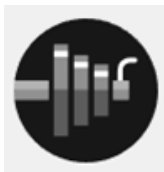
Impact on the disability management and rehabilitation fields



Promote the importance of modified work



Need for programs to facilitate the transition from modified to full duties for first responders



Rehabilitation and disability management need to continue after return to work modified occurs

- Although first responders seem “healthy”, they may lack the strength and fitness required to perform their normal work



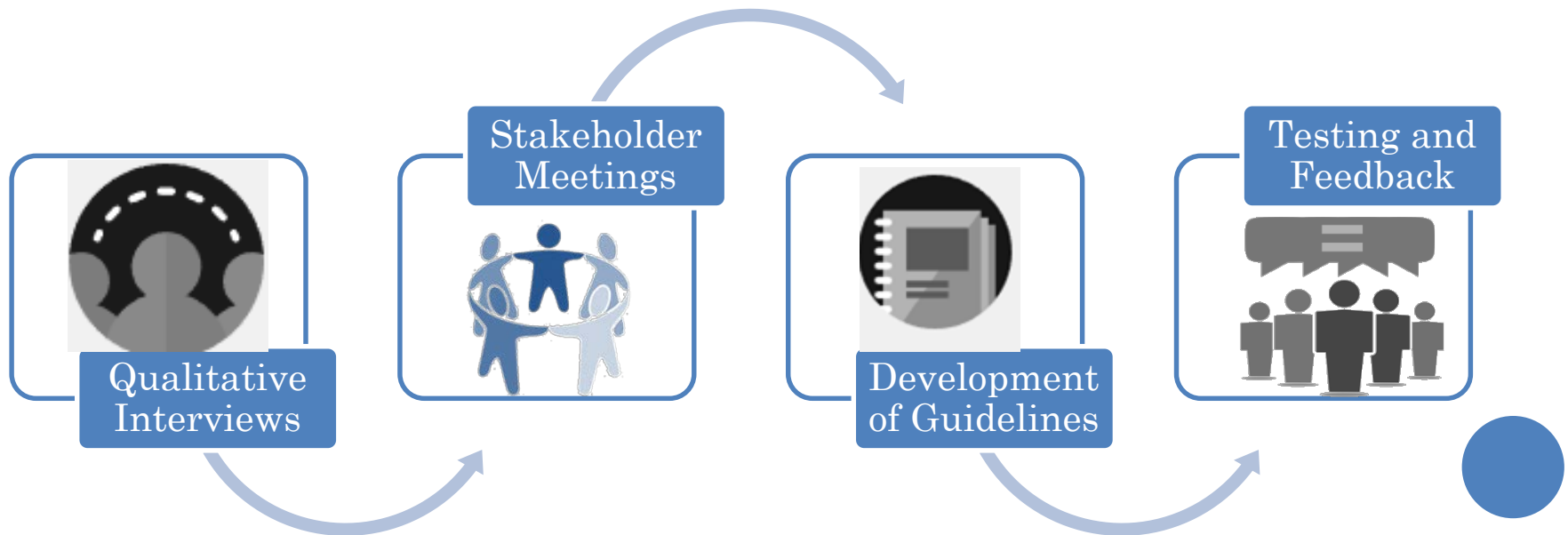


WHAT ARE THE NEXT STEPS

My PhD research goals... still a
work in progress

RESEARCH GOALS

- Create guidelines for disability managers to help manage firefighter injury claims
 - Qualitative studies are needed to gather more information



THE SEVEN 'PRINCIPLES' FOR SUCCESSFUL RETURN TO WORK

- Identified predictors of RTW aligned with some of these principles⁷
 - Importance of modified work
 - Early contact to avoid claim lag
 - Communication with health care providers to avoid medical report lag

SEVEN PRINCIPLES FOR RTW

1. The workplace has a strong commitment to health and safety, which is demonstrated by the behaviours of the workplace parties.
2. The employer makes an offer of modified work (also known as work accommodation) to injured/ill workers so they can return early and safely to work activities suitable to their abilities.
3. RTW planners ensure that the plan supports the returning worker without disadvantaging co-workers and supervisors.
4. Supervisors are trained in work disability prevention and included in RTW planning.
5. The employer makes early and considerate contact with injured/ill workers.
6. Someone has the responsibility to coordinate RTW.
7. Employers and health-care providers communicate with each other about the workplace demands as needed, and with the worker's consent.

HOW ARE THESE PRINCIPLES PUT INTO PRACTICE?

- Interviews with disability managers
 - Focus on the structure of disability management
 - Questions will reference concepts related to the Seven 'Principles' for Successful Return to Work
 - How are these concepts used in practice?
 - How are the principles interpreted?
 - Which components are seen as important?



IDENTIFYING UNIQUE AND COMPLEX COMPONENTS OF FIREFIGHTER INJURY CLAIMS

- Interviews with disability managers who have worked with firefighters
 - Both internal and external disability management
- Questions focused on identifying unique aspects
 - Factors that lead to successful RTW
 - Claim complexities



DEVELOPMENT OF GUIDELINES

- Meetings with stakeholders
 - Disability managers
 - Firefighters
 - Employers and policy makers
- Piloting of guidelines
 - Feedback from disability managers



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THANK YOU!

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