



How Do Organizational Policies and Practices Affect Return to Work and Successful Work Role Functioning Following an MSD Injury?

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Why Two Outcomes?

Different Outcomes May Uncover Different Predictors

Return to Work (RTW)

Either at work or not at work

Can be back at work but working with limitations

What gets a person back to work

Easy to manage

Successful Work Role Functioning (sWF)

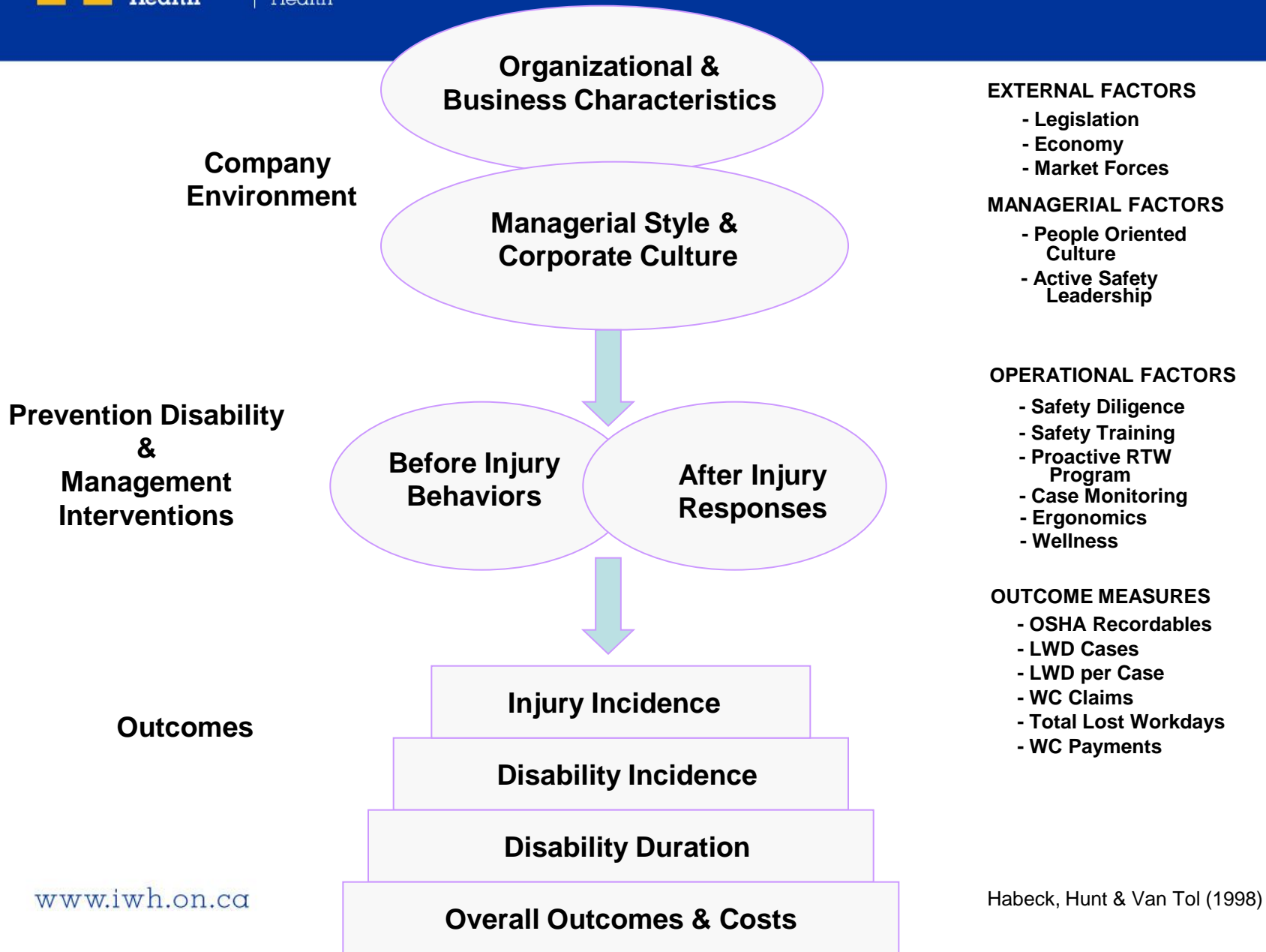
Recognizes varying degrees of return to work

Can be back at work but working with limitations

Can be back at work working without limitations

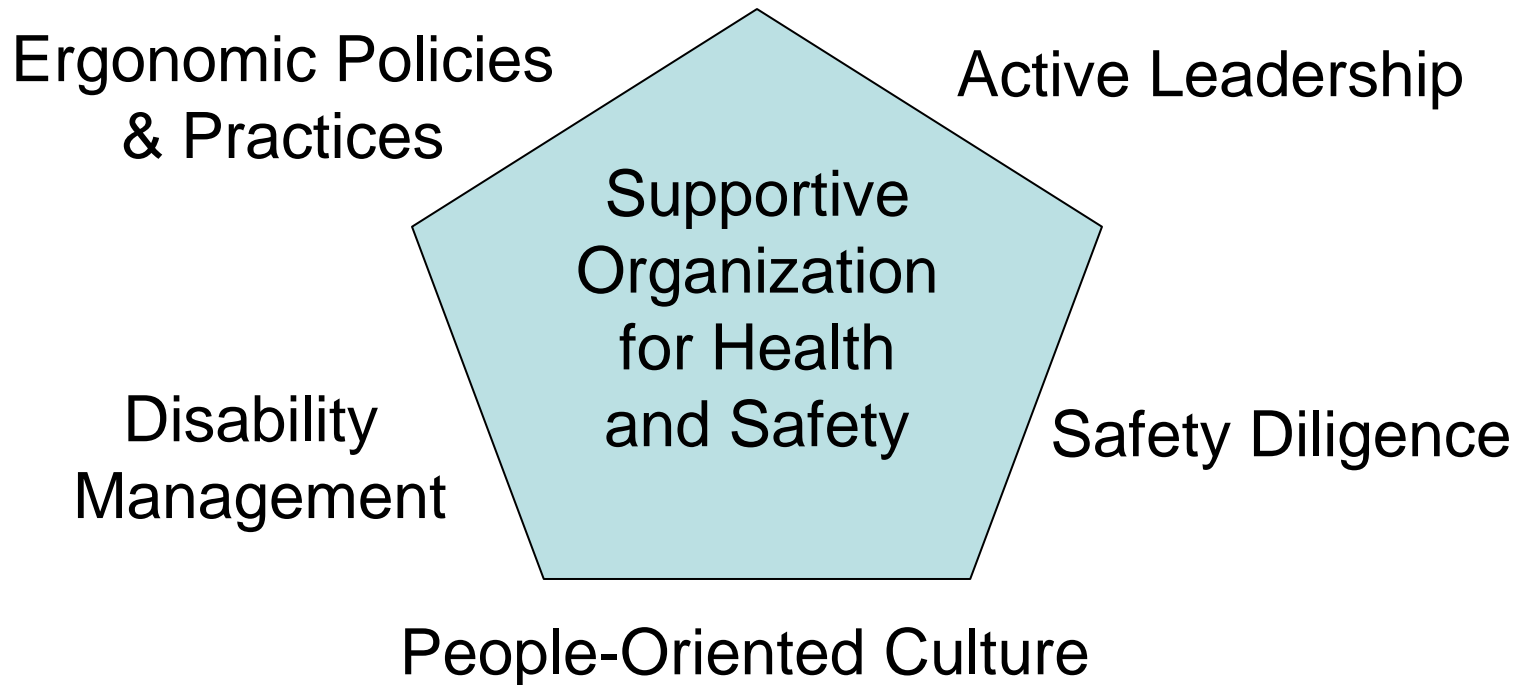
What gets a person back to work & working well

More difficult to manage





Is It All About Disability Management Programs, Policies and Practices? No!

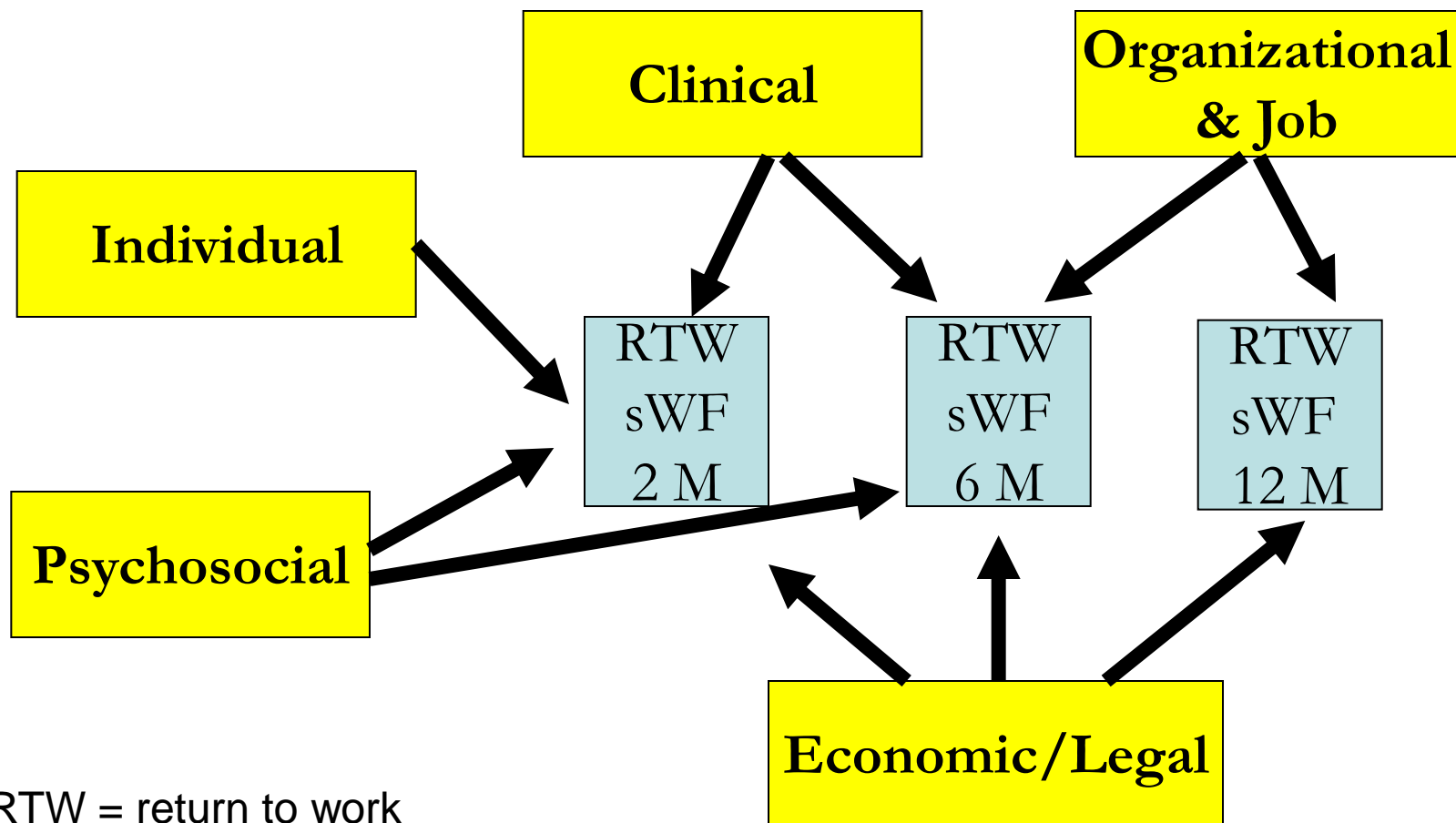




Let's Think About What We Mean By Supportive Organizations in OHS

1. Issue of 'strategic complementarity' – organizations that do one thing well do many things well creates a problem
2. We combine measures of people-oriented culture, safety practices (active leadership, safety diligence & training), ergonomic policies and disability management policies and practices from Amick et al., 2000
3. A highly supportive organization represents an average score of agree and strongly agree on the combined measure – we split at median creating high & low support

Multi-Dimensional Model From Maine CTS II Study



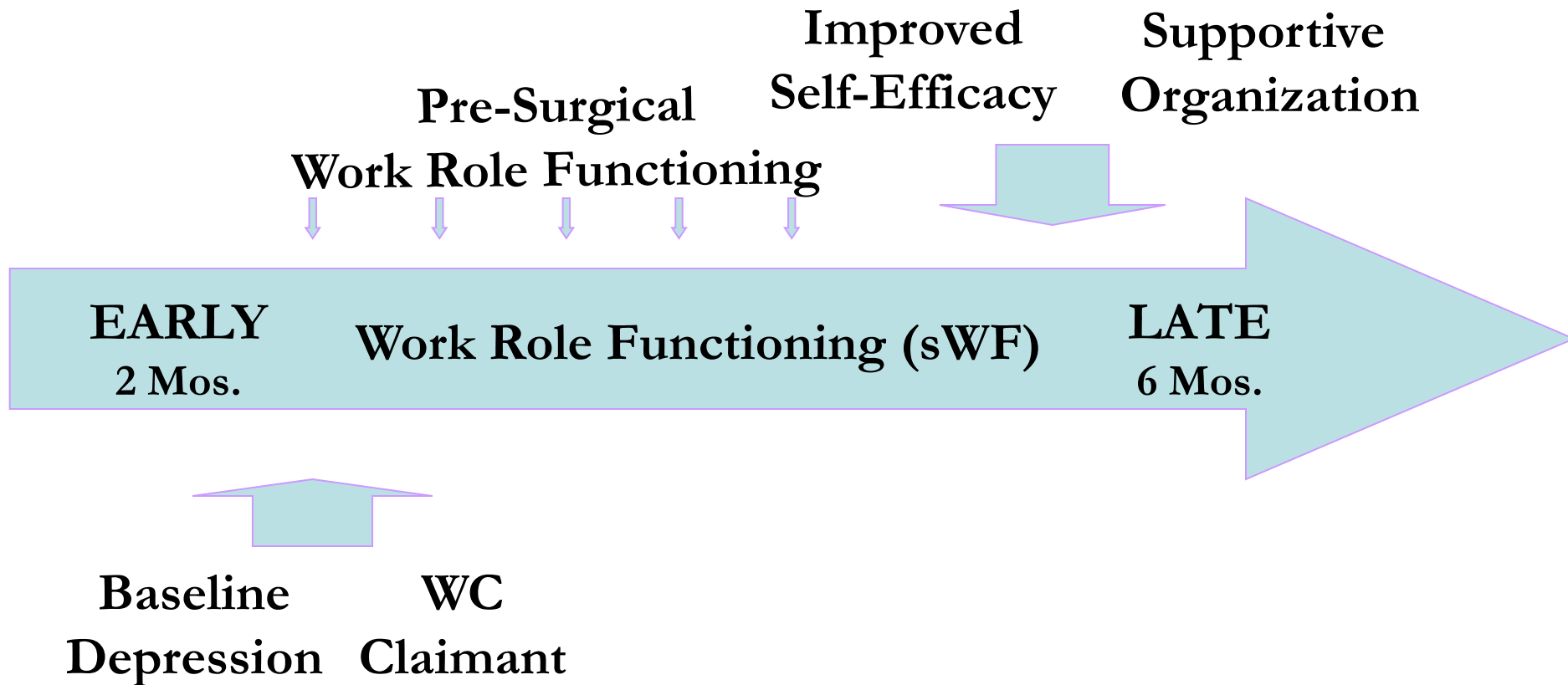
RTW = return to work

sWF = successful work role functioning

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To Summarize Success: Findings From Maine CTS II Cohort



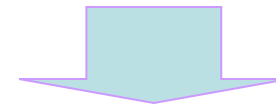


To Summarize Failure: Findings From Maine CTS II Cohort

**Multiple Pain
Sites**

**Reduced
Self-Efficacy**

**Non-Supportive
Organization**



**EARLY
6 Mos.**

Predictors of Work Absence

**LATE
12 Mos.**



Attorney

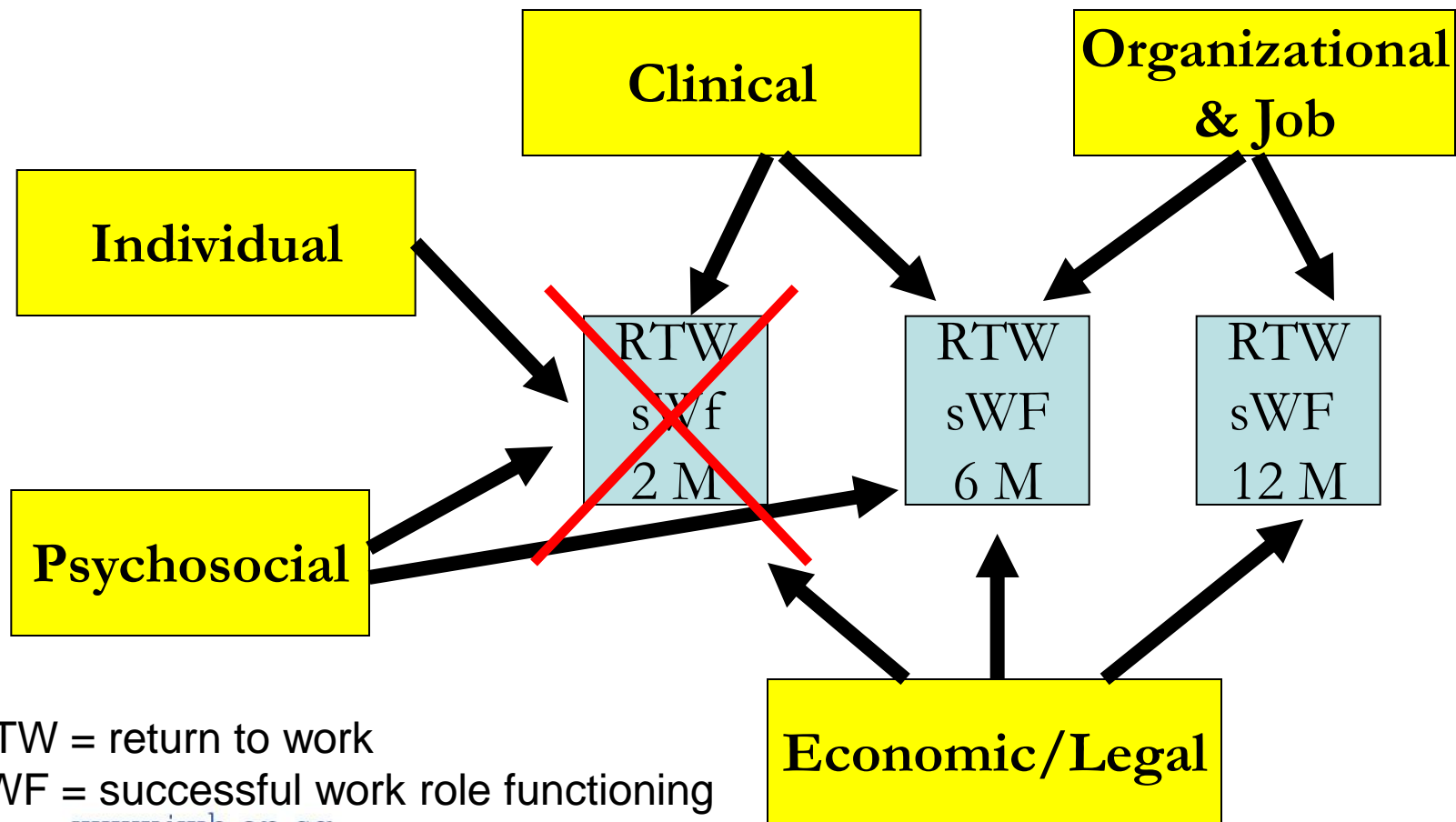
**Low
Income**

**Older
Worker**

**Worse
Physical Health**



Does Key Role of OPPs in Maine CTS II Cohort 'Sing True' In Ontario Readiness for Return to Work Cohort



RTW = return to work
sWF = successful work role functioning
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The Two Cohorts Side By Side: There are Important Differences

Maine CTS II Cohort

- N=119
- All workers undergoing Carpal Tunnel Surgery
- Only 50% filed Workers Comp Claim
- Baseline Pre-Surgery
- 1997-1999

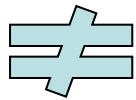
Ontario Readiness For Return to Work Cohort

- N=334
- All workers filed Workers Comp Claim for MSD Injury
- Baseline 1 Month After Injury
- 2005-2007

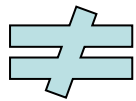


A Funny Thing Happened on the Way to the Presentation: The Odds are Not Proportional

Odds Ratio



Odds Ratio



Odds Ratio



Return to work without limitation
(sWF)

Return to work with limitations
(RTWwl)

Not yet back at work (nRTW)



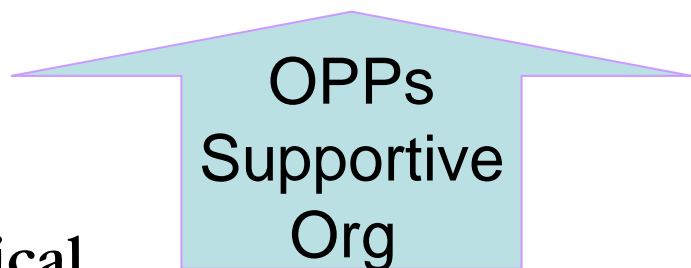
To Summarize Successful Return to Work: OPPs Important at 6 (Odds Ratio 2.3) & 12 Months (Odds Ratio 2.2)

Income > 60,000

College Education

Fewer Co-Morbidities

Fewer Pain Sym. Past Mo.



Low Physical Job Demands

Fewer

Good Physical Health

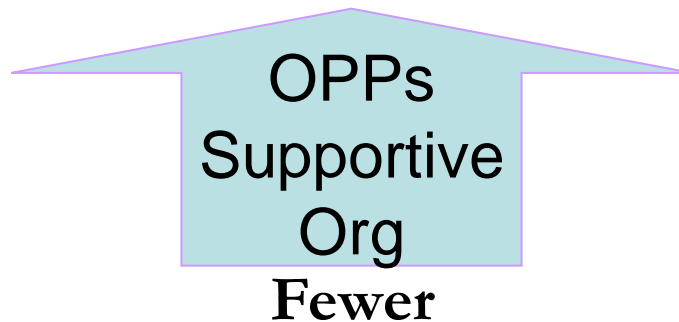
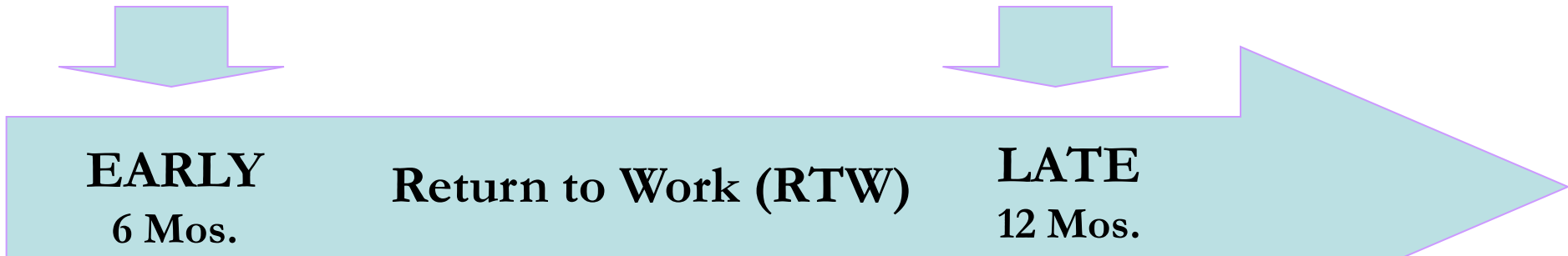
Depressive Symptoms



To Summarize Return to Work: OPPs Important at 6 months (Odds Ratio 1.9) & 12 Months (Odds Ratio 2.3)

100-300
Employees

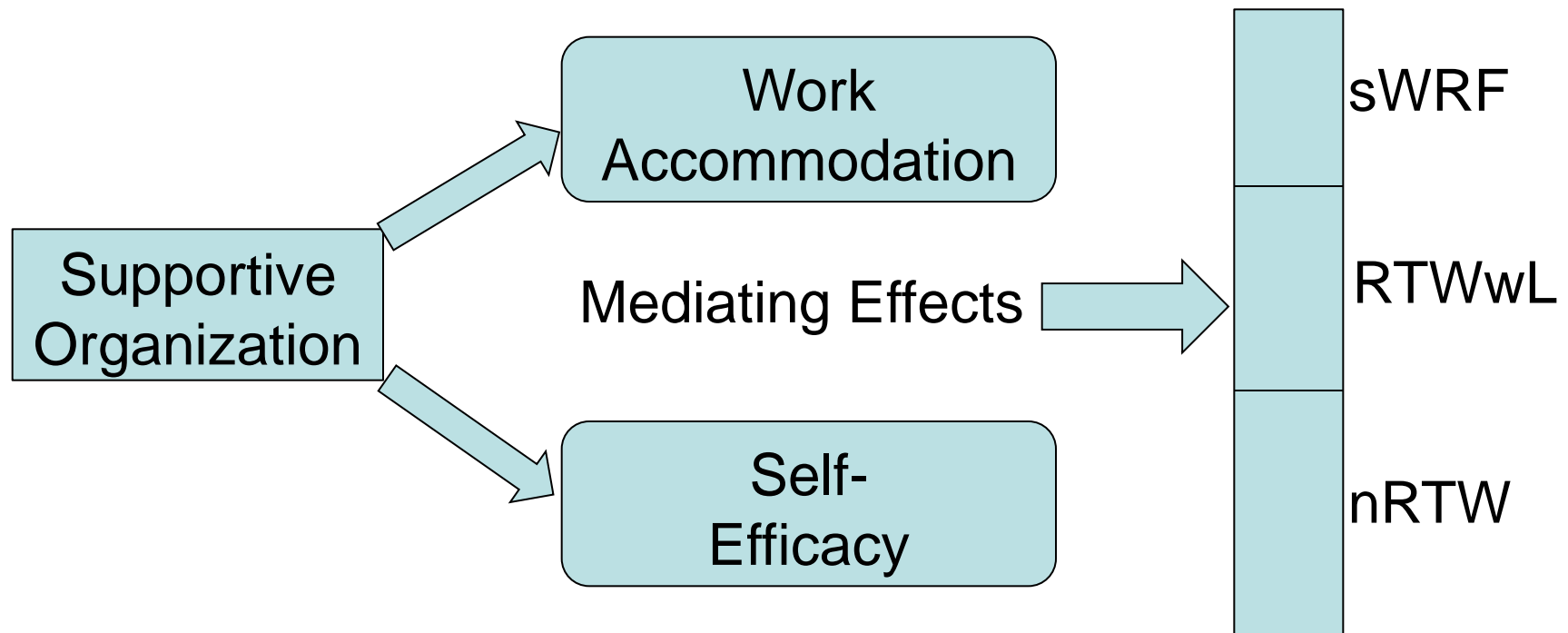
Fewer
Co-Morbidities
20-100
Employees



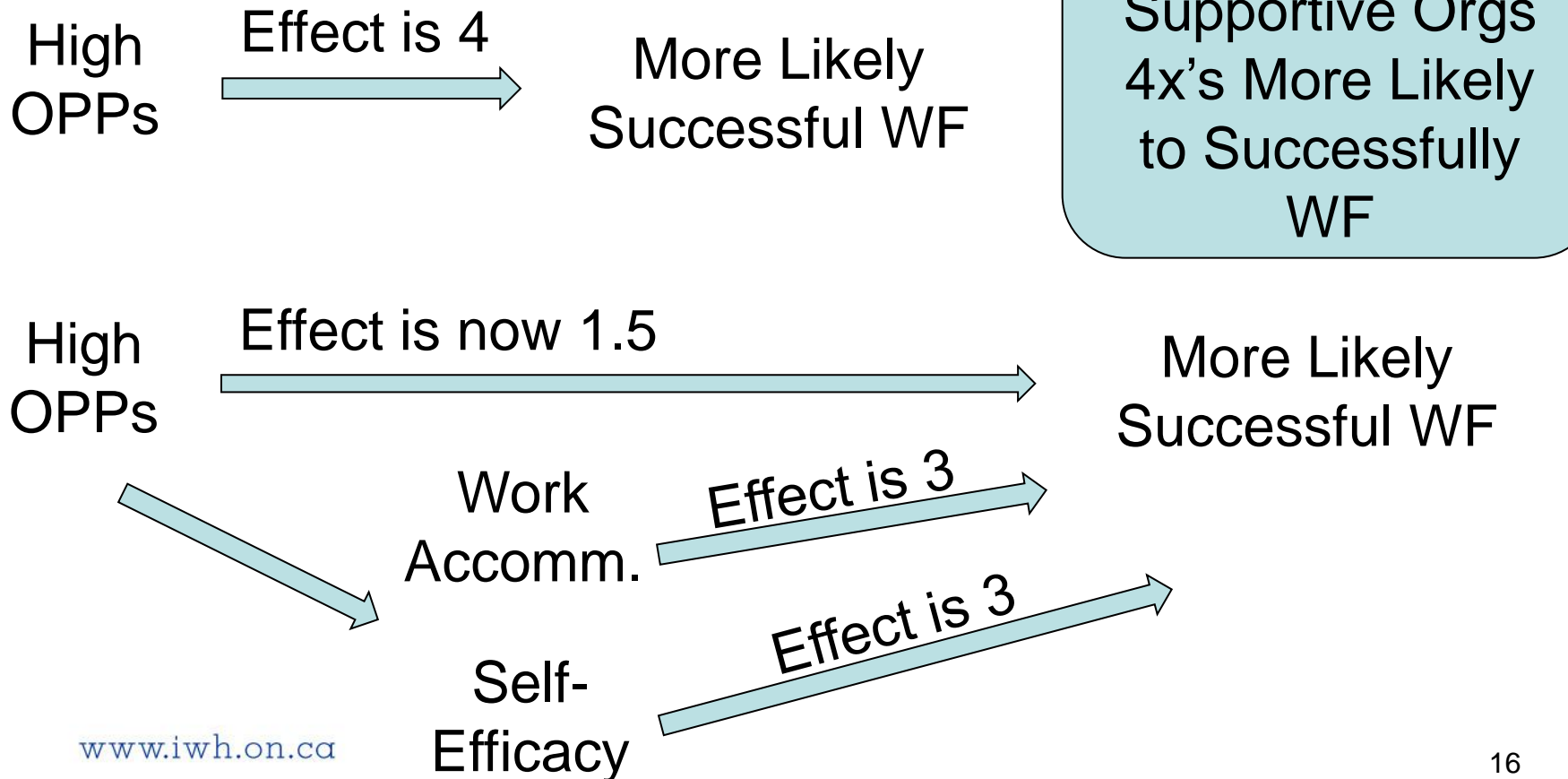
Depressive Symptoms



Another Funny Thing Happened on the Way to The Presentation: Not All Variables Are Equal



How Do We Identify Mediating Effects? A Hypothetical Example





Change in Self Efficacy and Work Accommodation Mediate the Relationship Between OPPs and RTW and sRTW

	Unadjusted	Adjusted	Mediating Models		
			WA only	SE only	WA & SE
Return to Work (RTW)					
OPPs @ 6 mos	2.2 (1.4, 3.4)	1.9 (1.1, 3.1)	1.7 (1, 2.9)	1.5 (0.9, 2.6)	1.4 (0.8, 2.4)
OPPs @ 12 mos	2.5 (1.5, 4.1)	2.3 (1.3, 4.0)	2.0 (1.1, 3.7)	2.3 (1.2, 4.2)	2.0 (1.1, 3.7)
Successful Return to Work (sRTW)					
OPPs @ 6 mos	2.7 (1.8, 4.0)	2.3 (1.5, 3.4)	1.9 (1.3, 2.9)	1.8 (1.2, 2.8)	1.7 (1.1, 2.7)
OPPs @ 12 mos	2.6 (1.7, 3.9)	2.2 (1.4, 3.5)	1.9 (1.2, 3.1)	2.0 (1.2, 3.3)	1.7 (1.0, 2.9)

Low OPPs are the reference group

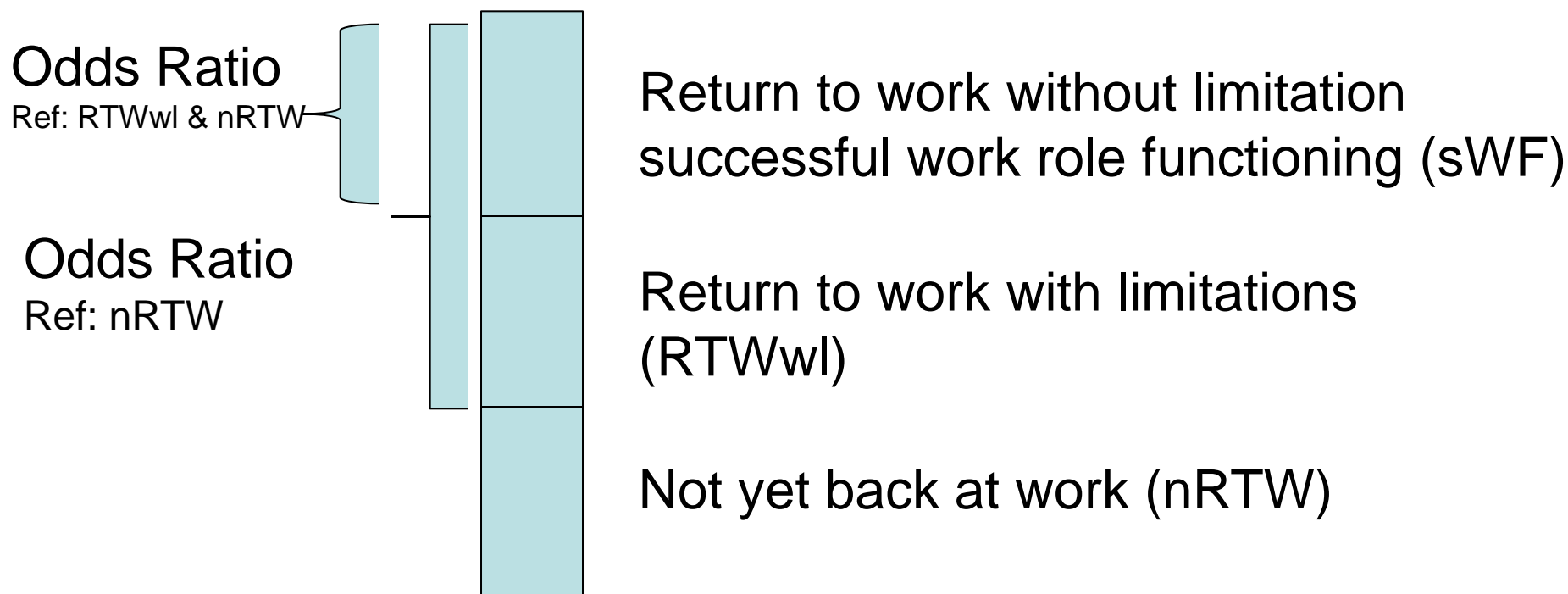


12 Month Effects for Work Accommodation and Self-Efficacy for Return to Work (RTW)

Work Accommodation		
Baseline		
	Offer Rejected	4.9 (1.4, 16.8)
	Offer Accepted	4.5 (2.0, 10.3)
6 Months		
	New Offer	2.6 (1.1, 6.4)
12 Months		
	New Offer	3.6 (0.9, 15.1)
Self-Efficacy		
	Baseline	1.0 (0.8, 1.2)
	6 – month change	1.1 (0.9, 1.3)



A Quick Reminder About Language and What You Will See Next





12 Month Effects for Work Accommodation and Self-Efficacy for Successful Work Role Functioning (sWF)

	RTWwl /sWF vs. nRTW	sWF vs. RTWwl/nRTW
Work Accommodation		
Baseline		
Offer Rejected	6.5 (1.8, 22.7)	5.5 (1.8, 16.8)
Offer Accepted	4.5 (2.0, 10.1)	1.3 (0.6, 2.8)
6 Months		
New Offer	2.8 (1.3, 6.2)	2.8 (1.3, 6.2)
12 Months		
New Offer	3.5 (1.1, 11.0)	3.5 (1.1, 11.0)
Self-Efficacy		
Baseline	1.0 (0.8, 1.3)	1.5 (1.2, 1.8)
6 – month change	1.1 (0.9, 1.3)	1.7 (1.4, 2.1)



So What Do We Think We Learned

- Organizational Policies and Practices (OPPs) Matter in RTW and in Successful Work Role Functioning (sWF)
 - Replicates a major finding from Maine CTS II Cohort
- Work accommodation mediates the relationship between OPPs and RTW and sWF
- Self-efficacy mediates the relationship between OPPs and sWF
- Depression matters



What Else Do We Think We Learned

- Choose your outcome carefully
 - Different outcomes lead to different conclusions
- Choose your analytic strategy carefully
 - You may be missing important pathways



What Confidence Do We Have In The Results?

- Large sample with strong statistical analysis – many potential covariates in multidimensional model
- Have temporal ordering – not only for OPPs predicting outcome but OPPs predicting change in self-efficacy and new work accommodation offers
- Still - all self-reports – so some unmeasured variable may explain relationship between OPPs and sWF, self-efficacy and work accommodation
- Furthermore, looking at people who are one month post injury – some effects may have already played out in the first month that we miss



Some Questions to Consider?

- Is one specific OPP, disability management, driving the observed effect?
- Does it hold for all MSD injuries or is it more relevant to back or upper extremity MSD injuries?
- Are there other pathways through which OPPs affect RTW and sWF?



What Policy, Program or Practice Interventions Do The Results Suggest?

- Supports leading indicators as a focus of policy
- Need to better understand how to measure and disseminate best practices for OPPs
- Need to facilitate the offer of work accommodation
- Self-efficacy can be improved in multiple ways with many success stories from chronic disease management



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