

THE DESIGN AND POLITICS OF RETURN TO WORK MEASUREMENT

February 9, 2017

Ellen MacEachen
School of Public Health and Health Systems

Presentation to Bancroft Institute for Studies
on Workers' Compensation and Work Injury



UNIVERSITY OF WATERLOO
FACULTY OF APPLIED HEALTH SCIENCES



Three main topics

I. RTW measurement issues

- A. Return to work (RTW) measures can contain misleading assumptions
- B. Apples and Oranges: inconsistent measurement of RTW
- C. Important dimensions of RTW are not (or barely) being measured

II. Political issues

III. How can RTW measurement improve?

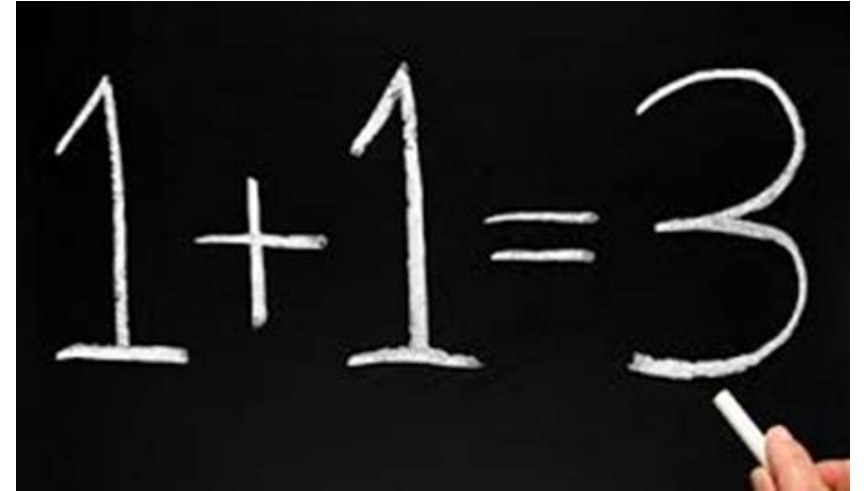


I. RTW measurement issues



A. RTW measures can contain misleading assumptions

- RTW \neq off benefits
- Administrative data: what's behind the numbers?
- Psychological explanations for delayed RTW: what do they actually measure?



End of benefits = RTW?

Authors	Country	Research Question/Aims	Definition of RTW	Self-report or Data Base	Sample Size	Working OR OFF benefits?	Length to assess RTW
Koehoorn, McLeod, Fan, McGrail, Barer, Cote, Hogg-Johnson	Canada	to investigate the effect of expedited surgical fees and surgical setting on the wait time and return- to-work time	"first return-to-work date"	Database	1380	Off Benefits	12 months since surgery
Stephens, Gross	Canada	Examine the efficacy of the continuum of care model	"Cumulative days receiving wage replacement benefits."	Database	54767	Off Benefits	12 months since injury day
Neilsen et al.	Denmark	Effectiveness of a national coordinated, tailored and multidisciplinary RTW program	Self-support - no longer receiving social transfer payment other than payments related to education.	Database	2200	Off Benefits	52 weeks (within 78 week period)
Hagglund	Sweden	Do time limits in the public SI system reduces sick-spell duration and increases return to work	Days of sick spell	Database	19211	Off Benefits	196 days right censored

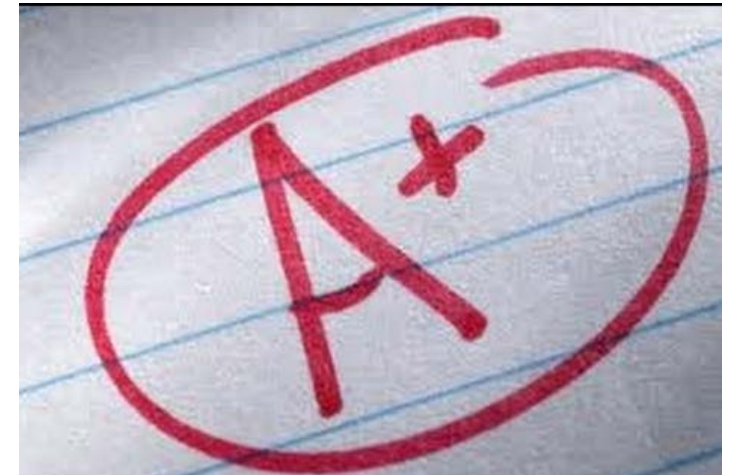


Authors	Country	Research Question/Aims	Definition of RTW	Self-report or Data Base	Sample Size	Working OR OFF benefits?	Length to assess RTW
Clay, Fitzharris, Kerr, McClure, Watson	Australia	To determine potential prognostic factors associated with time to return	Working at pre-injury hours or reduced hours following the injury event	Self-report	133	Working	12 months since baseline
Hamer, Gandhi, Wong, Mahomed	Canada	To describe the predictors associated with a successful return to work	Working at any job , part-time or full-time 3 months post-treatment using a questionnaire package mailed to the subjects.	Self-report	1002	Working	3 months since post intervention
Salkever et al.	USA	Effect of individual placement and support supported employment, systematic medication management, and provision or coverage of additional behavioral-health services	Average past-30-days earnings reported earnings per hour, usual hours per day, usual days per week, usual weeks per month, and job duration for each job as having occurred in the 3 months preceding the interview	Self-report	2055	Working	24 months since enrollment to the program.
Weathers II, Baillet	USA	estimate the impact of a rehabilitation and counseling program on the labor market activity	Employment and earning , data from the summary Earnings Record.	Database	14612 (erolled)	Working	24 months since enrollment to the program.



Administrative data: what's behind the numbers?

The case of Labour Market Re-Entry



Psychological explanations for delayed RTW: what do they actually measure?

The case of the Fear Avoidance Scale

Basic concept:
Over-thinking pain



MUSCULOSKELETAL PROGRAM OF CARE

AUGUST 1, 2014

REFERENCE GUIDE

Yellow flags refer to normal but unhelpful psychological reactions to injury. Unlike red flags, the presence of yellow flags alone is not a cause to exclude or discharge the worker from the MSK POC. However, if yellow flags become a significant barrier to a worker's participation in this active rehabilitation program, the worker should be discharged and referred for appropriate care. The following are examples of yellow flags:

- The belief that pain or hurt equals harm
- Preference for passive treatment
- Fear/avoidance of activities.

In some cases, workers with yellow flags may be identified without a formal and specific assessment. Screening tools for the presence of yellow flags include the Fear Avoidance Beliefs Questionnaire (FABQ), the Tampa Scale of Kinesiophobia (TSK) and the Pain Catastrophizing Scale (PCS). Use of these tools is not mandatory however; they may be useful and should be administered at the health professional's discretion.



Fear-Avoidance Beliefs Questionnaire (FABQ)
Waddell et al (1993) Pain , 52 (1993) 157 - 168

Here are some of the things which other patients have told us about their pain. For each statement please circle any number from 0 to 6 to say how much physical activities such as bending, lifting, walking or driving affect or would affect *your* back pain.

	Completely disagree			Unsure			Completely agree
1. My pain was caused by physical activity.....	0	1	2	3	4	5	6
2. Physical activity makes my pain worse.....	0	1	2	3	4	5	6
3. Physical activity might harm my back.....	0	1	2	3	4	5	6
4. I should not do physical activities which (might) make my pain worse	0	1	2	3	4	5	6
5. I cannot do physical activities which (might) make my pain worse.....	0	1	2	3	4	5	6

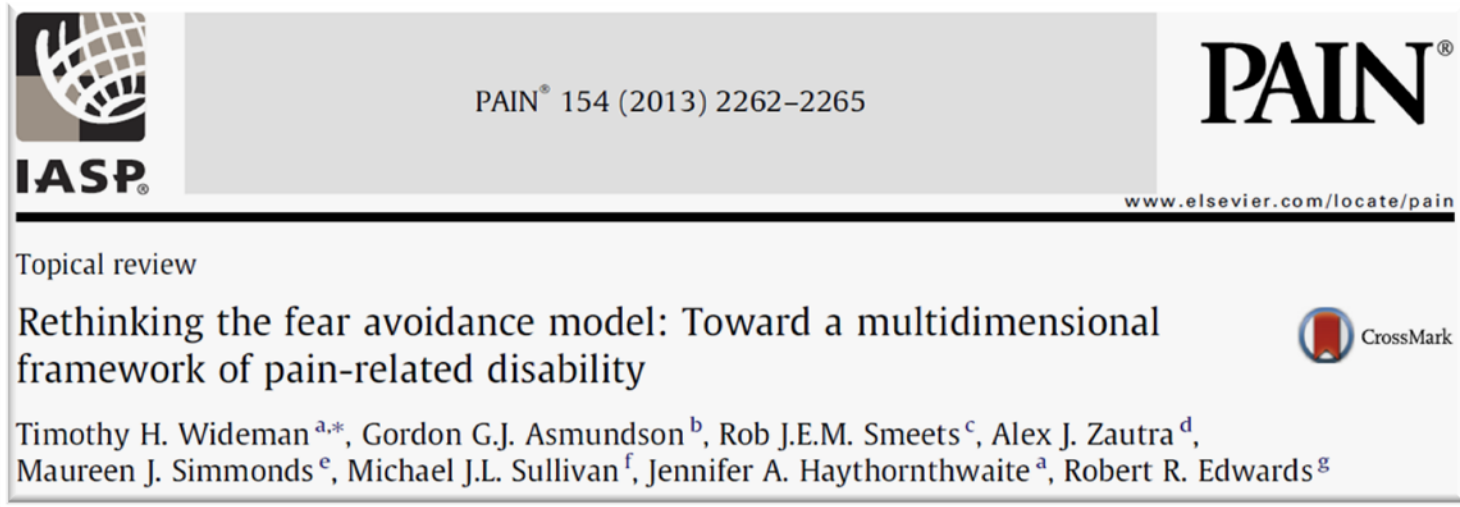
The following statements are about how your normal work affects or would affect your back pain

	Completely disagree			Unsure			Completely agree
6. My pain was caused by my work or by an accident at work.....	0	1	2	3	4	5	6
7. My work aggravated my pain.....	0	1	2	3	4	5	6
8. I have a claim for compensation for my pain.....	0	1	2	3	4	5	6
9. My work is too heavy for me.....	0	1	2	3	4	5	6
10. My work makes or would make my pain worse.....	0	1	2	3	4	5	6
11. My work might harm my back.....	0	1	2	3	4	5	6
12. I should not do my normal work with my present pain.....	0	1	2	3	4	5	6
13. I cannot do my normal work with my present pain.....	0	1	2	3	4	5	6
14. I cannot do my normal work till my pain is treated.....	0	1	2	3	4	5	6
15. I do not think that I will be back to my normal work within 3 months.	0	1	2	3	4	5	6
16. I do not think that I will ever be able to go back to that work.....	0	1	2	3	4	5	6

Scoring

Scale 1: fear-avoidance beliefs about work – items 6, 7, 9, 10, 11, 12, 15.

Scale 2: fear-avoidance beliefs about physical activity – items 2, 3, 4, 5.

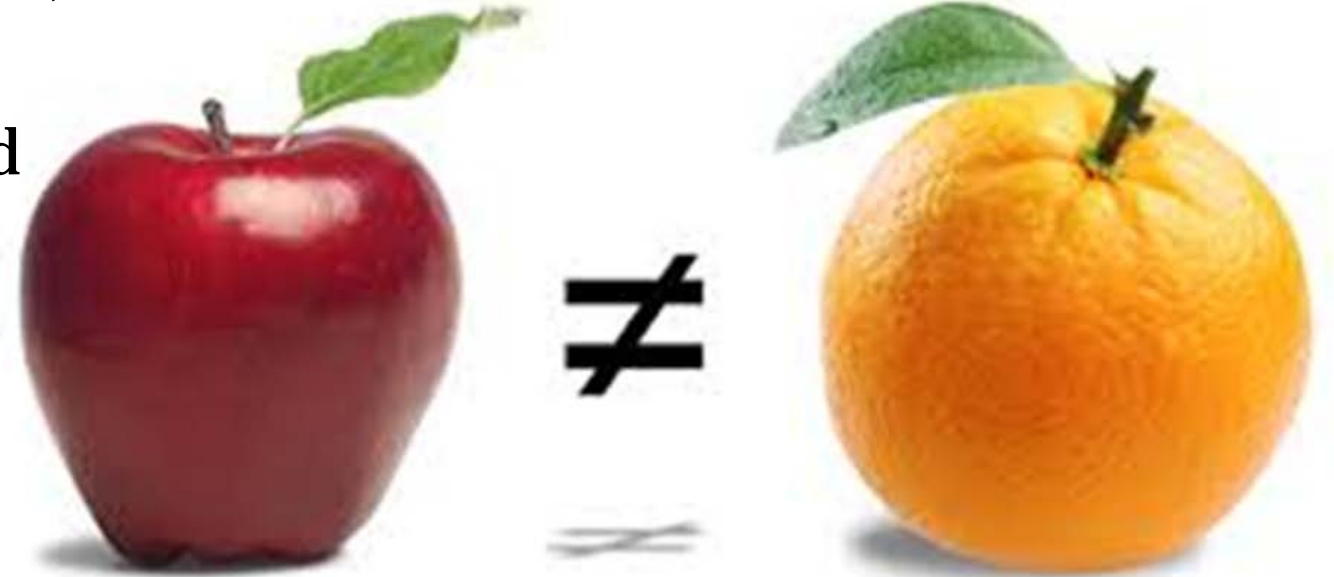


“Nearly 20 years ago, the Fear Avoidance Model (FAM) was advanced to explain the development and persistence of disabling back pain. The model has since ...become the **leading paradigm** for understanding disability associated with musculoskeletal pain. One relatively constant aspect of the model is the recursive series of fear-related cognitive, affective, and behavioral processes....Despite the endurance and popularity of these cyclical relationships, their **level of empirical support remains unclear**. For instance, recent prospective studies have **failed to support** the proposed sequential relationships among psychological risk factors. Also, the **validity of several fundamental assumptions** that underlie these cyclical relationships **has yet to be fully examined**, including the **characterization of fear as phobia**, the inextricable link between pain and disability, and the independence of disability from pain-related physiological processes.”



B. Apples and oranges: inconsistent measurement of RTW

- Differences in time point for measuring RTW
- Interpretation errors: RTW duration, RTW medical assessments
- Differences among who reports and for what



Differences in time point for measuring RTW

Authors	Country	Research Question/Aims	Definition of RTW	Self-report or Data Base	Sample Size	Working OR OFF benefits?	Length to assess RTW
Clay, Fitzharris, Kerr, McClure, Watson	Australia	To determine potential prognostic factors associated with time to return	Working at pre-injury hours or reduced hours following the injury event	Self-report	133	Working	12 months since baseline
Hamer, Gandhi, Wong, Mahomed	Canada	To describe the predictors associated with a successful return to work	Working at any job, part-time or full-time 3 months post-treatment using a questionnaire package mailed to the subjects.	Self-report	1002	Working	3 months since post intervention
Salkever et al.	USA	Effect of individual placement and support supported employment, systematic medication management, and provision or coverage of additional behavioral-health services	Average past-30-days earnings reported earnings per hour, usual hours per day, usual days per week, usual weeks per month, and job duration for each job as having occurred in the 3 months preceding the interview	Self-report	2055	Working	24 months since enrollment to the program.
Weathers II, Bailet	USA	estimate the impact of a rehabilitation and counseling program on the labor market activity	Employment and earning, data from the summary Earnings Record.	Database	14612 (erolled)	Working	24 months since enrollment to the program.

Interpretation errors: different places, different compensation schemes



The Structure and Process of Workers' Compensation Systems and the Role of Doctors: A Comparison of Ontario and Québec

Katherine Lippel, LL.L., LL.M., FRSC,^{1*} Joan M. Eakin, PhD,² D. Linn Holness, MD, MHSc, FRCPC, FFOM (Hon),^{3,4}
and Dana Howse, MASP, PhD (c)²

“Gatekeeping roles differed between jurisdictions both in initial adjudication and in dispute processes. Quebec legislation gives *greater weight to the opinion of the treating physician*.Policy-makers should contextualize the sources of the “evidence” they rely on from intervention research because *findings may reflect a system rather than an intervention effect*. Researchers should *consider* policy contexts to both adequately design a study and interpret their results.”

Differences in who reports and for what



Lewchuk, W. (2013). The limits of voice: are workers afraid to express their health and safety rights? *Osgoode Hall Law Journal*, 50, 789-812.

Lipscomb, H. J., Schoenfisch, A. L., & Cameron, W. (2015). Non-reporting of work injuries and aspects of jobsite safety climate and behavioral-based safety elements among carpenters in Washington state. *American Journal of Industrial Medicine*, 58(4), 411-421.



C. Important dimensions of RTW are not (or barely) being measured

- Quality of work return
- Prognostic factors and RTW effect of providers
- Role of gatekeepers



Return to *what*? Quality of work return



Prognostic indicators and RTW effect of providers



Kilgour, E., Kosny, A., McKenzie, D., & Collie, A. (2014). Interactions between injured workers and insurers in workers' compensation systems: a systematic review of qualitative research literature. *Journal of Occupational Rehabilitation*, 25(1), 160-181.



Role of gatekeepers



Kosny, A., Lifshen, M., Tonima, S., Yanar, B., Russell, E., MacEachen, E., . . . Cooper, J. (2016). *The role of health-care providers in the workers' compensation system and return-to-work process: Final report.*





OPEN ACCESS

Inter-rater agreement in evaluation of disability: systematic review of reproducibility studies

Jürgen Barth,^{1,2} Wout E L de Boer,¹ Jason W Busse,^{3,4,5} Jan L Hoving,^{6,7} Sarah Kedzia,¹ Rachel Couban,⁴ Katrin Fischer,⁸ David Y von Allmen,¹ Jerry Spanjer,^{9,10} Regina Kunz¹

“Despite their common use and far reaching consequences for workers claiming disabling injury or illness, research on the reliability of medical evaluations of disability for work is *limited* and indicates *high variation in judgments among assessing professionals*.”



II. Politics: “what gets measured gets managed”



MacEachen, E., Ferrier, S., Kosny, A., & Chambers, L. (2007). A deliberation on "hurt versus harm" logic in early return to work policy. *Policy and Practice in Health and Safety*, 5(2), 41-62.



III. How can RTW measurement improve?



Consider context



Measure more than the worker

- Worker at the centre

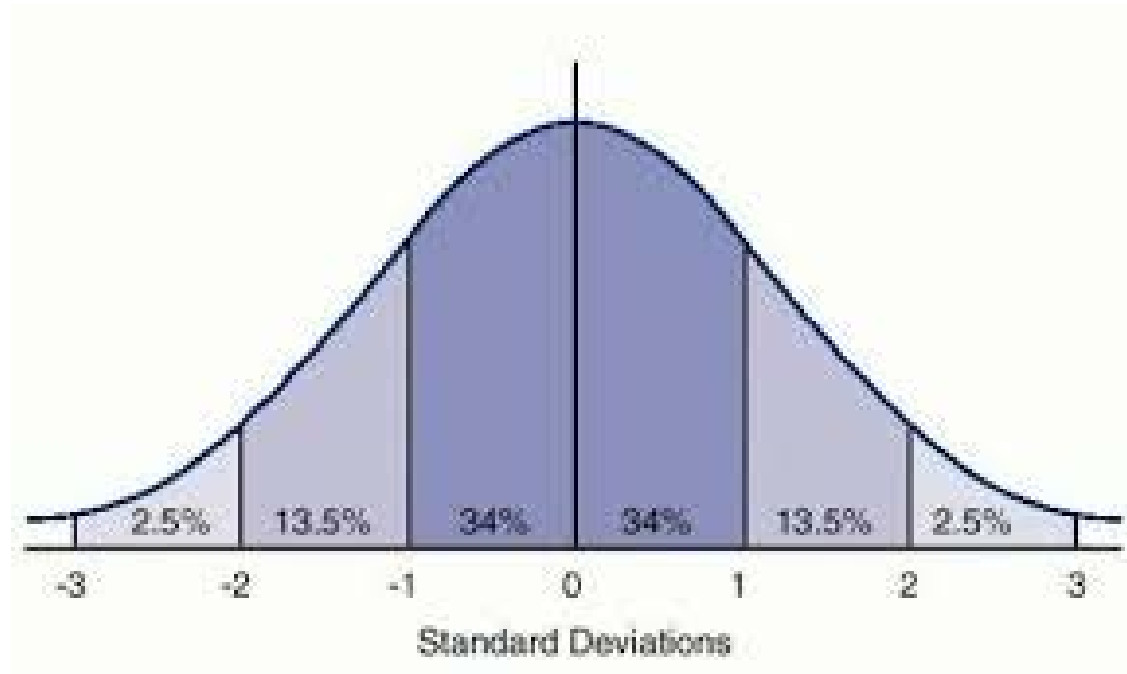


- Case manager at the centre



Measure workers at the fringes

- Take an 'inquest approach' to RTW.
- Learn from the 20% about how to improve the system for everyone.



Standardised measures



Create linked databases to track workers over time



Wrap up

- Many challenges measuring RTW, but issues are not insurmountable
 - Be sure that proxy indicators are valid (e.g. RTW \neq off benefits)
 - Consistent measurement and consideration of policy and social context to avoid interpretation errors
 - Focus on RTW providers, gatekeepers, work environment
 - Develop political will to share/link databases across ministries





UNIVERSITY OF WATERLOO

FACULTY OF APPLIED HEALTH SCIENCES

Thank You