Reducing disability and improving return to work – where do we go next?

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Today…

- Who are disabled and not working ?
- What has been done about it ?
- What are the results ?
- What could we do better ?
- Where could we go in the future ?

Focus - People who have worked in the past and are now out of work

WC - Low back pain - applicable to other disabling problems

Why focus on MSD's??

- Annual total cost of MSD's in Canada = $17.8B
- Second only to cardiovascular disease
- Of 95,000 WSIB claims, 72% MSD

Back pain: Persistent but not disabling

(Vingard E, *Spine*, 2002, 2159)

- 17,000 Swedes age 18-60, followed to identify those with onset of LBP severe enough to require treatment (5%)
- Course : 3 month improvement, then plateau through 24 months (pain / funct)
- 70% never lost a day from work

Disability Prevalence, Selected Countries (1991)

	Self-Reported Disability (%)	<60 yo and receiving disability pension (%)
United Kingdom	12	2.8
Netherlands	12	6.4
France	10	4.4
Germany	13	4.5
United States	12	3.4

The origins of work disability

(Waddell and Aylward, *Royal Soc. Of Med.*, 2002)

- Major differentiators:
  - Available cash benefits
  - Economic context
  - Acceptable disabling conditions
  - Culture around return to work

Trends over the last 20 years

- Escalating rates of work disability
- "The single greatest social security problem in the developed world is the increasing number of persons under age 55 transitioning to long-term disability due to health problems." Waddell, 2004

- WC: Fewer injuries - more disability

The primary response: more medical treatment

- Medical = 57% of claims cost
  - 3-fold increase in cost per claim over 10 years
- WC CPI (11%) > Med CPI (8%) in the US

Manipulation (Mior, *Clin J Pain*, 2001)

- Slight advantage over placebo – not over other effective Rx - only short-term/acute (<6 wks. Rx)
- Problems – belief system, dependence – direct conflict with self-management

Opioids (Fanciullo, G., *Spine*, 2002)

- Recent ↑ in usage and dose
  - Treat chronic back pain just like cancer
  - 35% acute LBP in one study
- Typical pain reduction only 30% in chronic treatment (Turk, *Clin J Pain*, 2002)

High-dose oral narcotics in WC
(> 80 mg/d MEq)

- >10% iatrogenic addiction
- >20% of all work-related deaths in WA state in 1999 – 2004 (Franklin et al AJIM 2005)

Despite evidence that …

- No recent medical innovation has had a significant impact on work disability
- Most are unhelpful, or actually prolong time away from work
- Even those that seemed promising for RTW in early studies failed to generalize Sinclair et al, ECC study, Spine, 1997

What drives unhelpful medical interventions?

- Provider myopia
  - Any clinical benefit is ample justification
  - Over-generalization of indications
  - Belief systems that parallel patients' misconceptions
  - 'Allegiance' to patient requests

Dersh, Polatin, Leeman and Gatchel, Jour Occ Rehab, Dec 2004

Other factors driving unhelpful medical interventions

- Irrational economic models
- Absence of limiting market forces (shared consumer burden, prior proof of concept, pay for performance…)
- Failure – based rewards (sickness demonstration = more benefits)
- Adulterated consumerism
  - DTC advertising, lay misinformation

Misinformation in the Media
(Schoene, 2003)

- 100 national press articles
- LBP usually depicted as chronic/catastrophic
- Experimental treatments effective
- Case report > group experience
- Few emphasized a non-medical approach

These problems are inherent and persistent features of many health care systems, not just WC.

Evolving perspectives on RTW

- 1920s -Medical determinism
- Post WW2 -Physical rehabilitation
  - Objective end-points, static measures
- 1980s -Vocational rehab / Human Rights Act
- Economic, cultural, social analyses
- 1992 -Biopsychosocial model

Exciting new theories about RTW

- State of change model (Prochaska - Franche)
  - Self-efficacy, expectations, decisional balance
- Adaptational model (Shaw)
  - Both worker and workplace (others as well)
  - Focus on RTW process, disability > diagnosis
- RTW as negotiated process (Clarke)
  - Key interaction: worker – employer communication
  - External expertise secondary

Evidence on RTW (Franche et al 2005)

- early contact with worker,
- work accommodation offer,
- contact between healthcare provider and workplace,
- ergonomic work site visits,
- presence of RTW coordinator,
- labor-management cooperation.

Effective inter-stakeholder communication is at the core of each successful program.

Many innovative programs fully resolve medical issues early on – with simultaneous linked but separate treatment of disability.

Resolve medical issues

- Indahl Study - subacute LBP (Spine, 1995)
  - Medical issues resolved on day 1 – multiple tests and exams
  - Uniform advice: avoid back fibrosis
  - 2X RTW at 1-yr f/u

Sherbrook program

(Loisel, 1998)

- > 8 wks disability
- Disability treated separately
- Early RTW in any capacity (concurrent with rx / rehab)
- Results: RTW 2.4 X faster,
  - less pain, disability, reinjury

- These programs are excellent but expensive, require expertise.
- How about more acute cases?
- Can we change typical practice?
- Perhaps…..
  - PGAP Program (Sullivan et al)
  - Enhanced ergo intervention (Anema and Steenstra)

Psychosocial and behavioral issues in community practice

- Simple cognitive / behavioral rx early
  - Trained PT / nurses?
  - Focus on short-term goals of RTW
- Psychiatric labels not helpful for treatment or for insurance
- Recognize importance of both internal and external factors

Psychosocial Risk Factors for Work Disability

- **Type 1 Risk Factors**

1. Pain severity
2. Perceived limitations
3. Pain catastrophizing
4. Fear of pain/re-injury
5. Depression
6. Attitudes, motivation

- **Type 2 Risk Factors**

1. Work Stress
2. Support
3. Workplace conflict
4. Workplace relations
5. Employer attitudes
6. Lack of autonomy

Employer Immediate Response

Shaw, Pransky and McLellan

- Theory: Prevent disability through improved employer responses to report of injury
- Purpose: Design, test and refine a management-supported supervisor training program

Supervisor Training Program

- Immediate contact
- No blame/inquiry
- Positive, empathic
- “Want you back”
- Ergo/safety educ.
- Problem-solving
- Regular follow-up
- Accommodations
- Workplace update
- Functional inquiry

Two 2-hour sessions, interactive
Mgmt endorsement
Result: 20% less lost time

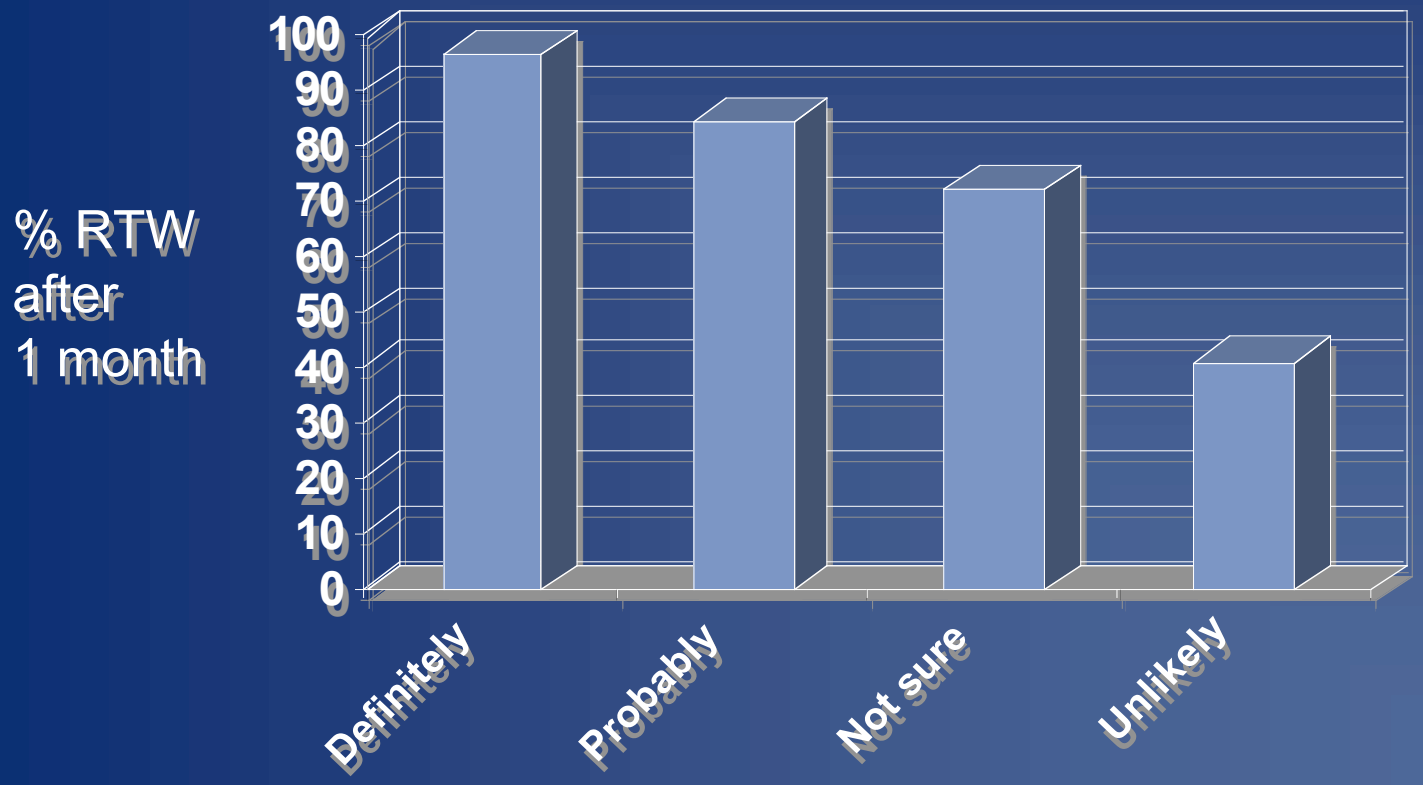
Mass media vs….mass media!

Buchbinder, *et al*, *Spine*, Dec. 2001

- 1997-99: Media campaign, Victoria, Australia
- Subsequent improvements: patient, doctor, community belief/attitudes
  - Less LBP claims, medical costs, disability charges
- Surveyed 1500 persons in Vic/NSW in late 2002
- Results – still more awareness, persistent improvements in beliefs

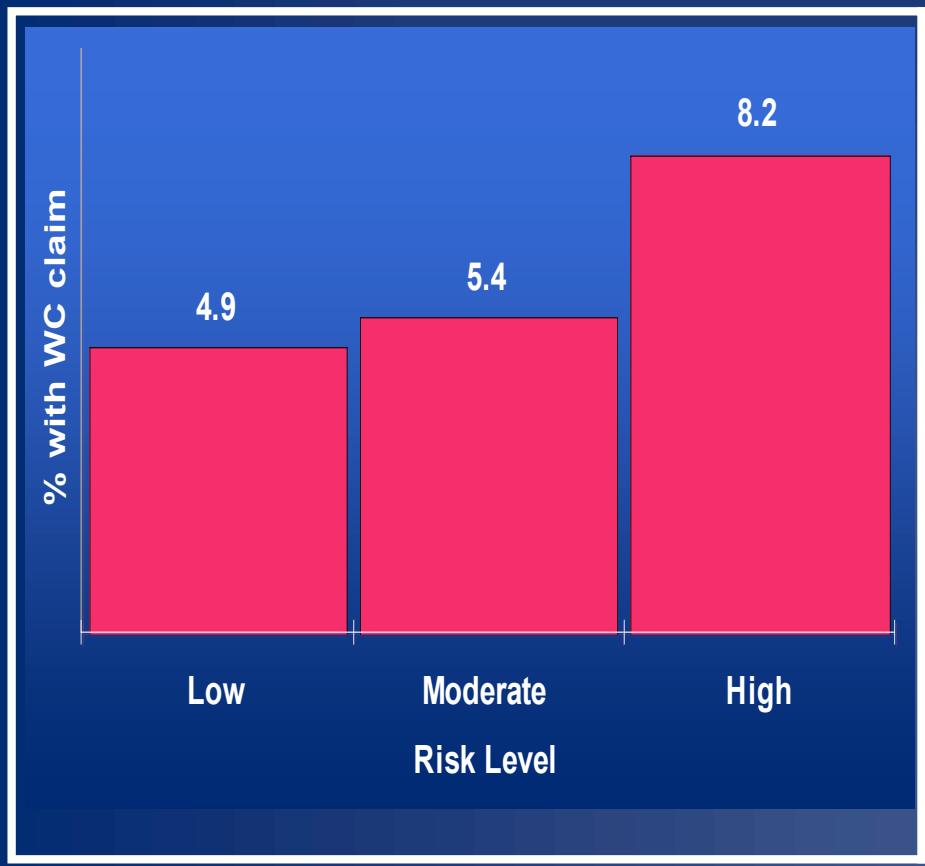
Risk prediction: Expectations for RTW

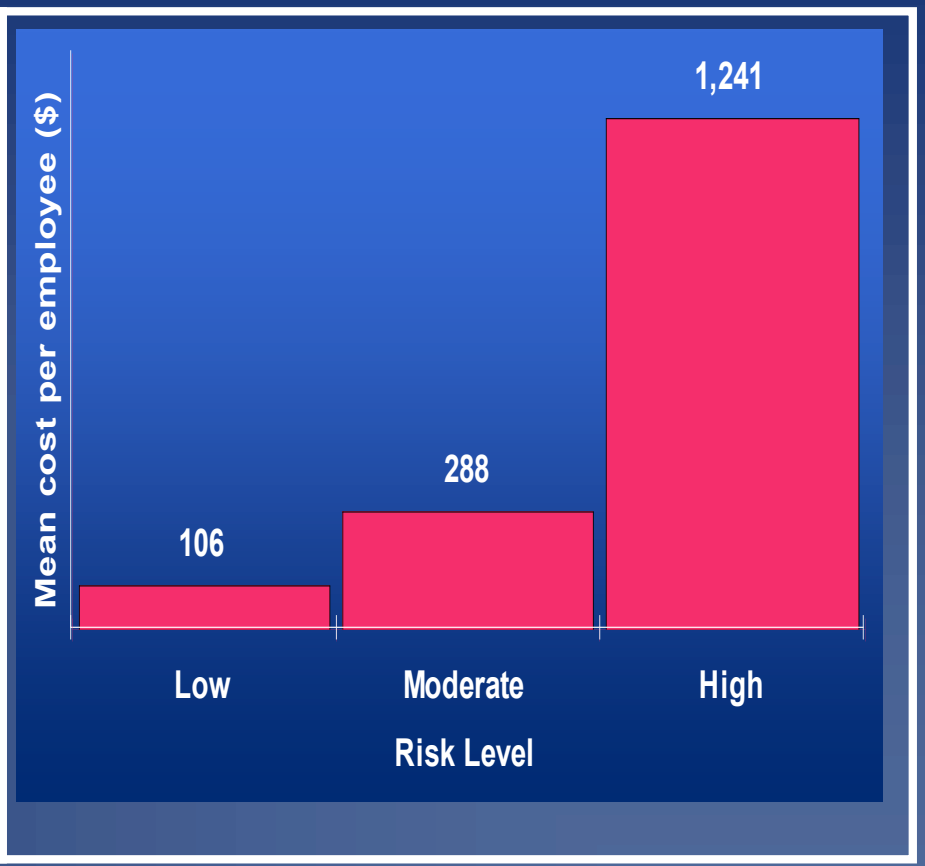
Do you think you will be able to do your regular job, without any restrictions, 4 weeks from now?



Can we intervene to improve outcomes?

Health Risks and WC Costs





Source: Musich, et al. *JOEM* 2001; 43:534-541

Health promotion and resilience

- Health promotion participants in a large telecommunication company
- Compared to pre-program and to non-participants, extensive adjustment for confounders
- STD episodes: same frequency, but RTW on average 8.3 days earlier

Serxner et al JOEM 2001

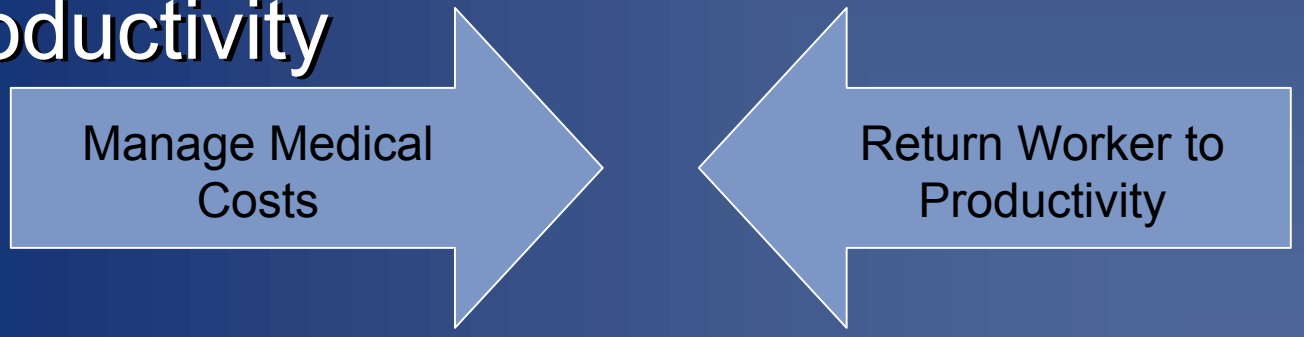
NIOSH National Institute for Occupational Safety and Health

Based on demonstration of better health promotion outcomes with blue collar workers with a combined individual and worksite-based approach to health risk reduction.

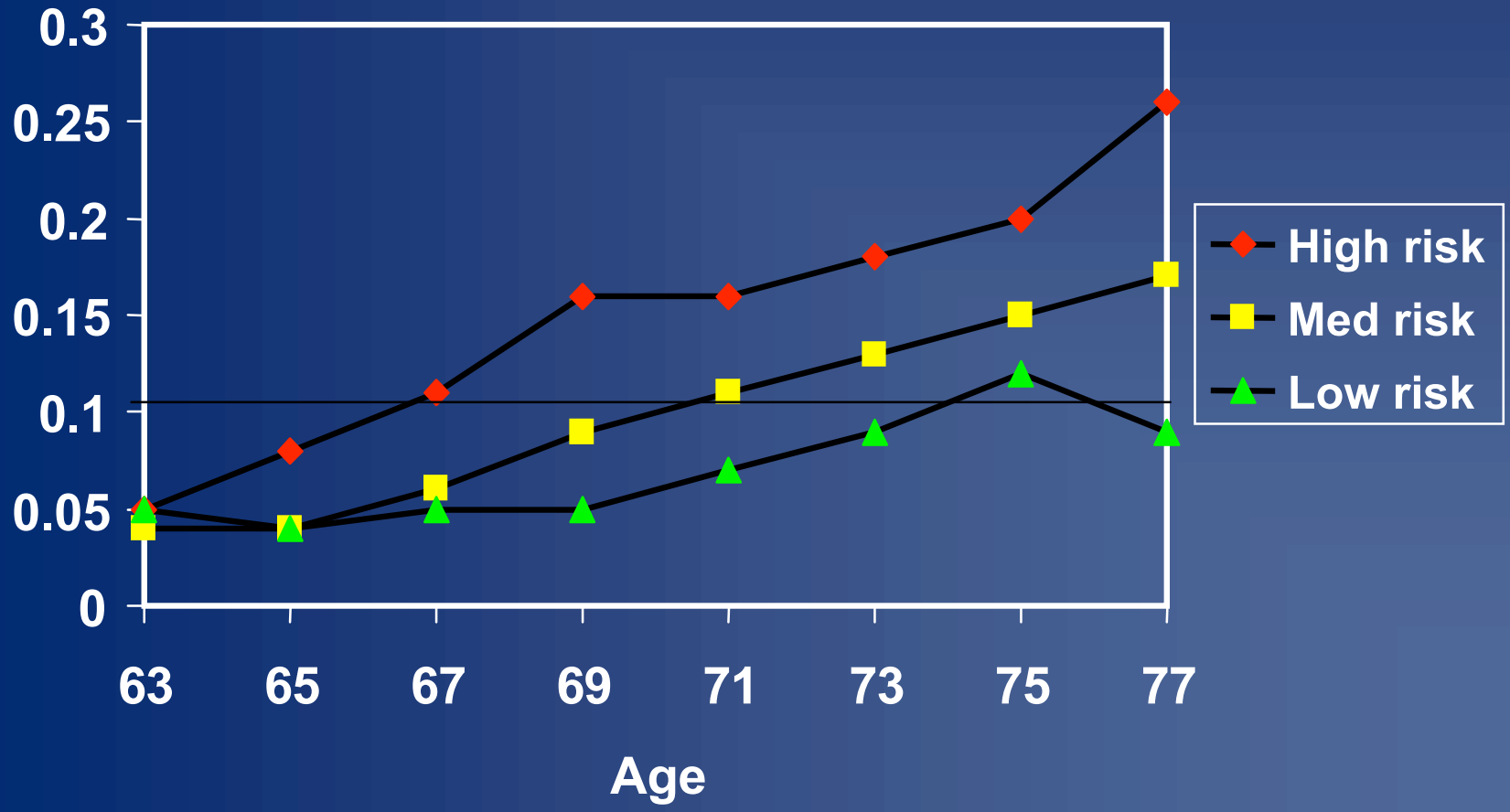
Provincial Health Model vs. WC Model

Provincial Objectives: Manage medical costs and provide care (80% = chronic illness)

WC Objectives: Manage medical costs (80% = acute illness) AND return employee to productivity



Aging, health risks and cumulative disability index (Vita, et al. 1998)



Future best practices???

- Preventive medicine (vaccination / wellness)
- Early risk prediction – targeted approach
- Addressing all psychosocial issues and comorbidity (depressing / dehumanizing work)
- Focus on disability independent of medical issues
- Pay for performance: RTW and function
- Science-based policies

Professor Alf Nachemson, 1996

- Referring to the poor results from back fusion surgery -

  "In any other surgical specialty, such results would lead to abandonment of the technique.
  Only spine surgeons have repeated conferences and books on failed back surgery.
  We should stick to the facts and let them guide us forward."