Opioids May Impair Functional Recovery

The impact of prescribing opioids on functional recovery and return to work may be a bigger risk in many claimants than dependency and addiction.

The biological model emphasizes the benefit of opioids for managing chronic non-malignant pain. While studies by MacLaren (2006), Townsend (2008) and Soins (2008) suggest there is no impact from opioid use on the outcomes of functional restoration rehab programs, other studies suggest that there may be poorer rehab and return to work outcomes.

Kidner (2009) found that higher opioid use was associated with poorer rehab and RTW outcomes. Dersh (2008) noted that long-term opioid use may be a risk factor for poorer RTW and health outcomes.

Prolonged absence from one's normal roles can be detrimental to a person's mental, physical and social well-being (CMA 2000). The probability of returning to any gainful employment declines the longer one is away from work – 50% probability at 6 months, 25% at one year and 10% by 2 years (Waddell 1987; Alyward and Sawney 2007). Failure to return to work can result in increased rate of morbidity and mortality (Talmage and Melhorn 2005).

WorkSafeNB's experience is that opioid use is higher in claimants with little or no impairment (e.g., strains and sprains) compared to claimants with definite impairment (e.g., fractures). In claimants with a mild-moderate soft tissue injury, the rate of prescribing opioids in those with a Pain & Activity score over 147 at week 4-6 was twice that for claimants with a score under 99. In 2008, case managed claims with a score over 139 at 4-6 weeks had on average 170 more days (7.4 months) away from work than those with a score below 99. Scores above 139 suggests that factors other than just the injury are affecting the extent of pain intensity and pain disability.

Item 3 in the pharmacist's report section of WorkSafeNB's Opioid Review Process mentions the risk of potential side effects, dependency and addiction. The impact of prescribing opioids on functional recovery and return to work may be the bigger risk for most claimants. A component of the opioid review process is the 6-week duration trigger for claims where one would not expect the claimant to be on an opioid based on the claimant's nature of injury (NOI). The NOI is coded based on information in the Form 8 and 10. The duration trigger facilitates the evaluation of risk for prolonged recovery due to pain disability.

References:

- Alyward, M. and P. E. Sawney (2007). Chapter 4: Support and rehabilitation (restoring fitness for work). <u>Fitness for Work: The Medical Aspects</u>. K. T. Palmer, R. A. F. Cox and I. Brown. Oxford, Oxford University Press: 69-79.
- CMA (2000). <u>The Physician's Role In Helping Patients Return To Work After An Illness</u> Or Injury (Update 2000). Ottawa, Ontario, CMA.
- Dersh, J. (2008). "Prescription opioid dependence is associated with poorer outcomes in disabling spinal disorders." <u>Spine</u> **33**(20): 2219-27.

- Kidner, C. L. (2009). "Higher opioid doses predict poorer functional outcome in patients with chronic disabling occupational musculoskeletal disorders." <u>The Journal of bone and joint surgery</u> **91**(4): 919-27.
- MacLaren, J. E., R. T. Gross, et al. (2006). "Impact of Opioid Use on Outcomes of Functional Restoration The Clinical Journal of Pain Medical Journal." <u>The Clinical Journal of Pain</u> **22**(4).
- Soin, A., J. Cheng, et al. (2008). "Functional outcomes in patients with chronic nonmalignant pain on long-term opioid therapy." Pain practice: the official journal of World Institute of Pain 8(5): 379-84.
- Talmage, J. B. and J. M. Melhorn (2005). Chapter1: Why Staying at Work or Returning to Work is in the Patient's Best Interest. <u>A Physician's Guide to Return-to-Work</u>. J. B. Talmage and J. M. Mehorn. Washington, DC, AMA Press: 1-6.
- Townsend, C. O. (2008). "A longitudinal study of the efficacy of a comprehensive pain rehabilitation program with opioid withdrawal: comparison of treatment outcomes based on opioid use status at admission." Pain 140(1): 177-89.
- Waddell, G. (1987). "1987 Volvo award in clinical sciences. A new clinical model for the treatment of low-back pain." Spine (Phila Pa 1976) **12**(7): 632-44.