Title: Early Opioid Prescriptions for Work-Related Musculoskeletal Disorders of the Low Back – Understanding Utilization Patterns, Determinants, and Impact on Work Disability (IWH # 2170)

Purpose: This project seeks to understand the use and impact of analgesic (opioid and non-opioid) and adjuvant analgesic drug use amongst workers with lost-time workers' compensation claims for work-related low back pain (WRLBP). This project also seeks to assess the validity of the administrative analgesic data.

Description: This project will use administrative workers' compensation and health care data contained within the British Columbia Health Linked Database (BCHLD), as well as prescription data from the PharmaNet database. These databases will be linked, by Population Data BC staff, at an individual level using identifiers such as names, birth dates, sex, postal codes, and Personal Health Numbers. All identifiable information used for the linkage will be removed before the data is provided to the research team. The researchers will use the de-identified data:

- 1. To describe pre- and post-claim analgesic (opioid and non-opioid) and adjuvant analgesic prescription patterns.
- 2. To describe analysesic and adjuvant analysesic prescription patterns over calendar time (from 1998 to 2010).
- 3. To determine whether opioid prescriptions (in general or specific characteristics of these prescriptions) are associated with work disability.
- 4. To describe opioid prescription patterns (both post-claim and over calendar time, 1998 to 2010) suggestive of possible opioid misuse or problematic prescribing.
- 5. To assess the validity of analgesic prescription data in WorkSafeBC's Pharmacy Management Information System (PMIS).

For each of the objectives above, the population of interest will be workers filing a new WRLBP lost-time claim.

Output: Only aggregate data which do not identify any individuals will be released from the analysis files (which are housed remotely at PopDataBC) through research papers or journal articles. The composite linked records generated for this study do not contain any direct identifiers and will be retained by PopDataBC until December 2017.

Ethical Review: The study proposal was originally reviewed and approved by the Research Ethics Board at the University of Toronto in October 2011(protocol number 26885).