Impact of pre-existing chronic conditions on age differences in sickness absence after a musculoskeletal work injury: A path analysis approach[1]

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Appendix A

Method used to identify musculoskeletal injury claims

Musculoskeletal disorder (MSD) injuries were defined using nature of injury and event

leading to injury codes from the Canadian Standards Association Z-795 injury

classification system. This method of identifying musculoskeletal injuries was developed

by Jonathan Tyson of the Ontario Pulp and Paper Health & Safety Association, and is

based on the Z795 Injury Codes ("MSD case definition," 2012).

Nature of Injury Codes

- 021XX = Sprains, strains, tears

- 029XX = Other injuries to muscles, tendons, ligaments, joints, etc. not classified

  elsewhere

- 082XX = Sprains and bruises

- 09720 = Nonspecific injuries and disorders – back pain, hurt back

- 09730 = Soreness, pain, hurt, except the back

- 12410 = Disorders of the peripheral nervous system – carpal tunnel syndrome

- 13710 = Raynaud's Syndrome or Phenomenon, Vibration Induced White Finger

- 153XX = Hernia

- 170XX = Musculoskeletal system and connective tissue diseases and disorders

- 172XX = Dorsopathies

- 173XX = Inflammation and irritation of joints, tendons, muscles and connective tissues

- 174XX = Osteopathies, chondropathies, acquired deformities

- 179XX = Other musculoskeletal system and connective tissue diseases and disorders

- 41200 = Symptoms involving nervous and musculoskeletal systems – symptoms involving nervous and musculoskeletal systems, unspecified.

- 41280 = Symptoms involving nervous and musculoskeletal systems – multiple symptoms involving nervous and musculoskeletal systems

- 41290 = Symptoms involving nervous and musculoskeletal systems – multiple symptoms involving nervous and musculoskeletal systems, n.e.c.

- 41480 = Symptoms involving head and neck – multiple symptoms involving head and neck

- 41490 = Symptoms involving head and neck – multiple symptoms involving head and neck, nec

Injury Event Codes

- 20XXX = Bodily reaction and exertion, unspecified

- 21XXX = Bodily reaction

- 22XXX = Overexertion

- 23XXX = Repetitive motion

- 25XXX = Static posture without application of force to an object

- 26XXX = Static posture with application of force to an object

-   27XXX = Other bodily conditions

-   29XXX = Other bodily reaction and exertion

Appendix 2: <u>Table A2: ICD Codes Used to Define Chronic Conditions</u>

Disorder	ICD9	ICD10[1]	Reference
1. Diabetes[2]	- 250: Diabetes Mellitus	- E10 – E14: Diabetes Mellitus	Lix et al (2008) (1) Hux et al (2002) (2)
2. Rheumatoid Arthritis	- 714: Rheumatoid arthritis	- M05-M06: Rheumatoid arthritis	Lix et al (2008) (1)
3. Osteoarthritis	- 715: Osteoarthritis	- M15-M19: Osteoarthritis	Lix et al (2008) (1)
4. Hypertension[3]	- 401: Essential hypertension - 402: Hypertensive heart disease - 403: Hypertensive chronic kidney disease - 404: Hypertensive heart and chronic kidney disease - 405: Secondary hypertension	- I10: Essential (primary) hypertension - I11: Hypertensive heart disease - I12: Hypertensive renal disease - I13: Hypertensive heart and renal disease - I15: Secondary hypertension	Tu et al (2007) (3)
5. Coronary Heart Disease (CHD)	- 410-414: Ischemic heart disease	- I20-I25: Ischemic heart disease	Lix et al (2008) (1)
6. Thyroid conditions	- 240: Simple and unspecified goiter - 241: Nontoxic nodular goiter - 242: Thyrotoxicosis with or without goiter - 243: Congenital hypothyroidism - 244: Acquired hypothyroidism - 245: Thyroiditis - 246: Other disorders of thyroid	- E00: Congenital iodine-deficiency syndrome - E01: Iodine-deficiency-related thyroid disorders and allied conditions - E02: Subclinical iodine-deficiency hypothyroidism - E03: Other hypothyroidism - E04: Other nontoxic goitre - E05: Thyrotoxicosis [hyperthyroidism] - E06: Thyroiditis - E07: Other disorders of thyroid	Investigator Team
7. Hearing	- 389: Hearing loss - V72.12: Encounter for hearing conservation and treatment - V72.19: Other examination of ears and hearing	- H90: Conductive and sensorineural hearing loss - H91: Other hearing loss - Z01.1: Examination of ears and hearing	Investigator Team
Disorder	ICD9	ICD10	Reference

[1] The MSP records used for this analysis were coded according to ICD9 only. The DAD records were coded according to ICD9 until the end of fiscal year 2000-01, and then to ICD10-CA for the remaining years. From fiscal year 2001-02 to fiscal year 2006-07 (inclusive), these DAD records also contain ICD9 codes because CIHI translated the original ICD10-CA codes to ICD9 codes in these years.

[2] To avoid counting gestational diabetes as chronic diabetes, we did not classify a respondent as "diabetic" if the medical or hospital records indicating this disorder were preceded, within 150 days, of a physician or hospital record for an obstetrical event (defined as ICD9=630 to 679 or ICD10-CA=O00 to O99).

[3] To avoid counting gestational hypertension as chronic hypertension, we did not classify a respondent as "hypertensive" if the medical or hospital records indicating this disorder were preceded, within 120 days, or followed, within 90 days, by a hospital record for an obstetrical event (defined as ICD9=630 to 679 or ICD10-CA=O00 to O99).

8. Depression	- 311: Depression, NOS - 300.4: Dysthymic disorder - 296.2: Major depressive disorder, single episode - 296.3: Major depressive disorder, recurrent	- F32: Depressive episode - F33: Recurrent depressive disorder - F34.1: Dysthymia - F38.1: Other recurrent mood [affective] disorders	CIHI (2008) (4) Townsend (2010, 2012) (5, 6)

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