

Appendix 1 (as supplied by the authors): Codes used for cohort definitions and outcomes

Inclusion criteria	Exclusion criteria	Outcomes
<i>Imaging for low back pain</i>		
OHIP claim for home or office visit to a primary care physician between April 1, 2008-March 31, 2013 with one of the following diagnostic codes as dxcode: 722, 724, 847	Invalid IKN Age <18 on visit date Red flag history up to 5 years prior to back pain visit: OHIP claims with dxcode for the following conditions: Prior diagnoses of low back pain: 722, 724, 847 Neoplasms: 140-239 Conditions of the nervous system: 320-359 Arthritis: 714, 715, 716, 730 Congenital abnormalities: 741-759 Fractures: 805, 806, 829 OHIP claims with fee code for visits to the following specialists: Neurosurgery: A043, A044, A045, A046, C042, C043, C044, C045, C046, C047, C048, C049; office visits to physician with specialty = "04" in IPDB Orthopaedic surgery: A063, A064, A065, A066, C062, C063, C064, C065, C066, C067, C068, C069; office visits to physicians with specialty = "06" in IPDB OHIP claims with fee code for a spine-related scan: Spinal x-ray: X025, X027, X028, X031, X032, X033, X034, X202, X203, X204, X205, X206, X207; CT: X415, X416, X128; MRI: X490, X492, X493, X495, X496, X498; EMG: G455, G456, G457, G458, G459, G465, G466, G467, G469; Other tests on spine fee codes: X057, X058, X080, X081, X164, X173, J006, J011, J020, J030, J038, Z454, G368, G386 OHIP claims with fee code for a spine-related operation: E533, E534, E535, E536, E548, E549, E554, E562, E565, E566, E567, E568, E570, E573, E574, E897, E901, E909, E910, E913, E914, E915, E920, E924, E926, E928, E929, F103, F105, F107, M137, N126, N182, N185, N186, N192, N194, N195, N196, N197, N248, N313, N314, N317, N318, N319, N320, N321, N323, N324, N329, N330, N331, N332, N333, N334, N335, N336, N337, N338, N339, N340, N341, R234, R251, R252, R254, R264, R270, R271, R274, R275, R296, R303, R310, R336, R346, R348, R350, R356, R357, R358, R359, R361, R362, R368, R369, R370, R371, R373, R374, R397, R419, R447, R450, R451, R452, R455, R457, R459, R461, R464, R493, R494, R634, R635, R636, S312, Z215, Z219, Z226, Z228, Z236, Z241, Z244, Z662, Z800, Z810, Z817, Z823, Z868 Hospital admission with one of the following diagnostic codes in CIHI-DAD: ICD-9 324.1, 334.8, 334.9, 335, 336, 340, 342, 344, 349, 349.81, 350-359, 720-724, 737, 738.5, 739.3, 710-742, 805, 806, 839, 847, 950-957	At least one OHIP claim with feecode for back imaging up to 3 months after index visit for low back pain: CT: X415, X416, X128 MRI: X490, X492, X493, X495, X496, X498

Inclusion criteria	Exclusion criteria	Outcomes
<i>Cervical cancer screening</i>		
Females aged <21 or >69 years of age between April 1, 2008-March 31, 2013	Invalid IKN Male sex Age <13; age >105 Diagnosis of invasive gynaecological cancer prior to index date: Entry in OCR with dxcode: 179, 1800, 1801, 1808, 1809, 1820, 1821, 1828, 1830, 1832, 1833, 1834, 1835, 1838, 1839 Evidence of hysterectomy prior to index date: OHIP claim with feecode: S710, S727, S757, S758, S759, S762, S763, S765, S766, S767, S810, S816, P042 Entry in CIHI-DAD or SDS with CCP code: 79.2, 80.3, 80.4, 80.5, 80.6, 80.7, 86.42 Entry in CIHI-DAD or SDS with CCI code: 1RM89x, 1RM91x, 1RN89x, 5MD60CB, 5MD60KE, 5MD60KF, 5MD60RC, 5MD60RD Entry in ICES HIV database Pregnancy	At least one OHIP claim for cervical cancer screening with Pap smear: Feecode: G365, G394, E430, E431 Lab feecode: L812, L713, L733
<i>Repeat DEXA scans</i>		
OHIP claim for DEXA scan between April 1, 2008-March 31, 2013 with one of the following feecodes: X145, X146, X152, X153, X142, X148, X149, X155	Invalid IKN Age <40 or age >105 on date of index scan	At least one OHIP claim for DEXA scan up to 2 years after date of index scan with feecode: X152, X153, X142, X148, X149, X155
OHIP = Ontario Health Insurance Plan; IKN = ICES Key Number; CIHI-DAD = Canadian Institute for Health Information Discharge Abstract Database; SDS = Same-day Surgery; CCP = Canadian Classification of Diagnostic, Therapeutic, and Surgical Procedures; CCI = Canadian Classification of Health Interventions; DEXA = dual energy X-ray absorptiometry		

