Appendix 2 (as supplied by the authors): Supplemental information of the selection of the comparator pool

We identified a cohort of complex, high needs patients residing in the Central LHIN that were not enrolled in the Health Links program. All Ontarians in the RPDB were randomly assigned an index date based on the distribution of index dates (coordinated care plan completion date) of Health Link enrollees (n=344). Socio-demographics (age, sex, location, rurality, neighbourhood-level income quintile) were then identified for all individuals based on this date. We included individuals into the full comparator pool if they had complete socio-demographic information (no missing values for age, sex, rurality of residence and income quintile), were alive at index, were eligible for OHIP coverage, were within the age range of selected HL enrollees, and were not among Health Link enrollees identified in the full CHRIS dataset.

Remaining individuals were assigned to a Health Link geographical catchment area based on the location of their usual provider of primary care (identified by their formal physician that is contractually responsible for their care [CAPE data] or for patients not rostered in a primary care program, by virtual rostering [assigning patients to a physician based on frequency of health services provided prior to index identified in the OHIP files]) or on the location of their home residence (for those without any usual provider of care). Only individuals assigned to a Health Link catchment area matching that of the 3 Central LHIN Health Links were included. Geographic boundary files for the Health Link catchment areas were provided by the MOHLTC.

Last, we restricted the full comparator pool to include only complex, high needs patients. We used the MOHLTC definition of high-cost patients to identify all remaining individuals with an active diagnosis (within 1-year of their randomly assigned index date) of 4 or more conditions from a list of 55 priority conditions. The selected conditions were decided on by the Measurement and Performance Sub-Committee (of the Health Links Advisory Table) that included members from Local Health Integration Networks (LHINs), the Institute for Clinical Evaluative Sciences (ICES) and health services providers. Each condition was identified from multiple data sources, including DAD, NACRS, OMHRS, NRS, CCRS, HCD, and OHIP. Conditions included: amyotrophic lateral sclerosis (ALS), amputation, anemia, anxiety, arthritis, asthma, bipolar disorder, brain injury, chronic obstructive pulmonary disease (COPD), cardiac arrhythmia, cerebral palsy, coagulation defects, coma, congenital malformations, congestive heart failure, Crohn's disease/colitis, cystic fibrosis, dementia, depression, developmental disorders, diabetes, eating disorders, epilepsy and seizures, fractures, human immunodeficiency virus and acquired immune deficiency syndrome (HIV/AIDS), hemiplegia/ hemiparesis, hernia, hip replacement, Huntington's chorea, hypertension, influenza, ischemic heart disease, knee replacement, liver disease, low birth weight baby, malignant neoplasm, meningitis, muscular dystrophy, osteoporosis, other perinatal conditions, pain management, palliative care, paralysis, Parkinson's disease, peripheral vascular disease, personality disorders, pneumonia, renal failure, schizophrenia and delusions, sepsis, stroke, substance-related disorders, transplant and ulcers.

Appendix to: Mondor L, Walker K, Bai YQ, et al. Use of hospital-related health care among Health Links enrollees in the Central Ontario health region: a propensity-matched difference-in-differences study. *CMAJ Open* 2017. DOI:10.9778/cmajo.20170054.