two-week recall. Two measures were derived for each condition—hours/worker/week of lost productive time (LPT) and its dollar equivalent. Several derivation methods were considered. We selected a conservative method based on self-reported attribution for LPT. A random sample of 13,252 workers 18–63 years of age completed the WHI between July 2, 2001 and January 2, 2002. LPT was converted to dollars/worker/week using self-reported annual salary. Tailored employer-specific reports can be generated based on the characteristics of an employer’s workforce including age, gender, occupation, and region. The illustration follows.

RESULTS: Company Y (n = 5,400) included 3,460 men and 1,940 women with similar age distributions: 45% 18–34 years, 30% 35 to 44 years, 20% 45 to 54 years, and 5% 55+ years. The five episodic/chronic-episodic health conditions associated with the most LPT in Company Y were cold/flu (8.2%), headache (5.9%), low energy (3.2%), back pain (3.1%), and digestive disorders (2.8%). LPT attributed to each condition among those affected was cold/flu (0.42), headache (0.22), back pain (0.21), low energy (0.14), and digestive disorders (0.12). These five conditions potentially cost the employer an estimated $5.1 million dollars/year in LPT.

CONCLUSIONS: The APA can be used to generate tailored reports for employers of health-related work loss. This is a first step toward providing employers with concrete estimates of the indirect cost of specific health conditions.

PREVENTABLE DRUG-RELATED MORBIDITY AND MORTALITY IN OLDER ADULTS: A CANADIAN COST-OF-ILLNESS MODEL
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The cost of drug-related morbidity and mortality is staggering, estimated to be $177 billion USD annually in the United States. Much of this is preventable and occurs in older adults.

OBJECTIVES: Given the lack of a Canadian cost-of-illness model, our objective was to determine the economic impact of preventable drug-related morbidity (PDRM) in older adults in Canada from a public payer perspective.

METHODS: A probability pathway model was developed for PDRM in older adults, based on a previously published methodology. To determine the probabilities that would be assigned to each branch of the pathway, a panel of 25 health care professionals (12 general practitioners, 4 clinical pharmacologists, 6 geriatricians, and 3 pharmacists) completed a written survey. Data from the Population Health Research Unit (PHRU) at Dalhousie University was primarily used to determine the costs that were assigned to each outcome. Data analysis was conducted by using Treeage (DATA, v3.5).

RESULTS: The cost-of-illness model estimated that the annual cost of PDRM in older adults in Canada is $10.9 billion CAN. Admissions to long-term care were found to be the biggest driver in the model, accounting for $6.7 billion CAN of the costs. One-way sensitivity analyses were performed, varying the probability and cost estimates, but the estimated total cost was relatively insensitive to these changes.

CONCLUSIONS: The burden of PDRM is potentially substantial in both the adverse clinical outcomes to the patient and the economic impact to our health care system. At an estimated annual cost of $10.9 billion, PDRM in older adults is one of the more costly “illnesses” in Canada, with a greater annual cost than either cancer or respiratory diseases. This study represents a progression in the literature on cost-of-illness models by focusing exclusively on (1) preventable drug-related morbidities that (2) occur in older adults, in (3) Canada.

PHARMACY BENEFIT RESOURCE UTILIZATION BY ENROLLEES OF A PUBLIC EMPLOYEES INDEMNITY INSURANCE PROGRAM FOR FIVE FISCAL YEARS FROM 1996 TO 2001
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OBJECTIVES: Quantify the prevalence and magnitude of utilization of pharmacy benefits in a public employees indemnity insurance program.

METHODS: The study was a retrospective study of paid pharmacy claims for an insured population of approximately 150,000 eligible members per month for five fiscal years from July 1996 to June 2001. Eligibility and paid pharmacy claims files were analyzed to determine the proportion of members who were recipients, intensity (number of prescriptions) per recipient per year, pharmacy reimbursement per prescription, and pharmacy reimbursement cost per member per month. The data were divided into twenty age groups and a sub-analysis was performed to assess changes in proportion, intensity, and pharmacy reimbursement for each age group over a five-year period.

RESULTS: Over the five-year period, the proportion of recipients to eligible increased 9.4% from 0.717 to 0.784; intensity per recipient increased 13.9% from 16.5 to 18.8 prescriptions per recipient per year; pharmacy reimbursement per prescription increased 51.2% from $40.17 to $60.74 per member per month. This led to an overall increased cost per member per month over the five-year period of 83.2% ($42.20 to $77.31). Intensity per recipient and proportion of recipients increased greatly with age. Recipients aged 10–14 received 5.8 prescriptions per year while those aged 30–34 received 9.4, those aged 35–54 received 18.9, and those aged 70–74 received 30.1 prescriptions per year in fiscal year 2001. The proportion of recipients to eligible increased from 0.593 to 0.730 to 0.834 to 0.946, respectively, for the age groups per the fiscal year.