International Journal of Population Data Science

Journal Website: www.ijpds.org

The New Brunswick COPD Health Information Platform

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Background

Chronic Obstructive Pulmonary Disease (COPD) afflicts one in five New Brunswick (NB), Canada residents aged 65+. The NB Institute for Research, Data and Training (NB-IRDT) has undertaken a project to develop an integrated COPD health information platform (CHIP) to study COPD in the NB population.

Aims

The aims of the CHIP initiative are 1) identification and tracking of population level diagnoses of COPD in NB, and 2) advancement in the management of COPD at the system planning, research, clinical practice and patient levels.

Approach

Unique in Canada, CHIP combines clinical and administrative data from multiple sources including all NB pulmonary function test laboratories (PFT). Clinics collect lung function test results, sociodemographic information, smoking and cessation, height, weight and other fields on everyone tested at a PFT. Since PFT data are not part of the NB electronic health record, data had to be assembled at each clinic. Data transfer required data sharing agreements, privacy impact assessments and disclosure schedules among Provincial Health Authorities, Department of Health and the University of New Brunswick.

Results

Clinical data from 2007-2017 have been standardized and transferred to NB-IRDT from all PFT clinics in NB. More than 100,000 tests have been linked to patient data on hospitalizations, physician visits, vital statistics, and prescriptions. A research working group of researchers, clinicians, administrators and patients has identified key questions that are being analyzed using the CHIP data platform, including the extent to which individuals with COPD tested at a PFT are receiving appropriate treatment, and whether individuals treated for COPD have been tested.

Conclusion

CHIP is a valuable tool to support research on COPD. Through identification of predictors and outcomes of COPD, CHIP will lead to improved prevention and treatment for NB residents and will generate valuable information transferrable to other jurisdictions.

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