REPORT FINDS NEW USES FOR PROVINCIAL LAB DATA

Provides evidence for health officials to target infectious disease programs for at-risk Manitobans

Researchers at the University of Manitoba now have access to more than 12 million anonymized provincial lab records says a new report from the Faculty of Medicine. The new source of information comes from the Cadham Provincial Laboratory which has been Manitoba’s public health lab for over 100 years. The lab focuses on detecting and monitoring human diseases and infectious outbreaks with bacterial and viral analyses.

The Manitoba Centre for Health Policy pioneered the use of administrative data in Canada. The research centre now maintains anonymized records for the Cadham Provincial Laboratory tests in their data repository which will provide new opportunities in population-based health research when linked with other data at MCHP. No other research centre has linkable data at this level.

For the study, A Systematic Investigation of Manitoba’s Provincial Laboratory Data, records for the entire population of Manitoba were looked at from 1992 to 2010. Information was compared by age, sex, income, and where people lived. The report found that in 2008/09 for example, about 12 per cent of Manitobans had at least one test in the Cadham Provincial Laboratory.

“The Cadham Provincial Laboratory data contain almost all of the tests that are done in this province for sexually transmitted infections (STIs) like chlamydia, gonorrhea, and even HIV. This is just one example how this new data can be used,” says lead researcher for the study, Dr. Lisa Lix. “By linking these testing data with other administrative data, we are now better able to estimate the costs of STIs to the healthcare system and the cost effectiveness of new STI prevention programs.”

When examining the proportion of Manitobans with at least one lab test, researchers were able to compare rural and urban income levels. They found testing rates were about 57 per cent higher for lowest urban income group when compared to the highest urban income group. The results show that those at greater risk for infectious diseases are tested more often than people with higher incomes. This represents some good news for Manitoba – people who are in need of care receive it.
Researchers were able to look at specific populations such as pregnant women who represent an important population for laboratory testing. Routine testing for infectious diseases, including hepatitis B, syphilis, and rubella, is typically done early in pregnancy. “While testing rates are high in Manitoba, the birth outcomes and long-term child health outcomes for women who are not tested can now be studied in the future, by linking the Cadham Provincial Laboratory data to other administrative databases in our data repository at MCHP,” says Lix.

The report shows the new data at MCHP is valuable tool for public health and other health services researchers to use. Future studies can focus on specific demographics where the results could provide useful evidence for health officials to target programs and policies for at-risk Manitobans.

For example, outbreaks of infectious respiratory diseases, like influenza, in long-term care facilities can be costly and disruptive and can negatively affect the health of residents says Lix. “By using Cadham Provincial Laboratory data linked to other administrative data, new opportunities could emerge to better understand the spread of diseases in these facilities, identify facilities that are successful in avoiding outbreaks, and examine the cost effectiveness of resident immunization programs.”

MCHP is a research unit in the Department of Community Health Sciences in the Faculty of Medicine at the University of Manitoba. Research scientists and their collaborators at MCHP study health services, population and public health, and the social determinants of health using data from the entire population of Manitoba. Most of the research answers questions of interest to policy makers based on a formal association with Manitoba Health and input from other government departments.

Media note: Dr. Lisa Lix is available for interviews.

For more information, please contact Jack Rach, communications officer, Manitoba Centre for Health Policy, Community Health Sciences, Faculty of Medicine, at: 204-789-3669.

The summary and full report will be available for download on December 3 from http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html