



AN ENVIRONMENTAL PUBLIC HEALTH TRACKING STORY

IMPROVING THE GEOGRAPHIC SPECIFICITY OF HOSPITALIZATION DATA: FROM USE CASE TO LEGISLATION

THE PROBLEM

The Wisconsin Environmental Public Health Tracking Program (Tracking) is a frequent user of hospitalization and emergency department visit data collected under Wisconsin’s hospital information program. For many years, state law required hospitals to report only the zip code of the patient. However, the opportunity to receive records with sub-zip code level data can enable finer spatial resolution analyses of health outcomes and potential environmental risk factors.

WHAT WE DID

To help illustrate the benefits of sub-zip code level hospital data, Tracking staff helped develop a compelling example—or *use case*—for increased geographical specificity. This use case focused on air pollution from roadways and how it affects asthma and heart-related hospitalizations. Because roadway pollution can vary greatly within a zip code, data analysts’ ability to tease out the impact of roadway pollution or other factors on observed health outcomes is extremely limited and would be greatly enhanced if the geographical resolution could be improved.

THE PUBLIC HEALTH IMPACT

The Wisconsin Department of Health Services (DHS) submitted this use case in support of a legislative effort to enable the collection of hospital data which will make health care analyses at the sub-zip code level possible. Supported by DHS and other public health stakeholders, this bill was passed by the Wisconsin legislature and signed by Governor Walker in early 2016.



Improving the geographic information on hospital patients allows the Division of Public Health to accurately assign patients to local health agencies, thereby improving the quality of surveillance data available to our local partners.

RICHARD MILLER
Research Scientist
Office of Health Informatics
Wisconsin Division of Public Health

