Data Detectives: Promising Strategies to Identify Suspect Client Records in Oregon's Immunization Information System (ALERT IIS)

AUTHOR(S): Andrew Osborn, MBA, Oregon Sentinel Project Coordinator; Deborah Richards, Oregon ALERT IIS Data Quality Coordinator

PRESENTATION FORMAT: 15 minute oral presentation

TOPIC/TARGET AUDIENCE: Data consumers, statisticians, epidemiologists, demographers

ABSTRACT: Oregon's IIS "ALERT IIS" is a dynamic database containing nearly six million client records, with over 350,000 new records imported in 2014. New client records arrive daily. A primary focus of data quality efforts is the identification of suspect client records: records that should not be included in ALERT IIS, or that should remain in ALERT IIS but not be included in the calculation of vaccination coverage rates. These efforts proceed even as ALERT IIS accepts new clients. Examples of suspect client records include: duplicate records for the same client, including records that contain insufficient information, or contain sufficiently inaccurate information (e.g., misspellings) to prevent auto-merging; and records of clients who have moved or gone elsewhere (MOGE). Oregon is leading a multi-state project in collaboration with the Centers for Disease Control and Prevention (CDC) to explore new strategies for identifying suspect client records through record-level analysis of client data field population, the leveraging of address information, and the use of population migration patterns. Preliminary results have demonstrated strong potential in these new strategies. We will summarize our work thus far using Oregon data and engage attendees in a discussion of the implications of this project in their work.

OBJECTIVE(S): Attendees for the presentation will be able to: Discuss some of the challenges to maintaining a well-populated dataset of unique client records in a dynamic database, Describe generally the new strategies presented and their potential impact, Discuss how their new understanding might enhance their own approach to data use and analysis

PRIMARY CONTACT INFORMATION:

Andrew Osborn, MBA
Sentinel Project Coordinator
Oregon Immunization Program
Portland, OR
971-673-0284 | andrew.w.osborn@state.or.us

CO-PRESENTER(S):

Deborah Richards | deborah.l.richards@state.or.us