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A Clinical Data Warehouse for Hospital Infection Control

Existing data stored in a hospital's transactional servers have enormous potential to improve performance measurement and healthcare quality. Accessing, organizing, and using these data to support research and quality improvement projects are evolving challenges for hospital systems. Wisniewski and colleagues from Cook County Hospital, Chicago, report on the development of a clinical data warehouse that they created by importing data from the information systems of three affiliated public hospitals. They describe their methodology; difficulties encountered; responses from administrators, computer specialists, and clinicians; and the steps taken to capture and store patientlevel data. Some examples of their use of the clinical data warehouse include monitoring antimicrobial resistance, measuring antimicrobial use, detecting hospital-acquired bloodstream infections, measuring the cost of infections, and detecting antimicrobial prescribing errors. This infection control information system led to savings of time and money and allowed personnel to redirect their efforts from acquiring data to implementing infection control measures.

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