Benefits and Challenges of Observational Clinical Studies Utilizing Electronic Medical Records Data

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ABSTRACT

The Center for Applied Health Services Research (CAHSR) at Ochsner is comprised of medical and public health care professionals who work with researchers across the Ochsner system to improve hospital and patient outcomes. CAHSR provides biostatistics services to all Ochsner investigators in addition to developing funded research projects of its own. Many of these research projects aim to evaluate programs implemented in the hospital system using data collected retrospectively in the form of electronic medical records (EMR). Challenges encountered range from meticulous cleaning and management of messy EMR data to analytical concerns that accompany non-randomized, observational research. On the other hand, the wealth of data available allow for carefully planned observational studies used to identify potential benefits of these programs that can be targeted in future well-designed prospective studies. Summaries of several projects are given to demonstrate the process of navigating research in this setting.