

ANESTHESIOLOGY



**Randomized
Controlled Trials**
vs.
**Administrative
Database Studies**

Administrative data research is relatively new but playing an increasingly significant role in research...

1966

100+ publications per year by...

2002

...and while these research data have some advantages compared to traditional studies...

<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-left: 10px;">Expensive</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-right: 10px;">Small, focused patient cohorts</div> </div> <div style="margin-bottom: 10px;">Lengthy recruitment and data collection</div>	<div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-right: 10px;">Inexpensive</div> </div> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="margin-left: 10px;">Large, broader patient sets</div> </div> <div style="margin-bottom: 10px;">Utilizes existing data sets</div>
--	---

...they assume accuracy of coding to reflect disease presence or absence.

To identify publications by study type, we searched PubMed for publications that used administrative data through the search terms “administrative data,” “Nationwide Emergency Department Sample,” “State Emergency Department Databases,” “national inpatient sample,” “kids inpatient database,” “state inpatient database,” and “state ambulatory surgery and services database.” Randomized controlled trials were identified by the search term “randomized controlled trial.”

Infographic created by Jonathan P. Wanderer, Vanderbilt University School of Medicine, and James P. Rathmell, Brigham and Women’s Hospital/ Harvard Medical School. Illustration by Annemarie Johnson, Vivo Visuals. Dr. Wanderer is funded by the Foundation for Anesthesia Education and Research, Schaumburg, Illinois, and Anesthesia Quality Institute’s Mentored Research Training Grant - Health Services Research, Schaumburg, Illinois. Address correspondence to Dr. Wanderer: jon.wanderer@vanderbilt.edu.