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Understanding Administrative Data

Understanding administrative data, the benefits of using administrative data, and its limitations.

Administrative Data

Administrative data refers to data collected for operational, programmatic, or regulatory purposes rather than statistical or research purposes.

Administrative Data Examples

Federal Administrative Data	State and Local Administrative Data	Commercial Administrative Data
Internal Revenue Service (IRS) data Social Security Administration (SSA) administrative records U.S. Patent and Trademark Office patent applications Center for Medicare and Medicaid Services data	Department of Motor Vehicles Drivers License Data Supplemental Nutrition Assistance Program and Temporary Assistance for Needy Families (SNAP/ TANF) Data Unemployment Insurance data	Black Knight (master address data, mortgage data) Experian (credit bureau header data) InfoGroup (household member data) Circana (point of sale scanner data) J.D. Power (new vehicle transaction data) D&B (business directory; credit and risk data)

Benefits of Using Administrative Data in Statistics

Administrative data is increasingly used in conjunction with federal statistics products (e.g., the 2020 Census, American Community Survey, USDA Consumer Food Data System). It involves linking the restricted versions of administrative datasets with a survey or another administrative dataset based on common identifiers such as Social Security Number (SSN) or Employer Identification Number (EIN). The administrative data can help:

- Build survey sampling frames.
- Evaluate and enrich survey data, reducing sampling and nonsampling errors.
- Fill in missing information and reduce the questions asked in a survey.
- Form the basis for comparing participant and non-participant outcomes or between communities.
- Save costs for data collection.

Benefits of Using Administrative Data in Evidence-Based Policy Research

- Routinely collected and broadly covered administrative data tend to be inherently longitudinal and more representative.
- The large size allows experiments with more treatment arms and detecting small or heterogeneous effects between groups, without losing statistical power.
- Often more objective, avoiding social desirability or recall biases common in survey data.
- Often more reliable and accurate, particularly for biometric data or geo-tagging data.
- Helping reduce the cost and complexity of research data collection.

Limitations of Using Administrative Data

- When repurposing administrative data, population coverage and sampling biases (e.g., self-selection bias or survivorship bias) may be of particular concern.
- Meanings of particular data values in administrative data are likely to be different from the user's concept of interest and it may not include broader variables of interest such as economic and demographic variables.
- Administrative records alone often cannot be used to address all analysis questions; for example, eligibility data doesn't provide information about nonparticipants.
- Micro-level administrative data is often difficult to access. Privacy and disclosure concerns are major constraints.
- Data cleaning and preparation can be complex, especially if the goal is to link administrative data with other data sources.



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To learn more, refer to Data Quality Literacy Series 06: Evaluating Administrative Data Quality.

References

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