USING INTEGRATED ADMINISTRATIVE DATA FOR CRIMINAL JUSTICE RESEARCH

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INTRODUCTION

Criminal offenders and victims of crime often experience backgrounds of adversity and may come into contact with multiple justice and social service agencies. Using integrated administrative data (IAD) from such agencies can help researchers move beyond traditional service silos to address complex social issues that cross systemic boundaries. In this brief, we provide a basic overview of some benefits and challenges of using IAD, as well as suggested steps for integrating administrative data. More detailed information can be found in the full scholarly article “Integrated Administrative Data & Criminal Justice Research” published in the American Journal of Criminal Justice (DeHart & Shapiro, 2016).

WHAT IS INTEGRATED ADMINISTRATIVE DATA?

Government and community-based agencies collect a variety of information on people who come into contact with their organizations. The administrative data collected is used to keep track of outcomes for persons served, to assess the effectiveness of agency programs, and to make sure the agency is providing appropriate services for the client population.¹ The process of integrating administrative data requires collecting and merging records of client-level data from more than one agency. For example, an individual currently in jail has jail records, but may also have mental health and/or substance use treatment records that could be combined into an integrated file. This type of integration is sometimes used by researchers working with individual agencies to link data specific to a research question (e.g., “how do justice interventions relate to mental health outcomes?”). However, in some locales there may be “linkage centers” that specialize in integrating multisystem administrative data for a variety of research and evaluation purposes.²

HOW TO USE INTEGRATED ADMINISTRATIVE DATA

IAD can be used on multiple levels to improve the services provided to at-risk populations who are engaged with more than one agency. On the individual client and programmatic-level, IAD can be used to determine which agencies have come into contact with the client and what services were provided.

On a research and policy-level, IAD can be used to explore the specific issues that affect system-involved populations. Often, individuals and families have problems that can more appropriately be addressed based on research that incorporates data from multiple systems.¹
BENEFITS/CHALLENGES OF USING INTEGRATED ADMINISTRATIVE DATA

**BENEFITS**

- Practitioners utilizing IAD will have a better gauge of the scope of services needed to provide comprehensive care to their clients.

- Information from IAD can provide practitioners with a general summary of the type of client being served, which can be used to eliminate programming redundancies, assess referral processes, and determine barriers to services.\(^1,3\)

- Agencies can use IAD to evaluate programming across service sectors and eliminate unnecessary programming costs.

- Agencies and researchers utilizing IAD can overcome “service silos” that make it difficult to fully understand issues that cross service boundaries.

- IAD can provide researchers access to large populations to study as well as comprehensive data on persons who have been involved with more than one agency.\(^2,5,6,7\)

- The process of integrating administrative data can provide a platform for agency personnel, researchers, and policy-makers to work together to examine criminal justice issues and understand the systemic impact of policy changes on specific populations.\(^3,4\)

**CHALLENGES**

- Agency administrative data is used to gather day-to-day information on programming that is not specific to research goals and may not fully capture all the information needed by researchers.\(^8,9\)

- Administrative data may be incomplete.\(^6\)

- Different agencies use different coding standards and terminology for their data, which creates challenges when trying to integrate all the data into a single analytic platform.\(^6\)

- Once administrative data is integrated, data sets may be large and complex, creating a barrier to data interpretation by agency personnel.\(^6\)

- Integrating administrative data may be a time-consuming process.\(^10\)

- Agencies may be reluctant to share data with researchers because of perceptions of additional workload burden and concerns over data security.\(^11\)
Key Recommendations for Researchers Utilizing Integrated Administrative Data

1. Securing Buy-in from Stakeholders for Data Integration

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<td><strong>Identify stakeholders who would be interested in and/or benefit from the research project</strong></td>
<td>A researcher might identify legislators who have worked on a similar issue to the research topic, community/government agencies that provide services to the selected research population, community leaders who have expressed interest in the issue, individuals utilizing those services, etc.</td>
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<td><strong>Create trust and establish buy-in with stakeholders</strong></td>
<td>Researchers can convene any inter-agency meetings that are open to the public to gauge interests of participating individuals or agencies and establish buy-in by providing information and/or resources to interested stakeholders (e.g., evidence-based research presentations or brief trainings on the selected topic).</td>
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<td><strong>Meet with key stakeholders and agency leaders to discuss mutual goals for the project</strong></td>
<td>Researchers can meet with stakeholders at their office and provide lunch/snacks. In addition, researchers can distribute short, bulleted handouts that explain the project, agency benefits, and agency needs that can be met through use of IAD.</td>
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<td><strong>Obtain a formal commitment to collaborate from agency leaders and establish a project advisory board</strong></td>
<td>A project advisory board can help agency leaders feel more secure in sharing data by giving them a place to voice their input on IAD and research process during the planning, implementation, and dissemination stages.</td>
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2. Logistics of Administrative Data Linkage & Access

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<td><strong>Evaluate current agency data sharing procedures and preparedness for using IAD</strong></td>
<td>Researchers can work with the project advisory board and agency leaders in this process, which may include distributing questionnaires/surveys on agency readiness for data collection and sharing (e.g., the Data Research and Infrastructure Assessment Checklist, developed by Duran et al., 2005).</td>
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<td><strong>Utilize data flow modeling to create a strategic plan for data transfer and archive</strong></td>
<td>Process mapping can be used for data flow modeling, and File Transfer Protocols (FTPs) can be used for data transfer. When archiving data, researchers should consider if archiving should be automated or manual, full or partial, and frequency of archiving.¹</td>
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<td><strong>Develop one application for accessing data that can be used for all agencies, including agency-specific appendices when needed</strong></td>
<td>The application should include information on the principle investigators, project description (i.e., title and funding sources), project design (i.e., objectives, hypotheses, sampling frame, and participant recruitment/consent), project benefits or risks, and data storage.</td>
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3. Research Design with IAD

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<td><strong>Review data from all sources and examine possibilities and limitations for each data set</strong></td>
<td>When reviewing the data, look for comparable codes across data sets (e.g., age ranges vs. exact age), determine how the data is defined by each agency, and note missing data.² It will benefit researchers to assemble</td>
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### 4. IAD Management

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<td><strong>Check-in with agency leaders to confirm the study design (i.e., study variables and sample) captures agency needs as well as research needs</strong></td>
<td>For the agencies involved, the study design should capture information that can aid in improving programming and services and help develop better policies.¹ For researchers, the study design should include key constructs, covariates, instrumental variables, etc.¹</td>
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<td><strong>Select only a few key variables to include when integrating data files</strong></td>
<td>Researchers and agencies can easily become overwhelmed with the amount of information that can be derived from IAD. The more variables that are included in the study, the more complex the study becomes. When using IAD, especially for the first time, having a well-defined sample and a few key variables will help keep the study manageable.</td>
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<td><strong>Review consent procedures for human-subjects research and decide with the advisory board which procedures to use</strong></td>
<td>There are no current standardized procedures for consent with IAD; it depends on the project. Institutional Review Boards may exempt certain projects from having to obtain individual consent.¹² It is important that the project advisory board review the needs of the project and establish policies and procedures that address consent and data confidentiality.</td>
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³ Reference catalogues that include: variable definitions, value codes, and original data entry rules.

¹ For researchers, the study design should include key constructs, covariates, instrumental variables, etc.

¹² Institutional Review Boards may exempt certain projects from having to obtain individual consent.
CONCLUSION

IAD is a promising resource for criminal justice agencies and researchers to examine the unique challenges facing at-risk populations. This data allows for a broader view of the systems serving these populations and how these systems can be improved. There are barriers to utilizing IAD; however, the benefits often outweigh those challenges. Researcher-practitioner partnerships to utilize IAD for analysis on criminal justice issues can help improve practice and policy, with positive impacts for justice-involved persons, their families, and their communities.

References:


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