

Phase III:
Disproportionate Minority Contact in Indiana:
Data Quality Improvement
(J-EQUIP)

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Executive Summary

African American youth represent 16% of the adolescents in the country, and almost 40% percent of the youth in local detention and state correctional facilities. The Juvenile Justice Delinquency Prevention (JJDP) Act of 1974, as amended in 2002, requires states to implement delinquency prevention and systems improvement strategies to reduce the disproportionate number of juvenile members of minority groups who come into contact with the juvenile justice system. A Phase I study of Disproportionate Minority Contact (DMC) was conducted in every county across the state of Indiana by criminologists contracted from Indiana University-Purdue University Indianapolis (IUPUI). Following this study, a Phase II assessment was conducted in three jurisdictions to determine possible causes of DMC that was identified during Phase I. Three Indiana counties (Allen, LaPorte, and Vanderburgh) were selected on the basis that they were relatively large metropolitan areas with significant DMC. Researchers from Community Solutions, Inc. conducted the Phase II study with researchers from the Center for Criminal Justice Research at IUPUI, the IU School of Medicine, and the American Institutes for Research. Phase III of the project includes a data quality assessment to quantify the accuracy of information gathered from the four primary juvenile justice information systems that operate in the state of Indiana. The end goal of this work is to have standardized, accurate reporting of DMC for the state of Indiana. The current study is the work of researchers from the IU School of Medicine and the American Institutes for Research.

The overall research methodology for the current project is described below. First, the developers of relevant juvenile justice systems ran a query to gather one year's worth of juvenile justice interactions (2013) from 12 counties that represent data from each of the four juvenile justice information systems. Then, the first phase of the work included an overall assessment on data quality, including gaps due to missing data and data inconsistencies. Thereafter, research staff communicated with each of the developers and personnel in the relevant counties to identify data errors. The identification and cleaning of errors was only an intermediary step towards improving the programs that extract the data before running another query. Lastly, the developers of relevant juvenile justice systems ran another query gathering data from 2013 and the data was studied again for data quality improvement.

Overall Findings

Data analyses and relevant case studies are presented in detail within the report. For each juvenile justice information system, we identify common issues and specific issues that were present. There are a number of common, cross-cutting themes:

- 1) **Developers were motivated to improve data quality.** Overall, the juvenile justice information systems involved in the current Phase III study were quite interested in improving the quality of data for the included counties.
- 2) **Missing data varied significantly across counties and data systems.** The overall percent of fields missing at each of the seven juvenile decision points (diversion, detention, petition, delinquency finding, probation, prison, and waiver) varied widely from 0 to 100% across jurisdictions.

- 3) **Data consistency varied significantly across counties and data systems.** Data consistency varied significantly at each of the seven juvenile decision points (diversion, detention, petition, delinquency finding, probation, prison, and waiver).
- 4) **Data quality was improved significantly by working with the developers.** After the J-EQUIP team noted missing data as well as data inconsistencies, the developers were contacted and afforded a chance to improve their extract programs based on our feedback for another data pull. A significant amount of missing data as well as data inconsistency was improved after the developers conducted another data pull.

Recommendations

The following recommendations are respectfully submitted by the authors based on the current JEQUIP data quality improvement project.

- 1) **State leadership is needed for continued progress on juvenile justice data quality.** To report consistent and accurate data on DMC for justice involved Indiana youth, it is necessary to continue to monitor and seek to improve juvenile justice data quality. Thus, state-level leadership is necessary to gather resources as well as galvanize local support to improve and maintain data quality.
- 2) **County buy-in and participation.** For the purpose of this grant, minimal county interaction was necessary. However, for continued data quality improvement, training with juvenile justice end users is necessary. Attention is needed for the quality of data that is input into the systems.
- 3) **Continuing data quality improvement from juvenile justice information systems.** The developers of the juvenile justice information systems targeted through JEQUIP, as mentioned earlier, were motivated to improve data quality. Given that improved data quality is an ongoing target that will shift over time, continuous quality improvement by the juvenile justice information system developers is necessary.

Introduction

Disproportionate Minority Contact (DMC) is the “overrepresentation of minorities in the criminal justice system relative to their proportions in the general population.” As in the adult criminal justice system, minorities are overrepresented in the juvenile justice system. In the realm of juvenile justice, the Juvenile Justice and Delinquency Prevention Act, originally authorized in 1974 and amended in 2002, defines DMC as “the disproportionate number of juvenile members of minority groups, who come into contact with the juvenile justice system.” Youth of color encompass about a third of the youth population in the U.S., yet over half of the youth in the juvenile justice system are youth of color. National, statewide and meta-analytic studies have found DMC at all decision points in the juvenile justice process for minority youth. Additionally, the overrepresentation of minority youth accumulates from the point of arrest to the final point of secure confinement.

African American youth, in particular, are overrepresented throughout the juvenile justice system. African American youth represent 16% of the adolescents in the country, and almost 40% percent of the youth in local detention and state correctional facilities. More specifically, while accounting for only 16% of the youth population nationwide, African American youth account for 26% of arrested juveniles, 31% of referrals to juvenile court, 40% of youth placed in residential facilities, and 44% of detained youth. Research also demonstrates that African American youth are treated more harshly than White youth, even when charged with an offense of similar severity. Under most charge categories, especially drug offenses, White youth are much more likely than African American youth to be placed on probation, and African American youth are twice as likely as White youth to be sent to out-of-home placements.

Phase I Process and Methodology

A core requirement of the JJDP Act of 1974, as amended in 2002, requires states to report information on DMC and efforts to address it to the Office of Juvenile Justice and Delinquency Prevention (OJJDP). There are five phases in this process, the first of which is identification. States are required to look at their juvenile justice systems to determine if and to what degree minority youth are overrepresented. In an effort to meet the requirements of the identification phase, the Indiana Criminal Justice Institute (ICJI), the agency in Indiana tasked with reporting DMC data to OJJDP, contracted with researchers from Indiana University’s Center for Criminal Justice Research to track every youth referred to the juvenile justice system from 2005 through 2009 from their point of entry into the system through each of the system’s decision points. Those decision points include: referral, secure detention, diversion, petition, adjudication, disposition (whether youth were placed on formal probation or confined in a state correctional facility), and waiver to adult court. Additional data collected include: race, age, offense severity, and gender.

From these data, the level of disproportionality at each decision point was determined using the relative rate index (RRI). The RRI indicates the rate of representation of nonwhite youth compared to white youth. An RRI higher than 1 indicates overrepresentation of the minority group at that decision point, and an RRI lower than 1 indicates underrepresentation of the minority group. Overrepresentation of minorities at referral, secure detention, petition, adjudication, placement in a secure correctional facility, and waiver to adult court is viewed as negative. Similarly, underrepresentation of minorities at

diversion and formal probation is also viewed as negative, because these decisions are less punitive than their alternatives. The results of an RRI analysis of statewide DMC data from 2009 are presented in Table 1.

Table 1: 2009 Statewide Relative Rate Index Results, Indiana							
	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islander	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	**	**	**	*	*	*	**
3. Refer to Juvenile Court	3.23	1.14	0.23	*	*	*	2.46
4. Cases Diverted	0.94	0.95	0.90	*	*	*	0.94
5. Cases Involving Secure Detention	1.65	1.28	1.21	*	*	*	1.58
6. Cases Petitioned	1.08	1.07	1.13	*	*	*	1.08
7. Cases Resulting in Delinquent Findings	0.89	0.97	0.97	*	*	*	0.91
8. Cases Resulting in Probation Placement	0.89	0.86	0.94	*	*	*	0.89
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	1.36	1.20	**	*	*	*	1.31
10. Cases Transferred to Adult Court	0.83	0.40	**	*	*	*	0.72
Key							
Statistically significant results				Bold font			
Results that are not statistically significant				Regular font			
Group is less than 1% of the youth population				*			
Insufficient number of cases for analysis				**			
Missing data for some element of the calculation				***			

In the state of Indiana, the magnitude of the disproportionality is greatest for African American youth. African American youth are overrepresented at referral, secure detention, petition, and confinement in state juvenile correctional facilities. They are underrepresented at diversion, adjudication, placement on formal probation, and waiver to adult court. Underrepresentation at formal probation and diversion is viewed as more punitive towards African American youth while underrepresentation at adjudication and waiver might be viewed as less punitive towards African American youth. The RRI's were statistically significant for African Americans at every decision point, with the exception of waiver to adult court. The RRI's specific to each county are presented later in the county case studies.

Phase II Process and General Methodology

The second phase of addressing DMC is the assessment phase. The purpose of Phase II is to determine possible causes of DMC. Three Indiana counties were selected with whom researchers from the Center for Criminal Justice Research at IUPUI, in collaboration with researchers from the IU School of Medicine, The American Institutes for Research, and Community Solutions, Inc., would work to identify potential causes of DMC. Counties were selected on the basis that they were relatively large metropolitan areas with significant DMC rates and were not already receiving assistance via the Juvenile Detention Alternatives Initiative (JDAI). The three counties were Allen County, whose county seat is the city of Fort Wayne; LaPorte County, whose county seat is the city of LaPorte; and Vanderburgh County, whose county seat is the city of Evansville.

A mixed-methods, case study approach was used to assess and explain potential causes of DMC in each of the three counties. First, the research team created County Profiles that described basic demographic and juvenile risk factor data for each of the three counties. This information, coupled with the Phase I DMC data, provided a foundation for the inquiry. The methodology utilized for this project, informed by a review of the DMC literature, involved a combination of one-on-one interviews with system-involved youth and focus groups with key stakeholders in each of the counties. Phase II resulted in over 100 juvenile justice youth recruited from probation and juvenile detention across all three sites being interviewed. In general, they reported instances of discrimination that impacted their lives. Data were then analyzed and triangulated to develop county-specific case-studies, including conclusions and recommendations, as well as cross-cutting recommendations for reducing DMC in all three jurisdictions. Additionally, results from the focus group indicated several ways to target DMC a local level. This led to recommendations for limiting DMC at a local level, as well as cross-cutting state leadership issues to address. Finally, this report includes state-level recommendations for reducing DMC in Indiana, particularly in the three counties examined through this study.

Overview of Phase III-JEQUIP

The primary focus of the current project is to support efforts to improve the use of Indiana juvenile court data that facilitates and informs juvenile justice reform. There are several ongoing efforts related to juvenile justice reform in the state of Indiana. The three largest and most systematic efforts include efforts to limit the use of detention placement for juvenile offenders (Juvenile Detention Alternatives Initiative; JDAI), address the over-involvement of minority youth in juvenile justice (Disproportionate Minority Contact; DMC), and to screen all detained youth for mental illness in detention centers across Indiana (Indiana Juvenile Mental Health Screening Assessment and Treatment Pilot Project; MH Project).

Each of these efforts is clearly needed in order to improve public safety and rehabilitation efforts with youth in juvenile justice. However, each of these efforts necessitates the appropriate use of data in order to improve, guide, and build upon juvenile justice reform efforts.

Some Many counties have sophisticated criminal justice data information management systems in place which inform the practice. Many of those Some counties have also developed the infrastructure and personnel support needed to utilize the criminal justice data management systems to inform practice. However, many counties have not yet implemented an effective criminal justice data systems informing their practices and many do not have the infrastructure or personnel support in order to utilize the sophisticated data system in place. Lastly, when sophisticated case management systems (CSI, PBS, Odyssey, QUEST, Tracker, or others) are being utilized, the State of Indiana State is unable to utilize this information effectively given that these systems do not communicate easily with each other.

As result, we are seeking to build the capacity to effectively utilize juvenile justice data, quantify the need for data across the state, and begin developing a capacity for building a data repository for Indiana juvenile justice data to inform best practice efforts.

In the sections that follow, we will review the importance of data to inform juvenile justice best practices. We then explicitly state the goals of the Indiana State Juvenile Data Evaluation, Quality and Use Improvement Pilot (J-EQUIP) Project with an emphasis on outcomes we expect to achieve from the project, as well as outcomes that will not be achieved from J-EQUIP. Lastly, we provide a set of conclusions and recommendations.

Importance of Data Informed Decision-Making

The importance of utilizing data in informing as well as guiding juvenile justice reform is becoming of increased interest to policymakers, practitioners, and researchers. At a national level, for instance, efforts have been made to limit the detention of low-risk offenders, younger offenders, vulnerable first-time offenders, or youth with strong family and community-based support systems (Austin, Johnson, & Weitzer, 2005). The 1974 federal Juvenile Justice and Delinquent Prevention Act (JJDP Act) prohibited states from confining status offenders (a category -- unique to juveniles -- of those with less serious offenses that would not be crimes if they were adults such as truancy and running away from home) alongside delinquents in secure detention facilities. The JJDP Act specified that states would not be allowed to receive federal funds related to juvenile justice practices if status offenders were placed into detention (Schwartz, 1989). However, in a 1980 amendment to the Act, the "Valid Court Order" exception allowed states to detain status offenders who had violated a valid court order. The JJDP Act resulted, by 1988, in a 95% reduction in the number of status offenders held in secure facilities. Data regarding offense type and incarceration was the central mechanism used to influence this issue.

Data also drives implementation of local level juvenile justice reform. For instance, risk assessment procedures at the time of arrest and subsequent probation intake is one method that limits the detention of low-risk youth. Reliable and valid risk assessment procedures are critical for identifying those youth at greatest risk for failing to appear in court for subsequent hearings or for engaging in new crimes prior to adjudication of the first allegation (Mulvey & Iselin, 2008; Steinhart, 2006). In contrast to the juvenile justice system's history of relying primarily on simple intuition, experience, and

individualized decision-making in determining the sanctions and services for arrested youth, structured risk-and-need assessment measures with empirical support are becoming more widely used and may “play a vital role in determining the number and type of youth best suited for either diversion or release from confinement” (Austin et al., 2005).

The overall plan for JEQUIP was as follows:

- 1) To aid state in understanding how best to equip counties in providing appropriate data for three state-wide projects and for federal reporting requirements regarding DMC. To do so, data quality needs to be confirmed across different case management systems (QUEST, PBS, Odyssey, and CSI) and locales.
 - a. As a first step, J-EQUIP staff and programmers from relevant case management systems (CMSs) will identify the three counties for each system for data extraction (12 counties in all). The data fields for extraction will be identified based on common purposes across the three statewide projects. To create appropriate data extraction processes is likely to be time intensive and will require the participation of programmers from each vendor, we encourage ICJI to consider making available (from Title II funds) up to \$5000 per CMSs.
 - b. J-EQUIP staff will conduct data reliability/completeness checks on each element of data extracted to identify data gaps and entry errors. We will establish a process that ICJI will be able to adopt for ongoing use in assessing data quality from counties. This process will include the following strategies:
 - i. Assess the completeness of a series of data points (i.e., race/ethnicity) based on protocols that establish maximum acceptable levels of missing data.
 - ii. Identify patterns of data that point to concerns with reliability. The extraction process should pull data from the system in such a manner that the resulting extracted data set is accurate. For instance, consider the following logical principles for the data points in the DMC data extracts:
 1. Based on the definitions of “filing of petition” and “diversion from juvenile court,” it should not be possible for a particular case to be coded “yes” on both decision points. Our protocol would flag such instances as reliability concerns.
 2. Receiving a code of “yes” for “filing of petition” is a necessary condition for there to be a code of “yes” for any of the subsequent decision points. Patterns in the data that contradict this principle will be flagged as reliability concerns.
 3. When a particular case is waived to adult court, it is unusual that that same case did not result in secure detention. Our protocol would track such patterns and would establish a level beyond which the percentage of cases with evidence of such a pattern would raise concerns regarding the reliability of the data archive.
 4. Our protocol would also look for levels of decisions that are lower or higher than average. For example, based on statewide prevalence data

from previous years, we will look for evidence that the percentage of cases adjudicated delinquent and not placed on formal probation is unusually low or high. Such occurrences would be flagged as reliability concerns.

- c. If data quality falls below a specific threshold, J-EQUIP will provide technical assistance to improve data completeness, reliability and appropriate data system utilization.
- d. For counties with poor data quality, data extraction for each element will then be repeated until it is demonstrated that technical assistance resulted in improved data quality.

Data query and cleaning

We adopted a structured process for the data; assessment and cleaning process for each juvenile justice information system. First, we identify the number of individual cases at each of the eight juvenile justice decision points (diverted, detention, petition, delinquent, probation, confined, and waived) that Indiana will need to report to the federal government for DMC. Thus, an individual adolescent could have multiple cases in a given year. Each case is reported within the juvenile justice information systems. The overall number of cases at each of the decision points are recorded as no, yes, or missing. The values in each column should equal 100%.

Secondly, we will explore data that appear to be incorrect is by looking at inconsistencies that occur across the decision points for a particular referral. There are certain decision points that if they are indicated as a “YES”, preclude other decision points from also being a “YES.” Similarly there are some decision points that if they are indicated as “NO”, other decision points cannot also be “NO.” Finally there are some decision points that if they are indicated as a “NO”, other decision points cannot be “YES.” Detention is the one decision point that there are not such inconsistencies that can occur. It will be indicated as either a “YES” or a “NO”, fully independent of what is happening at any of the other decision points. These inconsistencies are presented in mutually exclusive groups, meaning that although it is possible for more than one of these to occur within a particular referral, the referrals are only counted towards the first inconsistency in the juvenile court case chronology.

Below we present findings from each of the four juvenile justice information systems. These tables are presented as pre-intervention, since the data query has been pulled without looking for missing data or data inconsistency. We initially present a table describing each of the decision points in the proportion of cases within each decision point (no, yes, and missing). Thereafter, we present a table describing the percent of youth that meet the criteria for an inconsistency. Problems that were identified by the J-EQUIP team by analyzing the data and exploring individual cases are then discussed. J-EQUIP team members communicated with each of the juvenile justice information system representatives to see if data quality could be improved by fixing problematic cases. We then asked each of the representatives from the juvenile justice information systems to run an additional query after data errors and missing data were corrected. We present the pre-intervention again, followed immediately by post-intervention data. Thereafter, we summarize our recommendations and present RRI’s for each system, pre- and post-intervention.

System 1: CSI

CSI Pre-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	31.38%	95.83%	72.19%	91.06%	83.71%	0.00%	0.00%
	Yes	68.62%	4.17%	27.81%	8.94%	14.10%	0.00%	0.00%
	Missing	0.00%	0.00%	0.00%	0.00%	2.18%	100.00%	100.00%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	0.00%	3.57%	0.70%	0.00%	9.93%	14.20%

Problems Identified:

1. The largest issue was missing data for confined and waived individuals. In all three counties that used CSI, pre-intervention data suggested that every case was missing a decision on waiver and DOC confinement.
2. In one county (County 3, n=279), pre-intervention data suggested that all cases were missing a decision on adjudication. Pre-intervention data from the same county indicated that only one youth was held in secure detention, which seemed low based on previous data. Another county using this system (County 1, n=642) also indicated that only one youth was held in secure detention. Thus, for both jurisdictions, this seemed quite low.
3. 9.93% of pre-intervention CSI cases indicated no to adjudication but yes to later decisions- a scenario that is not possible legally. This number increased slightly in the post-intervention data (10.70%) suggesting that the “no” to adjudication but “yes” to later decisions inconsistency still comprises a large amount of inconsistencies even after intervention with the CSI system.

CSI Pre- and Post-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	31.38%	95.83%	72.19%	91.06%	83.71%	0.00%	0.00%
	Yes	68.62%	4.17%	27.81%	8.94%	14.10%	0.00%	0.00%
	Missing	0.00%	0.00%	0.00%	0.00%	2.18%	100.00%	100.00%
Post-Intervention	No	30.03%	95.84%	71.95%	90.78%	83.55%	91.97%	81.86%
	Yes	69.97%	4.16%	28.05%	9.22%	14.27%	8.03%	0.10%
	Missing	0.00%	0.00%	0.00%	0.00%	2.18%	31.32%	18.04%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	0.00%	3.57%	0.70%	0.00%	9.93%	14.20%
Post-intervention	0.00%	1.98%	1.29%	0.10%	10.70%	14.07%

Post-Intervention Summary:

Post-intervention data shows significant improvements, although there was still a considerable amount of missing data for decisions on confinement and waiver. Problematic decision combinations are still present in 14% of cases. Specifically, the inconsistency of “no” to adjudication but “yes” to later decisions still comprises a large amount of inconsistencies even after intervention with CSI. 10.70% of post-intervention CSI cases indicated no to adjudication but yes to later decisions. This is slightly higher than pre-intervention (9.93%).

On-going data improvement:

1. Continuing issues were identified with systematic missing data, particularly with the confined and waived data categories. CSI should consider further investigation of problems identified, then meet with representatives in each county to discuss possible solutions.
2. In an effort to address the problem of missing data, it may make sense to make some fields mandatory so that users must enter the data.
3. Additional CSI training for probation officers might also help solve issues of missing data and data inconsistencies. A significant portion of the missing data and inconsistency noted in CSI was related to data entry issues on the user end. Thus, training of end-users should focus not only on making sure they know which fields need to be filled in to accurately report the data, but also the importance of reporting on data in general.
4. Add a “preliminary inquiry – waiver” field.

CSI disproportionality analyses for CSI representative counties

The RRI indicates the rate of representation of nonwhite youth compared to white youth. RRIs were calculated for each country pre- and post-intervention and are presented in the tables that follow. Statistically significant results are indicated by **bold** font. An asterisk (*) indicates that the group is less than 1% of the youth population, and a double asterisk (**) indicates an insufficient number of cases for analysis. For county 2, there was not enough data on contact with minority youth to calculate RRIs.

County 1, Pre-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	--	--	*	*	*	*	--
3. Refer to Juvenile Court	--	--	*	*	*	*	--
4. Cases Diverted	1.03	**	*	*	*	*	1.04
5. Cases Involving Secure Detention	**	**	*	*	*	*	0.78
6. Cases Petitioned	0.90	**	*	*	*	*	0.89
7. Cases Resulting in Delinquent Findings	**	--	*	*	*	*	**
8. Cases resulting in Probation Placement	**	--	*	*	*	*	**
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	--	--	*	*	*	*	--
10. Cases Transferred to Adult Court	--	--	*	*	*	*	--
Group meets 1% threshold?	Yes	Yes	No	No	No	No	

County 1, Post-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	--	--	*	*	*	*	--
3. Refer to Juvenile Court	--	--	*	*	*	*	--
4. Cases Diverted	1.05	**	*	*	*	*	1.05
5. Cases Involving Secure Detention	**	**	*	*	*	*	0.78
6. Cases Petitioned	0.89	**	*	*	*	*	0.88
7. Cases Resulting in Delinquent Findings	**	--	*	*	*	*	**
8. Cases resulting in Probation Placement	**	--	*	*	*	*	**
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	**	--	*	*	*	*	**
10. Cases Transferred to Adult Court	**	--	*	*	*	*	**
Group meets 1% threshold?	Yes	Yes	No	No	No	No	

County 3, Pre-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	--	--	*	*	*	*	--
3. Refer to Juvenile Court	--	--	*	*	*	*	--
4. Cases Diverted	--	1.20	*	*	*	*	1.22
5. Cases Involving Secure Detention	--	**	*	*	*	*	**
6. Cases Petitioned	--	0.86	*	*	*	*	0.84
7. Cases Resulting in Delinquent Findings	--	--	*	*	*	*	--
8. Cases resulting in Probation Placement	--	**	*	*	*	*	**
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	--	--	*	*	*	*	--
10. Cases Transferred to Adult Court	--	--	*	*	*	*	--
Group meets 1% threshold?	Yes	Yes	No	No	No	No	

County 3, Post-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	--	--	*	*	*	*	--
3. Refer to Juvenile Court	--	--	*	*	*	*	--
4. Cases Diverted	--	1.22	*	*	*	*	1.24
5. Cases Involving Secure Detention	--	**	*	*	*	*	**
6. Cases Petitioned	--	0.85	*	*	*	*	0.83
7. Cases Resulting in Delinquent Findings	--	--	*	*	*	*	--
8. Cases resulting in Probation Placement	--	**	*	*	*	*	**
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	--	**	*	*	*	*	**
10. Cases Transferred to Adult Court	--	--	*	*	*	*	--
Group meets 1% threshold?	Yes	Yes	No	No	No	No	

Summary disproportionality analyses for CSI representative counties.

Changes in RRI were noted for two of the three counties. One County simply did not report enough interactions with minority youth to warrant an RRI analysis. Thus, through the JEQUIP data quality improvement process, data quality was improved for representative CSI jurisdictions and marginal changes in RRI were noted. That the changes were found to be marginal is noteworthy. It is certainly a goal to reach the highest level of data accuracy. Yet, it appears that we do not need to wait for the data quality process to be completed before we can assess DMC in many of the counties. Indeed the RRI results were reasonably close to their final values even before the data quality improvement procedures were applied.

System 2: Odyssey

Odyssey Pre-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	66.09%	93.10%	29.08%	91.49%	65.06%	97.24%	100.00%
	Yes	33.91%	6.90%	70.92%	8.51%	34.94%	2.76%	0.00%
	Missing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	24.94%	20.11%	0.11%	0.00%	25.98%	71.15%

Problems Identified:

1. The primary system-specific concern suggested by the Odyssey data was the fact that no youth were found to have been waived to adult court.
2. Certain counties were more problematic than others in terms of data accuracy and reliability pre-intervention. For example, County 5 reported zero youth adjudicated, zero sent to DOC, and zero waived to adult court. Additionally, the ratio of youth for whom a petition was filed to those for whom a petition was not filed seemed high (469:13). The ratio of youth who were in secure detention to those who were not seemed low (8:474). The same county reported a high number of cases with problematic combinations of decision points. For example, there were initially over 200 cases that indicated yes to petition and yes to diversion. Post-intervention, this number was reduced to zero.
3. Another county (County 6) reported a significant number of cases with problematic combinations of decision points. For example, according to pre-intervention data, well over 100 youth were neither diverted nor petitioned. Similarly, County 4, reported a large proportion of cases (almost 2/3 of youth) indicated no to diverted and no to petition filed, an invalid combination. The same county reported relatively few youth pre- and post-intervention for whom the decision was “yes” at any of the 6 decision points.

Odyssey Pre- and Post-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	66.09%	93.10%	29.08%	91.49%	65.06%	97.24%	100.00%
	Yes	33.91%	6.90%	70.92%	8.51%	34.94%	2.76%	0.00%
	Missing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Post-Intervention	No	55.90%	93.01%	55.67%	58.88%	60.48%	100.00%	100.00%
	Yes	55.56%	6.99%	44.33%	41.12%	39.52%	0.00%	0.00%
	Missing	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	24.94%	20.11%	0.11%	0.00%	25.98%	71.15%
Post-intervention	0.00%	0.11%	0.00%	0.00%	0.00%	0.11%

Post-Intervention Summary:

For the Odyssey system, very few errors remained after intervention. No data were recorded as missing. The most striking change involved inconsistencies. The inconsistency great pre-intervention was over 70% and was reduced to less than 1% post-intervention. Thus, clear gains in data quality were noted.

On-going data improvement:

Significant improvements were noted with the second data query. It should be noted that Odyssey has developed feedback for end-users regarding the issues noted during the initial data query. Thus, representatives from Odyssey recognize that ongoing data quality improvement is an ongoing target that ships over time. Thus, it is recommended that continued communication with the counties occur to ensure that the information in the data system accurately reflects judicial case processing reality.

Odyssey disproportionality analyses for representative counties.

County 5, Pre-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	0.86	--	**	*	*	*	0.90
5. Cases Involving Secure Detention	**	--	**	*	*	*	**
6. Cases Petitioned	1.01	--	**	*	*	*	1.01
7. Cases Resulting in Delinquent Findings	--	--	--	*	*	*	--
8. Cases resulting in Probation Placement	1.19	--	**	*	*	*	1.21
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	--	--	--	*	*	*	--
10. Cases Transferred to Adult Court	--	--	--	*	*	*	--
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

County 5, Post-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	0.86	**	**	*	*	*	0.92
5. Cases Involving Secure Detention	**	**	**	*	*	*	**
6. Cases Petitioned	1.14	**	**	*	*	*	1.08
7. Cases Resulting in Delinquent Findings	0.99	**	**	*	*	*	1.01
8. Cases resulting in Probation Placement	1.01	**	**	*	*	*	0.98
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	--	--	--	*	*	*	--
10. Cases Transferred to Adult Court	--	--	--	*	*	*	--
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

Summary disproportionality analyses for Odyssey representative counties.

Changes in RRI were noted for one of the three counties. Two counties simply did not report enough interactions with minority youth to warrant an RRI analysis. For the one county reporting enough judicial interactions with minority youth, there were significant improvements through the JEQIP process on RRI. For instance, by improving data quality, reporting of cases resulting in delinquent findings was able to be reported. In the first query, they were not of cases to report this data element in terms of RRI. Secondly, there was a significant shift in cases resulting in probation placement. Initially, the RRI of 1.21 indicated minority youth were more likely to be placed on probation. However, after improving data quality RRI shifted to 0.98. Thus, for at least one Odyssey county, improvements in data quality impacted RRI reporting.

System 3: Quest

Quest Pre-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	54.30%	60.56%	53.28%	67.97%	81.57%	87.31%	99.25%
	Yes	45.10%	39.44%	46.46%	31.62%	18.02%	12.28%	0.15%
	Missing	0.60%	0.00%	0.26%	0.41%	0.41%	0.41%	0.60%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	0.00%	8.44%	0.00%	0.00%	3.96%	12.41%

Problems Identified:

1. The majority of errors present for the Quest system were a result of selections made for “no” to diversion and “no” to petition as well as “no” to adjudication but “yes” to later decisions. Pre-intervention data shows 8.44% of cases indicating no to diversion and no to petition. Each incident should either be diverted (which includes everything that is not petition) or have a petition filed. Cases indicating no to diversion and no to petition were generally venued in from another county for disposition (so the current county had no record of diversion or petition for those cases) or were the result of an informal adjustments that were not accurately reflected in the extract. In the case of one county, those file numbers that indicated no to diversion and no to petition (n=267) were not tied to court referrals, but were cases that were housed in the detention center for other counties. It is also possible that this error was due to CHINS warrant arrests. Further investigation into what this means for reporting is required to determine if it belongs in the extract. The post-intervention incidence of this type of error is much lower (1.28%).
2. The second type of error occurring in the Quest dataset was no to adjudication but yes to later decisions. Theoretically, if the case is not adjudicated, that should be the formal end of the case. For instances of “no” to adjudication but “yes” to later decisions, the court most likely found probable cause that the child violated the terms of conditional release (the offense for which they appear in the extract). The conditional release was tied to an earlier case for which they were already in the extract. This prior case is what results in the later decision points being indicated.

Quest Pre- and Post-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	54.30%	60.56%	53.28%	67.97%	81.57%	87.31%	99.25%
	Yes	45.10%	39.44%	46.46%	31.62%	18.02%	12.28%	0.15%
	Missing	0.60%	0.00%	0.26%	0.41%	0.41%	0.41%	0.60%
Post-Intervention	No	48.29%	40.53%	51.75%	66.25%	79.25%	86.45%	99.23%
	Yes	51.09%	59.47%	47.64%	32.98%	19.98%	12.78%	0.15%
	Missing	0.62%	0.00%	0.62%	0.77%	0.77%	0.77%	0.62%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	0.00%	8.44%	0.00%	0.00%	3.96%	12.41%
Post-intervention	0.00%	1.28%	0.00%	0.00%	4.94%	6.22%

Post-Intervention Summary: Total inconsistencies declined, although cases indicating “no” to adjudication but “yes” to later decisions increased slightly. A marginal increase in missing data was seen consistently among most decision points in post-intervention data.

On-going data improvement:

1. The reduction in cases that indicated no to diversion and no to petition suggests that these errors have been reduced as much as possible with refinements to the extract program. Further decreases will only be realized after carefully examining how the information on those cases that still exhibit the error is entered and determining how it could be entered differently to avoid the error.
2. It may not be possible to adjust the extraction program to account for cases that indicate no to adjudication but yes to later decision points. For offense types that are likely to result in this error (as discussed above), it makes the most sense to design the extract program so that decision points that come after adjudication are automatically indicated as no when adjudication is no. A random sampling of those cases could then be checked to ensure that the extract does not erroneously indicate no to those decision points.

QUEST disproportionality analyses for representative counties.

County 7, Pre-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	1.07	0.79	**	*	*	*	0.86
5. Cases Involving Secure Detention	0.83	1.49	**	*	*	*	1.17
6. Cases Petitioned	1.02	1.18	**	*	*	*	1.14
7. Cases Resulting in Delinquent Findings	1.19	1.04	--	*	*	*	1.09
8. Cases resulting in Probation Placement	0.76	0.81	--	*	*	*	0.86
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	0.99	1.75	--	*	*	*	1.83
10. Cases Transferred to Adult Court	**	**	--	*	*	*	**
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

County 7, Post-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	1.06	0.75	**	*	*	*	0.83
5. Cases Involving Secure Detention	0.86	1.51	**	*	*	*	1.20
6. Cases Petitioned	1.01	1.20	**	*	*	*	1.17
7. Cases Resulting in Delinquent Findings	1.23	1.03	--	*	*	*	1.10
8. Cases resulting in Probation Placement	0.74	0.98	--	*	*	*	0.86
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	1.65	**	--	*	*	*	2.24
10. Cases Transferred to Adult Court	**	**	--	*	*	*	**
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

County 8, Pre-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	0.71	1.00	1.04	*	*	*	0.77
5. Cases Involving Secure Detention	0.98	1.15	1.21	*	*	*	1.02
6. Cases Petitioned	1.34	1.10	0.93	*	*	*	1.30
7. Cases Resulting in Delinquent Findings	0.93	0.84	**	*	*	*	0.93
8. Cases resulting in Probation Placement	0.97	1.46	**	*	*	*	0.96
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	0.98	0.84	**	*	*	*	0.93
10. Cases Transferred to Adult Court	--	--	--	*	*	*	--
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

County 8, Post-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	0.74	0.92	1.03	*	*	*	0.77
5. Cases Involving Secure Detention	1.12	1.06	1.15	*	*	*	1.12
6. Cases Petitioned	1.33	1.09	0.92	*	*	*	1.29
7. Cases Resulting in Delinquent Findings	0.94	0.86	**	*	*	*	0.94
8. Cases resulting in Probation Placement	0.94	1.42	**	*	*	*	0.96
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	1.10	1.00	**	*	*	*	1.02
10. Cases Transferred to Adult Court	--	--	--	*	*	*	--
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

County 9, Pre-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	1.13	--	--	*	*	*	1.07
5. Cases Involving Secure Detention	0.82	--	--	*	*	*	0.89
6. Cases Petitioned	0.88	--	--	*	*	*	0.87
7. Cases Resulting in Delinquent Findings	**	--	--	*	*	*	0.86
8. Cases resulting in Probation Placement	**	--	--	*	*	*	**
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	**	--	--	*	*	*	**
10. Cases Transferred to Adult Court	**	--	--	*	*	*	**
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

County 9, Post-Intervention: Relative Rate Index Compared with White Juveniles

	Black or African-American	Hispanic or Latino	Asian	Native Hawaiian or other Pacific Islanders	American Indian or Alaska Native	Other/ Mixed	All Minorities
2. Juvenile Arrests	--	--	--	*	*	*	--
3. Refer to Juvenile Court	--	--	--	*	*	*	--
4. Cases Diverted	1.05	--	--	*	*	*	1.05
5. Cases Involving Secure Detention	1.06	--	--	*	*	*	1.00
6. Cases Petitioned	0.80	--	--	*	*	*	0.82
7. Cases Resulting in Delinquent Findings	**	--	--	*	*	*	0.83
8. Cases resulting in Probation Placement	**	--	--	*	*	*	**
9. Cases Resulting in Confinement in Secure Juvenile Correctional Facilities	**	--	--	*	*	*	**
10. Cases Transferred to Adult Court	**	--	--	*	*	*	**
Group meets 1% threshold?	Yes	Yes	Yes	No	No	No	

Summary disproportionality analyses for Quest representative counties.

Changes in RRI were noted for each of the three counties. Changes for county 7 were significant. Data quality improvement resulted in an increase in RRI for cases involved in secure detention and petitioned. The resulting values after data cleaning were now significant. Additionally, the RRI for cases resulting in confinement in secure juvenile correctional facilities remain significant and increased from 1.83 to 2.24. Changes in the RRI value were also noted for counties eight and nine. Thus, for each of the Quests jurisdictions, improvements in data quality that impacted RRI reporting were found.

System 4: PBS

PBS Pre-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Pre-intervention	No	92.61%	99.80%	55.43%	56.31%	6.58%	70.08%	65.88%
	Yes	7.39%	0.20%	44.57%	13.98%	63.70%	0.20%	34.12%
	Missing	0.00%	0.00%	0.00%	29.72%	29.72%	29.72%	0.00%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	0.00%	48.05%	6.38%	18.72%	22.39%	95.52%

Problems identified:

1. Pre-intervention, almost 30 percent of the referrals are missing data at found delinquent, probation, and secure confinement.
2. 7.39% of cases indicated “yes” to diversion. This seemed low compared to what we normally see in terms of youth diverted from juvenile court
3. 0.20% of cases indicated “yes” to detention. This seemed low compared to what we normally see in terms of youth placed in secure detention
4. 34.12% of cases indicated “yes” to waiver. This seemed particularly high, waiver to adult court is typically the least frequent event in the juvenile justice system, for the extract to indicate that over 1/3 of the referrals were waived to adult court (particularly in the counties we are looking at) tells us that we probably have some errors in the extract related to this decision point.

County 12 Post-Intervention Data

		Diverted	Detention	Petition	Delinquent	Probation	Confined	Waived
Post-intervention	No	9.84%	85.25%	77.05%	80.33%	80.33%	86.89%	86.89%
	Yes	77.05%	1.64%	9.84%	6.56%	6.56%	0.00%	0.00%
	Missing	13.11%	13.11%	13.11%	13.11%	13.11%	13.11%	13.11%

	Yes to diversion and yes to petition	No to diversion and no to petition	Yes to diverted but yes to later decisions	Yes to waived but yes to later decisions	No to adjudication but yes to later decisions	Total Inconsistencies
Pre-intervention	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Post-Intervention Summary: Only one county in the PBS group reported post-intervention data. For that county, cases with missing data on diversion, detention, petition, and waiver decisions increased while cases with missing data on delinquent, probation, and confinement decreased post-intervention. Cases with problematic decision combinations also decreased significantly, particularly those with no to diversion and no to petition and those with yes to diverted but yes to later decisions.

PBS disproportionality analyses for representative counties.

RRIs could not be calculated for counties using PBS because 1 county reported insufficient minority contact and the other 2 counties did not report any data post-intervention.

Summary of Missing Data

	Pre-Intervention	Post-Intervention
CSI		
At least one decision point missing	31.40%	19.40%
Inconsistencies	14.20%	14.10%
Odyssey		
At least one decision point missing	0.0%	0.0%
Inconsistencies	71.1%	0.1%
Quest		
At least one decision point missing	0.8%	0.8%
Inconsistencies	12.4%	6.2%
PBS		
At least one decision point missing	29.7%	No data received
Inconsistencies	95.5%	No data received

Conclusions (Lessons Learned)

The primary focus of the J-EQUIP project has been data validation. The end goal of this project is to have sound, valid, and correct juvenile justice interaction data be available to Indiana state for reporting of DMC. In order to do this, a data repository will be necessary; theoretical work regarding the data repository is ongoing.

In terms of data validation, there have been several lessons learned through this project. We detail each below.

- 1) Developers were motivated to improve data quality.** Overall, the juvenile justice information systems involved in the current Phase III were quite interested in improving the quality of data for relevant counties. Each of the leaders from the juvenile justice information systems were cooperative and provided data from three counties in order to improve data quality. Moreover, at their own time and expense, each of the jurisdictions explored the data to improve missing this, inconsistency, and overall quality.
- 2) Missing data varied significantly across counties and data systems.** The overall percent of fields missing at each of the seven juvenile decision points (diversion, detention, petition, delinquency finding, probation, prison, and waiver) varied widely from 0 to 100% across jurisdictions. Thus, even a cursory glance at the data fields found significant missingness.
- 3) Data consistency varied significantly across counties and data systems.** Data inconsistency also varied significantly at each of the seven juvenile decision points (diversion, detention, petition, delinquency finding, probation, prison, and waiver). For instance, a large, urban jurisdiction had

a significant amount of inconsistency at two decision points (note to diversion and no to petition, 12.41%; no to adjudication but yes to later juvenile decisions, 7.23%). For some smaller, rural jurisdictions, inconsistencies were noted in 100% of the juvenile referrals.

- 4) **Data quality was improved significantly by working with the developers.** After the J-EQUIP team noted missing data as well as data inconsistencies, the developers were contacted and afforded a chance to improve their extract programs based on our feedback for another data pull. A significant amount of missing data as well as data inconsistency was improved after the developers conducted another data pull. As an example, one large urban jurisdiction had data inconsistencies for 11.21% of their referrals and 0.65% missing data. After the J-EQUIP staff identified these data issues, the number of data inconsistencies dropped to 3.15% and missing data points to 0.54%. Thus, data quality was improved once missing data and data inconsistencies were identified. It should be noted that the improvement of the data was able to be completed by interacting with developers.

Conclusions from the project underscore that data quality is quite variable depending on the county as well as data system. Significant data improvement can occur in a fairly straightforward manner once data errors are identified. However, data analysis for data inconsistency and missing decision points needs to occur to identify data errors. Thus, improving data quality should be a focus of state agencies given the variable quality. Lastly, additional training for end-users should occur to improve data quality and, in the future, maintain data quality. Despite the successes of this project in improving data quality by working with the data system developers, we would not recommend that the systems are ready to provide these data using un-cleaned extracts from each system. Improvements on the data entry end and better coordination between the system developers and end users are necessary to ensure that information in the extracts is accurate.

Recommendations

The following recommendations are respectfully submitted by the authors based on the current JEQUIP data quality improvement project.

- 1) **State leadership is needed for continued progress on juvenile justice data quality.** In order to report consistent and accurate data on DMC for justice involved Indiana youth, it is necessary to continue to monitor and seek to improve juvenile justice data quality. For this to be a priority, state-level leadership is necessary to gather resources as well as galvanize local support to maintain data quality. Similar models exist. For instance, for New Jersey's Juvenile Detention Alternatives Initiative has ongoing data quality as an ongoing target. The data quality improvement team includes an individual with the PhD, as well as several staff members focus only on data quality improvement. Additionally, Multnomah County (Portland), Oregon, has multiple statisticians focused on data quality and analysis in order to monitor juvenile justice trends and lead to improved targeting of interventions. These are models that could be explored for in the end to consider in order to continue to improve data quality not only for federal

reporting purposes but also to guide the many juvenile justice reform efforts that utilize juvenile justice data.

- 2) **County buy-in and participation.** For the purpose of this grant, minimal county interaction was necessary. However, in order for continued data quality improvement, training with juvenile justice end users is necessary. There are ongoing efforts in this vein. For instance, QUEST gathers county administrators on a regular basis to address concerns. Each of the juvenile justice information systems indicates in a regular basis with county systems. Thus, continued end user training, specific to DMC reporting, is necessary to make greater strides in data quality improvement.
- 3) **Continuing data quality improvement from juvenile justice information systems.** The developers of the juvenile justice information systems targeted through JEQIP, as mentioned earlier, were motivated to improve data quality. Given that improve data quality is an ongoing target that will shift over time, continued quality improvement by the juvenile justice information system developers is necessary.

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