Rhode Island Department of Corrections and Department of Children, Youth, and Families: Juvenile Criminal History Data Exchange Project

A Business Case Study of the Implementation of the Global Reference Architecture (GRA) and the Global Privacy Technology Framework

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BUSINESS CASE STUDY

As information sharing across the justice domain expands within jurisdictions and across agencies, it is increasingly important to find ways to use technology to help implement and enforce privacy and access rules to protect confidential information and comply with state and federal law. Articulating rules to be enforced by technology and converting such rules to a form understandable to computers is a high priority for the justice community. This case study focuses on how the state of Rhode Island (RI) used national standards to automate and improve information sharing.

BACKGROUND

Historically, the Rhode Island Department of Corrections (RIDOC) has worked to improve and streamline its offender reentry process and break down barriers that offenders face when released from prison. This effort goes hand in hand with RIDOC’s mission—to “employ a culture of sharing and exchanging information with agencies and providers to improve the overall care, treatment, and management of the offenders within their system in order to reduce recidivism, streamline processes, and reduce costs.”

At intake, RIDOC utilizes a series of standardized risk/need assessment instruments including the Level of Service Inventory-Revised (LSI-R) to determine offender risk of recidivism and to identify need areas and rehabilitative services that are appropriate for an offender during his or her incarceration. Ultimately, addressing offender need areas through prison rehabilitative interventions can reduce an offender’s probability of reincarceration. LSI-Rs are administered by case managers who are trained to administer the LSI-R assessment through interviews with offenders followed by verification of the information through external sources, when possible and permitted.

The major weakness in the use of this assessment is that most of the information collected is self-reported by the offender. This is generally a 75-minute process whereby the case manager must complete a 54-question LSI-R interview and manually enter all reported information into RIDOCs Transition from Prison to Community Data System (TPCDS). Based solely on an offender’s recollection or cooperation, this interview often leads to incomplete or incorrect information, potentially impacting rehabilitation program recommendations and classification decisions. RIDOC has long sought a means of increasing the automation and validity of this assessment through the use of collateral information sources. RIDOC recognized that most of the RI state agencies, as well as community treatment providers, share many of the same clients, such as medical and mental health facilities, substance abuse programs, employment, education, housing, etc. However, electronic sharing of such data between agencies was and is a barrier. RIDOC acknowledged that it needs to establish an efficient means of sharing information across these agencies in order to improve case management and the reentry process. More complete and accurate information leads to more accurate identification of offender risk of recidivism and criminogenic need areas, which ultimately should lead to increased success in offender outcomes.
ABSTRACT—PURPOSE OF CASE STUDY

After completing several projects and receiving funding and technical assistance (TA) from national agencies, RIDOC successfully partnered with the Rhode Island Department of Children, Youth, and Families (DCYF) to execute the first automated enforcement of the Global Justice Information Sharing Initiative (Global) privacy and access rules in its sharing of juvenile criminal history information. This objective was achieved by following the guidance provided in Global’s Implementing Privacy Policy in Justice Information Sharing: A Technical Framework (Privacy Technical Framework) and implementing the service-oriented architecture (SOA) solution of the Global Reference Architecture (GRA).

The purpose of this document is to provide a high-level overview and business case study of the RIDOC/DCYF exchange to demonstrate that the technology for executing complex data access policies and privacy rules is not only readily available but implementable and reusable. Specifically, this study will examine the automated sharing of one type of data—juvenile criminal history—from DCYF to RIDOC for the purpose of informing and validating assessments, such as the LSI-R. This discussion will cover RIDOC’s business drivers, challenges faced, solutions employed, outcomes, and RIDOC’s next steps. The ultimate goal of this case study is to provide a real-world example of this technical implementation for other public safety entities considering the automated sharing of information between agencies that must adhere to strict electronic privacy and access rules governing such exchanges. In fact, while this case study describes a juvenile criminal history information exchange, the GRA and Privacy Technical Framework can be implemented for any type of justice and public safety information exchange that requires the electronic expression and enforcement of privacy and access rules.

BUSINESS DRIVERS

For this case study, a business driver is considered a process, goal, or condition that, as a result of automated sharing of domain information to inform the LSI-R, contributes to the improvement of RIDOC case management and the rehabilitation and successful reentry of offenders in Rhode Island.

Though the primary purpose of this case study is to discuss implementable solutions for resolving the business need of executing access and privacy rules electronically within an information exchange, the following are additional business drivers articulated by the RIDOC/DCYF implementation. Even though this study examines the exchange of a small subset of data—juvenile criminal history, a component within one of the ten LSI-R domains, criminal history—the following list of drivers can be attributed wholly to the electronic sharing of all domain information to inform LSI-R assessments, not just juvenile criminal records.

1. Reduce Workload and Streamline Processes—Rhode Island utilizes two centralized intake facilities for all individuals who are jailed or enter long-term incarceration: (1) the Anthony P. Travisono Intake Service Center (ISC) for males (first photo) and (2) the Gloria McDonald Facility (GM) for females (second photo). An estimated 3,200 individuals are committed as
sentenced inmates each year and must pass through these facilities. Many of them must be assessed by a case managers, using the LSI-R, within 30 days of commitment. This volume of commitments can represent a significant hardship for case managers having to complete a 75-minute LSI-R assessment process per offender, or during times when staffing may be inadequate to efficiently handle the workload, potentially lengthening an offender’s time at the intake center. It is important to note that performing risk/need assessments is only one of the many job responsibilities of case managers; RIDOC does not have personnel whose only role is to complete assessments. On average, each of the seven case managers currently working at the ISC completes six 75-minute LSI-R assessments each week (7.5 hours per case manager/52.5 hours for the team per week). In 2011, because of economic conditions, there were only four case managers at the ISC and two at the GM handling the entire volume of offender LSI-R assessments. Between 2008 and 2010, more than 2,900 offenders (2,554 men, 356 women) were assessed using the LSI-R.

The LSI-R is a 54-question risk/need assessment instrument that evaluates an offender using ten domains known to be related to the likelihood of recidivism. These ten domains include criminal history (of which juvenile criminal history is just one component), education/employment, financial, family/marital, accommodation, leisure/recreation, companions, alcohol/drug problem, emotional/personal, and attitudes/orientation. Interviewing offenders to request responses to a majority of the 54 questions and manually entering the self-reported answers into TPCDS can critically impact the efficiency of an LSI-R assessment process.

Implementation of automated sharing of an offender’s historical records from partner agencies will help speed up and streamline the LSI-R assessment process, since the answers to assessment questions are electronically available. Having information available electronically reduces both the case manager’s workload and the length of time offenders must wait for an available case manager to complete their assessments.

2. Meet Time Limits Set By State Law—In addition to the volume of offenders, referenced in business driver 1, which case managers must assess, there is a state law imposing a restriction on the amount of time an intake center has to complete these assessments. Rhode Island General Law Title 42 State Affairs and Government, Chapter 42-56 Corrections Department, §42-56-29, states that “every person so sentenced shall be segregated for a period not to exceed thirty (30) days during which period the person shall be studied and evaluated to determine whether the person shall be a maximum, medium, or minimum security risk and to develop a program of rehabilitation, education, and medical and other care as shall be deemed necessary and appropriate to prepare the person to become a useful member of society. During the [30-day] period, . . . an assessment of rehabilitative needs shall be made of the person and the results, together with the nature of the offense for which the person has been committed, the previous criminal history, if any, . . . and the social history of the person shall be studied and evaluated in determining the degree of custodial care of the person, the rehabilitation program for the person,” etc.

Having the information needed to complete an LSI-R readily available electronically, through automated partner information sharing exchanges, would significantly reduce the time needed to complete an offender assessment and aid RIDOC in its compliance with the 30-day limitation.

3. Increase Accuracy—Using automated information that is drawn from factual historical records rather than relying solely on individual self-reporting helps to augment the case manager interview, validate offender responses, and improve the accuracy and overall results of the assessment. More complete
and accurate information leads to more accurate identification of offender risk of recidivism and criminogenic need areas, which ultimately should lead to increased success in offender outcomes.

4. **Reduce Redundant Questioning of Repeat Offenders**—In Rhode Island, if a repeat offender has completed an LSI-R within one year or less and is recommitted, he or she is not required to repeat the assessment. However, many return to the system after one year and require reassessment. For example, in 2013, Rhode Island had the “third-highest probation rate in the country, nearly half of Rhode Island’s sentenced admissions to the ACI [adult correctional institutions] in 2014 were people who had been revoked from probation or parole supervision.”10 In addition, in 2011 “approximately three-quarters of the [incarcerated] population (74%) had two or more prior adult convictions and almost two-thirds (62%) had three or more priors, indicating that most offenders surveyed [using the LSI-R] were repeat offenders.”11 These examples show how many offenders return to the system, with those returning after one year having to undergo another 54-question LSI-R assessment process prior to their recommitment. This can impact offender attitudes towards the assessment and may result in refusals to answer (based on assumptions they have answered this information before and should not have to answer it again) or may result in incorrect information being reported (e.g., due to poor recollection).

Automating information based on validated historical records and previous LSI-Rs would help to inform many of the items on the reassessment LSI-R, reducing the need to re-ask every single question on the assessment form, since some of the information drawn from validated records will not change.

5. **Improve Case Management**—Appropriate case planning, effective case management, and rehabilitation begin with a complete, accurate, and valid assessment of the individual. Such an assessment should “best determine the level of supervision and an appropriate modality of treatment. The LSI-R is argued to be one of the most theoretically effective offender risk/needs assessment instruments available. More than 45 studies have examined the predictive validity of the LSI-R with recidivism as the outcome of interest (variably defined, see Vose, Cullen, and Smith, 2008). Effective treatment programs for offender populations deliver services that address [these] dynamic factors known to influence criminal behavior. This is known as the risk-needs-responsivity (RNR) [which] dictates the treatment and custody milieu: The higher one’s risk for reoffending, the higher the treatment intensity needed.”12 Identifying an offender’s criminogenic needs in assessment and focusing on these dynamic factors in treatment have reduced future recidivism and improved social functioning (Dowden and Andrews, 1999; Vieira, Skilling, and Peterson-Badali, 2009).”13

With these facts in mind, the importance of having complete, accurate, and valid information to inform the LSI-R cannot be emphasized enough and demonstrates how better-informed LSI-R scores can improve case management and increase successful outcomes.

6. **Reuse Solution to Automate Other Types of Information Sharing**—For reasons such as long-term viability, reduction of costs, and less-needed resources, RIDOC wanted an information exchange solution that could be duplicated. That is, the components and technical solutions implemented to facilitate the juvenile criminal history exchange could then be replicated to automate other types of information needed to inform the LSI-R and other assessments.

7. **Measure Outcomes**—“The development of effective inmate reentry programming is one of the most critical challenges facing corrections in the 21st century. With the number of inmates reaching an all-time high of 2.1 million (Harrison and Beck, 2006), coupled with the fact that a vast majority of all inmates eventually return to society (Council of State Governments, 2005), the need for successful approaches
to inmate reentry has never been greater. To address the need for better reentry services, greater emphasis has been placed on the use of evidence-based practices and, specifically, the use of risk and needs assessments to guide programming and case planning for offenders returning to the community.\textsuperscript{14}

The LSI-R can be used as a repeated measure to show a client’s progress and, ultimately, achieve long-term positive outcomes that can be measurable through established evidence-based practices. The need for more accurate, complete, and validated information to make decisions about offender rehabilitation will not only benefit reentry outcomes, but also can be measured for their effectiveness.

**BUSINESS CHALLENGES**

**Challenge 1: Funding and Technical Assistance**

To achieve RIDOC’s goal to automate the risk/need assessment process, RIDOC needed funding and technical assistance to (1) identify the data elements needed (to inform the LSI-R), (2) identify the agencies that were the best sources of validated information, and (3) apply technical solutions and implement the exchanges.

**Solutions:** To accomplish the first two tasks, RIDOC received funding and technical assistance through participation in the Corrections Information Exchange for Offender Reentry\textsuperscript{15} initiative, sponsored by the Bureau of Justice Assistance (BJA), Office of Justice Programs (OJP), U.S. Department of Justice (DOJ). RIDOC was selected by BJA because of the state’s demonstrated commitment to information sharing and reentry innovation, as well as its structure as a unified system—jails, probation, parole, and state corrections all fall under the purview of one entity—greatly simplifying the challenge of connecting disparate systems. This activity was facilitated by BJA’s national technical assistance partners, who supported the project—The National Consortium for Justice Information and Statistics (SEARCH),\textsuperscript{16} the Association of State Correctional Administrators (ASCA),\textsuperscript{17} and the Integrated Justice Information Systems (IJIS) Institute.\textsuperscript{18} According to Robert May, Assistant Director for Program and Technology Services at IJIS, “concerns over privacy laws and the ‘need to know’ information on justice-involved populations is a critical factor that all states must consider. Helping RIDOC and key reentry partners decide what types of information could and should be shared, was a critical part of IJIS efforts to help state agencies collaborate and share information in a meaningful way.”\textsuperscript{19} Through this planning and exchange-requirements definition process, RIDOC was able to develop a project plan that identified seven source agencies and defined more than two dozen information exchanges.

For the third task, apply technical solutions and implement the exchanges, RIDOC received service specifications for direct funding and technical expertise from SEARCH (the lead implementation TA provider on this project), as well as funding and support from the National Center for State Courts (NCSC).\textsuperscript{20}
Challenge 2: Changes to Rhode Island Legislation

While DCYF was the only state agency of the seven identified in the BJA-sponsored offender reentry initiative readily able to commit to the project, Rhode Island law did not allow for confidential juvenile criminal history to be shared outside DCYF. As such, a change in RI legislation was required in order for DCYF to be legally permitted to share the juvenile criminal history data with RIDOC.

Solution: RIDOC and DCYF jointly worked with RI state legislators to amend the law to allow this information to be shared. After nearly two years, their efforts paid off and in 2010, § 42-56-10(12) was amended to allow RIDOC “to receive, with the express consent of the inmate, and upon request to [DCYF], the offender’s juvenile arrest and/or adjudication records.” The legislative purpose of this exception to the confidentiality of juvenile records is “to effectively develop an individualized program for each sentenced inmate that will address each offender’s individual treatment and rehabilitative needs.” Further, the legislation stipulated that those authorized to receive such information were “those department personnel directly responsible for, only for the purpose of, developing the individualized program for the offender.”

In simple terms, not only did this legislative change legally allow the exchange to occur, in essence, it articulated the technical scenario—or rules—by which this exchange could take place.

<table>
<thead>
<tr>
<th>Technical Scenario</th>
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<tbody>
<tr>
<td><strong>What information can be made available</strong></td>
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<tr>
<td><strong>To what entity</strong></td>
</tr>
<tr>
<td><strong>Under what conditions</strong></td>
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<tr>
<td><strong>For what purpose</strong></td>
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<tr>
<td><strong>To whom</strong></td>
</tr>
</tbody>
</table>

Challenge 3: Technical Solutions for Implementation

After the change in Rhode Island law that permitted the juvenile criminal history to be shared with RIDOC, the next challenge was to determine what technical solutions would be best, both for the initial implementation and long-term. The following items from the original exchange list were selected for implementation. This information would be provided electronically from DCYF’s Rhode Island Children’s Information System (RICHIST) and sent to RIDOC’s TPCDS for use in completing the LSI-R.

- Age at first arrest (includes truancy and curfew violations)
- Number of arrests as a juvenile
- Yes/No indication—ever incarcerated as a result of an adjudication (sentenced to training school or to a group home if it was mandated by sentencing on a conviction)
- Yes/No indication—escape history from a juvenile detention center, group home, or state escort (include escapes and attempted escapes)
- Yes/No indication—offender sentenced to probation as a juvenile
- Indications of violations of juvenile probation (VOP): Yes/No indication of VOP—technical, Yes/No indication of VOP—criminal (new charge)
- Number of assaultive/violent crimes (number of convictions/adjudications)
- Number of institutional misconducts due to violent or assaultive behavior
- Number of juvenile felony convictions
Solutions: SEARCH and NCSC worked to implement this cross-boundary exchange using the Global Reference Architecture and the Global Privacy Technical Framework, as described below.

A. Global Reference Architecture\textsuperscript{21, 22}—Global developed a framework, profiles, and guidelines called the Global Reference Architecture\textsuperscript{23} (or “GRA”). The GRA is a service-oriented architecture (SOA) for justice and public safety information sharing that is designed to reduce the time and cost to implement information sharing solutions through reuse of established promising practices in IT architecture and design.

The GRA provides guidance nationally to the public safety community on how to plan and design information sharing technology solutions based on SOA—a methodology for integrating systems while maintaining as much independence and autonomy as possible. SOA allows multiple systems to share information in such a way that still allows the systems to change independently. To this end, GRA’s focus is on interoperability at the system interface, rather than within the systems themselves. The GRA adheres to the principles of SOA, which are somewhat technical in nature but boil down to three things:

1. When partners share information, they implement a layer of technology in between so that the systems are insulated from one another, removing direct dependencies between systems. This allows a greater degree of flexibility and autonomy between the information sharing partners.
2. Information sharing projects follow accepted and well-established open-industry standards whenever possible, rather than solutions and approaches proprietary to particular vendors. This allows everyone to participate, regardless of the vendor or technology used—and allows independence in these choices.
3. Adoption of a formal governance structure allows partners to strive for a common approach and a common technology infrastructure, rather than doing things on a project- or agency-specific basis. This tends to reduce the cost and effort of information sharing by eliminating redundancy and enabling better utilization of resources.

A key benefit of the GRA is that it helps promote consistent thinking and approaches among the people who use it, even if they have not shared information with each other before.

In addition to the GRA, SEARCH and NCSC ensured that the confidential juvenile criminal history information was properly protected by following the guidance contained in the Global Privacy Technical Framework. This framework provides a foundation for overcoming common barriers to sharing sensitive information by allowing for the execution of privacy and access rules.

B. Global Privacy Technical Framework\textsuperscript{24}—Implementing Privacy Policy in Justice Information Sharing: A Technical Framework provides assistance to technical practitioners in support of the electronic expression of privacy and access rules through guidance on how to convert such rules so they are understandable to computers and software. The framework provides approaches and alternatives to resolving technical and interoperability challenges and outlines a sequence of steps for implementing a set of electronic privacy policy rules that can be readily implemented using existing information technology architectures, standards, and software tools. The electronic policy rules are designed based on written policies, such as privacy policy documents, memoranda of understanding (MOU), and contracts.

The following graphic depicts one way the Privacy Technical Framework can implement electronic access and privacy policy rules. For example, the framework requires all information \textbf{requests} to be submitted with a set of electronic \textbf{identity credentials} to allow the \textbf{policy service} to ensure that the request is authenticated and authorized and that it generates an \textbf{audit trail} before granting access to the information. In addition,
the policy service may impose a set of obligations on the user regarding restrictions on further information dissemination, record retention, and audit logging.

A key requirement of this project was to fully apply and enforce privacy policy requirements that any data pertaining to juveniles would only be released to those RIDOC personnel who were authorized and whose jobs involved the classification of adult offenders. These rules were implemented following the Global Privacy Technical Framework, referenced earlier, which uses the Extensible Access Control Mark-up Language (XACML) to enforce these rules at a technical level. 25

Using XACML, RIDOC, and DCYF created system-level checks that enforced policy requirements. For example, one rule enforced in this exchange is that RIDOC include in the query to DCYF a message confirmation that the requestor is an authorized member of RIDOC staff. Rather than sending the requestor’s name, etc., the message asserts that this is a valid request by an authorized user. Using XACML, a rules engine called a Policy Decision Point (PDP) evaluates the request information to determine whether to allow the request to proceed, which provides DCYF with the assurance that this is a valid request without having to add its own access control mechanisms or monitor specifically authorized individuals. The policy in the rules engine is backed up by governance documents that outline the rules RIDOC must follow to ensure compliance, such as access control logging at RIDOC that confirms that only appropriate personnel have access to this service.

Other policy rules include assertions that the business purpose for the DCYF information is to complete the risk/need assessment and confirmation that the offender has signed a Release of Confidential Information form, as well as the assignment of a unique “systemID” for the requestor. RIDOC then stores the retrieved juvenile criminal history information in its database to enable integration into assessments. An electronically scanned copy of the signed release form is also stored by RIDOC. Note: In adherence to
§ 42-56-10(12), if the offender refuses to sign the release form, no query can be performed to request information from DCYF.

Finally, other privacy protections were articulated in a memorandum of understanding between RIDOC and DCYF to address prohibitions on redisclosure, duration of RIDOC’s data retention, and other rules of engagement, as well as to clarify the offender’s right to seek an investigation of potentially erroneous juvenile criminal history data.

Challenge 4: Operational Changes

With the Global Privacy Technical Framework and GRA technical solutions identified, the next challenge was to make changes to both the RIDOC mechanism used for the intake process (e.g., TPCDS) and to the daily work steps taken by case managers to complete assessments.

Solutions: RIDOC case managers perform risk/need assessments using the automated LSI-R contained in the TPCDS. In order to allow for the consent and query process to occur, the TPCDS required modifications, both to the menus and to the TPCDS data screens, to create electronic functions that facilitated the consent and DCYF query processes. Once these modifications were made, RIDOC developed an instruction manual titled TPCDS Guide Book for the Use of the Juvenile Information Section to provide case managers with simple step-by-step instructions and screenshots on how to use the new functionality. Further, these functions procedurally added a few extra steps to the intake process, as follows:

1. Provide a hard copy of the consent form to the offender and obtain a signature indicating his or her consent to allow the case manager to view the juvenile criminal history information.
2. Scan and store the signed consent form into the TPCDS.
3. Select and view “Inmate Details” from the TPCDS menu.
4. In the “Juvenile Data Request” screen, check the box to confirm that the inmate has signed the consent form and then initiate the request for juvenile data.
5. A new “Juvenile Information” menu option is automatically generated. Select the option to view the juvenile data.
6. Refer to the data provided in the “Juvenile Information” screen and type the information into the LSI-R.

Challenge 5: Protection of Personally Identifiable Information (PII)

While the new process of acquiring offender consent to allow the case manager to view juvenile criminal history data enabled RIDOC to comply with the confidentiality rules set forth in § 42-56-10(12), two potential privacy risks remained:

1. What if use of a standard last name, first name, and date of birth query, resulted in records from the wrong individual?
2. What if multiple records (on various individuals) resulted in using the same criteria? While only one offender signed a consent to release, a list of multiple results would have the potential of sharing records from other individuals who had not signed releases, thus violating § 42-56-10(12).

Solution: To facilitate more accurate search results and prevent the wrong individual’s records from being the result of a query, the search criteria were expanded with the following set of challenge/secondary identifiers: name suffix, middle initial, and mother’s first and last name. These additional identifiers worked to ensure that records were provided for the correct individual, as well as restricted the case manager from viewing data
pertaining to anyone other than the offender. The challenge/secondary identifier approach prohibited the system from functioning like a standard search, removing the potential for the case manager to view a list of multiple returned results.

The following graphic, excerpted from SEARCH’s Final Report—GRA (Global Reference Architecture) Implementation Pilot Project, Rhode Island Department of Corrections Juvenile Criminal History Data Exchange Project with the Department of Children Youth and Families—illustrates the implementation of the solutions previously discussed and the resulting step-by-step process developed by SEARCH and NCSC to accomplish the RIDOC/DCYF exchange. This process includes privacy rule enforcement (e.g., execution of the offender’s consent to release the juvenile criminal history), as well as the query-matching process (to include the expanded search criteria to ensure that the correct individual’s records are returned).
Rhode Island Department of Corrections & Department of Children, Youth, and Families Data Exchange

DOC Intake:
- Adult Counselor conducts LSI-R interview
- Inmate executes consent
- Adult counselor inputs LSI-R & consent data to TPCDS
- Adult counselor reviews DCYF response with potential matches (race, mother’s name, father’s name)
- If match, store RICHIST person ID in TPCDS
- Juvenile history is stored in DOC database
- Adult counselor completes LSI-R assessment

Intermediary/Broker:
- Person-matching query includes name and DOB
- Determine whether RICHIST contains Juvenile match (wayward or delinquent)

DCYF:
- Juvenile history query includes RICHIST person ID
- Assemble juvenile history report

LSI-R (MHS):
- Juvenile history report is added to LSI-R submission for scoring
BUSINESS OUTCOMES

The GRA implementation for the electronic sharing of juvenile criminal history data from DCYF to RIDOC resulted in several business outcomes, such as an efficient and effective means for adhering to RI state law by electronically enforcing access and privacy rules, the availability of valid historical records to better guide offender treatment and rehabilitation programs, and the opportunity for RIDOC to reuse the model implementation to apply to other cross-boundary data exchanges.

1. **Better Individualized Treatment/Rehabilitation Plan**—As a result of this pilot implementation, validated juvenile criminal history data is now available to inform multiple assessments at the RIDOC—primarily the LSI-R. RIDOC reports that prior to this automation, juvenile criminal history information was self-reported and thus inconsistent for a variety of reasons (e.g., an offender’s memory of his or her date of first arrest lacks consistency, especially if the date was before the age of 16). The transition from often unreliable, self-reported information to validated historical juvenile criminal history records is significant in terms of rehabilitation. Knowing that the period of time when an offender’s criminal activities began (such as in youth versus in adulthood) helps to guide psychological counseling, since the counselor now knows how far back to address issues the individual faced. In addition, counselors can discuss outcomes of any supervision the offender experienced as a youth, thus improving recommendations on the most effective programs and rehabilitative services.

2. **Enforcement of Privacy Protections**—One benefit of implementing GRA and following SOA, and the purpose for RIDOC’s implementation, is greater flexibility and agility to improve the ability to implement and enforce policies, as well as to more easily accommodate policy changes within IT systems. With the sensitivity of juvenile criminal history records and the importance of remaining in compliance with § 42-56-10(12), RIDOC was able to successfully incorporate privacy protections within the electronic exchange between DCYF and RIDOC.

3. **Reusable Requirements for Other Types of Data**—As a result of the project, once additional legislative changes are enacted to permit other partner agencies to share information with RIDOC, Rhode Island will be positioned to be able to design and implement additional electronic data-sharing capabilities to exchange other types of information. Once fully implemented, these data sets will improve decision making and, ultimately, the success of reentry and the reduction of recidivism, and will cut commitment corrections costs. Another benefit of the GRA, and the reason RIDOC chose to utilize this approach, is the opportunity for greater reuse of components and, therefore, less waste of resources. It was important to RIDOC that the work to establish the RIDOC/DCYF exchange could be reused for the exchange of other types of information to inform the assessment process. The GRA and its SOA methodology was a logical choice for streamlining information sharing solutions and reducing the learning curve and resources required to implement SOA.

ONGOING CHALLENGES

As mentioned earlier, RIDOC has clearly demonstrated a proactive commitment to information sharing and reentry innovation. Improving successful reentry outcomes, however, is not accomplished overnight. RIDOC has invested many years to this effort and will continue to take on challenges in its mission to
undertake reentry initiatives that improve cross-boundary information sharing. Some of the challenges faced during this pilot implementation are ongoing. RIDOC is actively working to resolve obstacles such as slow adoption across the department, agencies whose records are still in paper or whose vendor-supplied systems are proprietary and incompatible, and additional changes to state law needed for the exchange of other types of data.

1. **Legislative/Political Challenges**—Much of the information required to complete the LSI-R is held outside of RIDOC (e.g., human/social services partners, substance abuse treatment providers, mental health providers, educational entities, employment records) and is confidential. The dissemination of such data is governed by numerous Rhode Island General Laws in which the adult correctional institutions are not listed as partners or receiving agencies. Just as RIDOC and DCYF worked together to enact § 42-56-10 to enable juvenile criminal history to be shared with RIDOC, so must RIDOC pursue legislative changes to allow for other critical information to be made available to inform the LSI-R. Until such changes in law are enacted, a majority of the information used to complete intake assessments remains self-reported by the offender.

2. **Slow Adoption**—Adoption has been slow, across RIDOC and partner agencies at the administrative and practitioner levels, for a variety of reasons. These include dynamically changing department priorities, competing projects across the administrative landscape, and issues that affect adoption by case managers (e.g., turnover). With the case managers handling multiple responsibilities, having time in their daily schedules to learn about, obtain access to, receive training on, and implement a new process can be daunting when personnel have busy workloads.

RIDOC personnel involved in this implementation have made training and a user guide available, but until recently there has been a lack of managerial or administrative follow-through to alert case managers to the new process or to the fact that both training and a user guide are available to assist them. When untrained personnel attempt to use the new protocol, the result may be distrust in the system when the query yields a null response (e.g., if the individual queried has no juvenile criminal history). Personnel who do not know otherwise may assume that the exchange is not working or useful.

Finally, there is slow adoption of consistent use of the query for all offenders completing an assessment. Case managers are more likely to perform the juvenile criminal history query if an offender is closer in age to a juvenile than farther away. Use of the query protocol may be less likely for older offenders. Training on the query’s benefits to the LSI-R and the decisions made for rehabilitation of the query, regardless of the offender’s age, would help resolve this discrepancy.

RIDOC is currently working to address the adoption issue. During the development of this case study, RIDOC reported that it was updating its processes and actively revising its case manager training manual and that it will add the juvenile criminal history query to the manual and training process. This will ensure that the process becomes an integral part of a case manager’s daily routine.

“Widespread organizational change, as in the adoption of a new protocol, requires a tremendous amount of support and commitment from both staff and administrators (Lariviére, 2001; D. Robinson et al., 1993, 1996). Changes that occur in the wake of a new initiative often disrupt the daily routines of workers and challenge tradition and staff comfort levels. Thus, a lack of
demonstrated commitment on the part of either staff or administrators can lead to a diminished capacity on the part of the organization to make the necessary substantive changes (McGuire, 2004).

A growing body of literature is beginning to demonstrate that a program’s likelihood of achieving successful outcomes is substantially diminished if staff do not properly assess offender risk and needs and/or an agency fails to achieve fidelity in the use of such tools among staff (Hubbard and Latessa, 2004; Lowenkamp and Latessa, 2005; Wilson and Davis, 2006). Correctional administrators must be aware of how top-down decisions can impact staff attitudes and the importance of establishing mechanisms to ensure staff buy-in.”

3. **Paper Records**—Not all of the RIDOC identified source agencies have digitized all of their records, some still maintaining only paper records. This makes those agencies unavailable for electronic information sharing.

4. **Incompatible Systems**—Unfortunately, some of the source agencies with which RIDOC would like to exchange data have legacy systems that are not interoperable with RIDOC’s TPCDS or have implemented vendor-based proprietary systems that are not compatible with Web Services. Policy decisions will be required to allow access, followed by implementation of technology to enable the exchange.

**RIDOC NEXT STEPS**

As part of Rhode Island’s ongoing efforts to pursue a culture of sharing and information exchange with agencies and providers, RIDOC has identified several next steps to further the success of the RIDOC/DCYF exchange and pilot implementation.

RIDOC plans to proactively communicate the long-term benefits of implementing multiagency exchanges and the availability of open source privacy enforcement through several mechanisms. Internally, RIDOC is updating case manager training and will work within the department to raise the awareness of case managers/practitioners, managers, and administration on the availability, ease of use, process efficiency, and business outcomes of the DCYF consent and query process. As part of this initiative, RIDOC will enhance its efforts to promote and support practitioner training on the new process. Training practitioners will improve case managers’ comfort level with and usage frequency of the consent/query process. In addition, RIDOC will participate in an NCSC-sponsored Webinar, hosted on May 24, 2016 to share with the justice community their goals, challenges, solutions, and successes for the implementation. A podcast of the recorded Webinar will be available following the presentation on [www.ncsc.org](http://www.ncsc.org) and [www.TechnicalPrivacyTraining.org](http://www.TechnicalPrivacyTraining.org).

Further, RIDOC plans to continue its long-term goal of affecting legislative changes to enable other agencies outside of RIDOC to share vital information needed for the LSI-R assessment. Having validated information from human/social services partners, substance abuse treatment providers, mental health providers, and educational entities, as well as the availability of employment records, would dramatically improve decision making and assignment of offender rehabilitation programs, in addition to increasing positive reentry outcomes.
CONCLUSION

This study focused on a real-world example of an implementation of national standards for information sharing across different domains using the GRA, the Global Privacy Technical Framework, and XACML to implement an exchange and to successfully execute access and privacy rules. Despite the challenges faced, the Rhode Island Department of Corrections was able to initiate a query, electronically enforce privacy protections, and receive results from the Rhode Island Department of Children, Youth, and Families for a small subset of DCYF data—juvenile criminal history records. This pilot implementation was a successful first step for RIDOC in its continuing efforts to tackle legislative, administrative, and operational challenges to automate the sharing of validated source information to better inform offender risk/need assessments and, ultimately, improve reentry outcomes. Because of this success, RIDOC is now positioned with a use-case to promote the new query across the department, as well as to leverage these replicable technical solutions for automating other types of domain information that inform the LSI-R.

Use of the solutions discussed in this document is not limited to this narrow scope—informing a risk/need assessment or for use only by corrections entities. Though this example addresses an electronic request for juvenile criminal history records to inform an LSI-R assessment, the solutions used—GRA, the Global Privacy Technical Framework, and XACML—are well-developed national standards that any justice or public safety agency can use to automate the exchange of cross-boundary information while enforcing access and privacy rules.

MORE INFORMATION

Global Privacy Resources—To support justice agencies in their efforts to implement privacy, civil rights, and civil liberties policies and protections for the information they collect, store, maintain, access, share, and disseminate, the U.S. Department of Justice’s (DOJs) Global Justice Information Sharing Initiative (Global) has developed an online Global Privacy Resources Web site, which serves as a road map to guide justice entities through the diverse privacy policy development and implementation products available today. The resources presented there were developed for state, local, and tribal (SLT) entities by DOJ’s Global or Global partners or through DOJ collaborations with other federal agencies, such as the U.S. Department of Homeland Security (DHS).


Global Reference Architecture—Information on the Global Reference Architecture (GRA) is available at http://it.ojp.gov/initiatives/gra. This site includes an overview, background materials, frequently asked
questions ([http://it.ojp.gov/documents/GRAFAQ2012_compliant.pdf](http://it.ojp.gov/documents/GRAFAQ2012_compliant.pdf)), GRA components and information on GRA services, and more.

**IJIS Institute**—The Integrated Justice Information Systems (IJIS) Institute represents industry’s leading companies, which collaborate with local, state, tribal, and federal agencies to provide technical assistance, training, and support services for information exchange and technology initiatives. IJIS facilitates, through its membership, private-sector participation in the advancement of national initiatives affecting justice and public safety, and more recently homeland security. Today, the IJIS Institute represents the leading companies serving these and other related sectors. For communities interested in implementing enhancements to their information sharing capabilities, the IJIS Institute provides training, technology assistance, national scope issue management, and program management services to help governments and their private-sector partners fully realize the power of information sharing. Refer to [www.ijis.org](http://www.ijis.org) for more information. In addition, to learn about the benefits of corrections information sharing, read the IJIS white paper *Value of Corrections Information: Benefits to Justice and Public Safety*, available at [www.kms.ijis.org/db/attachments/allnews/1088/1/IJIS_Corrections%20Advisory%20Committee%20Whitepaper_Value%20of%20Corrections%20Information%20-%20FINAL.pdf](http://www.kms.ijis.org/db/attachments/allnews/1088/1/IJIS_Corrections%20Advisory%20Committee%20Whitepaper_Value%20of%20Corrections%20Information%20-%20FINAL.pdf).

**National Center for State Courts**—The National Center for State Courts (NCSC) is the organization courts turn to for authoritative knowledge and information because its efforts are directed by collaborative work with the Conference of Chief Justices, the Conference of State Court Administrators, and other associations of judicial leaders. All of NCSC's services—research, information services, education, consulting—are focused on helping courts plan, make decisions, and implement improvements that save time and money, while ensuring judicial administration that supports fair and impartial decision making. For more information, refer to [www.ncsc.org](http://www.ncsc.org).

**SEARCH**—SEARCH, The National Consortium for Justice Information and Statistics (SEARCH), is a national organization for collecting, sharing, and analyzing innovative and timely knowledge, information, best practices, services, and solutions for justice information sharing. SEARCH offers solutions, resources, assistance, and training to help stakeholders in state, local, and tribal justice and public safety effectively use, manage, and exchange mission-critical information. Through its information sharing programs, SEARCH helps justice and public safety practitioners and organizations at all levels of government improve their use of technology, information sharing capabilities, and voice and data interoperability in mission-critical projects and initiatives. Refer to [www.search.org](http://www.search.org) for more information. For SEARCH’s information sharing programs, refer to [www.search.org/resources/information-sharing-resources/](http://www.search.org/resources/information-sharing-resources/).

**Technical Privacy Training**—The Technical Privacy Training Web site, sponsored by BJA and supported by NCSC, is a repository of guidance and resources for information sharing partners in the public domain who seek technical solutions for enforcing access-control policies governing protected data. See [www.TechnicalPrivacyTraining.org](http://www.TechnicalPrivacyTraining.org).
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