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# About the Respondents

This report is a consolidated response from a number of business and information technology practitioners from within the justice information sharing community. Many of these practitioners volunteer their expertise and time to participate in advancing interoperable information sharing practices and standards for the justice and public safety communities of interest under the oversight of the Global Justice Information Sharing Initiative (Global)—a Federal Advisory Committee (FAC) that advises the U.S. Attorney General on justice information sharing and integration initiatives. Although this report was independently prepared outside the purview of the Global initiative, the authors of this report and the submitting organization—Integrated Justice Information Sharing (IJIS) Institute—highly encourage the U.S. Department of Health and Human Services (HHS) and the Office of the National Coordinator for Health Information Technology (ONC) to reach out and initiate a collaborative dialogue with the U.S. Department of Justice (DOJ), Office of Justice Programs (OJP), Bureau of Justice Assistance (BJA), and, by extension, Global, to review the full merits of these recommendations and consider advancing the dialogue between the justice and health domains and program offices accordingly.

# Executive Summary

The respondents would like to commend ONC for developing a comprehensive national vision and a shared interoperability roadmap for building a learning health care system. The publication of the health interoperability roadmap and the request for public comments is a great step forward in aligning interoperable standards for maximizing information sharing.

*“Information sharing between the criminal justice and healthcare communities has the potential to enhance both public safety and health outcomes by reducing redundancies, enhancing continuity of care, and generating efficiencies in both domains. Used judiciously, and with the necessary legal and technical safeguards to protect privacy and confidentiality, bi-directional sharing of health information between community-based care providers and correctional institutions can be used to divert individuals from the criminal justice system (when appropriate), better provide for their health needs while under justice supervision, and prepare for a successful post-release transition to the community.”*

*—Opportunities for Information Sharing to   
Enhance Health and Public Safety Outcomes—  
A Report by the Criminal Justice and Health Collaboration Project*

The U.S. DOJ sponsored a study conducted by the IJIS Institute and the Urban Institute that analyzed and documented the business use cases between the justice and health domains. The results of this study are outlined in a report titled *Opportunities for Information Sharing to Enhance Health and Public Safety Outcomes.*[[1]](#footnote-1)This report is considered to be the most comprehensive national work documenting the business use cases between the health and public safety business domains. The report emphasizes the information exchange crossover, interaction, and the need for stronger coordination between the health and justice lines of business; it further depicts, in specific business use cases, the functions and critical need for cross-domain interoperable information sharing.

Jails and prisons are required to provide health services for prisoners and inmates. Law enforcement agencies, parole and probation, prosecutors, courts, and other justice organizations at the federal, state, local, and tribal levels interact daily with laboratories, hospitals, mental health organizations, health providers, prescription drug monitoring programs, and the like. Clearly, the justice and health lines of business intersect in numerous areas. As a result, there is an increasing demand and need for interoperable information sharing standards. **If the ONC Roadmap is modified to recognize this large business intersection and to include tangible next steps in the roadmap, these interoperable standards can enable and improve justice, health, and business outcomes; lower costs, and provide better patient care and coordination between the business domains.**

In addition to the justice-led initiative above, the Center on Budget and Policy Priorities (CBPP) recently explored estimates on the number of adults leaving jail and prison who would likely be enrolled in Medicaid.[[2]](#footnote-2) While the article disputes the 35 percent number provided by the U.S. DOJ of ex-inmates potentially covered in the Medicaid expansion, it does admit that adults leaving jail and prison are still a significant population. In addition, this article points to a number of national projects that “. . . have linked people leaving jail to care in the community . . . such projects show that increased access to substance abuse treatment can be cost-effective and result in medical cost savings, and may play a role in reducing recidivism, particularly those with mental illness and substance-use disorders.”

One of those projects mentioned in the CBPP report was an article documented in the March 2014 issue of *Health Affairs*. The authors of the article “Integrating Correctional and Community Health Care for Formerly Incarcerated People Who Are Eligible for Medicaid”[[3]](#footnote-3) examined the needs of individuals transitioning back into the community after incarceration. They offered a series of recommendations to overcome barriers associated with integrating individuals into community-based care following their release. This included potential policy changes and the recognition of many new competencies necessary to effect and enable the recommendations. As the following excerpts from the article reveal, robust collaboration between justice personnel and community health care providers is critical to deliver on justice and health business priorities:

*“One significant systemic barrier is the lack of functional information exchange between justice settings and community-based health care systems. Information systems in criminal justice settings currently lack the capability to support coordinated care. Many people who leave the criminal justice system—and their new, community-based health care providers—must wait for weeks, if not months, for accurate copies of their medical records.”*

*“At a minimum, policy makers need to facilitate the development of partnerships among corrections professionals, health plans, and community providers. These partnerships at the city, county, and state levels will be new, will take time and effort to develop, and will require an understanding of each sector’s respective priorities and constraints. Stakeholders should establish common objectives rooted in the triple aim of improving population health, health care quality, and cost reduction.[[4]](#footnote-4)*

*“Standards such as ‘meaningful use’ do not apply to criminal justice settings. This raises the concern that correctional settings will increasingly lag behind health care settings in terms of technology and that the two will become less—rather than more—able to exchange information.”*

Even though health and justice are both working towards interoperability within their own ecosystems, there are real and tangible business lines that cross the justice and health ecosystems, as highlighted above. Another clear example is represented by the prescription drug monitoring programs (PDMPs) and the Prescription Monitoring Information Exchange (PMIX). Nationwide, PDMPs are housed within a variety of agencies, including State Attorneys General, boards of pharmacy, bureaus of narcotics, and other health functions. This division creates a clear divide between PDMPs with a health and/or regulatory focus and those with an enforcement focus, which complicates efforts to share data and adopt standards. Prescription drug monitoring represents an excellent example that illustrates the governance, policy, and technical challenges inherent to cross-domain information sharing efforts. Because of entrenched governance structures and the lack of interoperability between standards used by justice and health, neither domain has been able to employ PDMP data sharing to its fullest capabilities, leaving considerable opportunity to share data and combat prescription drug use. This one program has brought the need to interoperate across business domains to the attention of many justice and health leaders. While it presents a stark example of the interoperability challenges facing justice and health, PDMPs and PMIX represent only one of the cross-domain areas with a need for a more prescriptive direction in the health vision and roadmap to ensure cross-business domain interoperability.

# Recommendations

The publication of the “Connecting Health and Care for the Nation—A Shared Nationwide Interoperability Roadmap” (referred to as “Roadmap”) is a great step forward in understanding ONC’s national health vision and direction for interoperable information sharing standards. We are pleased to provide in this report a number of recommendations to promote a more holistic national approach in aligning and focusing the tangible actions and outcomes using interoperable information standards where there are clear intersection points in both the justice/public safety and health business domains. **Following the priority recommendations (section 3.1) and comments to the ONC Roadmap (section 4), we encourage ONC’s review of Appendix 1, where we highlight the numerous business drivers that necessitate the need for greater information sharing between the justice and health communities of interest.**

## Common business drivers that necessitate the need for greater information sharing between the justice and health communities of interest (refer to Appendix 1 for further explanation):

* Stronger public safety and better care for patients
* Improve program efficiencies and reduce costs
* Increased focus on successful reentry
* Individuals diverted from the criminal justice system
* Continuity of care for persons in and out of custody
* Collaborating on and coordinating care for inmates during incarceration
* Effective community supervision of defendants and offenders
* Decision making on program eligibility
* Public health surveillance

## Priority Recommendations

Collaboration and Governance

The state-to-national cross-collaboration between justice and health should be strengthened. It is critical that the states stay focused on interoperability with the federal government to ensure that all government agencies have a set of interoperable standards. These interoperable standards within the health community also need to collaborate with the justice interoperable standards. This is vital to maximize cross-domain information sharing. This set of interoperable standards needs to address three critical areas: transport, message structure, and semantic interoperability. States do not have the incentives or the funding to force or ensure this interoperability themselves across business domains—let alone sometimes within a given business domain. In addition, national governance has tended to differ with commercial industry on building and implementing interoperability standards. While there are undoubtedly many reasons why the marketplace and related political dynamics may resist “open” health care systems, it is crucial that ONC provide the example and incentives for standards-based, collaborative systems to the private sector health care systems vendors and to all health and human services agencies that procure and use these systems. A great example of a successful, interoperable collaborative standard is the National Information Exchange Model (NIEM), which has been widely adopted in justice and public safety nationwide (at federal, state, local, and tribal levels) and is designed to accommodate an even wider range of domains and subjects.

Implementation

Thirty-eight federal agencies were selected for 2015–2020 to begin using the interoperable standards to deliver and show the value within and across federal government programs (Social Security, Veterans Administration, U.S. Department of Homeland Security, etc.). The federal government needs to implement these interoperable standards proving the value across and within programs and departments. Once this is done, the value can be expanded to government-to-government (G2G) at the state, local, and tribal government levels.  G2G incentives will be maximized by the federal government’s delivering on its commitments and showing the value of interoperability within and across federal government agencies. Cross-federal agency adoption of interoperable health standards will show leadership and drive the businesses/commerce to adopt the interoperable government standards.   This will lead and incentivize the government to businesses/commerce (G2B) interoperability.  This incentivized approach is similar to the way health-care (payer and provider) community was moved to adopt Centers for Medicare & Medicaid Services (CMS) rule changes. One candidate for a timely implementation would be comprehensive provider and resource directories (see 4.1.1).

Business Alignment

If the health care roadmap needs to include a plan to clearly identify and/or include the business use cases between the justice and health business domains, both the justice and health program offices could collaborate on funding, governance, and technical interoperability to provide a true breakdown in government stovepiped and siloed priorities and funding and promote cooperation and collaboration in solving and resolving local information sharing issues across and between the two domains. A clear national alignment of cross-domain business collaboration between the health vision and roadmap, and a justice vision and roadmap, could have national significance in resolving numerous business issues across the domains and programs. For example, successfully interfacing justice and health care information could promote more efficient court processing, increase reentry, and provide better cross-justice and health reporting and monitoring. ONC is encouraged to review and consider partnerships for cross-domain collaboration.

* Health is finalizing its use case priorities, and justice has done a similar exercise with the justice/health use cases. A formalized analysis should be done by a group of justice/health professions to build a set of cross-business domain high priorities.
* Executive priorities and business alignments should be done separately (by business domains) and then coordinated (across business domains) to maximize funding and other government resources.
* Federal cross-business domain-granting organizations should be coordinated with the proper grant restrictions (business and interoperable technical standards) and governed properly to ensure that business priorities are achieved more quickly with stovepiped funding sources.

Solid Interoperability Standards

By better understanding the cross-domain business objectives and tangibly or empirically measuring their impacts on each other, the nation will be able to better shape policy and law to build a more efficient and effective government. These empirical evidences will become more evident when the vision includes the cross-domain use cases, when roadmaps include them, and when vision and roadmap alignment across business domains begins to take place. Interoperable cross-domain standards must be encouraged, bridged, and forced by government grant funding for state, local, and tribal government to also force grant funding and move industry adoption. Once local implementations have been adopted, business domain programs will be able to report on and monitor the full impacts of the cross-domain issues. In turn, the reporting can be used to foster more specific changes to each business domain and its policies, law, and technologies.

The use of Health Level 7 (HL7) within NIEM should be used as a cross-governmental interoperable standard for data representation, message structure, and semantic interoperability in exchanges between justice and health.

Providing interoperable open standards for accessing state and federal provider directories and consent sharing systems with the security and privacy trust solution will enable more efficient, effective, and precise cross-domain coordination and information sharing.

Ecosystem Security Privacy and Trust

The ONC Roadmap must include a detailed “health trustmark plan” to drive the adoption and implementation of trust frameworks for organizations in the health-care community of interest (COI) and its subcommunities.

Healthcare organizations need to be able to participate in multiple trust frameworks concurrently. In a scalable manner, with minimal cost and effort, the health trust plan must address the issues of componentization and reuse of trust framework requirements

The health trustmark plan must recognize and account for the following realities:

* + A typical health-care organization needs to participate in trusted transactions with many other health-care organizations within multiple health-care subcommunities, utilizing multiple trust frameworks.
  + Some health-care organizations need to participate in trusted transactions with other organizations that reside outside the health-care community (e.g., justice agencies), utilizing trust frameworks defined by non-health-care communities.

We recommend that the ONC Roadmap strongly consider addressing all of the trust requirements through the use of the Georgia Tech Research Institute (GTRI) “Trustmark Framework” as part of the ONC Roadmap’s “Rules of Engagement and Governance.”

# Comments on ONC Roadmap

We offer the following comments on the ONC Roadmap using the proposed ONC questions as its guide.

1. This plan has a series of additional plans and has broken out the technical standards work into data, transport, security, privacy, etc. The plan is overly limited and restricted in scope (to clinical) for interoperability and misses the larger cross-COI value proposition and larger health value proposition with interoperable standards.
2. NIEM actually gets a brief mention in the Moving Forward and Critical Actions Section and is further defined and described in Appendix E.  The goals within this plan are oddly specific (develop standardized use for secure, RESTful APIs), and in other cases, they are extremely broad and open-ended. By creating a governance framework to determine the best interoperability standards at a given point in time, standards become open-ended and change so rapidly that adoption is stymied.  This leaves open the real question of broad-scale community acceptance and adoption by implementation. The health-care system will not be overly impacted until the interoperable standards are widely accepted, adopted, and implemented throughout the United States.
3. This Roadmap sets out a series of principles, goals, and objectives and makes a nice companion document to the vision document that was done previously. However, it does not really do an adequate job of providing a clear roadmap to achieve the vision over time. (See the timeline on page 15, “ONC to publish and annually update a list of the best available standards for interoperability.”) How does a constantly changing list of interoperable standards provide industry with good implementation targets while providing backward compatibility to previous standards and achieve a set vision? It seems that defining interoperable standards that are backward compatible with improvements to meet the business objectives and vision that can be reused would provide a more efficient and effective use of interoperable standards and implementation resources.
4. The Roadmap does a good job of identifying the different aspects of interoperability that are critical to meeting the vision and objectives.

## General

**ONC Roadmap Guidance**

1. **Are the actions proposed in the draft interoperability Roadmap the right actions to improve interoperability nationwide in the near term while working toward a learning health system in the long term?**
2. **What, if any, gaps need to be addressed?**
3. **Is the timing of specific actions appropriate?**
4. **Are the right actors/stakeholders associated with critical actions?**

General Comments

1. The term “ecosystem” is not really defined in the Roadmap. The reader would assume   
   that the scientific logical definition of an ecosystem may be logically applied to the health-care system OR that the National Strategy for Trusted Identities in Cyberspace (NSTIC) definition for ecosystem would apply. The “entities” within the ecosystem term need to be more formally defined.
2. We propose that a formal definition of the health-care “ecosystem” term be defined to provide clarity and specificity in relationship to the NSTIC and other definitions. The term “ecosystem” is used in the context of a learning health system on page 19. Their relationship seems to be vague given the lack of understanding of the term “ecosystem.”
3. This plan does a good job of defining the health-care interoperability components. However, it does not show or recognize other businesses or sectors with which it needs to interoperate to accomplish its goals. Interoperability standards could be used to facilitate these needs.
4. The health ecosystem crosses over into criminal justice (CJ) business domain. Criminal justice has labs that may even be clinically certified labs that service only criminal justice needs. The criminal justice system uses both specialized labs (run only for CJ purposes) and more open labs within the health ecosystem. Interoperability across these “disparate,” yet similar in function and nature, systems will require collaboration in both the health and justice ecosystems. Another example is the PDMPs that are overseen disparately by the health and justice communities based on state law.
5. Interoperability comments (on page 15) seem to lean towards an ever-changing or   
   -evolving standard that shows great potential for noninteroperable propensities without further understanding of how the interoperable standards will be managed and their associated life cycle. Will interoperable standards be backward compatible when possible? Will multiple interoperable standards exist within the same information, services, and implementation layers to REST profiles that support the same information and services models? If so, what will drive the adoption of one or the other? Less is more in the sense of interoperable standards. It takes time to adopt and implement standards.
6. Interoperability (page 18) is defined widely, and the scope includes other ecosystems   
   (page 19) like public safety, but the plan fails to elaborate on how cross-ecosystem interoperability will be established, governed, promoted, and maintained. For example, the PDMP, PMIX project is governed across ecosystems. No common governance or funding structure has been established, creating inconsistencies and challenges for interoperable PMIX.
7. Global Federated Identity and Privilege Management (GFIPM)/Trustmarks are mentioned on page 60 and are rapidly maturing as a solution to building component-based federated trust and access control. The health-care plan needs to have a more rigorous and planned approach for how health care will pilot, mature, and utilize the NSTIC within the 3-, 5-, and 10-year plans.
8. Propose certain areas where interoperability between the health-care and criminal justice systems requires coordination and perhaps inclusion in their roadmap.  How, for example, do they plan to interact with outside standards development organizations (SDOs) to handle edge cases, and how can stakeholders outside their clinical care universe weigh in to achieve coordination of interoperability standards that meet their needs as well?
9. There appears to be less emphasis placed on federal ability through the funding “lever” and more responsibility placed in the states to actually embrace or require standards in procurement and implementation.
10. Even if limited to clinical, the Roadmap should be updated to include cross-business domain interoperability with justice. Use cases within the clinical sub-COI cross-business use cases with justice and these use cases should be identified and documented to ensure that cross-business domain interoperability can be achieved using the interoperable health standards.
11. The Roadmap should include building a cross-business domain governance structure that includes an executive, business, technical, and federal advisory committee.
12. The Roadmap should include building and aligning cross-business domain use cases based upon health-care priorities and Roadmap implementation time frames.
13. The Roadmap should include building interoperable cross-business exchange standards or a standard bridging mechanism to connect the justice and health interoperable exchange standards to enable cross-business domain standards interoperability.
14. The Roadmap fails to show how the various funded components (health information exchange [HIE], HealtheWay, Direct, PDMPs, PMIX, electronic health records [EHRs], etc.) of ONC will all interoperate via standards (i.e., no big picture and where the interoperable standards will play). How does this limited-scope roadmap fit into the big-picture roadmap?
15. The Roadmap needs to define more specific objectives and do more to promote a nationally consistent and interoperable cross-COI patient consent management system.
16. The Roadmap needs to define other COIs beyond justice where interoperability is imperative and promote a single interoperable set of standards for all cross-COI businesses.
17. The Roadmap should coordinate pilot exchanges between justice and health domains.
18. Determine use cases where law enforcement should have access to PDMP data. By recognizing that law enforcement does not need access to all PDMP data, a clear set of use cases and standard interoperable data elements that are shared with justice can assuage health domain concerns.
19. Ensure that law enforcement access to PDMP data is included in the interoperability roadmap.
20. Continue to identify opportunities to more broadly include PDMPs in the health interoperability vision and plan.
21. Leverage existing PDMP and PMIX governance structures to further facilitate cross-domain sharing. This is particularly important since PDMPs have already had to face some of the challenges of interoperability across domains.
22. Cross-business domain government governance structures (with federal, within state, within tribal, and intergovernment) should be built to provide coordination across government business domains.
23. Evaluate the FACs assigned to health and justice for interoperability, and consider cross-functional justice/health interoperability coordination and cooperation. To successfully gain broader adoption, the interoperable standards should first be driven with G2G implementations and then expanded to G2B and government-to-citizen (G2C).
24. Cross-business technical governance structures should be built by DOJ and ONC to explore business use cases that cross the justice and health domains within G2G first and G2B/C second.
25. Pull together and coordinate business organizations that sit between justice and health (Community Oriented Correctional Health Services [COCHS], Substance Abuse and Mental Health Services Administration [SAMHSA], etc.) to ensure that strong subject-matter experts are available to provide strong COI cross-over business definitions and governance direction with the cross-COI business lines.
26. ONC needs to develop an approach and process for promoting and implementing the interoperable standards with all cross-COIs to maximize the benefits of interoperability.

### Are the actions proposed in the draft interoperability Roadmap the right actions to improve interoperability in the near term while working towards a learning health system in the long term?

1. Finding practical and “in-common” components of multiple health-care systems—particularly those that are important to systems from other domains, especially justice—should be an immediate goal.
   1. One example is an authoritative, open, up-to-date and accessible statewide provider directory. Not only does this play a critical role to HIEs, having authoritative provider information available would allow systems relying on these data to yield more accurate and meaningful results.  One example is the original vision of allowing consumers on health-insurance marketplaces to visually survey, via interactive maps, all providers and plans that could meet their needs.  While each insurance carrier should have up-to-date information on the providers in their respective networks, this information is currently not available to most consumers in a manner that allows them to see information from all private carriers as well as Medicaid or other essential community providers (ECPs).

In its [*Final 2016 Letter to Issuers in the Federally-facilitated Marketplaces*](http://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/2016_Letter_to_Issuers_2_20_2015.pdf) dated February 20, 2015, CMS outlines what could be a framework for what a state- or federally maintained authoritative and accessible provider directory might entail. Many of the crucial components necessary to allow state-, federal-, or private-based systems to access and consume relatively up-to-date, basic information about health-care providers are addressed in the letter. On page 24 of Chapter 2, Section 3, item i, CMS states that it will require each insurance issuer to submit detailed information, including regarding a plan’s “physicians, facilities, and pharmacies.”

Section 2 specifically requires insurance issuers to “publish an up-to-date, accurate, and complete provider directory, including information on which providers are accepting new patients, the provider’s location, contact information, specialty, medical group, and any institutional affiliations, in a manner that is easily accessible to plan enrollees, prospective enrollees, the State, the FFM, HHS, and OPM.”

The letter goes on to state that the information must be in a machine-readable format and allow for third-party aggregation of information about providers in a particular plan.

While this is all very encouraging, it applies only to CMS and qualified health plans (QHPs) in health-insurance marketplaces and relies on links to this provider information and the initiative of other parties to aggregate this information. In other words, while this goes a long way toward developing a framework, it does not completely address what is really needed—a single source of updated, authoritative information on providers.

It also should be noted that insurance issuers are already required to submit similar information through the Health Insurance Oversight System (HIOS) maintained by CMS, so it is possible that redundant and potentially conflicting data could exist.

As has become apparent in some unfortunate cases where a consumer believes that he or she is going to be able to or has received care from an “in-network” provider but that in fact, information provided on a health-insurance marketplace was either out of date or otherwise inaccurate, there are tremendous issues of financial and legal liability.

Another example is the benefit to waste, fraud, and abuse systems at various government agencies.  By ensuring that their systems are able to work with the most current and complete data possible, they will be able to yield more consistent and reliable results. One example of a NIEM-based information exchange to help combat waste, fraud, and abuse is the Public Assistance Reporting Information System (PARIS). More information on PARIS is available at http://www.acf.hhs.gov/programs/paris.

The PDMPs are systems that cross various organizations and domains.  Having a reliable and accessible list of providers will help ensure the accuracy and effectiveness of whatever analyses or functions the PDMPs may perform. Not only will this benefit public agencies with health or investigative roles, it will also ensure that third-party payers are able to have access to the same provider information as public entities.

As it is, provider directory information is typically fragmented, housed in multiple silos, and scattered across different public and private organizations.  By using appropriate “levers,” ONC and the organizations funding such systems should require that there be some entity responsible for maintaining a meaningful provider directory in each state and that they should be interoperable and consistent among the states.

At least one other related issue is the importance of a common set of terminology to describe the services provided and the people providing such services.  There is little, if any, consistency across the various states in describing various medical specialties—something critical to allow meaningful comparisons and analyses to be performed.  From a technology standpoint, the actual description of the “attributes” and “roles” of a given profession could be key in such areas as interstate and interdisciplinary sharing of and access to information systems, particularly when personal and health data are being exchanged.

1. On page 17 of the Roadmap, “Interoperability Vision for the Future,” ONC predicts, “This ‘learning health system’ should also result in lower health care costs (by identifying and reducing waste) . . . .” We suggest broadening the ways in which a “learning health system” will reduce costs: in addition to fraud detection and prevention (waste resulting from intentional acts), we too frequently witness cases of unintentional but harmful health care mistakes. One example involves children and youth placed in out-of-home care who never receive recommended immunizations, or who are “overmedicated” with multiple immunizations, because providers do not have access to these children’s health records. Another example is the justice system’s inability to access a person’s known drug allergies, which can result in the administration of treatment in a crisis situation that is contraindicated for that person. Finally, a “learning health system” can reduce costs by eliminating unnecessary (and often expensive) duplicative diagnostic tests and procedures.

### What, if any, gaps need to be addressed?

* The ONC Roadmap provides minimal reference to the need of the health domain to coordinate and share with the justice community. This is a major gap. The health concerns of individuals who are involved in the criminal justice setting are and should be a part of the conversation in this Roadmap. Correctional institutions that house offenders have either internal or contracted health-care providers who provide the same medical services as providers in our communities. Their need for obtaining and sharing health information is essential for good medical practice. The importance of the Roadmap in identifying the need to develop interoperability between the health and justice domains in both the body of the Roadmap and in the use cases outlined in Appendix H cannot be overstated.
* There is a major gap in the Roadmap in that it fails to recognize all of the cross-domain interactions that happen to our underserved population. In addition, we believe that this underserved population is consuming a large percentage of the national justice and health resources.
* There is a major gap in the Roadmap in that it fails to articulate in clear terms what will be done to build interoperability into and between business domains (justice and health). The plan does address much of the health scope, but it seems to stop short of discussing how the health domain will interoperate with other business domains outside of health. Today, health interoperates with many other domains: syndromic surveillance, homeland security, justice/public safety, human services, etc.
* While the Roadmap mentions NIEM, the plan does not address or officially determine how HL7 will interoperate with NIEM. Specifically, the Standards and Interoperability (S&I) interoperable specifications, such as the Continuity of Care Document (CCD) and the Continuity of Care Record, and HL7 data models are well defined, yet NIEM does not yet fully accommodate many of the HL7 data models. We understand the IJIS Institute has begun work on this problem with funding from BJA. The IJIS Institute and its subcontractors, the National Center for State Courts and the Georgia Tech Research Institute, are developing an interoperable framework to translate between technology systems used by criminal justice and health practitioners. A Justice Continuity of Care Document (JCCD) is being developed and will include Global justice extensions in the CCD, thereby ensuring interoperability. It will also contain additional justice-specific data elements that can be shared with other criminal justice organizations or with interested health-care organizations. A direct mapping between the CCD (with justice extensions) and Global standards will provide a national approach for immediate interoperable information sharing capability without requiring either standards body to adopt the other’s frameworks. A formalized governance process will be provided to guide, create, and implement this work. A common messaging architecture will be developed that follows the two most prevalent messaging standards used in the health-care space: direct messaging (secure   
  e-mail) and direct Web services (system to system). Profiles for each of these methods will be developed, enabling direct communication between agencies. This project will provide a comprehensive solution to the technical problem of justice/health information sharing, resulting in a consistent and open-standards-based way. The solution will be supported by both the justice and health communities, will build on previous standards work, and will not require either community to significantly alter its current technical standards. Once these standards are in place, the prioritized use cases and services can be implemented to support reentry at significantly less cost and faster and more successful implementations.
* The Health and Human Services Domain Deputy Lead at HHS recently reached out to the IJIS Institute due to the significant body of work between IJIS, BJA, and ONC Office of Science and Technology (OST) and expressed interest in figuring out how they can work with IJIS, NIEM, ONC, SAMHSA, and others to advance this very important body of work.

### Is the timing of specific actions appropriate?

* The timing of some key specific actions (e.g., the timetables for actually implementing “suggestions” or actions being “encouraged”) appears to ensure that health systems will continue to lag the maturity of conformance with interoperability standards found in many systems in the justice domain—the PDMPs being a prime example.
* Table 2, Item 11 (B1) on page 43 seems to finally get to a funding situation which makes sense—but not until 2021–2024. This also addresses the issue of health information being exchanged in a manner that does not limit competition. Even if the exchange of health and other pertinent information is not currently feasible from a technical standpoint, contracts, purchasing agreements, and so forth should contain provisions requiring open information exchange when it is technically feasible.
* Item 5 in Table 2 (B3) also seems to be lagging in its urgency: it is not until 2021–2024 that the call to action suggests “Access to seamless and secure patient data across the continuum of care should be a fundamental component . . . .”

### Are the right actors/stakeholders associated with the critical actions?

On page 22 of the Roadmap, there is a list of stakeholder perspectives to be considered moving forward. If the intention is to promote cross-domain sharing, it would be helpful to consider including criminal justice stakeholders in addition to those currently listed. In some instances, the stakeholders are very well-aligned across the two domains. However, in some cases, there are differences as noted by the underlined items in the column titled “Criminal Justice Domain.” These stakeholders should also be associated with critical actions moving forward.

| **Stakeholder Perspectives (From ONC)** | **Health Domain**  **(From ONC)** | **Criminal Justice Domain** |
| --- | --- | --- |
| **People who receive care or support the care of others** | Individuals, consumers, patients, caregivers, family members serving in a non-professional role and professional organizations that represent these stakeholders’ best interests | Persons under supervision (inmates, probationers, parolees), caregivers, and family members serving in a nonprofessional role and professional/advocacy organizations that represent these stakeholders’ best interests |
| **People and organizations that deliver care and services** | Professional care providers who deliver care across the continuum, including, but not limited to, hospitals; ambulatory providers; pharmacies; laboratories; behavioral health, including mental health and substance abuse services; home- and community-based services; nursing homes; and professional organizations that represent these stakeholders’ best interests | Professional care providers who deliver care across the continuum, including, but not limited to, jails; prisons; hospitals; ambulatory providers; pharmacies; laboratories; behavioral health, including mental health and substance abuse services; home- and community-based services; nursing homes; and professional organizations that represent these stakeholders’ best interests |
| **Organizations that pay for care** | Private payers, employers, and public payers that pay for programs like Medicare, Medicaid, and Tricare | State, county, and municipalities that fund corrections operations; Medicare, Medicaid, and Tricare (for probation and parole populations) |
| **People and organizations that support the public good** | Federal, state, tribal, and local governments | Federal, state, tribal, and local criminal justice officials |
| **People and organizations that generate new knowledge, whether research or quality improvement** | Researchers, population health analytics and quality improvement knowledge curators, and quality measure stewards | Researchers, population health analytics and quality improvement knowledge curators, and quality measure stewards |
| **People and organizations that provide health information technology (IT) capabilities** | Technology developers for EHR and other health IT, including, but not limited to, HIE technology, laboratory information systems, personal health records, pharmacy systems, mobile technology, medical device manufacturers, and other technology that provides health IT capabilities and services | Technology developers for EHR and other health IT, including, but not limited to, HIE technology, laboratory information systems, personal health records, pharmacy systems, mobile technology, medical device manufacturers, and other technology that provides health IT capabilities and services |
| **People and organizations that govern, certify, and/or have oversight** | Governing bodies and accreditation/certification bodies operating at local, regional, or national levels that provide a governance structure, contractual arrangements, rules of engagement, best practices, processes, and/or assess compliance | Governing bodies and accreditation/certification bodies operating at local, regional, or national levels that provide a governance structure, contractual arrangements, rules of engagement, best practices, processes, and/or assess compliance |
| **People and organizations that develop and maintain standards** | SDOs and their communities of participants, such as technology developers, health systems, providers, government, associations, etc. | Standards development organizations (SDOs) and their communities of participants, such as Global; IJIS Institute; SEARCH, the National Consortium of Justice Information and Statistics, etc. |

## Priority Use Cases

**ONC Guidance: Appendix H lists the priority use cases submitted to ONC through public comment, listening sessions, and federal agency discussions. The list is too lengthy and needs further prioritization. *Please submit three priority use cases from this list that should inform priorities for the development of technical standards, policies, and implementation specifications.***

While we understand that these were identified through public comment, many of these use cases appear to be more policy statements or goals rather than actual use cases. In addition, these use cases are not specifically intended to be justice/health use cases, but primarily health use cases. That said, it is important to add use cases for specific exchanges with the justice community in the final version. Health matters of individuals who are involved in the criminal justice setting are still health matters.

A comparison was made with the ONC use cases and the 34 use cases identified in the *Opportunities for Information Sharing to Enhance Health and Public Safety Outcomes* report produced through BJA’s justice/health grant project (IJIS Institute and Urban Institute, 2013). In addition, a comparison was made to see if there was any alignment with the top ten use cases prioritized by the Global Standards Council’s (GSC) Justice-to-Health Services Task Team   
(JH-STT) interdomain exchanges that were recommended to begin aligning the two domain information exchange architectures to ensure a low policy and legal risk pilot/implementation and gain additional buy-in and support from both the justice and health communities. The Global effort identified the top ten high-priority justice-to-health interexchange opportunities that would not only provide the most beneficial use for the justice community but align with the top information exchange priorities identified by the health community (Direct’s top ten exchanges).

We offer below what could be considered the most relevant ONC exchanges, as shown in bold, followed by commentary on their correlation with the 34 BJA exchanges that were specific justice-health exchanges. There are some alignments between some of the ONC exchanges. We recommend that ONC reference in these exchanges the inclusion of correctional health care and other justice entities in the final version of the Roadmap.

**#14: Patients routinely engage in health-care encounters using electronic communications such as eVisits and telemedicine.**

Comment: Telemedicine is used by some, but not all, corrections agencies in order to minimize security risks and associated costs with transporting offenders outside of institutions. It also has the benefit of minimizing false complaints by offenders in order to travel outside the facility. These telemedicine encounters are with the free-world medical community, and this creates an excellent opportunity for continuity of care by including the corrections-based telemedicine with that referenced here.

**#18: Patients have the ability to access their holistic longitudinal health record when and where needed.**

Comment: Connecting with correctional health care records is essential for the 1.7 million offenders who receive medical services by corrections-based practitioners.

**#27: Data for disease surveillance, immunization tracking and other public health reporting are exchanged automatically.**

Comment: This correlates with BJA use case #14 (Global Priority #8): “Health departments receive notification about inmates with reportable communicable diseases, in accordance with public health reporting laws, to prevent disease transmission and care for the affected individual.”

**#33: Providers have the ability to query data from other sources in support of care coordination (patient generated, other providers, etc.) regardless of geography or what network it resides in.**

Comment: This is the exact point of the Global Exchange #12 (Global Priority #3): “Correctional health records are populated with basic personal and demographic information from the facility’s offender management system to reduce the time spent asking for redundant information and to eliminate duplicate data entry.” It is essential that correctional health care have as much accurate information about an offender’s health status, diagnosis, and prescriptions at intake. The offender is not a reliable source of that information.

**#39: Primary care providers share a basic set of patient information with specialists during referrals; specialists “close the information loop” by sending updated basic information back to the primary care provider.**

Comment: This exchange relates to BJA’s exchanges #17 and #21, both of which concern the exchange of health care information between corrections and community providers.

* BJA #17: Community-based providers receive health information from detention or correctional facilities when treating inmates during incarceration, either on- or off-site.
* BJA #21: Community-based providers receive discharge summaries or health records of released inmates to ascertain treatment during incarceration and/or facilitate continuity of care.

**#41: Providers and patients receive electronic laboratory results from laboratory information systems (LISs) inside and outside their organization.**

Comment: This exchange has some similarity with BJA’s use case #26, with the exception that this exchange was specific to drug use test results: “Pretrial, court-based, or post-conviction supervision personnel receive drug testing results from treatment providers (or their laboratories) to support compliance monitoring.”

**#42: Providers can query or access case management information about patients’ care in outside organizations.**

Comment: This exchange supports several of the BJA identified exchanges, including, but not limited to:

* BJA #17: Community-based providers receive health information from detention or correctional facilities when treating inmates during incarceration, either on- or off-site.
* BJA #18: Correctional facilities (e.g., detention, jail or prison) receive a discharge or treatment summary from community-based providers after a person under custody receives care.
* BJA #20: Community-based providers receive health records of soon-to-be released inmates as part of reentry planning to facilitate continuity of care.
* BJA #21: Community-based providers receive discharge summaries or health records of released inmates to ascertain treatment during incarceration and/or facilitate continuity of care.

**#44: Providers have ability to access information in PDMP systems before prescribing narcotics to patients.**

Comment: This exchange aligns somewhat with BJA exchanges #15 and #16.

* BJA #15: Correctional health providers receive information about past prescriptions from community-based pharmacies to continue prisoners’ previous medication regimens.
* BJA #16: Community-based pharmacies receive inmate prescription orders from correctional health personnel.

***Please submit three priority use cases from this list that should inform priorities for the development of technical standards, policies, and implementation specifications.***

In addition to the attempt above to align ONC use cases with similar use cases in the IJIS/Urban report, we reviewed the ONC use cases in the Roadmap and identified three that would be of significant value in justice/health exchanges. These three use cases were selected because of their potential impact on public health and public safety.

1. ONC-RM #27: Data for disease surveillance, immunization tracking, and other public health reporting are exchanged automatically. This exchange correlates with use case #14 (Global Priority #8).
2. ONC-RM #33: Providers have the ability to query data from other sources in support of care coordination (patient-generated, other providers, etc.) regardless of geography or what network it resides in. This aligns well with BJA exchange #12 (Global Priority #3).
3. ONC-RM #44: Providers have access to PDMP info before prescribing narcotics. This is consistent with a common sentiment at the PDMP Third Party Payers meeting at Georgetown in 2012 and the work being done by BJA and the IJIS Institute.

For reference, the table below shows where there is close alignment between the use cases in the Roadmap and the *Opportunities for Information Sharing to Enhance Health and Public Safety Outcomes* report.

| **ONC’s Use Case** | **Justice-Health Use Case** | **Justice-Health Description** |
| --- | --- | --- |
| 2, 27 | 14 | Health departments receive notification about inmates with reportable communicable diseases, in accordance with public health reporting laws, to prevent disease transmission and care for the affected individual. |
| 3, 39 | 17, 18, 20, 21 | #17: Community-based providers receive health information from detention or correctional facilities when treating inmates during incarceration, either on- or off-site.  #18: Correctional facilities (e.g., detention, jail or prison) receive a discharge or treatment summary from community-based providers after a person under custody receives care.  #20: Community-based providers receive health records of soon-to-be-released inmates as part of reentry planning to facilitate continuity of care.  #21: Community-based providers receive discharge summaries or health records of released inmates to ascertain treatment during incarceration and/or facilitate continuity of care. |
| 9 | 9 | Health providers receive arrest and detention dates to: (a) help them account for their clients’ whereabouts, and (b) facilitate continuity of care in the detention facility. |
| 18 | 22 | Returning inmates receive copies of their correctional health records upon release as a means of both information transfer to community-based health providers and personal empowerment. |
| 45 | 2 | Law enforcement receives reports of suspected child abuse, intimate partner violence, or elder abuse from health providers in order to initiate an investigation. |
| 56 | §3.1: Privacy and Consent | *See* Alabama’s ASSURE Project. *See* Rhode Island Department of Corrections-Department of Children, Youth, and Families consent management. |

## Governance

***ONC Roadmap Guidance:***

***The draft interoperability Roadmap includes a call to action for health IT stakeholders to come together to establish a coordinated governance process for nationwide interoperability. ONC would like to recognize and support this process once it is established. How can ONC best recognize and support the industry-led governance effort?***

ONC and its IT stakeholders should rely on the example of organizations such as IJIS to help recognize and support government industry-led IT governance.

The Roadmap is obviously very much health-centric. The criticality of including the viewpoints of other domains—law enforcement and courts, in particular—cannot be stressed enough. The PDMP is a strong example of both the need for cross-domain and interdisciplinary collaboration AND the desirability for an increased sense of urgency in adopting open information sharing and standardization.

## Supportive Business, Cultural, Clinical, and Regulatory

***ONC Roadmap Guidance:***

**How can private health plans and purchasers support providers to send, find, or receive common clinical data across the care continuum through financial incentives? Should they align with federal policies that reinforce adoption of standards and certification?**

Incentives should be provided to align with federal policies that reinforce adoption of standards and certifications. A time frame should be placed on the incentives, and then penalties should be placed on those who are noncompliant or nonadopters.

## Privacy and Security Protections for Health Information

***ONC Roadmap Guidance:***

**What security aspects of RESTful services need to be addressed in a standardized manner?**

* In addition to the Roadmap’s references to the Health Insurance Portability and Accountability Act (HIPAA), consideration of 42 CFR Part 2 protections of mental health and substance abuse health information should also be included. A large portion of those persons under criminal justice supervision are involved in substance abuse and/or mental health treatment services. Protecting confidentiality for offenders in such programs is critical. 42 CFR Part 2 outlines under what limited circumstances information about the client’s treatment may be disclosed with and without the client’s consent. Determining when 42 CFR Part 2 is applicable and how to legally access information about substance abuse treatment is essential when the justice and health communities begin to share information.
* On page 56 of the Roadmap, ONC accurately describes the current policy landscape:

“Contracts, such as Data Use Agreement, Memorandum of Understanding/Memorandum of Agreement (MOU/MOA), Interconnection Security Agreement (ISA), and Business Associate Agreement (BAA). These documents, which are typically bi-lateral between two parties, exist in addition to each party’s own compliance documents such as HIPAA Privacy & Security Policies and Procedures, or other documents required by law. Collectively, the bilateral documents *and* the individual organization’s policy and compliance documents document the regulatory and other requirements for security controls, technical implementation as well as business to business requirements for connecting between health IT systems.” We know from experience that a tangled web of bilateral policy documents will not scale.

* On page 59 of the Roadmap, ONC describes several possible approaches to user authentication. We could also suggest remote identity proofing with “out of wallet” challenge questions (now being used by the large credit-reporting firms) and “soft tokens” on mobile devices. Finally, trustmarks are likely a solution to the web of bilateral agreements.

## Core Technical Standards and Functions

***ONC Roadmap Guidance:***

1. Which data elements in the proposed common clinical data set list need to be further standardized? And in what way?
2. Do you believe the approach proposed for Accurate Individual Data Matching will sufficiently address the industry needs and address current barriers?

* Roadmap, page 86: The following paragraph doesn’t read well and mixes a few key concepts:

*“One of the guiding principles for the Roadmap is the notion of modularity: complex systems are more durable under changing circumstances when they are divided into independent components that can be connected together. SOA is at the core of the modularity required by a learning health system. But in order for interoperability to function on a wide scale, the APIs (which represent the points of contact, or boundaries, between disparate systems) need to be consistent and standardized as much as possible. Such "loose coupling" means that not all systems within organizations need to perform the same functions identically (or at all), only that when they choose to request access to data or services from each other. What’s more, they should do so in predictable ways agreed upon by learning health system participants.”*

We suggest changing this to:

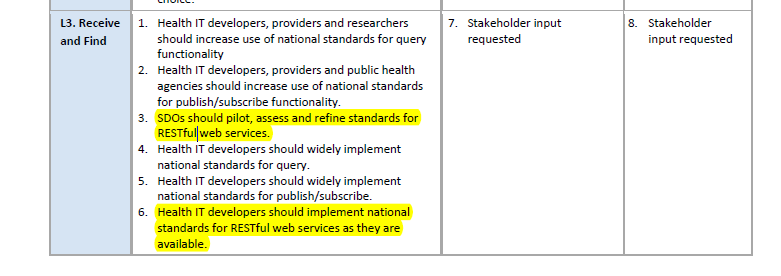
*“One of the guiding principles for the Roadmap is the notion of modularity: complex systems are more durable under changing circumstances when the systems are interfaced through independent components (loose coupling) that can be connected together. SOA is at the core of the modularity required by a learning health system. But in order for interoperability to function on a wide scale, the services (which represent the interfaces between disparate systems) need to be standardized to process information in ways agreed upon by learning health system participants.”*

* The term “Service” with respect to Service Oriented Architecture (SOA) should be defined in the Glossary (e.g., a service is a unit of solution logic to which service-orientation has been applied to a meaningful extent. It is the application of service-orientation design principles that distinguish a unit of logic as a service compared to units of logic that may exist only as objects or components. [<http://serviceorientation.com/soaglossary/service>]. The definition should include mention that both “RESTful services” and “Web services” are distinct technical implementations of a service.
* The term “RESTful services” or “RESTful” is used in the narrative and tables of this document in a manner that, from a reader’s perspective, precludes “Web services” (Simple Object Access Protocol [SOAP]-based Web services). In this respect, the document reads in places that RESTful services have been adopted as the de facto standard over SOAP-based Web services (Web services) in the Roadmap.  We would suggest using the term “service orientation” (<http://serviceorientation.com/soaglossary/service_orientation> ) in all circumstances where either “Web services” or “RESTfull services” could apply as an SOA technical implementation solution. Also, we suggest adding “service orientation” to the Glossary.
  + We offer the following as examples:

Roadmap, page 60:

* “To prepare, the nation can take some simple steps to pave the way today: establish common identity proofing practices at the point of care; require multi-factor authentication for all patient and provider access to health IT systems in a way that aligns with what is required in other industries; leverage existing mobile technologies and smart phones to provide efficient, effective paths for patient or provider identity authentication; and integrate the RESTful approaches to authentication in anticipation of that vision of tomorrow.”

Roadmap, page 90:



## Certification and Testing

***ONC Roadmap Guidance:***

In what ways can semantic interoperability be best tested (e.g., Consolidated-Clinical Document Architecture [C-CDA] content and semantics)?

To the best of our collective knowledge, there is no coordination with health and justice regarding certification and testing for interoperability standards. It is commonly understood that health has many more disparate certification and testing organizations than does justice.

We would like to encourage ONC to work collaboratively with Global via U.S. DOJ/OJP/BJA to determine the most appropriate way of using the C-CDA content, message exchange, and semantic definitions to achieving cross-domain interoperability. DOJ currently uses the Springboard initiative to enable standards-based testing and conformance of the Global interoperable product sets.[[5]](#footnote-5) The Springboard certification process may be used by industry as well as government.

We recommend that Global, U.S. DOJ/OJP/BJA, and Springboard work with ONC S&I certification bodies to coordinate test cases and checks for providing interoperable testing and certification of the critical standards areas of transport—message structure and semantic interoperability between the justice and health COIs.

## Measurement

***ONC Roadmap Guidance:***

1. Does the measurement and evaluation framework cover key areas? What concepts are missing?
2. Which concepts from the framework are the most important to measure? What types of measures should be included in a “core” measure set?
3. Should measurement focus on certain use cases, priority populations, or levels of the ecosystem (e.g., encounter, patient, provider, organization)?
4. What other types of metrics have been successfully used at the local or regional level that might be considered for nationwide use? Would stakeholders be willing to propose novel metrics and provide “test beds” to assess the potential for nationwide use?
5. What measurement gaps should be prioritized and addressed quickly?
6. What other available data sources at the national level could be leveraged to monitor progress?
7. Are the potential mechanisms for addressing gaps adequate? What are other suggestions?
8. How should data holders share information to support reporting on nationwide progress?
9. What are appropriate, even if imperfect, sources of data for measuring impact in the short term? In the long term? Is there adequate data presently to start some measurement of impact?

In 2011, the National Child Welfare Resource Center for Legal and Judicial Issues (a service of HHS’s Children’s Bureau) promulgated court performance measures for the physical health of children and youth under court jurisdiction because of abuse or neglect.[[6]](#footnote-6) In its report, the interdisciplinary working group observed:

*Some estimates say approximately 80 percent of children in foster care have significant health care needs, including chronic health conditions and developmental concerns. Many of these health care needs are a result of maltreatment and a history of inadequate health care. Once these children and youth enter the child welfare system, barriers exist in the coordination and provision of health care services. While courts are responsible for ensuring that children and youth under [their] jurisdiction receive necessary health services to ensure well-being, judges often have difficulty making informed decisions regarding these children due to a lack of current and accurate health care information.[[7]](#footnote-7)*

To help address the poor health outcomes of children and youth in foster care, the working group proposed the following measures:

1. Percentage of children and youth under court jurisdiction [who] received an initial health screening within 24 hours of [out-of-home] placement
2. Percentage of children and youth under court jurisdiction [who] received a comprehensive health assessment within 30 days of placement
3. Percentage of children and youth under court jurisdiction [who] received preventative health examinations at the recommended regular intervals
4. Percentage of children and youth under court jurisdiction [who] have current immunizations within 30 and 60 days of placement
5. Percentage of children and youth under court jurisdiction [who] have a current health passport[[8]](#footnote-8)

To the best of our knowledge, no court in the nation is currently able to capture and report these performance measures for children and youth in foster care. We encourage ONC to consider opportunities to collaborate with child welfare and juvenile court practitioners to focus on the physical health of this vulnerable population.

Appendix 1

Reasons for Justice/Health Interoperability

There are numerous reasons for planning, designing, and developing interoperability standards between the justice and health business domains and for including justice in the health interoperability discussion:

* Stronger public safety and better care for patients
* Improve program efficiencies and reduce costs
* Increased focus on successful reentry
* Individuals diverted from the criminal justice system
* Continuity of care for persons in and out of custody
* Collaborating on and coordinating care for inmates during incarceration
* Effective community supervision of defendants and offenders
* Decision making on program eligibility
* Public health surveillance

Second, the business lines between justice and health cross over, and there are daily high-volume interactions between them. Some of the larger business areas from a justice perspective that cross over to justice include offender reentry, corrections health-care treatment, prescription drug monitoring, and prescription drug monitoring exchange. Third, DOJ has had an advisory committee for many years focused on building and promoting interoperable standards within the justice community. This organization is well-positioned to provide valuable alignment with tangible interoperable health standards to provide cross-domain value and program-specific funding and implementations. Finally, Global has been involved in developing various products and interoperability alignment with health.

**Common Business Drivers Between Justice and Health**

We offer a sampling of common lines of business that necessitate the need for greater information sharing between the justice and health communities of interest:

* Stronger public safety and better care for patients: Under the Affordable Care Act (ACA) and the Medicaid expansion, those involved with the criminal justice system, including single adult males without dependents, will have access to necessary medical care and mental and substance use disorder services.
* Improve program efficiencies and reduce costs: New healthcare delivery models, such as accountable care organizations (ACOs) and financing tools require health information technology. These models assess quality and value, thus providing people in jail an avenue to continue the provision of health care services once released from jail.
* Increased focus on successful reentry: U.S. DOJ continues to fund programs targeted at successful reentry through funding opportunities such as the Second Chance Act. One of the goals is to improve continuity of care for offenders with mental illness and/or substance abuse disorders to help ensure that offenders remain in treatment and adhere to prescription drug regimens where appropriate. Interoperable communication between corrections-based and free-world treatment providers is vital to ensure a seamless transition into the community when an offender is released from incarceration.
* Individuals diverted from the criminal justice system: Information from community-based health-care providers can enhance the ability of corrections officials to appropriately diagnose issues associated with continuity of care and to ensure no gap in service when incarcerated. Likewise, information from the criminal justice community—including risk assessments, correctional health records, correctional treatment history, and court dates—can support health providers in their care of justice-involved clients. Law enforcement officers may also be able to divert a subject they encounter if they are aware of a health or mental health condition.
* Continuity of care for persons in and out of custody: Disruptions in health care and medication regimens are key problems when individuals with chronic health problems cycle in and out of the justice system. Consistent treatment approaches to chronic disease management and timely receipt of medication are necessary to maintain health and avoid dangerous health crises, such as decompensation among people with mental illness or spikes in blood glucose levels among people with diabetes.
* Collaborating on and coordinating care for inmates during incarceration: Correctional facilities may utilize providers outside the facilities to provide needed services. Inmates may be transported for hospitalization or specialty services. Conversely, noncorrectional providers may use telemedicine to treat inmates or periodically deliver services inside the facility. In these cases, there needs to be a free exchange of information between corrections and the health provider. Health assessments by the correctional facility need to be shared with the community provider to supplement the community provider’s work with the inmate. Findings or follow-up from the external medical care, such as a discharge summary, should then be returned to the correctional facility.
* Effective community supervision of defendants and offenders: With the use of alternatives to incarceration comes the need to effectively supervise offenders. Various agencies at different points in the criminal justice system have the responsibility to supervise individuals in the community and have common needs for health information in order to match individuals to appropriate community-based programs and to monitor compliance with supervision conditions, such as drug testing and program attendance.
* Decision making on program eligibility: Health-service programs, such as residential drug or mental health treatment facilities, need to assess potential clients’ risk for violence and other behavioral problems when evaluating whether they can work with a particular individual. Security risk assessments that are routinely conducted by justice agencies are a valuable source of such information.
* Public health surveillance: The justice-involved population has disproportionately high rates of many serious health conditions—so much so that jails are considered to be a catchment area for conditions such as HIV, sexually transmitted diseases (STDs), hepatitis, and tuberculosis. Correctional facilities routinely screen for these conditions. Alternately, inmates requesting health care may present with these conditions. Like other health-care providers, clinicians in correctional settings have a responsibility to notify the local health department of reportable communicable diseases. Electronic transmission may increase the efficiency, timeliness, and completeness of reporting.

**Business Domain Intersections**

We offer the following insight into current justice and health business domain information sharing intersections that further illustrate the need for the two communities to share information:

**Offender Reentry**

Interoperable and secure information sharing provides a foundation for this successful coordination of health care and justice needs for individuals returning to the community or returning to prison or jail and is a cornerstone to providing patients, providers, and community-based programs with comprehensive, timely, and complete health records. Information sharing between these domains provides continuity of care, ongoing treatment, proactive alerting, monitoring, and reporting in the health care of this vulnerable population. A cross-domain learning system can play an integral part in shaping future policies and funding. Empirically based changes have the ability to impact the outcomes of patients and offenders in building more effective health and justice services and ultimately having a positive impact in lowering recidivism rates and improving reentry successes.

Harnessing health and criminal justice data can help to increase this population’s access to health care and will improve health-related public safety outcomes*.* Consider the following key facts:

* In 2013, 2.2 million Americans were incarcerated in state and federal prisons and in local jails, and another 6.9 million were under some form of community supervision.[[9]](#footnote-9) In 2011, an estimated 12 million people were admitted into our nation’s 3,300 jails.[[10]](#footnote-10) In addition, more than 12 million people will cycle in and out of the local jails and prisons every year.
* Prisons and jails are required by law to provide health and mental health care to those in their custody at the community’s standard of care. Compared to the general population, people in jail have high rates of mental illness, substance addiction, and chronic and infectious diseases, including hypertension, diabetes, tuberculosis, HIV/AIDS, and hepatitis B and C. Unlike prison inmates, who are incarcerated for sentences of at least one year, jail detainees are released quite quickly into their home communities; 64 percent of detainees are out within one week.[[11]](#footnote-11)
* Roughly 15 percent of the male population and 31 percent of the female population have serious mental illnesses. It is estimated that between 10 and 30 percent of corrections spending is diverted to inmate health care and behavioral health care. The percentage of individuals jailed each year with serious mental illnesses has been rising since 2010. It is estimated that more than 50 percent of all individuals jailed in the United States have a substance abuse disorder.[[12]](#footnote-12) The data clearly shows that the health-care needs of the jail and prison populations are great. Whether these populations of individuals are in our institutions or in our communities, they place a large demand on health-care and justice resources.

When dealing with these populations, both criminal justice and community-based agencies and private entities that provide services to reentering offenders conduct similar assessments and collect similar information from clients. This similarity across the two groups of agencies demonstrates the clear need for the same set of information. By capturing and securely sharing this information, agencies can (1) capitalize on information obtained by those best equipped to collect it, (2) reduce errors (e.g.*,* when transcribing prescription information), (3) decrease staff time spent on gathering information, and (4) increase the quality and efficiency of client interactions. Successfully sharing health-care records and histories of these populations between health and justice is essential for reducing recidivism and health and justice costs and will enable better patient continuity of care and proper health treatment.[[13]](#footnote-13)

Information from community-based provider agencies can help justice agencies more effectively respond to individuals with health concerns and avert serious health crises that may arise while in custody. Examples include improved law enforcement responses to people in mental health crises, appropriate diversions from the criminal justice system (e.g., drug courts), and prescription continuity for those who are incarcerated. Information sharing from the justice system back to the community-based agencies supports reentry planning and facilitates continuity of care. Consider the following:

* The continuation of a client’s heath-care treatments (treatment retention) contributes to stable or improved health outcomes, whereas disruptions in treatment can lead to decreased functioning or substance use relapse.
* Coordinated care has been shown to result in lower health-care expenditures for populations with multiple health needs.
* Gains in health status may lead to improvements in post-release reintegration and employment, as well as decreased reoffending.[[14]](#footnote-14)

**Prescription Drug Monitoring Programs**

Prescription drug abuse, misuse, and diversion have increasingly become among our most tragic and high-profile public health and criminal justice issues. Because of this, prescription drug monitoring has reached a point of national interest and has gained broad support nationally. Currently, 49 states have PDMPs or are in the process of starting them up. PDMP access within states has come to fruition, but most important, the promise of national PDMP interstate interoperability is within reach. Over the past several years, PDMPs and their allied communities have successfully leveraged Global Standards, including NIEM and the Global Reference Architecture (GRA), to enhance the sharing of prescription drug data by allowing PDMPs to more effectively share data in order to prevent and detect the diversion and abuse of pharmaceutical controlled substances. Although PDMPs are commonly known for their use by and benefit to the health-care community, in their earliest iterations, the programs were designed for public safety purposes and still hold significant promise as tools for justice stakeholders in addressing prescription drug issues.

While it is encouraging to see that ONC recognizes the critical importance of integrating electronic health records and health information exchanges with PDMPs, it has missed an opportunity to include law enforcement as a critical component of the future roadmap for health IT integration, particularly as it concerns the nexus with prescription drug monitoring. The duties and responsibilities carried out by justice and public safety agencies complement the work of other domains, including public health agencies, pharmacy boards and agencies, behavioral health agencies, and health-care professionals. Law enforcement and justice agencies must play a crucial role in reducing the nation’s prescription drug epidemic and protecting the public. Increasingly, there is a direct connection between abuse of prescription opioids and the rapid, catastrophic surge in heroin use—a scourge that is reaching epidemic proportions. Effective collaboration between the justice, PDMPs, and the health community represents the best opportunity to comprehensively address this challenge.

The public safety/justice and public health systems must partner to realize the benefits of PDMP data. When diversion or doctor shopping is suspected, PDMP data can be crucial to a law enforcement investigation; likewise, when convicted substance abusers are placed on community supervision, PDMPs and data can be used to monitor their compliance with conditions of release. PDMP inquiries and reports can assist investigators in gathering evidence, generating leads, and bringing investigations to a successful conclusion. In addition to the investigations of existing crimes, PDMP data and reports can also inform preventative and proactive activities (such as regulation, education, and deterrence), facilitating the strategic targeting of resources in a cost-effective manner. In general, PDMP reports can be used for many law enforcement purposes that also have a clear connection and benefit to the health community, including, but not limited to:

* Doctor-shopper investigations
* Identification of altered prescriptions and fraudulent prescriptions
* Identification of organized prescription forgery activity
* Identification of possible instances of identity theft involving controlled substances
* Investigation of unlawful prescribing or dispensing
* Identification of possible pill mills
* Potential detection of instances of insurance fraud
* Location of lost or stolen prescription pads
* Identification of prescribers’ or dispensers’ involvement with pill mills
* Detection of theft or loss of controlled substances

It is important to acknowledge that policy and governance decisions need to be finalized to ensure protections for personal health information (PHI) and personally identifiable information (PII), but access to PDMP reports with the targeted data that law enforcement officials need can go a long way toward achieving law enforcement goals while balancing the need for the protection of health-care data that may require HIPAA or other health information privacy considerations.

Leveraging Global’s existing information sharing standards has helped define a clear path for PDMP data sharing and provides a replicable model that can be extended to ensure that access to PDMP data is not only available to the broader health-care community but also meets the critical need to provide law enforcement with access to some of the potentially lifesaving data that resides within the nation’s PDMP systems. As ONC continues to evolve and mature plans for Health IT integration in upcoming iterations, it should also factor ensuring interoperability between law enforcement and PDMPs into its upcoming efforts. The same strategies that are undertaken to ensure PDMP integration can also be leveraged to provide law enforcement access to PDMP data as needs require.

**Laboratory Support for Justice and Health**

Many different justice agencies use labs for testing substances, evidence, blood samples, DNA, and other items. In 2011, the DOJ, Bureau of Justice Statistics estimated that local law enforcement agencies made over 1.2 million arrests nationwide for driving under the influence (DUI) of alcohol; that equals 1 out of every 10 arrests for all crimes in the United States. In most jurisdictions, this is the single largest reported offense.

DUI offenses require a significant amount of manual and administrative work by law enforcement. These manual practices can inundate officers and consequently impact law enforcement’s assessment, determination, and charging processes. Today, law enforcement relies heavily on the results of forensic and clinical laboratories to provide blood and urine test results to law enforcement in order for an officer to determine whether or not there is sufficient evidence to file charges against individuals alleged to have committed a crime, including driving under the influence of drugs or alcohol. Currently, blood and urine samples are delivered to the prosecutor’s office for analysis and/or after analysis. After the sample is analyzed, typically the officer must return to the laboratory to pick up the lab results and then return to the office to enter the information into the agency’s records management system (RMS). In most jurisdictions within the United States, the laboratory system and police RMS do not interface with one another.

Other justice agencies that interact regularly with the laboratories include the parole and probation agencies and the courts. There are many different business scenarios that show a clear and distinct business need to interact with clinical and forensic laboratories.

**Justice Access to Juvenile Health Records**

There is a population of children and youth involved with the justice system because of delinquency and/or dependency. For millions of children and youth, juvenile probation officers, child welfare caseworkers, foster parents, and juvenile judges serve *in loco parentis,* including the responsibility to make health-care decisions when their parents cannot. Justice community access to comprehensive health records is essential to improving health outcomes for these juveniles. To illustrate, the Health and Human Services Administration for Children and Families’ Web site stated:

“*Using the stringent Harm Standard definition, more than 1.25 million children (an estimated 1,256,000 children) experienced maltreatment during the NIS-4 study year (2005–2006). . . . Nearly 3 million children (an estimated 2,905,800) experienced Endangerment Standard maltreatment during the NIS-4 2005-2006 study year.”*[[15]](#footnote-15)

In addition, the OJJDP Web site reported that “1.4 million youth were under the jurisdiction of a juvenile court in 2010.”[[16]](#footnote-16)

**Other Justice Health System Interactions**

License-to-carry permits in some states interact with various behavioral and mental health systems. When prosecutors deal with victims of violent crime, they eventually interact with health administrative systems to validate health services and to understand outstanding financial obligations due to bodily injury associated with victims of violent crime.

Many courts throughout the nation can and do order restitution, fees, fines, and costs against the offender for the offender and/or victim(s). Many of these payments are directly associated with medical costs including administrative, procedural, testing, and lab fees. In many cases, the court requires close collaboration and extensive paperwork with the victim(s)’ and offender’s medical providers to ensure that associated medical costs are relevant and applicable. Cross-sector collaboration and information sharing has the ability to provide better quality of information to the court and provide more complete and accurate costs associated with the case, offender, and victim(s).

**Global Information Sharing Standards and Products for Justice**

Not only does the criminal justice community intersect with the health-care community, but, for over ten years, Global has been involved in the interoperable criminal justice information sharing business. Over the years, Global has built a number of products designed to promote and encourage interoperable sharing of information with justice agencies and practitioners. These products include focus areas such as governance, privacy, training and awareness, performance measure/evidence-based, prevention, data exchange specifications, architecture, security, data quality/accuracy, and identity management.

Global is also responsible for the creation of the GRA. This services-based architecture supports two high-level national use cases: (1) the reuse of the exchange within specific jurisdictions; and (2) the interoperable use case of the service across different jurisdictions to provide national interoperable information exchanges. Another example of Global work accomplishments is the GFIPM and horizon initiative, trustmark-based policies. This work has now been used to provide the foundational Trustmark Framework for the NSTIC.

Through a grant under the NSTIC, GTRI. a Global partner, developed a strategy and solution for meeting this challenge. The “Trustmark Framework” is a robust, fully decentralized, standards-based “meta-trust-framework” for componentizing a COI’s trust framework requirements, reconciling those requirements with the trust framework requirements of other COIs, expressing those requirements in a reusable and machine-readable format, and enabling organizations to obtain cryptographically secure, digital artifacts (“trustmarks”) that provide formal attestation of conformance to those requirements. The Trustmark Framework concept is currently in use by numerous agencies within the justice COI under the NSTIC pilot project. In addition, Global has formally endorsed the Trustmark Framework concept as a critical part of its trust and interoperability strategy for the justice COI, and Global has recently assembled a Global Trustmark Task Team to develop an implementation strategy for the Trustmark Framework concept. For more information about the Trustmark Framework concept, see <https://trustmark.gtri.gatech.edu/>.

DOJ proactively supports and promotes the use of these interoperable products across state, local, and tribal governments. DOJ has supported these interoperable products in numerous ways. First, DOJ uses stipulation language on most of its technology or implementation grant solicitations that promote the use of these products and solutions. Second, DOJ provides technical assistance through a number of its partners to provide guidance and direction to state, local, and tribal jurisdictions on the use of interoperable solutions. Third, DOJ works with industry via the IJIS Institute to provide input, testing, training, and other technical support to promote the adoption of these interoperable standards within the vendor products and wares.

**Global Interoperable Products and Solutions for Justice and Health**

There are a number of Global standards and work products that fit into a number of broad categories that interoperate to provide a congruent and cohesive set of practical and useful products to provide for secured interoperable information sharing within justice at the federal, state, local and tribal levels of government, including the following:

1. GRA: The GRA addresses various areas in the implementation of information exchange. Together, these areas form critical components of a comprehensive, replicable, and scalable solution to information sharing that balances varied technologies with dynamic policy considerations. The GRA documents interoperable and reusable service specifications and policy guidance. Specifically, a number of justice/health services are defined within the GRA.
2. Information Sharing Services:
   1. Global Reference Service Specification Package
      1. Client Profile Query Response Service—Treatment Provider Service Specification, Version 1.0 (<http://it.ojp.gov/gist/145/Client-Profile-Query-Response-Service>)
3. Security and Privacy: The GFIPM framework provides the justice community and partner organizations with a standards-based approach for implementing federated identity. GFIPM defines and provides understanding for metadata across a trusted set of systems. Just as a common Extensible Markup Language (XML) data model was the key to data interoperability, a standard set of XML elements and attributes about a federation user’s identities, privileges, and authentication can be universally communicated. The GFIPM metadata and trust framework support the following three major interoperability areas of security in the federation: identification/authorization, privilege management, and audit.
4. Privacy Policies, Legal and Information Quality: Global Privacy and Information Quality is a cross-functional, multidisciplinary set of products within the GRA. This focus area addresses privacy, legal, and information quality within local, state, tribal, and federal justice domains. These products cover such topics as intelligence, biometrics, information quality, privacy, civil rights, and civil liberties in ensuring that PII is appropriately collected, maintained, used, and disseminated within evolving integrated justice information systems.
5. Justice—Health PDMP and PMIX: Under the direction of DOJ, the IJIS Institute has worked in close collaboration with the health, PDMP, and justice communities to develop a set of interoperable standards based on the Global Standards Package (GSP) that are designed to facilitate information sharing for prescription drug monitoring. A PMIX Information Exchange Package Documentation (IEPD) serves as the foundation of these standards and defines the common vocabulary and set of data elements necessary for sharing. The PMIX Service Specification Package (SSP) builds on the IEPD by providing support to establish and operate automated PMIX capabilities between PDMPS leveraging the GRA. Finally, the PMIX Architecture represents the complete set of information necessary to facilitate the exchange of prescription history reports from PDMP-authorized organizations. In addition, the PMIX Architecture defines the high-level addressing and security requirements for information exchange, relying on GRA standards, including NIEM-compliant content structure. The architecture also ensures end-to-end protection and encryption of PHI and PII. While much of the initial progress has benefitted health agencies and PDMPs, BJA, Global partners, and subject-matter experts have continued work to expand this PDMP sharing to more comprehensively include law enforcement. Global has recently developed a new resource designed to further illustrate that need for including law enforcement access to PDMP data. The document, [*Call to Action and Issue Brief:  Justice System Use of Prescription Drug Monitoring Programs*—*Addressing the Nation’s Prescription Drug and Opioid Abuse Epidemic*](http://it.ojp.gov/gist/174/Call-to-Action-and-Issue-Brief--Justice-System-Use-of-Prescription-Drug-Monitoring-Programs--Addressing-the-Nations-Prescription-Drug-and-Opioid-Abuse-Epidemic)*,*[[17]](#footnote-17)offers practitioners and policymakers valuable, practical, hands-on guidance designed to help them understand the current challenges and plot next steps to help them address this critical public safety and public health challenge. NIEM has a number of mature interoperable data sharing products in use across the nation. Some specific examples include the creation of the Global Justice Data Dictionary (JXDD), which later became the Global Justice Data XML Model (GJDXM) and then NIEM. NIEM is a cross-data platform data model that is being used at federal, state, local, and tribal levels for interoperable data sharing. For some time, health has been at the table with NIEM.
6. NIEM: In October 2010, HHS became the third federal agency to serve on the NIEM Executive Steering Council. With NIEM 3.1, scheduled for release in April 2015, the following domains will participate in NIEM’s data model, being used across the nation by federal, state, local, and tribal information sharing partners:
   1. Biometrics
   2. Chemical, Biological, Radiological, Nuclear (CBRN)
   3. Children, Youth, and Family Services (CYFS)
   4. Emergency Management
   5. Human Services
   6. Immigration
   7. Infrastructure Protection
   8. Intelligence
   9. International Trade
   10. Justice
   11. Maritime
   12. Military Operations (MilOps)
   13. Screening

NIEM has steadily been maturing and gaining traction over the past 12 years, tracing its roots to the GJXDM, first released in 2003. It is anticipated that NIEM will welcome two additional domains in the near future: Cybersecurity and, equally important, Health.

1. Justice/Health Project Tracking
   1. The IJIS Institute has been working on a number of BJA-funded projects involving justice to health since 2013. The *Criminal Justice and Health Collaboration Project,* in partnership with the Urban Institute, was a true collaboration between criminal justice, health care, and IT stakeholders. The project report,[[18]](#footnote-18) *Opportunities for Information Sharing to Enhance Health and Public Safety Outcomes*, detailed 34 beneficial opportunities for interdomain information exchange that were identified by a working group of experts from both health and justice communities. This seminal report was used by the GSC Justice-to-Health Services Task Team (JH-STT) to prioritize the top ten interdomain exchanges. Global has recommended that work be done to align the two domain information exchange architectures to ensure a low policy and legal risk pilot/implementation and gain additional buy-in and support from both the justice and health communities in the final report, *Aligning Justice to Health Priority Exchanges.*[[19]](#footnote-19) The IJIS Institute is also leading a BJA-funded effort to develop a solution to the technical problem of justice/health information sharing using open-standards-based solutions that will be supported by the key governance organizations in both the justice and health communities. Two pilot justice/health exchanges are planned for early 2016 using the solution currently under development.
   2. COCHS, with funding from SAMHSA, is developing case studies on data sharing between the criminal justice and health care sectors to promote continuity of care. These case studies provide insights from a range of jurisdictions and organizations and inform data sharing efforts in other communities.[[20]](#footnote-20)
   3. The Vera Institute’s Substance Use and Mental Health Program launched the Justice and Health Connect (JH Connect) initiative in 2011 with support from BJA. JH Connect aims to increase agencies’ capacities to share data across behavioral health and justice systems in confidential, legal, and ethical ways to better serve people with behavioral health needs who come into contact with justice systems.[[21]](#footnote-21)
2. Several examples of BJA-funded projects that are working on or implementing solutions to share information between justice and health are provided below:
   1. **The Alabama Secure Sharing Utility for Recidivism Elimination (ASSURE) project.** According to recent statistics, 56 percent of state prison inmates and 64 percent of local jail inmates have a history of mental illness and/or behavioral health problems. More than 74 percent of those offenders have a history of substance abuse or dependency.  ASSURE (Grant No. 2013-DB-BX-K059) was developed to improve access to and continuity of care for those offenders with substance abuse and mental health issues who are also under probation supervision in the community and for those released from the Alabama Department of Corrections (ADOC) into the community. Specifically, ASSURE targets the lack of information sharing relative to offenders’ substance abuse and mental health diagnosis and treatment histories among the ADOC, the Alabama Board of Pardons and Paroles (ABPP), the Alabama Department of Mental Health (ADMH), and community-based substance abuse/mental health-treatment providers. The exchange uses GRA and NIEM. GFIPM user, entity, and resource attributes to support justice-to-health exchanges are also used to support access control and privilege management. Technology assistance was provided by SEARCH and the GTRI. The University of Alabama Center for Advanced Public Safety (CAPS) is the primary development group for the project. Trustmarks will also be implemented (Grant No. 2014-DB-BX-K003) to allow even greater participation among providers involved in delivering services to those under supervision and/or receiving behavioral health services.
   2. **Maryland—Reentry case plan and treatment record information sharing** between the Maryland Department of Public Safety and Correctional Services (DPSCS) and the Maryland Alcohol and Drug Abuse Administration (ADAA) using the GRA. This exchange was implemented to achieve a two-way reentry information sharing exchange capability between the DPSCS and the ADAA “SMART” system connecting to over 360 community-based substance abuse treatment providers. The electronic exchange of offender case plan information shared from the DPSCS offender case management system (OCMS) and the Assessment and Treatment Record information shared from the ADAA through the SMART system is intended to provide opportunities for a more successful reentry outcome for an individual upon release and reentry back into the community. The implementation tasks were structured around four areas of focus: network and server infrastructure, 42 CFR Part 2-compliant consent management, case plan sharing (DPSCS), and treatment record sharing (ADAA). This was a National Justice Information Sharing (JIS) Initiative–Reentry funded by a BJA grant to the Association of State Correctional Administrators (Grant No. 2009-DG-BX-K014). ASCA subcontracted the implementation to the IJIS Institute. On behalf of Maryland, the IJIS Institute also contracted with Open Networks, an IJIS member company, to assist Maryland with the implementation of the service specification originally developed by SEARCH.
   3. **Pima County, Arizona—Justice–Health Integration Project—Best of NIEM Award 2014.**

Like many other jurisdictions across the country, Pima County, Arizona, faces challenges managing offender care and successful reentry into the community as service demands increase and budgets decrease. The Pima County Justice-Health Integration Initiative used the GRA and NIEM to leverage participating stakeholder information systems, establishing a standard vocabulary and messaging infrastructure (Web services) so the agencies could share information and translate the content into the language of each system. NIEM’s extensibility enabled the initiative to define medical and behavior health terminology used by stakeholder agencies. The exchange promotes discharge planning for offenders, improving the efficacy of community care, and subsequently reducing recidivism and its associated expense to the community. This effort went live in August 2014 and will significantly reduce the number of labor-intensive, manual phone calls between medical staff (Correct Care Solutions) at the Pima County Adult Detention Center (PCADC) and the Community Partnership of Southern Arizona (CPSA). The new process will automate the current manual system to determine an offender’s behavioral health treatment history with the regional behavioral health authority (RHBA). Completely automating the system will have a potential cost savings of $300,000 and 20,000 hours of personnel time per year. This system promotes the seamless provision of health services within the criminal justice system, and the success of this project reflects a strong interagency partnership among government, nonprofit, and private sector technology agencies.

**Other Organizations With Strong Justice/Health Experiences**

We also highlight some of the good work being done by COCHS, SAMHSA, the Vera   
Institute of Justice, Health Connect (<http://www.jhconnect.org/>), and the justice center (<http://csgjusticecenter.org/mental-health/publications/justice-and-health-connect-website/>).

Accountability courts’ interdisciplinary teams provide intense services and monitoring; i.e., they depend on timely access to their clients’ health records to assess compliance and adjust treatment.  We offer the following as examples.

From the National Drug Court Institute’s Resource Center:

“How Many Problem-Solving Courts Are There?”  <http://www.ndcrc.org/content/how-many-problem-solving-courts-are-there>

* 414 mental health courts

“How Many Drug Courts Are There?” <http://www.ndcrc.org/content/how-many-drug-courts-are-there>

* 1,538 adult drug courts
* 433 juvenile drug courts
* 303 family treatment courts
* 242 driving-while-impaired courts
* 220 veterans’ treatment courts
* 36 co-occurring disorder courts

Appendix 2

Acronym List

|  |  |
| --- | --- |
| **Acronym** | **Description** |
| ACL | Access Control List |
| ADAA | Alcohol and Drug Abuse Administration |
| ABAC | Attribute Based Access Control |
| ADS | Attribute Delegation Service |
| BAE | Back-End Attribute Exchange |
| CCD | Continuity of Care Document |
| COI | Community of Interest |
| CP | Certificate Policy |
| DHS S&T | United States Department of Homeland Security Science and Technology |
| DOJ | United States Department of Justice |
| DPSCS | Maryland Department of Public Safety and Correction Services |
| EHR | Electronic Health Records |
| FAC | Federal Advisory Committee |
| FBI | Federal Bureau of Investigation |
| FICAM | Federal Identity and Credentialing and Access Management |
| FIPS | Federal Information Processing Standard |
| FIPPS | Fair Information Practice and Principals |
| GFIPM | Global Federated Identity and Privilege Management |
| GJXDM | Global Justice XML Data Model |
| GIST | Global Information Sharing Toolkit |
| Global | Global Justice Information Sharing Initiative |
| GSP | Global Standards Package |
| GT | Georgia Technology |
| GTRI | Georgia Technology Research Institute |
| GSA | General Services Administration |
| HIE | Health Information Exchange |
| HL7 | Health Level 7 |
| IJIS | Institute for Justice Information Sharing |
| IDESG | Identity Ecosystem Steering Group |
| IDP | Identity Provider |
| IDPO | Identity Provider Organization |
| JXDD | Justice XML Data Dictionary |
| LOA | Level of Assurance |
| NASCIO | National Association of State Chief Information Officers |
| NIST | National Institute of Standards |
| NIEF | National Identity Exchange Federation |
| NIEM | National Information Exchange Model |
| NSTIC | National Strategy for Trusted Identities in Cyberspace |
| OAuTH | Open Authorization Standard |
| ONC | Office of National Coordinator |
| ONC-RM | Office of National Coordinator-Roadmap |
| OpenID | Open Identity |
| PIV-I | Personal Identification Verification–Interoperable |
| PHI | Personal Health Information |
| PII | Personally Identifiable Information |
| PBAC | Policy Based Access Control |
| PDMP | Prescription Drug Monitoring Program |
| PMIX | Prescription Monitoring Information Exchange |
| PMR | Personal Medical Records |
| RBAC | Roles Based Access Control |
| REST | Representational State Transfer |
| SAML | Security Assertion Markup Language |
| SDO | Standards Development Organization |
| SICAM | State Identity Credentialing and Access Management |
| SOA | Service Oriented Architecture |
| SP | Service Provider |
| SPO | Service Provider Organization |
| SSO | Single Sign On |
| TD | Trustmark Definition |
| TR | Trustmark Recipient |
| TRP | Trustmark Relying Party |
| TP | Trustmark Provider |
| VPN | Virtual Private Network |

Appendix 3

Resources

**Bureau of Justice Assistance—**Provides leadership and services in grant administration and criminal justice policy development to support local, state, and tribal justice strategies to achieve safer communities.

<https://www.bja.gov/>

**Controlled Substance Agency Resource Directory—**Contact information on the governmental agencies that regulate and oversee the manufacture, distribution, prescription, dispensing, and possession of controlled substances.

<http://www.pdmpassist.org/pdf/controlledsubstanceagencydirectory.pdf>

**Drug Enforcement Administration Diversion Control—**Prevents, detects, and investigates the diversion of controlled pharmaceuticals and listed chemicals from legitimate sources while ensuring an adequate and uninterrupted supply for legitimate medical, commercial, and scientific needs.

<http://www.deadiversion.usdoj.gov/>

**Health Information Designs (HID)—**HID’s RxSentry® (one of the hubs mentioned in this *Brief*) is a Web-based program that facilitates the collection, analysis, and reporting of information on the prescribing, dispensing, and use of prescription drugs.

<http://www.hidinc.com/solutions/prescription-drug-monitoring-programs.html>

**Global Justice Information Sharing Initiative (Global) Information Sharing Toolkit (GIST)—**Whether users are tackling a justice information sharing business problem, targeting a general area of interest, or looking for a specific Global publication, GIST has the solution. This tool is designed to give the user options for locating the best solutions. From developing a privacy policy to ensuring information quality, from GFIPM information to how to implement GRA standards, Global has your solution!

<https://it.ojp.gov/gist>

**Global Call to Action and Issue Brief on Justice System Use of Prescription Drug Monitoring Programs:**  [*Call to Action and Issue Brief:  Justice System Use of Prescription Drug Monitoring Programs—Addressing the Nation’s Prescription Drug and Opioid Abuse Epidemic*](http://global.cmail2.com/t/t-l-ttdrhuy-tiqitkky-i/)

**Global’s Privacy Policy Template:**  it.ojp.gov/documents/privacy\_guide\_final.pdf

**Global Standards Package:** The GSP constitutes a full suite of information sharing technology standards and guidelines that address messaging architecture, security, privacy requirements, and data standardization. It is a collection of Global Justice Information Sharing Initiative (Global)- recommended normative standards that have been developed and assembled into a unified   
package of composable, interoperable, and secured solutions enabling effective information exchange. GSP solutions are generally focused on providing a cost-effective, agile, technical solution that promotes national interoperability. The GSP also includes associated guidelines and operating documents to assist implementers.  Additional information regarding the GSP can be discovered via <https://it.ojp.gov/gsp>.  To review the entire suite of GSP components, please visit <http://it.ojp.gov/gist/Guide/47/Show-me-all-information-sharing-components-contained-in-the-entire-Global-Standards-Package->.

**Global’s Technical Privacy Training** site: [www.TechnicalPrivacyTraining.org](http://www.TechnicalPrivacyTraining.org)—Presents Global’s guidance about policy development, eXtensible Access Control Markup Language (XACML) technical architecture for policy enforcement, XACML rule development and maintenance.

**Other Privacy and Security Resources:**

**HHS’s Administration for Children and Families:** Confidentiality Toolkit (August 2014, <https://www.acf.hhs.gov/sites/default/files/assets/acf_confidentiality_toolkit_final_08_12_2014.pdf>)

**IJIS Institute—**Helps guide the PMIX with a steering committee composed of people who have implemented state PMPs, members and alliance partners of the IJIS Institute, and representatives of federal agencies. The goal of PMIX is to establish a national interoperability architecture, specifications, and a reusable infrastructure for the secure, reliable, and sustainable interstate exchange of state prescription data. PMIX leverages service-oriented architecture principles through the GRA (see http://www.it.ojp.gov/gra) to minimize custom development and maximize future agility. The RxCheck hub (one of the hubs mentioned in this *Brief*) is the baseline implementation of the PMIX architecture. BJA supported development of an operational data sharing hub to implement the PMIX specifications and deliver a functional interstate data sharing capability.

<http://www.ijis.org/>

<http://www.ijis.org/_programs/pdmp.html>

**National Alliance for Model State Drug Laws—**Acts as a resource for governors, state legislators, attorneys general, local prosecutors, drug and alcohol professionals, health professionals, community leaders, the recovery community, and others striving for comprehensive and effective state drug and alcohol laws, policies, regulations, and programs.

<http://www.namsdl.org/about.cfm>

**National Association of Boards of Pharmacy (NABP)—**Provides state PDMPs with connectivity through the NABP PMP InterConnect® (one of the hubs mentioned in this *Brief*) as well as community resources and opportunities to participate in its AWARxE programs, which target the prevention of prescription drug abuse.

<http://www.nabp.net/>

**National Association of State Controlled Substances Authorities—**Provides information, a newsletter, and an annual conference through which state and federal agencies, as well as others, can work to increase the effectiveness and efficiency of state and national efforts to prevent and control drug diversion and abuse.

<http://www.nascsa.org/>

**PDMP Training and Technical Assistance Center—**Provides support, resources, and strategies to PDMPs, federal partners, and many other stakeholders to further the efforts and positive outcomes of PDMPs.

<http://www.pdmpassist.org/>

**PDMP Center of Excellence—**Provides academically sound and practice-relevant information, evaluation, and expertise to PDMPs and their stakeholders.

<http://www.pdmpexcellence.org/>

**PDMP Contact List—**Names, addresses, telephone numbers and e-mail addresses for state, territory, and district PDMPs.

<http://www.pdmpassist.org/node/400>

**PDMP Acronyms and Terms—**Common acronyms and terms related to prescription drug abuse and diversion.

<http://www.pdmpassist.org/content/pdmp-acronyms-terms>

**PDMP Program Administrators Guide for Training Law Enforcement—**Guide for PDMPs developing curriculum to train law enforcement personnel.

<http://www.pdmpassist.org/pdf/LE_USE_OF_PDMP_CURRICULUM_Final.pdf>

**Prescription Drug Monitoring Program Interoperability Standards—**Report developed pursuant to the Food and Drug Administration Safety and Innovation Act of 2012 (FDASIA) on enhancing PDMP interoperability with other technologies and databases used for detecting and reducing fraud, diversion, and abuse of prescription drugs.

<http://www.healthit.gov/sites/default/files/fdasia1141report_final.pdf>

**Prescription Drug Monitoring Programs: An Assessment of the Evidence for Best Practices—**Report detailing what is known about PDMP best practices, description and assessment of the evidence supporting the practices, and extent of implementation of the practices.

<http://www.pdmpexcellence.org/sites/all/pdfs/Brandeis_PDMP_Report_final.pdf>

**Recommended Standards for PDMP Reports to Licensing/Regulatory Boards and Law Enforcemen**t**—**Guide containing suggestions for PDMPs to consider when creating and disseminating PDMP information to law enforcement agencies and boards.

<http://www.pdmpassist.org/pdf/Standardized_Reports_LE_Boards_TAG_FINAL_20140626.pdf>

Appendix 4

Acknowledgements

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*Mr. James Dyche*

*Team Chair*

*Commonwealth of Pennsylvania / Justice Network (JNET)*

*Mr. James Douglas*

*Justice Information Sharing Practitioner*

*Mr. Richard Fiore*

*Alabama ASSURE Project Sponsor*

*Mr. Donald Gabbin*

*IJIS Institute*

*Ms. Becki Goggins*

*Justice Information Sharing Practitioner*

*Ms. Di Graski*

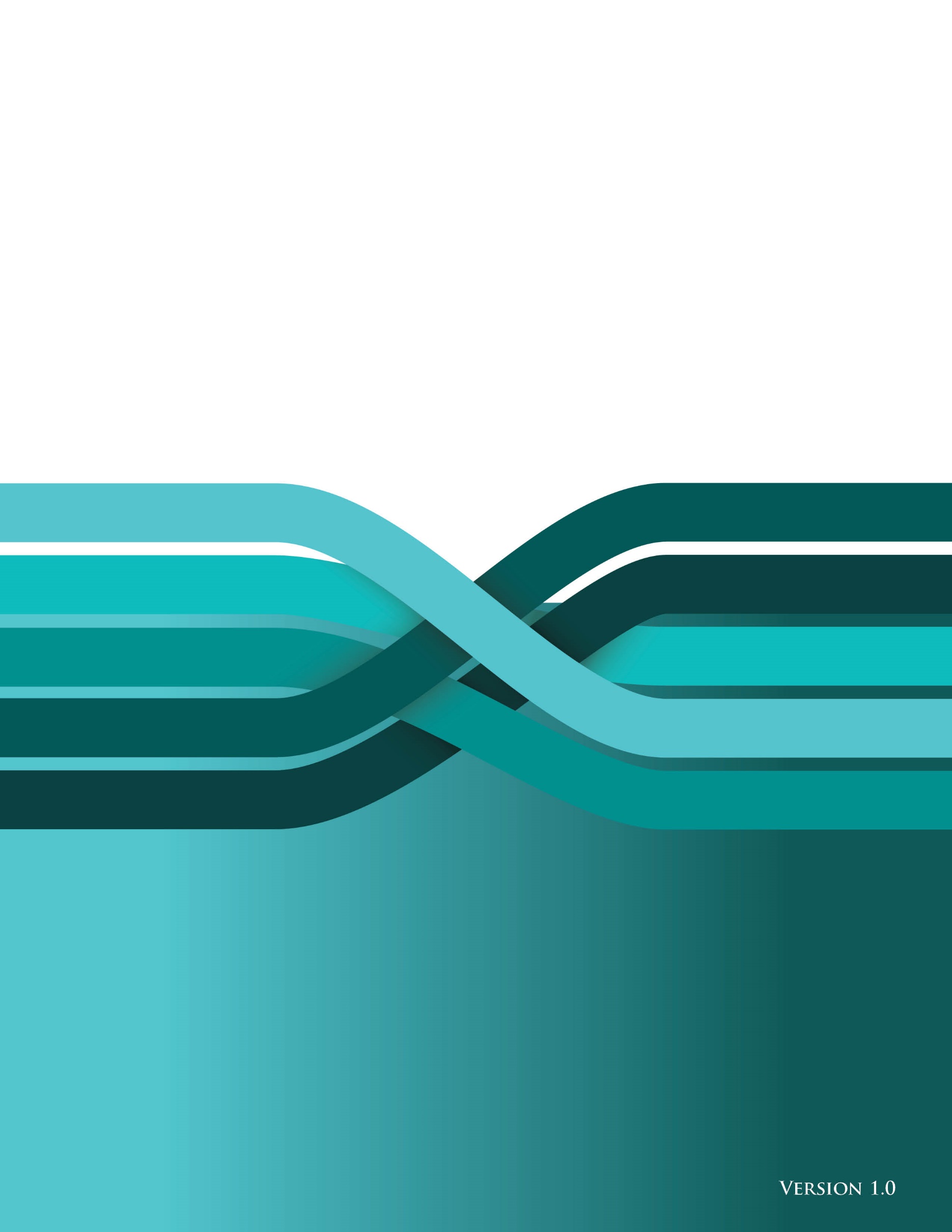
*Justice Information Sharing Practitioner*

*Mr. Robert May*

*IJIS Institute*

*Mr. John Wandelt*

*Justice Information Sharing Practitioner*



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