Middlesex County
Data-Driven Justice Initiative
Final Report

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Executive Summary

The Middlesex County Data Driven Justice initiative (MSO DDJ) aims to build a strong network of cross-jurisdictional and cross-system stakeholder groups to identify and better serve frequent utilizers—defined as individuals with mental health issues, substance use disorder, or who are experiencing homelessness who frequently interface with law enforcement (whether police or incarceration), first responders, or healthcare providers (in the emergency department of a hospital).

With funding from Arnold Ventures, in January 2018, DDJ was launched to support project partners in integrating data from law enforcement, healthcare, behavioral health and social service providers to identify frequent utilizers and better understand their key characteristics and service needs. The goal is to demonstrate impact through actionable insights and the support of system coordination and service delivery.

The stakeholder group, which includes Middlesex County Sheriff's Office (MSO), over 50 Police Departments, State Clinicians, Mass Hospital Association, Cambridge Health Alliance, State Law Enforcement Data agencies, and state policy makers met on an ongoing basis to discuss community goals, supporting initiatives, trends in data, and other strategies for addressing this population.

The team started with four case studies of individuals who represented significant cross-system utilization, and a broader 10 agency pilot analysis. Key insights from that pilot analysis included:

- 2% of the population analyzed represented 13-15% of police contacts
- Frequent utilizers that cross jurisdictional borders may have varying levels of police interaction which can impact the types of services and attention they receive
- Jail Diversion Program Clinicians have a demonstrated impact on police contacts for frequent utilizers, and with more actionable insights from frequent utilizer analyses, can use this information to better inform their casework.

This was just the start of unlocking the power of data to both understand and better address the needs of frequent utilizer. Ongoing data sharing across has led to additional insights, informing the planning of county wide behavioral health and justice strategies and the development of new tools and programs to support first responders, and policy. For example,

- Working with partner agencies to extract historical data to perform preliminary analysis using frequency of contacts to rank individuals with police or corrections interactions.
- Partnering with the Cambridge Health Alliance and CPD for analysis of frequent utilizers that cut across police, sheriff, and hospital data.
- Performing analysis to support planning efforts for the Middlesex County Restoration Center. Commission.
- Partnering with Jail Diversion Program clinicians and police departments to pilot a behavioral health reporting system.

Supported by DDJ, there is significant work happening within Middlesex County to address the gaps and needs in services and treatment for frequent utilizers. Efforts include behavioral health/law enforcement partnerships, the expansion of co-response models, sequential intercept mapping exercises across the county, task forces focused on substance use disorder and opioid use, and

legislative efforts aimed at tackling the overlap between behavioral health and law enforcement. One example of MSO DDJ's support for these broader efforts is the ongoing analysis they are doing for the Restoration Center Commission. The 13-member Commission—chaired by Middlesex Sheriff Peter J. Koutoujian and Dr. Danna Mauch, the President and CEO of the Massachusetts Association for Mental Health—is tasked with developing a restoration center in Middlesex County to support ongoing law enforcement diversionary efforts and expand community behavioral health treatment capacity. MSO DDJ is supporting planning efforts by leveraging partnerships and data to analyze service gaps, service utilization, and overlap in law enforcement and health care calls for service to support decisions around the center's capacity, what services to provide, and geographically where it should be located.

Most notably Middlesex County DDJ's efforts are driving both change in policy and programming across the community. Some examples of the successes include:

Behavioral Health and Law Enforcement Pilot - MSO DDJ is partnering with Tewksbury Police Department and its Jail Diversion Program (JDP) Clinician, Matthew Page-Shelton, to build out a proof-of-concept project that would allow for regional collaboration between police and mental health clinicians. Currently, due to information sharing silos, clinicians that work with PDs rely solely on their personal relationships, or any access granted to them through their parent healthcare organizations, to access information outside PD databases or their own information gathering. This project would allow clinicians, and officers, to create records for incidents involving individuals in crisis, which will support ongoing outreach, case management and referrals to services. The team is currently working with OpenLattice to ensure that any data-entry done through this program is easily exported to DMH, in the format required, so that DMH-funded clinicians are not required to perform multiple data entry exercises for a single interaction.

Cambridge Police and Hospital Data Analysis - MSO DDJ partnered with Cambridge Police Department (CPD) and Cambridge Health Alliance (CHA), a community hospital system within the county, to examine the overlap of justice-involved frequent utilizers and healthcare frequent utilizers. Based on this analysis, individuals with corrections involvement are much more likely to seek out certain types of medical care from CHA. Specifically, these individuals are more likely to use the emergency room and inpatient behavioral health services. These individuals are also more likely to have diagnoses of substance use disorder, alcohol use disorder and/or opioid use disorder. This analysis is preliminary and meant to serve as a first glance at the two datasets.

State Wide Information Sharing System Initiative (SWISS) - MSO DDJ sought to find or build efficiencies in order to extract department data more efficiently. The range of vendors, the varying level of access to the data, and the diversity of formatting, coding and integrity created significant obstacles to extracting and analyzing the data. Currently, hundreds of Massachusetts police departments are submitting incident level data to a state managed database via SWISS. This system is used primarily as a searchable database – populated by participating departments. SWISS provided a way to aggregate police data efficiently; well over half of Middlesex County departments were already submitting data to SWISS, and remaining departments are amenable to initiating data submission. SWISS allows MSO DDJ to set up a

single extraction, run a single integration, and have the ability to link over 30 police departments' data, an efficiency that does not exist on the county level at this time.

Introduction

Middlesex County was selected as a national pilot site for an effort to break the cycle of incarceration for those suffering from mental health and substance use disorders. Arnold Ventures committed funding to support this effort focused on linking local police, jail, hospital, and service provider data to identify individuals that overlap within these multiple systems. These individuals that interact repeatedly across these entities are known as "frequent utilizers" and their repeated interactions impose enormous, recurring costs. The Middlesex Sheriff's Office served as the lead agency among a coalition of law enforcement and healthcare stakeholders, including over 50 municipal law enforcement agencies.

The Middlesex County Data-Driven Justice initiative (MSO DDJ) has focused on building a strong network of multi-jurisdictional and cross-system stakeholder groups to share data meant to identify frequent utilizers. These frequent utilizers can be described as individuals with mental health issues, substance use disorder, many of whom are experiencing homelessness and frequently interface with law enforcement (whether police or incarceration), first responders, or healthcare providers (in the emergency department of a hospital). MSO DDJ aims to integrate data from law enforcement, healthcare, behavioral health and social service providers to identify frequent utilizers and better understand their key characteristics and service needs. The goal is to provide actionable insights back to stakeholders to support system coordination and service delivery to help divert these individuals out of the CJ system. Throughout the stakeholder engagement process and data analysis, MSO DDJ identified opportunities to equip law enforcement and first responders with the information and tools they need to safely respond and divert individuals to appropriate treatment and services in the community when they cycle into crisis.

Middlesex County is made up of 54 cities and towns, representing a geographically diverse area that includes urban, suburban and rural municipalities. It is quite large, both by area and population, covering almost 850 square miles and housing approximately 1.6 million people. Middlesex is home to two major cities of over 100,000 people- Cambridge and Lowell; however, neither serve as the sole urban center for the county. The county contains several towns with a population under 10,000, representing several rural communities. And there are several suburban communities that act as major suburbs to both Boston and Cambridge. With such a range of municipality size, structure and geography, Middlesex County represents a very diverse area. Whether related to geography, population density, income, ethnicity, or political, Middlesex County is a relevant example for any community interested in implementing DDJ. If DDJ can be implemented in Middlesex County, it can be implemented anywhere.

When thinking about Middlesex County as an example of how to approach implementation of DDJ, it is important to consider what also makes it unique. Middlesex County, unlike many counties around the country, does not have county-level government. The only county-level officials remaining include the Sheriff and the District Attorney. Beyond that, government agencies exist either at the municipal level or the state level. What this means in practice is that some efficiencies that may exist elsewhere, like county-level dispatch call centers, health agencies, and data centers are not available in Middlesex County. This poses a unique challenge to find ways to bring disparate services and data sources together. For example, to integrate Middlesex County police data involves integrating 54 separate and siloed police department data systems together. Additionally, disparate services, such as behavioral health and homelessness services, are not coordinated at the county level.

Also unique to Middlesex County is the function and purview of the Sheriff's Office. In many counties, the Sheriff has a patrol function; in Middlesex County, the Sheriff's role is primarily care, custody, and control of individuals awaiting trial and inmates carrying sentences of up to 2.5 years. In Middlesex County, primary patrol functions remain with the local municipal law enforcement agencies. Without county level infrastructure, the Sheriff sometimes acts in that capacity, aggregating and allocating resources across the county. The Sheriff of Middlesex County himself brings a unique perspective to this initiative as a veteran public safety and public health official. Prior to his time in office as a Sheriff, he served as a leading voice on healthcare issues at the Massachusetts State House, and it is with that dual lens that his agency led on DDJ.

At the Middlesex Jail & House of Correction a disproportionate number of inmates and detainees have mental illness and/or substance use disorders. Approximately 50 percent report a history of mental illness, over 40 percent of newly admitted detainees and inmates require medical detox and 76 percent of those being treated for mental illness report a co-occurring substance use disorder[1]. Inmates and detainees with co-occurring conditions are also more likely to recidivate. The MSO provides treatment and care to incarcerated individuals with behavioral health conditions; however, individuals shouldn't have to go to jail to receive that level of care and services. Mental healthcare is best delivered in a medical setting, not a jail setting and yet, these numbers highlight the fact the MSO has become a *de facto* mental healthcare provider.

These issues are not only prevalent in corrections, they are just as present in other areas of law enforcement, especially police. Middlesex County police departments were early partners in the MSO DDJ initiative, which can be directly attributed to the fact that they are finding

[1] Middlesex Sheriff's Office data

themselves on the frontlines of the gaps in behavioral health service in the community. These departments were already aligned with the aims of MSO DDJ because of their officers' experiences in the field with frequent utilizers. MSO DDJ found that police departments are already taking innovative steps to address individuals with complex behavioral health needs. Even without extensive data sharing or county-wide infrastructure to provide services, individual police departments are already taking steps to avoid arrests and divert individuals with behavioral health issues or substance use disorder out of the criminal justice system. However, departments acknowledge that the tools available to them to do this important diversion work are limited.

The challenge that many of these departments, and their clinical staff, face is that while Middlesex County is not short on services and programs, these programs are not well coordinated with each other or within the larger behavioral health system. These services and programs serve different communities, provide different services and have different entry criteria. Despite there being many, and varied, programs, it is challenging to find the right place for an individual in crisis, and even more challenging to find an open bed. An individual utilizing these services can end up with several case workers who are meant to coordinate their care, and still fall through the cracks. Additionally, their case workers face many obstacles in communicating with each other to ensure care is in fact coordinated. The result is that many individuals end up cycling through law enforcement encounters, hospital emergency rooms, and the Sheriff's custody – all places that are not well-positioned to best serve these individuals. Middlesex County aims to address these gaps through its MSO DDJ initiative.

Partnerships

MSO DDJ began its work with a significant number of law enforcement partners and continued to expand these partnerships. Over 20 departments signed on as initial partners, and MSO DDJ was able to expand to over 50 police departments as part of the stakeholder group. The Sheriff has a good and long-standing relationship with the Middlesex County police departments and his past partnership and support of those departments translated to support and engagement in this initiative. Through these police departments, MSO DDJ also collaborated and partnered with Jail Diversion Program clinicians as it built out a pilot focused around the Jail Diversion Program.

Data access and efficiency was a significant challenge for Middlesex County – given the disparate nature of law enforcement data entry and management. MSO DDJ researched different data collection efforts across the state to determine if any might be a good fit for the type of data, and the breadth of data, that MSO DDJ was seeking. From both a cost and efficiency perspective, MSO DDJ identified that the Statewide Information Sharing System (SWISS), managed by the Massachusetts Department of Criminal Justice Information Services (DCJIS), as well as the Executive Office of Technology Services and Supports (EOTSS), would be important stakeholders as we tried to address the challenges around gathering data from the many police departments.

While there was a heavy law enforcement presence in the initial stakeholder group, MSO DDJ knew it was vital that healthcare, behavioral health and social services stakeholders come to the table and inform these efforts. The work that the Sheriff was spearheading around the Restoration Center engaged some of these same stakeholders. In an effort to inform and engage additional stakeholders, MSO DDJ attended, participated in and presented at Restoration Center Commission meetings. Through these meetings, MSO DDJ was able to engage with MassHealth (Massachusetts Office of Medicaid), the Department of Mental Health, Department of Public Health, the Massachusetts chapter of NAMI, state legislators, the courts, and other behavioral health advocates. Via relationships built through this commission, MSO DDJ was also invited to present and share ongoing work at various regional stakeholder taskforces, working groups, and sequential intercept mapping exercises.

Additionally, as part of its efforts to incorporate healthcare stakeholders, MSO DDJ met with several hospitals and behavioral health providers within the county. MSO DDJ collaborated with the Massachusetts Health and Hospital Association (MHA), an association that is home to 70 licensed member hospitals and 29 health systems. This collaboration focused on ways that MSO DDJ could scale some of its work to a county or even a state level. In addition to MHA, MSO DDJ partnered with Cambridge Health Alliance (CHA), a community hospital system

centered mostly in Middlesex County, initiating a pilot data analysis project. This pilot is discussed in more detail in this report.

As MSO DDJ approached each of these partnerships and collaborations, it was important to lead with what value MSO DDJ could bring to each of these stakeholders. Initially, many of these stakeholders were skeptical of how an initiative centered around sharing healthcare data could work, given HIPAA-related restrictions, and that slowed some of these conversations down. By reassuring these partners, ensuring that MSO DDJ intended to respect and adhere to HIPAA protections, and then discussing how MSO DDJ could support the work that these stakeholders were already engaged in, MSO DDJ found success in building lasting collaborative relationships. Listening sessions helped support these efforts, learning about how the stakeholders were already working to serve the frequent utilizer population provided opportunities to determine how DDJ could inform those efforts. To maintain these relationships, MSO DDJ ensured that stakeholders were updated on the progress of the sub-projects and pilots. Much of the stakeholder communications was project-based, and stakeholders were kept informed via project-based meetings. Additionally, regional and county-wide meetings, such as the Middlesex County Chief's Association meetings, regional taskforce meetings, and other working groups allowed MSO DDJ to disseminate its work widely, keep stakeholders up to date, and engage new stakeholders as well.

Data Governance

When considering the type of data sharing proposed by a project like MSO DDJ, there are many data sharing policies, regulations and laws that impact these types of efforts. For law enforcement data access, background checks, CORI-checks and DCJIS certification were all required prior to allowing access to criminal justice data. For protected health information, HIPAA and 42 CFR Part 2 governed who could access healthcare information. The intersection of these different types of data requires that we take all of these legal considerations into account when allowing individuals access to these types of data. The approach that MSO DDJ took when considering how to protect individuals' privacy was to consider, in addition to applicable law, who the most appropriate arbiter of this intersection of healthcare and law enforcement data might be. The aim of DDJ is to create a concerted multi-disciplinary approach that allowed a team of stakeholders to best serve the frequent utilizer population, and most times the individual best suited for this was not in fact a law enforcement officer. Explaining this approach helped assuage any concerns about law enforcement having access to sensitive health information. Data sharing, and data governance, at its core is an exercise in trust.

Many times, MSO DDJ found that internal data governance was more conservative than these policies and regulations, and it was important to ensure that all stakeholders were comfortable with data sharing. With each stakeholder, there was a spectrum of readiness to engage in data sharing, starting with interest in the project, enthusiasm in participating in the project, willingness to sign a commitment letter as a partner agency, all of which were distinct from readiness to sign a data sharing MOU and allow the active sharing of data. It is understandable that as responsible custodians of sensitive information, whether it be law enforcement related or healthcare related, that stakeholder agencies are uncompromising when it comes to sharing that information, and as we built the DDJ work in Middlesex County, we found that being flexible and attentive to these considerations were an important component to finding success.

Considering the direction of the flow of data, the difference in thresholds in access to data, and building trusting relationships within stakeholder groups all contributed to our ability break through some long-standing barriers. For example, when working with one healthcare provider, rather than requiring that they share healthcare information with our analyst, we engaged in a collaborative discussion where we determined that rather than healthcare information flowing to a law enforcement agency for analysis, that the healthcare entity could receive law enforcement data. Something as simple as reconsidering who manages the analysis workload can impact the effort's success. Healthcare stakeholders that thought they would need to relinquish PHI were far less likely to want to participate until the MSO DDJ team was

able to reassure them that appropriate data sharing governance would be employed. As previously mentioned, data governance for this type of project is as much a trust building exercise as it is a series of memoranda of understanding listing each party's responsibility.

In each instance of data sharing, we considered who within the stakeholder groups would be the best fit for receiving the data in question. Which individual was particularly trained and certified to see the data, but also who was best positioned to then act on the analysis and its conclusions. In cases where healthcare data was involved, that person was always a healthcare provider or analyst. Identifying the individual that would be best suited to access that information also helped address these concerns. In Middlesex County specifically, we felt that the Jail Diversion Program clinician in many instances was the best arbiter of this type of information. By straddling the line between healthcare and law enforcement, JDP clinicians are appropriately credentialed to access HIPAA protected information but also cleared to access law enforcement data. They are also best suited to divert these individuals into more appropriate services and supports.

Project Descriptions

County-wide Law Enforcement Data Integration

As discussed previously, Middlesex County lacks a centralized infrastructure for law enforcement data collection, management and integration. Law enforcement data management is handled agency by agency. Each agency procures its own records management system vendors and manages its own data entry protocols and procedures. Each police department also has varying ability to analyze its own data, particularly around the frequent utilizer population. While departments anecdotally are experiencing high volumes of calls and incidents related to behavioral health issues, many of these departments do not have the ability or analytic capacity to demonstrate that experience using data. Through site visits with partner police departments, MSO DDJ better understood each department's data integrity, capacity for analysis, and how to support the departments needs through MSO DDJ. At each site visit, MSO DDJ interviewed a range of police department staff – including leadership (chiefs and deputy chiefs), officers, clinicians, data analysts and IT staff. Through these interviews, MSO DDJ was able to document the different vendors and records management systems each department used, the varied access each department had to its data, and the coding and reporting practices of each department. Departments documented their interactions with the frequent utilizer population using varying methods – some included these in their records management systems in the narrative of their incident reports, some used explicit coding to identify behavioral health or substance-use disorder related calls, while some departments noted these in dispatch call notes in the CAD system, and some departments weren't noting these types of incidents at all.

Initially, MSO DDJ intended to set up direct data connections with each department. To better understand this undertaking, and to better understand the challenges that each RMS would present in extracting, integrating and linking the data, MSO DDJ performed a 10-dataset pilot, described below. The pilot demonstrated the need for a more efficient way to extract police data in Middlesex County. This need led to the SWISS initiative, an effort to partner with state law enforcement data agencies to utilize state level police data reporting systems that were already in place to more quickly extract and integrate police data.

10-dataset pilot

MSO DDJ's initial analysis focused on a 10-dataset pilot, made up of police data from nine different communities, as well as corrections data from the Middlesex County Sheriff's Office.

These data are historical, from January 1, 2016 through July 31, 2018; this time period represented a span included in each data submission. These communities' police datasets were selected to represent a wide variety of records management systems enlisted by the police departments. The communities also represent a wide-variety of the types of communities that make up Middlesex County, i.e. rural, suburban, and urban.

This initial analysis was meant to serve as a step towards the larger Middlesex DDJ goals. This pilot served a number of purposes including:

- Developing relationships with and creating buy-in from the police agencies
- Understanding the data structures of multiple records management systems used throughout Middlesex County
- Developing the definition of a frequent utilizer
- Understanding the capacity of each community to analyze and serve their frequent utilizers
- Identifying gaps in analysis plan and continue to build toward a more robust analytic product
- Demonstrating progress to DDJ partners

This initial analysis was meant to better understand the data structures of each vendor, and as such, MSO DDJ accepted any data submission from the PD partners. For future analyses, MSO DDJ refined the data extractions to include victims, witnesses, offenders/defendants of all available incident and arrest data, as well as a complete CAD submission. Upon review of the initial outputs, MO DDJ noted that approximately 2% of each dataset population made up what seemed to be the dataset's frequent utilizers. As such, MSO DDJ re-ran the queries to pull the top 2% of each dataset population. The results of these queries and additional searches were woven into individualized analytical reports for each police agency/MSO. These actionable reports included:

- A summary of the respective agencies' top 2% frequent utilizers
- A matrix of frequent utilizers including information on frequency of contacts, as well as residency status (city of origin/homelessness status), where applicable
- The percent of total city/town police activity for which the frequent utilizer was responsible
- Indication of involvement in MSO data or other pilot communities
- The average contacts of top frequent utilizers during the time period
- A summary of the counts and types of involvements of the frequent utilizers
- Case studies of highest frequent utilizer(s) detailing:
    - count and types contacts

- role in contacts, where available
- timeline of activity

Beyond identifying individual communities' frequent utilizers, this initial analysis revealed a collection of best practices and gaps in analytic methods. These lessons learned will facilitate MSO DDJ's efforts in approaching future, more complex analyses.

Some of these best practices include:

- Requiring Reports for All Overdoses
- Use of Uniform Codes for Overdoses and Mental Health-Related Police Contacts
- Incorporating Diverse Record Types in Frequent Utilizer Analyses
- Referral of Behavioral Health and Substance Use Disorder cases to Jail Diversion Clinicians

The 10-dataset pilot was an initial step towards better understanding Middlesex County frequent utilizers. MSO DDJ intends to perform similar analyses for all police partners using Open Lattice's Frequent Utilizer tool to provide these types of insights to other departments. Through the dissemination of these analyses, MSO DDJ solicited feedback from departments to inform future analyses to ensure efforts are best serving the departments.

SWISS Initiative

As previously discussed, connecting each department's database to the Open Lattice server for integration and analysis did not seem an effective use of time or resources. MSO DDJ sought to find or build efficiencies in order to extract department data more efficiently. The range of vendors, the varying level of access to the data, and the diversity of formatting, coding and integrity created significant obstacles to extracting and analyzing the data. The solution that MSO DDJ identified was the State Wide Information Sharing System (SWISS).

Currently, hundreds of Massachusetts police departments are submitting incident level data to a state managed database via SWISS. This system is used primarily as a searchable database – populated by participating departments. Because the development of SWISS was a state-funded effort, the state also provided the financial resources for all of the participating department RMS vendors to build a SWISS-specific report so that departments would be able to easily (and freely) submit their data. As such, even departments who do not have access themselves to their data are able to still able to submit their data to SWISS. This solved multiple problems for MSO DDJ – one was the challenge around the sheer number of departments and connecting directly to their data; well over half of Middlesex County

departments were already submitting data to SWISS, and remaining departments were amenable to initiating data submission. Another challenge solved was the fact that many departments had not paid the extra fees required to access their data, so even if the department wanted to participate in MSO DDJ, we did not have the ability to access their data without the department incurring a significant cost. Additionally, by extracting data via SWISS, rather than via each individual department's database, this would cut down on work and time spent cleaning and integrating the data as the data was already being cleaned and reformatted by SWISS. Instead, we would be able to set up a single extraction, run a single integration, and have the ability to link over 30 police departments' data.

Building out a data extraction at the county level was a large undertaking for SWISS. Users primarily would use the system's front-end search function; however, MSO DDJ was looking to access back end data. After months of collaboration to build out the data extraction, a test extraction was performed – providing historical data over a one-week period. This test extraction gave Open Lattice the opportunity to build out an integration for SWISS data, so that when larger datasets, or recurring datasets, were transferred to their server, the integration of the data would be seamless. As of the writing of this report, SWISS has provided a second data extraction of historical data spanning a 5-year period, which is currently being integrated. MSO DDJ aims to work with SWISS to create a recurring data extraction that would continue to transfer to Open Lattice, providing near-live data updates. This would then facilitate one of MSO DDJ's primary goals for the project: providing Middlesex County police departments the ability to use the Open Lattice Frequent Utilizer tool on their own live data, as well as have access to other participating departments' data.

Massachusetts Health and Hospital Association Stakeholder Engagement

MSO DDJ built an early partnership with the Massachusetts Health and Hospital Association to collaborate on recruiting hospitals to participate in the initiative. Through brainstorming sessions, MHA and MSO DDJ identified an opportunity to recruit a member hospital to participate in a data sharing pilot. The intended pilot analyses would link law enforcement data to de-identified healthcare data. MHA and MSO DDJ together crafted a shared goals document and used that document to recruit the additional pilot participants, including additional hospitals, EMS providers and additional police departments. The aim of this analysis was to summarize and identify any trends in the overlapping populations in these datasets. This analysis also served as an opportunity to build a data sharing relationship with MHA and other healthcare stakeholders, with the intention of continuing to build on the success of the pilot. Ideally, this analysis would lead to a further analysis inclusive of more hospitals, and eventually informing interventions.

The Massachusetts Health and Hospital Association (MHA) and MSO DDJ were able to bring together healthcare and law enforcement stakeholders to discuss data sharing. While all parties involved in the discussions around data sharing were enthusiastic and eager to share data, an agreement was not reached around the terms of data sharing. This experience may be familiar to many DDJ communities attempting data sharing with interested stakeholders. In this particular instance, the parties were unable to reach a resolution on insurance requirements. While this particular arrangement was not successful, MSO DDJ was able to use the work product, which served as a template for a separate pilot project that was ultimately successful.

Cambridge Health Alliance and Cambridge Police Department Data Pilot

MSO DDJ partnered with Cambridge Police Department (CPD) and Cambridge Health Alliance (CHA), a community hospital system within the county, to examine the overlap of justice-involved frequent utilizers and healthcare frequent utilizers.

MSO DDJ partnered early with CPD, exploring a proof of concept data analysis that provided some of the case studies included in this report. This early data partnership helped build the foundation for a pilot data analysis partnering both with the PD and CHA. Through ongoing listening sessions and site visits with Dr. James Barrett of CPD, MSO DDJ learned of its work with CHA focusing on the juvenile population through the Safety Net Collaborative. The Safety Net Collaborative is an effort aimed at decreasing youth arrest, youth violence, improving school attendance and completion and reducing symptoms of mental illness and psychological distress[2]. By focusing on integrating mental healthcare with juvenile policing, the collaborative aims to divert the most vulnerable youth out of the criminal justice system[3].

The approach to identifying and diverting at risk youth was analogous to the MSO DDJ approach to identifying frequent utilizers. It seemed that there was potential in crafting a similarly structured analysis of data. Better understanding how these individuals with a high frequency of interactions with the police department also interacted with the CHA system would give us better insights into the population and their needs. The three stakeholders, CPD, CHA, and the MSO, began work collaborating on a proof of concept analysis to mirror some of the work of the Safety Net Collaborative.

[2] Barrett J, Janopual-Naylor E, Description of a Collaborative Community Approach to Impacting Juvenile Arrests. Psychological Services. 2016; 13(2):134

[3] Barrett J, Janopual-Naylor E, Description of a Collaborative Community Approach to Impacting Juvenile Arrests. Psychological Services. 2016; 13(2):138

One repeated challenge in working with healthcare data is ensuring that HIPAA protected information is appropriately managed and protected. With this partnership, stakeholders navigated this challenge by housing the data analysis within CHA. CHA's Health Equity Research Lab had the research and analytic capacity to be able to integrate and link both police and corrections data. In order to ensure that CJ data was also appropriately handled, according to CJIS requirements, the CHA data analyst was CORI- and background checked, as well as DCJIS certified, prior to gaining access to sensitive criminal justice data. Prior to the sharing of any data, data sharing agreements were signed by all parties to ensure the goals of the proof of concept analysis were agreed upon and that proper protections were in place for all data included. The exercise involved in crafting a data sharing agreement that both parties are comfortable signing involves lengthy conversations about the types of data that will be shared, how that data will be stored, and eventually destroyed. These discussions are a good opportunity for stakeholders to walk through research questions the group would like to answer, and which data elements would be required to answer said questions. In addition, it is helpful in understanding what data each party is able to share and disclose, and what they are not able to. These conversations are necessary in any data sharing relationship between agencies or organizations.

The intended analysis, which combines police, healthcare and corrections data, is on-going. As of the writing of this report, the CHA HER lab had corrections and hospital datasets on hand, and the data sharing agreement with CPD was signed. Because CPD data has not yet been incorporated, the linked analysis includes corrections and hospital datasets.

Analysis and Results

The linked dataset included two separate datasets – one dataset that includes all individuals in the Middlesex County Sheriff's custody between 2009 and 2019, and the second dataset includes all individuals that utilized Cambridge Health Alliance services between that same time period. A data analyst in the CHA HER lab performed the linking and analysis of the resulting dataset. First, the analyst cleaned and geocoded the addresses within each individual dataset using SAS – this was to ensure a cleaner dataset for future analysis if the group decided to explore geographic distribution within the set. The analyst then linked the two datasets using first name, last name, gender, and date of birth. The final linked dataset included all individuals from the Sheriff's dataset that were also included in the CHA dataset. The analyst used spot checks to confirm that linking was occurring correctly. Once the datasets were linked, the analyst performed a topline analysis of summary statistics to describe the linked dataset. Also included in the final analysis was a comparison to the overall hospital-only dataset. This proof of concept data analysis is meant to be a first step to begin more detailed discussions around a

more robust and detailed further analysis. Additional research questions are expected to evolve from review of this first analysis.

The MSO dataset included approximately 30,000 individuals during the time period from 2009 to 2019. The CHA dataset included approximately 550,000 individuals during the same time period. The linked dataset included 5,247 individuals that were present in both the MSO dataset and the CHA dataset. Because the MSO data only includes individuals in MSO custody, and the MSO only holds male inmates and detainees, the sex representation is almost entirely male in the crossover dataset. Middlesex County females are housed by the Department of Corrections at their women's facility in Framingham, MA. On rare occasions, as women are transferred and transported by the Middlesex County Sheriff's Office, sometimes the MSO does book them for documentation purposes, hence the few females included in the linked dataset. Similarly, the Sheriff only houses individuals over the age of 18, so the age representation excludes individuals under the age of 18.

The crossover dataset sample size is 5,247 individuals. This constitutes individuals that were both housed by the Middlesex County Sheriff's Office and received some sort of services from the Cambridge Health Alliance hospital system. The age distribution of the linked dataset has a majority of the individuals falling within the 25-34 and 35-44 age bands. The dataset is almost entirely male (99.9%). The time in care table shows how many individuals interacted at least one time in a given year. This variable gives insight into how many repeat visitors the hospital has. 34.6% of individuals sought care over the course of only one year. The remaining group, 65.4%, sought care over multiple years, with 14% of individuals received care 8 or more years.

When looking at the service usage of these individuals, interesting insights emerge. When comparing service usage to CHA'S general population, there are some differences worth noting. 82% of the crossover population used the emergency department, as noted by an All-cause ED category of service usage. Compare this to 51% of the CHA general population. The corrections-involved population was 30% more likely to use the emergency department. They were also 10% more likely to use inpatient behavioral health services, (13.1% compared to the 3.1% of the general population).

Figure 1.

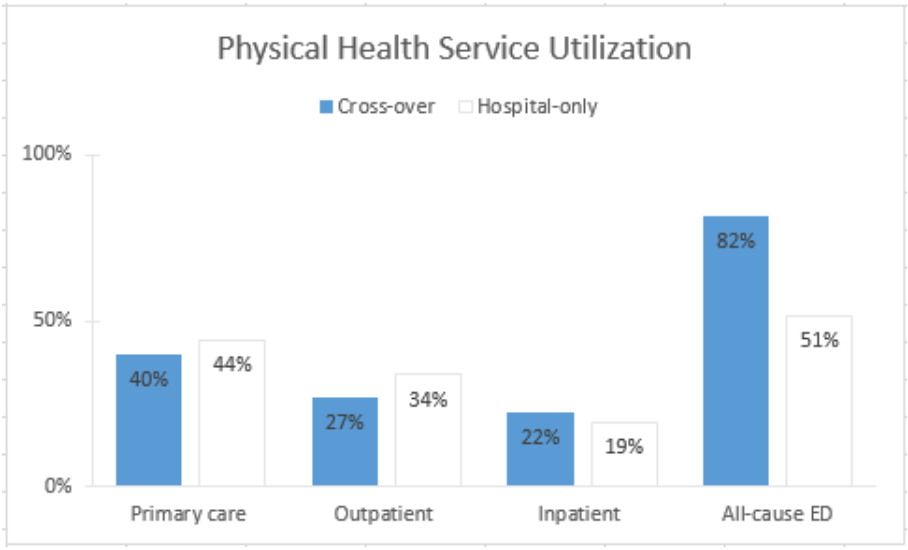
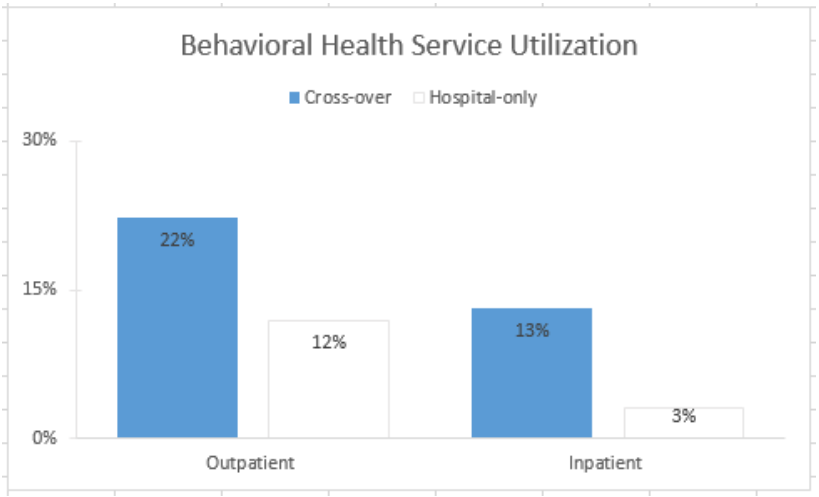
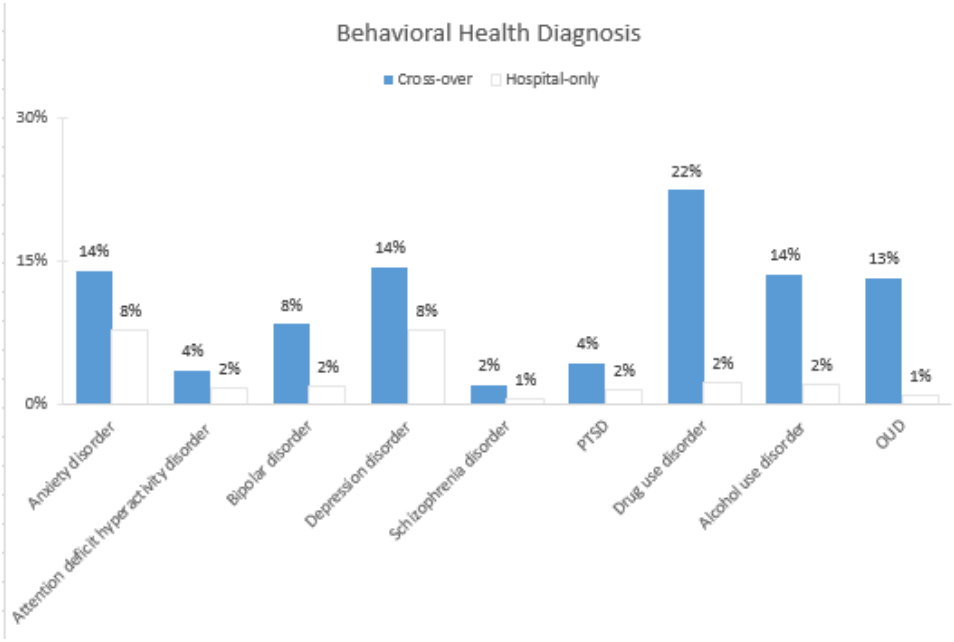


Figure 2.



Some service usage categories remained approximately the same across the two groups – specifically the physical health diagnoses. However, behavior health diagnoses did demonstrate differences between the two groups. Drug use disorder, alcohol use disorder and opioid use disorder all were significantly higher in the corrections-involved population. Drug use disorder was diagnosed in 22.5% of the population, compared to 2.3% in the general population. Alcohol use disorder was diagnosed in 13.7% of the population, compared to 2.1%, and opioid use disorder was diagnosed at 13.2% compared to 1.1%.

Figure 3.



Lessons Learned and Next Steps

Based on this analysis, individuals with corrections involvement are much more likely to seek out certain types of medical care from CHA. Specifically, these individuals are more likely to use the emergency room and inpatient behavioral health services. These individuals are also more likely to have diagnoses of substance use disorder, alcohol use disorder and/or opioid use disorder. This analysis is preliminary and meant to serve as a first glance at the two datasets. We intend to incorporate Cambridge Police Data as well.

These initial results demonstrate differences between the justice-involved patients and the general CHA patient population. These data are worth investigating further to better understand this specific population. Inclusion of Cambridge Police Department data into the larger dataset would allow for further analyses and help us to better understand the population that overlaps all three entities. By honing in on this overlapping population, individuals with repeated police contact, jail stays and repeated hospital visits, we can better identify those particularly vulnerable individuals. These are individuals in need of better supports and resources to divert them from the criminal justice system. Ideally, understanding both the historical data, as represented by this 10 year look back, as well as current data, CPD, CHA and the MSO would be able to target these vulnerable individuals to reduce police encounters, jail stays and emergency department visits. At the writing of this report, CPD had signed a data

sharing MOU with CHA to share police data to incorporate into the above analysis. After this analysis is performed, next steps would include building on the partnership that has developed through this initial analysis and expanding the scope of the analysis to include additional research questions. These analyses may then facilitate discussions around potential interventions. MSO DDJ aims to develop interventions based on data analysis projects such as these; therefore, a future goal would also include facilitation of a pilot intervention focused on a cohort from this analysis.

Behavioral Health and Law Enforcement Pilot

MSO DDJ noted during information gathering interviews that a large percentage of Middlesex County police departments utilized trained behavioral health clinicians or social workers as part of their department staff to support officers' responses to behavioral health crisis calls. While the model of how the clinician engages with clients varies department to department, there is an overall consensus in Middlesex County that these types of resources are important for police departments to best serve their communities. These clinicians are funded mostly through Department of Mental Health grants through their Jail Diversion Program, but some clinicians are funded through municipal line items or funding sources.

Over 80% of departments work with a full-time or part-time clinician, and in some cases, clinicians are shared by multiple police departments. Some clinicians follow a co-response model, where the clinician rides along with and responds alongside police officers responding to a crisis call. Other clinicians use a follow-up model, where a police officer refers behavioral health crises calls to the clinician after responding to an incident and the clinician then follows up with the involved individual, providing resources and services. Many clinicians do follow-up work because their case load is so high. It is also challenging for a clinician to be present for all crisis calls as many of their work hours fall during the day, during the work week. Whether follow up or co-response, these services have changed how many departments approach these types of calls, and have in some cases made an impact on workload.

To better understand these clinicians' roles in police work, MSO DDJ, in conjunction with the MSO Restoration Center Commission, convened a group of Jail Diversion Program Clinicians for a working group session. Ten clinicians from a range of police departments participated in the convening. The discussion focused on the challenges that JDP clinicians face when trying to provide services and resources to frequent utilizers in their communities. An important outcome of this discussion was a better understanding of the barriers to treatment and gaps in services that were identified by clinicians in the room. Some of these barriers included:

- Challenges around referrals – finding the right service provider in the right amount of time
- Lack of intermediary/transitional resources – gaps in service exist between acute crisis episodes and enrollment in long terms supports and programs
- Limited options available for diversion – police and other first-responders have limited options to offer to individuals in crisis, usually either protective custody or hospitalization
- Transportation is a recurring challenge – transportation can be a significant barrier to individuals for basic needs, doctor's appointments, crisis services, etc.

- Lack of holistic response – no single provider, agency or facility exists to serve an individual's full range of needs. Co-occurring issues, whether substance use, mental illness, homelessness, food insecurity, healthcare coverage, many times compound and create significant challenges in supporting and connecting an individual to appropriate services

Upon further discussion with one of the JDP clinicians in attendance, challenges around data collection and communication across jurisdictional lines were also revealed. As a result of these conversations, MSO DDJ partnered with five Middlesex County police departments and their Jail Diversion Program Clinician, Matthew Page-Shelton, to build out a proof of concept project that would allow for regional collaboration between police and mental health clinicians. Currently, clinicians that work with PDs rely solely on personal relationships to access information that a neighboring clinician or police department might house.

This project aims to pilot Open Lattice's CARE (Coordinate. Assess. Respond. Engage.) app in an effort to provide a data collection tool for clinicians working with law enforcement in diversion programs. The app is designed to accomplish a series of primary goals: de-escalate encounters quickly through information about an individual's mental health, substance use, and/or special needs; alert third party treatment providers through curated crisis plans specific to each individual's needs; and improve outcomes by creating alternatives to arrest. The app allows officers and clinicians to create records for incidents involving individuals in crisis. These reports are then accessible to other participating clinicians. Theoretically, these reports could also be made accessible to the Department of Mental Health, and in some cases, officers and/or dispatch. The creation of such a database would be a valuable tool to many of the JDP clinicians – potentially solving multiple challenges that JPD clinicians face around data collection, sharing and referrals. Many JDP clinicians currently use their own spreadsheets or basic databases to track their own caseload. Referrals from police officers to JDP clinicians is equally varied and archaic, many times including paper forms or requiring a JDP clinician to scroll through police reports or word of mouth referrals to develop their case load. Communication across borders to other jurisdictions can be hit or miss – many times, again, relying on personal relationships.

Additionally, JDP clinicians that are funded via a Department of Mental Health (DMH) grant are subject to further reporting requirements to the state agency. Open Lattice is working to create a report that is compatible with DMH's reporting requirements and format to minimize the data entry and reporting that JDP clinicians must perform.

CARE App

In the CARE app, a clinician can create a report for each crisis incident. The individual's identifying information is then cross-referenced against the police report database. Any linked information then populates the clinician's dashboard, allowing them access to past JDP behavioral health reports, as well as police incident reports, allowing a more holistic view of this individual's history. Permissions are managed to ensure that only clinicians are able to view any sensitive HIPAA protected information, and clinicians would need to be CORI-cleared and DCJIS-certified in order to access any police/law enforcement data.

Data Sharing

In order to successfully launch a behavioral health/law enforcement partnership, issues around data sharing were central to ensuring the pilot's success. When considering data sharing, the employment structure of the outreach team can have a significant impact. Many communities that employ clinicians to support their police departments do so through diverse and creative funding streams – through grant funding, embedding behavioral health staff from local healthcare systems, and less commonly through municipal funding. Depending on these different scenarios, a clinician's ability to access or share data can vary. For this specific pilot, the jail diversion team, made up of clinicians, recovery coaches and police officers, all had different employers, varying levels of credentials and varying ability to access CARE app data. Specifically, clinicians employed by a local healthcare system, as opposed to those employed BY the police department, were not able to use the CARE app or share data without the healthcare system signing a business associate agreement, allowing Open Lattice to house HIPAA-protected data on their servers.

As of the writing of this report, discussions around data sharing and app usage are ongoing. In fact, due to the current pandemic, questions around HIPAA and healthcare information sharing, particularly sharing information about health status with first responders, are being reconsidered due to the public health emergency. As such, while healthcare systems are reviewing these policies, the opportunity presents to include considerations about behavioral health information sharing in the case of behavioral health emergencies.

Specifically being considered in the data sharing agreements under negotiation for this project are allowing these clinicians the ability to use the CARE app and store data on their clients on the app, allowing town employed clinical staff access to their data, and an emergency override allowing responding police officers access to applicable information within the app for a short period of time only in the case of a behavioral health crisis. While these data sharing requests are under consideration, it is worth noting that if successful, an agreement of this sort could serve as a template for future partnerships aiming to share information between behavioral health entities and law enforcement.

Current Status

MSO DDJ worked with the pilot communities, JDP clinician, and Open Lattice to build a behavioral health crisis form within the CARE app that reflected the work flow and data collection already underway in these communities. The JDP clinician created a paper form system for case referrals. Police officers would fill out this form which would communicate to the JDP clinician the information he needed to perform a follow-up. Additionally, the JDP clinician created a form for involuntary commitments (known in Massachusetts as a Section 12).

The JDP clinician recognized that in some cases, section 12s were used as an alternative to arrest, but weren't always an appropriate choice. He also noticed that there were some individuals where a section 12 was in fact appropriate; however, in the hand off to the healthcare provider, a lack of communication resulted in that individual being released without getting any treatment or services. He aimed to bridge the communication gap by creating a supplemental form for officers to fill out that would accompany the individual and his or her section 12 paperwork. This form gathered information that officers were already trained to observe, and translated it into "clinical speak" - allowing the officer to effectively communicate their concerns about an individual's state.

The CARE app form incorporates both the JDP clinician's referral form and section 12 form into a single form. Working with the Jail Diversion Program clinician, we were able to pilot and test out customized version of this form. This required some back and forth as the JDP clinician used the app and reported any bugs or work flow improvements needed.

As of the writing of this report, the app and the form were live, and additional users were being trained to use the app. The JDP clinician has been using the app, entering historical data. Once the database is populated with enough crisis reports, then the project will then advance to the analysis phase, using the CARE app to better understand trends in behavioral health crises within this community. The pilot intends to onboard additional communities and clinicians already recruited by MSO DDJ to expand the jurisdictions included in the pilot. This will then demonstrate the impact and value of communicating across jurisdictions. Additionally, MSO DDJ would demonstrate the pilot, its preliminary findings and impact to the Department of Mental Health, with the intention of proposing it be used as a state-wide system.

Middlesex County Frequent Utilizers – Case Studies

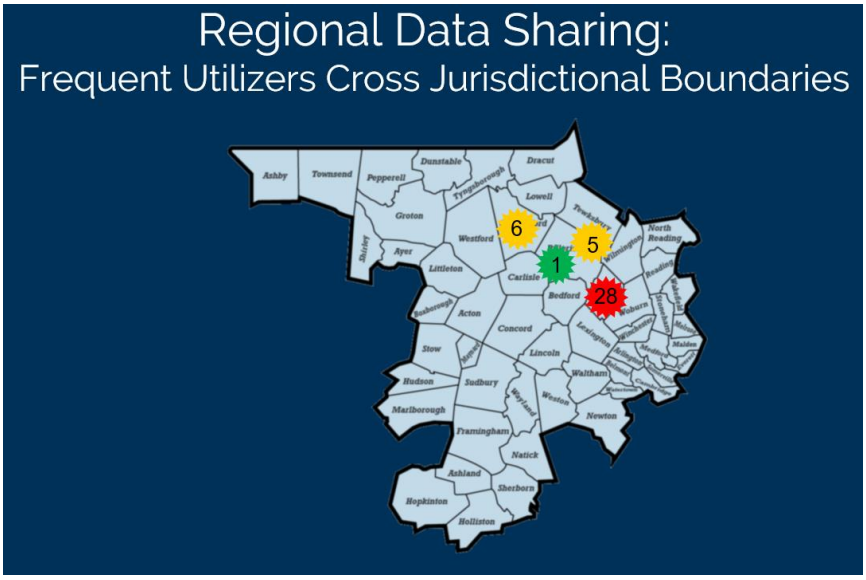
Cambridge Proof of Concept:

Through a proof of concept analysis, done by the Cambridge Police Department, we were able to identify a number of frequent utilizers and glean important insights from even limited amounts of interaction data. Some examples include Joe J, Mary M, and an anonymous 26-year-old female. See attached narratives for further detail on these individuals.

Regional Data Sharing:

For the MSO DDJ initiative to be successful, police data must be linked at the county level, ideally incorporating data from all 54 municipalities. Connecting all 54 law enforcement agencies within Middlesex County corrections data would allow for a level of systematic information sharing that does not currently exist and this alone would represent forward progress for data sharing on the county-level. Departments shared that, in many cases, they were aware of their own high frequency utilizers, however, were unaware of that individual's impact on surrounding communities. Additionally, there were times that officers came across an individual that was well-known to a neighboring jurisdiction and were unaware of that individual's history and therefor unable to best serve that individual. Breaking down these information silos would allow many of the departments to identify and analyze this type of cross-jurisdictional activity and afford officers the additional information that would allow them to better serve these frequent utilizers.

Figure 4.



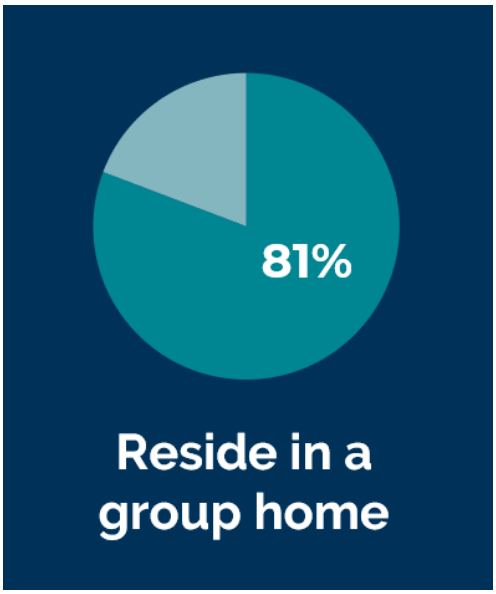
One specific example is shown in Figure 4. This individual had discrepant frequent utilizer status depending on which community's data was analyzed. In Burlington, this individual was clearly a frequent utilizer with 28 police interactions; however, when looking at neighboring jurisdictions, this individual had much lower frequencies (1 in Billerica, 6 in Chelmsford, 5 jail stays). Without communication between these agencies, this individual went unnoticed, especially when he was not a suspect or a perpetrator. In some communities, these cross-jurisdictional frequent utilizers may be noticed due to shared resources, especially if neighboring towns share a Jail Diversion Program clinician. However, Billerica and Burlington each have their own JDP clinician, so this individual wasn't flagged as a frequent utilizer when he crossed town lines. As a result – neither town was aware of this individual's activity in the other's community, all the while, he is experiencing repeated crises due to substance use disorder.

Community Support and Resource Allocation:

Data analysis can reveal unexpected trends and patterns. When reviewing a frequent utilizer analysis from one community, MSO DDJ noted that many of the frequent utilizers shared the same address. Upon further investigation, MSO DDJ found these repeated addresses were in fact group homes located within the community. The local police department was very familiar with these group homes, and noted that they were called to these locations often. These group homes are meant to provide services and supports to individuals that without them might become frequent utilizers, and yet, its clients were continuing to have repeated, frequent contact with the local police. This begged the question as to how resources were being allocated and whether these homes were providing the level of support and treatment that were required of them.

Additionally, data can help communities as they advocate for resources. As communities consider questions around funding and resource allocation, having a sense of both how many and who their frequent utilizers are can help a community better decide how to support services that will address the underlying problem. If a community is considering whether they can afford to bring on a clinician to support the police department, knowing the number of frequent utilizers and the work load they present can help make a case for the funding for that staff person.

Figure 5. Frequent Utilizers Residing in a Group Home

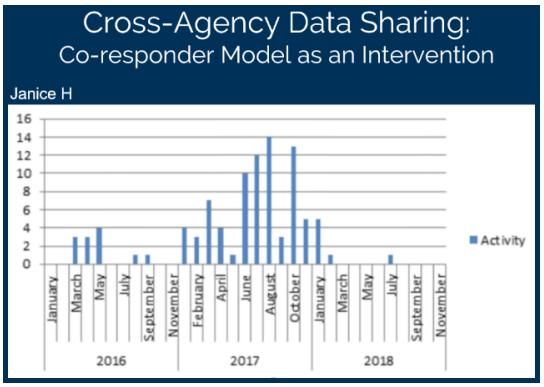


Impact of behavioral health clinicians embedded with PDs

A unique characteristic of Middlesex County is that a significant number of police departments partner with social workers or behavioral health clinicians to engage with individuals in mental health crisis.

In a frequent utilizer analysis of a Middlesex County community, MSO DDJ identified an example of the impact of these Jail Diversion Clinicians. In this community, one of the top frequent utilizers of police services, with 90+ interactions with the police (including 911 calls) had an interesting pattern of interactions over time. Figure 6 shows her activity over a two-and-a-half-year period, with her activity peaking in mid to late 2017. Her activity then drops off and disappears in early 2018. When we asked the PD about this particular individual, and what may have happened, they recalled that that was around when they introduced the individual to their JDP clinician. After this point in time, the individual wasn't "cured" or removed from the community; however, she no longer was having repeated interactions with the police. Instead she was working with a clinician who was specifically trained to help her. The responsibility of managing this frequent utilizer was no longer on the police officers, rather now was on a professional who had the skills and the tools available to better serve her.

Figure 6.



Arrest Culture in Middlesex:

Frequent utilizers have complex and varied interactions with police, particularly in Middlesex County. In a county like Middlesex, there is a low arrest culture around interactions with frequent utilizers. In fact, many times, these individuals are not perpetrators, and instead are victims, witnesses, or involved parties. When looking at police data for these frequent utilizers, one must expand the dataset to include not only arrest data, but incident-level data. You need to look much further than arrests in order to find these individuals.

In one DDJ community, this was made apparent through trial and error. The community's police department worked with a Jail Diversion Program clinician who was familiar with the community's frequent utilizers. This served as a helpful test case as MSO DDJ began to analyze police data. The first data extraction was solely arrest data – many times, this is the cleanest and easiest data to pull. Once pulled, MSO DDJ analyzed the data and shared a frequent utilizer list with the clinician – in an attempt to spot check the analysis methods used. Upon review, the clinician did not recognize any of the listed individuals. Those individuals represented the frequent arrestees; however, those individuals were not the frequent utilizers of the clinician's services. MSO DDJ expanded the data extraction to include all incidents, and all person types, not just arrests and suspects, and reran the analysis. Further review of the updated list of frequent utilizers, based on a more inclusive dataset that counted all types of interactions with the police, the clinician confirmed that the top list of utilizers was a much more accurate reflection of the individuals she worked with daily.

Much of this is contingent on the arrest culture of your community. If police departments are already working to minimize arrests of frequent utilizers, then you may need to expand your dataset beyond simply arrests or bookings to better understand your frequent utilizer population.

Justice Involved Individuals Healthcare Usage:

Based on the Cambridge Health Alliance analysis, described in detail in an above section, individuals with corrections involvement are much more likely to seek out certain types of medical care from CHA. Specifically, these individuals are more likely to use the emergency room and inpatient behavioral health services. These individuals are also more likely to have diagnoses of substance use disorder, alcohol use disorder and/or opioid use disorder.

Next Steps and Sustainability

Much of MSO DDJ's work throughout this grant period has been focused on building stakeholder relationships and building a data sharing environment that would allow stakeholders to engage in and benefit from frequent utilizer analyses of their data. Middlesex County required much more foundational infrastructure construction in order to successfully integrate law enforcement and healthcare data, and much of that work has now been accomplished.

Data Integration:

The integration of SWISS datasets has laid the foundation for recurring data extractions that include most of the county's police departments. At the beginning of this project, MSO DDJ was individually extracting data from one department at a time. Now, MSO DDJ is able to pull most departments data in one large data extraction. MSO DDJ is working with the remaining departments that currently aren't include to establish data connections in order to submit their data to SWISS, which will make analysis of police data that much more efficient. Next steps to fully integrate police data across the county would be to work with the SWISS data team to create a recurring data extraction, a task that the team has agreed to. They are currently undergoing a database migration, and upon completion, will work with MSO DDJ to create a recurring extraction that will be exported to Open Lattice's server for integration and analysis. Additionally, MSO DDJ will complete work with police departments that are not currently submitting data to SWISS to facilitate their connection to the database. The use of the SWISS database to analyze police frequent utilizers also demonstrates the ability to scale up the analysis from not just the municipal level up to the county level, but from county level to the state level. SWISS is a state-level data sharing system, and therefore, the potential to perform these types of analyses at the state level are reliant only on participation from municipalities across the state.

Healthcare and Law Enforcement Data Linking:

Our CHA analysis served as a first step in analyzing both healthcare and corrections data. This was the first time an analysis of this type had been done in the county, and the results were illuminating. However, this analysis was just the beginning and there are many remaining questions. Next steps for this analysis would include integration of police data, which is underway. Additional analysis of the larger linked dataset would include digging deeper into the details of frequent utilizers that cross over all three datasets.

Behavioral Health Data Pilot:

The CARE app pilot provided a small number of communities the opportunity to field test a behavioral health tool to support their jail diversion work. As of the writing of this report, the tool was beginning to be disseminated to a multidisciplinary team that included a clinician, recovery coaches, and police officers. The next step for this pilot is to incorporate the additional clinicians not currently covered by the data sharing agreements. Currently, discussions are underway with the clinicians' employer healthcare company to develop a data sharing agreement allowing these clinicians to participate in the pilot.

Beyond this initial pilot, the intention behind this project is to expand the use of the CARE app to departments across the county – starting in collaborative communities that share clinicians, and then expanding beyond. This project is also intended to serve as a proof of concept and demonstration for the Massachusetts Department of Mental Health. If successful, this tool could be implemented across the Jail Diversion Program state-wide.

Sustainability:

As MSO DDJ looks to the future sustainability of the project, it is considering additional sources of funding. As Middlesex County continues its work toward developing a Restoration Center, MSO DDJ has supported its work by supplying data analysis and insights. As funding is considered for building and sustaining a Restoration Center, there may be opportunities for collaboration and the combination of resources to support and continue MSO DDJ's work. Additionally, MSO DDJ intends to seek out additional grants, potentially with some local foundations, based on the development and continuation of some of the projects described here.

In order to continue to support the frequent utilizer analysis for the participating police departments, MSO DDJ has considered association funding or sheriff's funding to support the continued access to the frequent utilizer tool and analyses.