

Worker Connect: A Process Evaluation of a New York City Data Integration System

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VERA'S NYC-BASED WORK

In 1961, Vera embarked on its first project: reforming the bail system in New York City, which at the time granted liberty pretrial based only on income. Evidence from this project of a viable alternative to bail helped change how judges make release decisions in criminal courts around the world. Today, Vera is a national organization, leading dozens of projects across the country. However, with our headquarters just across the street from City Hall in Manhattan, much of our work remains closely linked to the heart of New York City's criminal justice system.

Vera's work in New York City spans across our centers and programs. What these projects have in common is close collaboration with our partners, data and evidence-driven approaches, and recommendations that seek to improve the systems that New Yorkers rely on for public safety, justice, and human services. Although these projects take place in the unique context of New York City, they all bear important implications and lessons for jurisdictions across the country.

For more information, visit www.vera.org/project/nyc-based-research-projects.

Introduction

Local governments seeking to enhance the delivery of their services have increasingly explored the potential impact of integrating services between agencies to break down traditional organizational silos. This integration can promote communication among people and organizations that work with common clients, eliminate service gaps and overlapping benefits, reduce redundancies in data collection and entry, support advanced analytics for the development of policies and programs, and identify at-risk individuals and families.¹ Data integration is often a key element to achieving these goals. Health care providers in particular have made progress in using an integrated service delivery approach to meet client needs over time and across different levels of the health care system.² Despite the growing interest in integrated service delivery and the integrated data systems that support it, there is a dearth of related studies on the topic.³

The Vera Institute of Justice (Vera) was contracted by New York City's Center for Economic Opportunity (CEO) to evaluate Worker Connect—a data integration system that allows provisioned city workers to view client information across multiple city agencies. The evaluation's goals were twofold: 1) to understand how city agencies use Worker Connect, and 2) to explore user perceptions of the system. The evaluation was conducted between July 2014 and April 2015. This brief reports on the main findings of this study.

Worker Connect

In 2008, then-Mayor Michael Bloomberg issued an executive order establishing a government body dedicated to using state-of-the-art technology to integrate service delivery for vulnerable New Yorkers throughout health and human service (HHS) agencies.⁴ Named HHS-Connect and staffed with policy and legal experts, this unit was formed to oversee three distinct programs: ACCESS NYC, an online tool available to all New Yorkers to self-screen for eligibility in city and state human-service benefits; Enterprise Case Management, a case management platform designed to streamline screening and eligibility determination to enhance contract management, and support overall agency system needs; and Worker Connect, a portal available to city workers that provides interagency client data in a close-to-real-time manner.⁵

In order to facilitate data integration across agencies and databases, HHS-Connect developed a common terminology that could be “understood” by databas-

es from different city agencies by adopting protocols based on the National Information Exchange Model (NIEM). NIEM recognizes multiple synonyms of the same phrase (e.g., some databases may use the term “client” while other databases may use the term “case” or “applicant”) as a single entity in order for databases to better communicate with each other regardless of their use of different vernaculars.⁶ In 2009, HHS-Connect was given a Best of NIEM award for information architecture and development.⁷

By integrating data, Worker Connect is an innovative tool that intends to increase efficiency and encourage communication and collaboration across city agencies—thereby enhancing each agency’s ability to deliver services and improve the client’s experience and outcomes.⁸ For example, frontline staff could use the data available in Worker Connect to verify or find missing information—such as income, employment, or family composition—on applications for city services or to determine eligibility for benefits, thereby eliminating the need for the applicant to return with supporting documents and expediting access to services.

The city launched Worker Connect in the summer of 2010 with five data-source agencies.⁹ Since then, it has grown to include close to 6,000 provisioned users across eight HHS agencies and six partner non-HHS agencies.¹⁰ During the first four years of operation, HHS-Connect was housed in the office of the Deputy Mayor for Health and Human Services, and was governed by an executive steering committee made up of commissioner-level representation from each HHS agency. Since the mayoral transition in 2014, HHS-Connect has operated under the jurisdiction of the Mayor’s Office of Operations, allowing for improved data-informed policy development and enhanced data integration between city agencies.

Given the personal information of clients to which Worker Connect’s users are privy, access to the system is tightly controlled. Commissioners of the city agencies involved in the program signed an agreement that defines common terminology and articulates the terms and conditions under which it operates.¹¹ An agency requesting access to data must submit a “use case”—a written document that outlines desired data, how data will be used, and by whom. The HHS-Connect general counsel then reviews the document and attaches a legal opinion about the validity of the proposed use before passing the use case along to the legal teams at the agencies from which data is being requested. Those legal teams then review the request and determine whether to grant access. This process ensures that, once their request is approved, provisioned users of Worker Connect can only access data that is relevant to their work. In this process, HHS-Connect plays the role of a broker, negotiating data access and terms of use across agencies and facilitating the approval process. Each agency that obtains access to Worker Connect is asked to designate a liaison to serve as a point person to HHS-Connect and to users of the system within his or her agency.

Study Methodology

Vera conducted a qualitative evaluation of Worker Connect across all New York City agencies that currently use the system. The goals of the evaluation were twofold: to understand how Worker Connect is used and to explore perceptions of the system's strengths and weaknesses.

Interviews with staff at HHS-Connect informed the evaluation approach and provided the context within which HHS-Connect was established and currently operates. The development of the data collection instruments was informed by a review of literature about the design and implementation of integrated data systems and an iterative feedback process with HHS-Connect and CEO.

HHS-Connect identified 11 city agencies as the target for interviews and focus groups.¹² Vera researchers conducted interviews with agency leadership (executive-level agency staff, such as deputy commissioners) and/or the agencies' liaisons to HHS-Connect.¹³ Leadership interviews focused on the degree to which they were aware of Worker Connect and their perceptions of the system's role in the day-to-day operations of their agency. Liaison interviews focused on their perceptions of their role as liaisons, their interactions with Worker Connect users and with HHS-Connect, and their perceptions of the system's strengths and weaknesses.

Vera also conducted focus groups with provisioned Worker Connect users and their supervisors in nine city agencies.¹⁴ These focus groups centered on the perceptions of the system's functionality, training needs, the role of the liaison, and supervisors' expectations about the use of Worker Connect as part of their agency's routine workflow.

Vera also distributed an online survey to all provisioned users of Worker Connect that asked about their experiences using the system and training needs. Of the 5,754 users contacted, Vera received 1,818 responses (about 32 percent of all provisioned users).

Key Findings

- **Worker Connect is an important and useful tool for many frontline city workers.** About 80 percent of survey respondents who indicated they are active users (or 860 users) acknowledged that Worker Connect is helpful to their work and about 65 percent said that they are likely to recommend Worker Connect to their colleagues.¹⁵ Focus group discussions highlighted that for some, Worker Connect made small improvements to their business practices, but for others the tool was transformative.
- **Worker Connect is being used in a variety of ways.** The most prominent use, reported by about 80 percent of the survey respondents, is to verify client information (e.g., address, income, family composition). Seventy percent of respondents reported using the system to find missing information about clients. About 30 percent reported using it to coordinate their work with other agencies.

- **Worker Connect could further improve cross-agency coordination.** While almost three in 10 survey respondents reported using Worker Connect to coordinate with other city agencies, focus group discussions indicated that having access to the contact information of relevant frontline staff in other agencies would increase their ability to coordinate client services. A few respondents from HHS agencies discussed their desire for an alert system that would let them know when their clients became involved with another city agency.
- **Worker Connect is self-explanatory and easy to navigate, but more training is needed.** About 80 percent of survey respondents agreed that Worker Connect is an easy-to-navigate and self-explanatory tool. However, survey respondents and focus group participants also indicated that they would like small group, on-site, and hands-on training that uses actual cases. Focus group discussions suggested the need for training that is specific to users' job roles and that takes into account other databases that are available to users.
- **Worker Connect is not yet integrated into agencies' business processes.** Agencies have not developed internal policies or procedures for identifying new users that could benefit from access to Worker Connect or for requesting additional data sources for existing users. In addition, agencies have not incorporated formal training on Worker Connect into their new employee on-boarding process. Focus group participants indicated that new employees learn about the system in an ad-hoc manner that varies greatly depending on the expectations of individual supervisors and the degree to which their peers use the system. Interviews with agency leadership suggested that they were only peripherally aware of Worker Connect. However, it is important to note that some people interviewed were relatively new to their agency role.
- **There is a lack of clarity about the role of the agency Worker Connect liaison.** Interviews with liaisons highlighted the varying degrees to which they understand their role and responsibilities in relation to HHS-Connect and to their agency. Most of the liaisons interviewed reported being removed from users and not having routine mechanisms in place to communicate with users about their needs or receive feedback. Focus group discussions also highlighted that users were unclear about the role of their agency liaison. Only 22 percent of the survey respondents reported knowing who their agency liaison to HHS-Connect was.
- **There is still room for improvement.** Focus group participants were often unclear about the role of HHS-Connect as a broker of data access rather than the owner of the data. Users suggested the need for a process to flag agency data they believed to be inaccurate. Vera also found gaps between what HHS-Connect reported about existing system functionality and what users believed the system was able to do (e.g., whether searches by partial name were possible).

Conclusions

Vera's findings suggest that Worker Connect is an important and useful tool for many city workers. While users access Worker Connect for a variety of reasons, and with varying degrees of frequency, they reported that Worker Connect has had a meaningful and positive impact on their work. For some, the impact was small, while others said the tool was transformative.

The findings also indicated that while agency leadership have a general perception of Worker Connect as an effective tool for frontline staff, they are only peripherally aware of the system's capabilities and potential. Similarly, conversations with liaisons illuminated the fact that most liaisons do not work closely with frontline users and do not fully understand the intricacies of how Worker Connect is used within their agency. For some agencies, this is a result of Worker Connect being perceived as an information technology initiative rather than a service-delivery tool and the degree to which the system has been integrated into the agency's internal business practices.

While Worker Connect has already made a difference in the way many frontline staff approach their work, Vera's findings suggest that by expanding its use among staff and offering more training on its capabilities, the system has the potential to further enhance communication and coordination within and across agencies and improve the delivery of services to residents who rely on the city so deeply.

ENDNOTES

- 1 Will Carroll, "Achieving Integrated Service Delivery," *Policy & Practice* 72, no. 4 (2014): 16-18.
- 2 For information on data integration in the health care industry, see World Health Organization, *Integrated health services – what and why* (Geneva, Switzerland: WHO, 2008).
- 3 Gail D. Armitage et al., "Health systems integration: state of the evidence," *International Journal of Integrated Care* 9 (2009).
- 4 Executive Order 114 of March 18, 2008, HHS-Connect, *The City of New York Office of the Mayor* (2008), www.nyc.gov/html/om/pdf/eo/eo_114.pdf.
- 5 *HHS-Connect, 2013 Annual Report: Breaking Information Silos* (New York: HHS-Connect, 2013). In January 2015, HHS-Connect underwent a reorganization. As part of the restructure, HHS-Connect merged with HHS-Accelerator, a separate unit with which HHS-Connect already shared technical staff. In addition, Enterprise Case Management shifted to Enterprise Data Solutions, focusing on interoperability of data rather than mandating that all agencies utilize a single case management product.
- 6 National Information Exchange Model (NIEM), *Case Study: New York City HHS-Connect* (Washington, DC: NIEM, 2014).
- 7 National Information Exchange Model, "The 2009 Best of NIEM Winners," www.niem.gov/aboutniem/best-of-niem/Pages/2009-winners.aspx.
- 8 Allon Yaroni and Timothy Ross, *Innovations in Health and Human Services Policy: Data Integration and Cross Agency Collaboration* (New York, NY: Vera Institute of Justice, 2014).
- 9 Administration for Children's Services (ACS ACCIS database), Department of Homeless Services (DHS CARES database), Department of Finance (DOF SCRIE database), Human Resources Administration (HRA Documents and WMS database), and the New York City Housing Authority (NYCHA TDS database).
- 10 The HHS agencies that currently have access to Worker Connect include: Administration for Children's Services (ACS), Department for the Aging (DFTA), Department of Homeless Services (DHS), Department of Corrections (DOC), Department of Health and Mental Hygiene (DOHMH), Department of Probation (DOP), Health and Hospitals Corporation (HHC), and the Human Resources Administration (HRA). Other agencies with access to Worker Connect include: the Department of Finance (DOF), Department of Housing Preservation and Development (HPD), Department of Education (DOE), New York City Housing Authority (NYCHA), Office of the Chief Medical Examiner (OCME), and the Mayor's Office to Combat Domestic Violence.
- 11 The Inter-Agency Data Exchange Agreement was signed in 2010 by the commissioners of ACS, HRA, DFTA, DOC, DOHMH, DHS, DOP, HHC, Department of Information Technology and Telecommunications (DoITT), NYCHA, and DOF.
- 12 The target agencies identified include: Administration for Children's Services (ACS), Department for the Aging (DFTA), Department of Homeless Services (DHS), Department of Corrections (DOC), Department of Finance (DOF), Department of Health and Mental Hygiene (DOHMH), Department of Probation (DOP), Health and Hospitals Corporation (HHC), Department of Housing Preservation and Development (HPD), Human Resources Administration (HRA), and the New York City Housing Authority (NYCHA). Other agencies with access to Worker Connect but not involved in the evaluation include: the Department of Education (DOE), Office of the Chief Medical Examiner (OCME), and the Mayor's Office to Combat Domestic Violence.
- 13 Interviews not conducted in OCME, DOE, and the Mayor's Office to Combat Domestic Violence. Focus groups not conducted in OCME, DOE, DOF, DOC, and the Mayor's Office to Combat Domestic Violence.
- 14 Vera initially planned on conducting separate focus groups with frontline staff and with supervisors. However, this was not always possible, since some supervisors are also provisioned users and the data did not allow Vera to make the distinction.
- 15 The survey was sent only to provisioned users. Out of the total survey respondents, about 20 percent reported that they had never heard of Worker Connect. About 13 percent reported that they had heard of Worker Connect but did not use the system. These respondents who did not know of or use Worker Connect were asked general questions about information gathering only. The phrase "survey respondents" refers only to the 1,116 provisioned users that responded to Vera's survey and indicated that they are active users of Worker Connect (total survey responses =1,818).

Worker Connect Team's response to Vera's evaluation of the Worker Connect program

The New York City Center for Economic Opportunity, part of the Mayor's Office of Operations, engaged the Vera Institute of Justice (Vera) to conduct an independent evaluation of Worker Connect. Worker Connect was launched in 2010 as an innovative legal and technical framework for integrating data across the health and human services domain in New York City. It provides frontline workers a single portal to view a client's information across multiple HHS agencies in order to better understand and meet their needs. The goal of this evaluation was to assess Worker Connect's perceived effectiveness towards service delivery and client engagement, as well as provide potential insights for its future direction.

Overall, this evaluation underscores the value of Worker Connect as a critical tool for improving the way workers interact and serve City residents. With a high survey response rate and active participation of agency leadership and staff, Vera was able to gather some very useful, substantive feedback. The majority of findings was anticipated and support several current priorities for the Worker Connect initiative. For example, it comes as no surprise that some of the executive staff interviewed for this evaluation may only be "peripherally aware" of Worker Connect capabilities. With the change in administration, we have been steadily engaging new agency leadership and staff with system demonstrations, even those already familiar with Worker Connect. These have largely resulted in the identification of new user groups and use cases for the system.

With recent Worker Connect enhancements, including the addition of new data, we have taken the opportunity to revitalize our approach to training and change management. This includes increasing the availability of on-site trainings, refreshing the training curriculum and facilitating more interactive sessions tailored to the roles and responsibilities of the user. This change in the approach to training and communication is tied to the overall re-engagement strategy to enhance perception of the tool and increase system utilization.

Over the past year, the Worker Connect team has continued its focus on growing the user population and adding data sources while investigating new ways to leverage the tool's supporting technology. To this end, we have begun two important Worker Connect expansion initiatives. The first is the development of a new "service alert" that will automatically alert an agency to the need for a potential service intervention that would otherwise not have been known. The other involves leveraging Worker Connect's data matching and integration capabilities to support city initiatives, including several large service outreach efforts. In all, Worker Connect continues to find new ways to help the City achieve better outcomes for low-income New Yorkers.

Worker Connect Team
Mayor's Office of Operations, Accelerator/Connect

For More Information...

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