



# Innovations in NYC Health and Human Services Policy Data Integration and Cross-Agency Collaboration

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## Overview

New York City's eight health and human services (HHS) agencies provide billions of dollars worth of services each year to more than two million people,<sup>1</sup> many of whom are served by more than one agency. The services offered by these agencies are largely provided through thousands of contracts between city agencies and for-profit and nonprofit organizations.<sup>2</sup> In most respects, each agency acts as an autonomous organization with its own business processes for managing all aspects of its mission: identifying its clients' needs, providing services, verifying eligibility, managing procurement and contracts with service providers, case management, and tracking progress and outcomes. This uncoordinated approach to service provision has resulted in an inefficient set of practices that hinder efforts to meet the needs of city residents. For decades, senior city executives and policy experts have been frustrated by missed opportunities and inefficiencies created by these fragmented services.

During the last eight years, the city launched three innovative policy initiatives that use information technology and administrative data to integrate HHS processes in an effort to strengthen cross-agency policy development, increase the quality and efficiency of service delivery, and improve the outcomes of HHS clients. The city established an interagency research team in the Office of the Deputy Mayor for Health and Human Services, developed an online procurement and management system for health and human service agencies, and systems to coordinate the delivery of services. Significant progress has been made in moving the city closer to a modernized service system that integrates information across agencies, uses data to drive policy more effectively, makes informed decisions, and measures the outcomes of these services consistently and frequently.

Solidifying and expanding these gains will require cooperation and coordination at the highest levels of city government. It will also require dedicating staff and funds to support future development. With sufficient stewardship, these initiatives can continue to revolutionize public administration, saving the city money while improving client outcomes and worker effectiveness.

This brief first outlines some of the problems with fragmentation that the policy initiatives aimed at addressing. Next, it discusses the challenges these efforts have faced and the strategies used to tackle them. And finally, it looks ahead at lessons learned and forthcoming issues that will need attention. To produce this brief, the authors reviewed documents provided by the Mayor's Office, interviewed key government and provider staff, and drew on their own professional experiences designing and evaluating health and human services and programs.

## Methods

This policy brief draws on interviews with experts and the leadership teams of the initiatives discussed in this brief. The brief is also informed by review of internal documents, review of relevant literature, and the professional experiences and expertise of the authors.

## Policy Problems and Responses

Improving the outcome of individuals and families served by HHS agencies requires identifying needs, implementing programs and services to target these needs, coordinating client services—particularly among those who are served by more than one agency—and improving the ability of city residents to identify and sign up for programs and services for which they are eligible.

In 2006, the Deputy Mayor for Health and Human Services kicked off a series of initiatives aimed at strengthening the city's ability to do three things:

- develop cross-agency, data-driven policies to expedite the efficient implementation of services and programs,
- provide better coordinated services to clients, and
- assist city residents in identifying and applying for city, state, and federal programs and services for which they are eligible.

This policy brief focuses on three of these initiatives: (1) the Center for Innovation through Data Intelligence, (2) HHS Accelerator, and (3) Worker Connect, which is part of a broader cross-agency coordination initiative called HHS Connect.<sup>3</sup>

### ***Strengthening data-driven policies***

*The problem:* Each HHS agency collects data about individuals and families they serve and has some data analysis capacity. The city, however, did not have the legal or analytical infrastructure to analyze data across agencies routinely or quickly and was unable to identify people who receive services from multiple HHS agencies or determine their outcomes. For example, the city was unable to determine whether children entering foster care are at higher risk of involvement in the juvenile justice system, or whether supportive housing for youth aging out of foster care helps prevent involvement with other city systems, such as homeless services, probation, or corrections.

*The policy response:* The most complex and critical social policy issues—such as teen pregnancy, juvenile delinquency, and healthy aging—cut across agency, regulatory, and budgetary boundaries. To improve the ability of senior policymakers to address cross-agency policy challenges, the city established the Center for Innovation through Data Intelligence (CIDI) in 2011. CIDI is a data intelligence team in the Office of the Deputy Mayor for Health and Human Services that focuses on interagency research by using data and information from multiple HHS agencies to answer policy questions, sharpen policy and program design, assess outcomes, and advocate for data-driven best practices.

*Some examples:* To coordinate services for residents affected by Hurricane Sandy across city agencies, CIDI analyzed survey data collected by the National Guard on a daily basis. The analysis was used to create multi-agency reports that allowed the Mayor's office to coordinate the service delivery of city agencies such as

visiting nurses (Department of Mental Health and Hygiene), sanitation workers (Department of Sanitation), shelter officials (Department of Homeless Services [DHS]), and hot meals (Department for the Aging). In another example, CIDI analyzed child welfare and juvenile justice data to determine that the strongest predictor of a foster care youth becoming involved in juvenile justice is the age of entry into foster care. Those who entered for the first time at the age of nine or older had a higher likelihood of juvenile justice involvement. Based on these findings, the Administration for Children’s Services (ACS) contracted for more than \$20 million in prevention services targeting families at risk with children in this age group. Finally, using administrative data about health, education, employment, and justice, CIDI created a comprehensive analysis of racial disparities across the HHS agencies as part of Young Men’s Initiative.<sup>4</sup>

Some of CIDI’s projects are funded through private sources. For example, CIDI secured private funding to track the outcomes of foster care- and juvenile justice-involved youth to predict risk factors associated with poor outcomes. CIDI also teamed with a nonprofit service provider to evaluate the outcomes of young adults in a supportive housing program using administrative data from the HHS agencies.

### ***Expediting efficient program implementation***

*The problem:* The city’s procurement process, from design of a service or program to contracting with a service provider, typically takes more than a year.<sup>5</sup> Because agencies procure services independently, multiple providers may be delivering similar services in the same neighborhoods under contracts with two or more city agencies, but at different prices and with different reporting requirements. Further complicating integration efforts, city agencies often use different terms to describe similar processes or the same term to refer to different services. Prior to the initiative described below, the city was unable to detect overlapping services, pricing differences in similar services, or geographic gaps in services. Similarly, providers often did not learn of opportunities to propose their services beyond a single city agency.

The lack of standardization, combined with the paper-based submission processes used by most city agencies, created striking inefficiencies. Bidders were required to submit several copies of the same boilerplate documents (such as audited fiscal reports, lists of board members, and legal assurances) to the same agency for each proposal. Large providers with dozens of contracts might submit the same documents to the city hundreds of times a year. Some providers describe submitting boxes of documents in response to a single request for proposal (RFP). With reams of paper inundating agencies, documents could be misplaced; delaying and undermining the proposal’s review process. This labor-intensive process also hindered the ability of smaller providers with limited resources to compete for city contracts, reducing the pool of potential qualified vendors.

*The policy response:* To improve procurement and contract management processes, the city developed HHS Accelerator—an online procurement and fiscal management system for the eight HHS agencies and for the Office of the Criminal Justice Coordinator, Department of Small Business Services, and Department of Housing Preservation and Development, which also provide human services.<sup>6</sup>

HHS Accelerator improves the ability of city agencies and private service providers to focus their efforts on providing the best possible programs and services, rather than muddling through laborious practices and procedures. HHS Accelerator includes a taxonomy of common terms that standardizes definitions, an electronic document vault so that service providers need only submit basic documents once, an online proposal review system, and a standardized fiscal monitoring system.<sup>7</sup>

The new system creates common procedures for contracting with service providers and allows vendors to pre-qualify to compete over city contracts for a period of three years. Once qualified, the system creates a more level playing field for small service vendors. It also allows for citywide performance monitoring to better understand the impact of services. By late 2014, the city will be able to produce reports showing the geographic distribution of services, thereby helping the city identify gaps in services and improve its ability to address them.

Using HHS Accelerator to procure human services became mandatory for the HHS agencies in October 2013. More than 500 service providers are currently approved to compete for RFPs through Accelerator, with more than 500 additional organizations in the process. The first two RFPs were released through HHS Accelerator on October 31, 2013. Eighteen more RFPs are scheduled for release by the end of January 2014.

### ***Improving service coordination***

*The problem:* Although many city residents participate in multiple services provided by different city agencies, prior to the initiative described below, these agencies had no formal mechanism to share client data. As a result, clients provided the same information and documents many times and made separate trips to each city agency to file application forms. These “silos” of information also created problems for city agencies lacking crucial client information that other city agencies already possessed.

*The policy response:* In 2010, New York City introduced Worker Connect to increase the efficiency of city caseworkers by providing them with an integrated view of information across HHS services and programs. A small but growing set of agencies contribute to a “Common Client Index” that identifies clients shared across agencies using a sophisticated matching algorithm. This allows caseworkers to view information from multiple HHS agencies and view their clients’ demographic data, household composition, and case histories in accordance with applicable privacy and confidentiality laws and regulations.

This capacity provides city caseworkers with a broader and deeper understanding of their clients’ needs and allows them to process applications for benefits faster while allowing city agencies to locate clients more quickly. For example, information obtained by the Human Resources Administration or DHS can help ACS child protective workers conduct faster and more methodical investigations by providing information about a family’s composition and demographics, children’s school attendance, and whether family members are receiving Medicaid or other services. Child protective specialists are required to collect this information as part of their investigation which, without Worker Connect, is a lengthy and labor intensive process. In addition to helping to locate children who are the subject of child maltreatment reports, the information also can be used to design more appropriate service plans.

Worker Connect also allows participating agencies to access key documents that clients have already submitted to another agency from which they receive services. For example, numerous programs require applicants to furnish birth certificates, Social Security cards, utility bills, or other documents to determine eligibility. Through Worker Connect, agency staff can view previously submitted documents, sparing applicants the need to resubmit documents and expediting access to services.

## **Challenges**

Each of these initiatives offers the potential for improved services to the public and for large savings to city agencies and their provider partners. To reach this potential, the Mayor’s office and each agency had to

grapple with three main challenges related to governance, confidentiality, and information technology. We discuss these challenges in the context of three initiatives: CIDI, HHS Accelerator and Worker Connect.

### ***Governance***

These cross-agency initiatives required creating a governance structure that satisfied the need of agency commissioners to retain autonomy while collaborating with their peers to produce better outcomes more efficiently. Participation in the initiatives required commissioners to commit their time and political capital, as well as the time of other senior staff. In many situations, participation required training agency staff—from front line workers to data analysts to procurement specialists—to work in different ways.

To promote cooperation and to ensure fair treatment for each agency, the initiatives are overseen by an Executive Steering Committee chaired by the Deputy Mayor for HHS that includes each of the HHS commissioners as well as the commissioners of the Office of Management and Budget and the Department of Information Technology and Telecommunications (DoITT) as non-voting members, and the Law Department and the Mayor’s Office of Contracts as advisors.<sup>8</sup> The Executive Steering Committee holds monthly meetings with a strictly enforced “no substitutes” rule, meaning that only commissioners, not their deputies, are allowed to attend. The decisions of the Steering Committee have been made by consensus with each commissioner having the opportunity to discuss concerns. Because the HHS commissioners were already meeting regularly to resolve integration issues, there was little resistance to this governance structure.

One function of the governance structure is to set priorities among the many ideas for data integration projects. To help inform the Steering Committee’s discussions, each project that is part of these initiatives is subjected to a rigorous analysis of costs and benefits. This analysis allows the Steering Committee to consider return on investment as a critical factor in setting priorities.

### ***Confidentiality***

Efforts to share data, both within and across organizations, have long been stymied by confidentiality concerns. Each of the HHS agencies is subject to numerous agency-specific confidentiality mandates based on local, state, and federal laws and regulations. Federal laws concerning the confidentiality of health data (Health Insurance Portability and Accountability Act, HIPAA), education data (Family Educational Rights and Privacy Act, FERPA), and child welfare data (45 CFR 205.50), for example, create challenges—and each is overlaid with city and state laws and regulations. However, confidentiality laws have many gray areas. Where the law is vague, agency general counsels have traditionally declined data sharing requests.

Several strategies were used to address confidentiality concerns. First, HHS Connect established an Interagency Data Sharing Agreement, signed by the members of the Executive Steering Committee, to establish a framework for the effective and secure exchange of confidential data among HHS and related agencies. Under the terms of this agreement, specific data are shared only with permitted staff using the information for a set purpose (“if you don’t need it, you don’t see it”). Worker Connect, for example, is not a database; instead it provides one-time snapshots of approved data to authorized workers in approved user groups.

CIDI has a formal data sharing protocol for its research and analysis projects, which often involve data matching. Each project must be approved by the Executive Steering Committee. Research projects, as opposed to discrete analysis tasks, are reviewed also by an Institutional Review Board.<sup>9</sup>

Second, staff working on Worker Connect, as part of the broader HHS Connect initiative, used a problem solving approach to work through approved data sharing requests. Instead of a general request to share data, HHS Connect staff work with agencies to create “business use cases” that identify the purpose for which the data will be used, who will have access to the data, and a description of the added value and benefit of accessing the requested data. For example, to assist ACS’s Division of Child Protection (DCP) in locating children, a use case examined the laws that applied to agencies that might share client addresses, child care enrollment locations, and child care providers’ data with DCP. Agency lawyers review and approve all use cases. Focusing on specific uses often turns general concerns about confidentiality into discrete issues that are easier to resolve.

A third strategy used to address confidentiality is listening carefully to the organizations impacted by the initiatives. HHS Accelerator, for example, requires service providers to submit some sensitive financial information to the electronic document vault. Throughout the development of Accelerator the city partnered with the Human Services Council (HSC), an organization that advocates on behalf of thousands of city nonprofits serving the HHS sector. In response to HSC’s concerns, the city limited the nonprofit financial data that could be shared as public information such as IRS Form 990s and board membership lists. Treating service-providing agencies as partners instead of vendors helped resolve problems and built a sense of common purpose.

Initiatives often started with a small group of agencies before expanding. Worker Connect, for example, included workers from only five agencies in its first iteration. Only after the protocols were approved, a pilot launched, and the value of the initiative demonstrated for this group have staff turned toward expanding Worker Connect to include additional data and user groups. The Department of Education (DOE), for example, has not yet contributed data to Worker Connect (though work with DOE has advanced by drawing on existing MOUs and with recent changes in the federal FERPA law). The city is planning to add DOE as a Worker Connect data source in 2014.

### ***Information technology***

Though the data integration initiatives are policy initiatives, not IT projects, each contain significant IT components and IT investments. The projects have IT roadmaps that detail steps in the hardware integration and software development process, but creating those roadmaps and ensuring their implementation has required skills more closely associated with policy leadership: building consensus, negotiating compromises, patience, and perseverance in the face of obstacles. Leadership of each of the initiatives requires several skills—not only in IT management, but in managing the agencies’ and city budgets and procurement processes and attention to interagency relationship management.

The current operating overall budget for HHS Connect (which includes Worker Connect, Access NYC, and Enterprise Case Management) and HHS Accelerator is a relatively modest. One-time start-up funding from the American Recovery and Reinvestment Act (ARRA) supplemented city funds to enable capital investment and the purchase of sophisticated software programs and tools for HHS Accelerator.

### **Looking Ahead**

The data integration initiatives have increased efficiency and generated new insights into city operations. There are, however, many challenges ahead. Below are some of the lessons learned and challenges that the new administration is likely to encounter.

### ***Confidentiality issues are ongoing***

Ensuring compliance with confidentiality laws is not a one-time task. Laws and regulations change. New agency general counsels may not understand the legal basis for data sharing. Going forward, creating a repository of documents that spell out the legal reasoning behind data sharing would prevent repeating the process of researching confidentiality laws and working through specific use cases. At minimum, a repository would move that process forward more quickly.

### ***Adoption of innovations***

Staff at some HHS agencies are using the tools provided by the initiatives much more than others. For example, staff at ACS and DHS routinely log more than 100,000 Worker Connect transactions per month, while the other eight agencies only log 20,000 transactions per month—with staff at some agencies accessing the system less than 5,000 times a month. Learning more about the possible causes of these variations, such as how workers value the data, staff knowledge of the Worker Connect system, and how “user friendly” workers find the software to be would help guide next steps in implementation. HHS Connect includes data tracking to assess questions about system usage, user satisfaction, and effectiveness of the initiative components.

Adoption issues also present a challenge for Accelerator. HHS agencies are now required to use Accelerator for all client services RFPs. RFPs, moreover, will only be released through Accelerator to pre-qualified providers. Transitioning to the new procurement system will be a challenge, particularly to those who are entrenched in the old system. Some expressed concern that agencies will find ways to circumvent Accelerator. If the HHS agencies use Accelerator sporadically, the system’s capacity to streamline and speed up the procurement process, identify duplication, and compare services will be limited.

A second concern is that smaller, community-based providers will be challenged by Accelerator’s prequalification protocol. Accelerator staff have targeted such organizations and offer training and technical assistance with the pre-qualification process. Smaller organizations have more to gain by using Accelerator, as they usually do not have development arms that specialize in identifying and responding to new opportunities. Still, in a municipality the size of New York City, ensuring that all organizations have the opportunity to compete will require ongoing vigilance.

For CIDI, the adoption issues center on the willingness to engage in cross-agency research and incorporating the lessons of CIDI’s analysis into practice. Cross-agency analysis sometimes produces information that indicates a need for agency change (e.g. developing new procedures, retraining staff, focusing on certain target populations or switching to new providers). To be most effective, agencies need to view these insights as valuable guidance to improve their operations, not as distractions to their agendas.

### ***Governance and Management***

As in other policy areas, an open process that is receptive to suggestions and inclusive in its methods helps build support. Including the DoITT as a member of the Steering Committee, for example, ensured that hardware and software were compatible with the city’s overall data infrastructure plans. OMB’s participation provided the capacity to conduct sophisticated cost-benefit analysis and helped ensure that the data integration initiatives received the necessary funding. Instead of proposing CIDI projects to commissioners at a Steering Committee meeting, the group’s director first met with each commissioner to learn his or her priorities and discuss ways that cross-agency analysis could advance agendas.

The initiatives will continue to need the support of the Mayor's office and commissioners. Delegating responsibility to lower level staff will hamper decision-making—and coordinating eight agencies is challenging even with the most senior executives at the table. Housing the initiatives in the Mayor's office, many believe, encourages staff to identify opportunities that most benefit the city as a whole rather than those of a specific agency. A drawback of this structure is that key staff are vulnerable during mayoral transitions. The knowledge base developed in agency-based initiatives usually survives transitions, as most agency staff remain in their positions with the arrival of a new mayor. The fluidity of staffing in the Mayor's office, however, puts the knowledge base of initiatives housed in City Hall at risk. Considering the impact of structural and staffing changes in the Mayor's office on the data-sharing initiatives will help ensure a smooth transition.

### ***Sustainability and Expansion***

CIDI often works on discrete projects or conducts routine cross-agency analysis, which makes issues of sustainability and expansion easier to manage. Worker Connect and Accelerator, however, have ambitious roadmaps for the future and pose more challenging issues. Worker Connect currently allows approximately 7,000 staff from 10 agencies to see data from five agencies. The Worker Connect roadmap envisions expanding the number of workers with access to data, the number of agencies contributing data, and the types of data shared. DOE, for example, has progressed to the point of developing use cases for Worker Connect and DOE data is seen as especially valuable to other child- and youth-serving agencies. This process has taken years and is vulnerable to disruption. While DOE is the most pressing agency, expanding Worker Connect to additional agencies outside of the core HHS group will create similar implementation challenges.

HHS Accelerator has to date focused on designing the process, developing the IT, and pre-qualifying providers. Accelerator will allow the city to produce performance measures across providers working under the same contract and ultimately across all providers of similar services. For example, Accelerator could allow for comparisons of providers of job development services for probationers. Eventually, the system could generate performance measures per dollar invested, measures of a single service across an agency's contracts, and measures of a single service across all of the HHS agencies.

In collaboration with HSC and individual providers, Accelerator staff has started to develop performance measures in some areas, including workforce development, services for criminal justice-involved youth, service provider fiscal health, and senior services. The collaborative process has helped assuage provider concerns that inappropriate measures will provide misleading information and unfairly impact the ability of individual providers to compete. Continuing to develop performance measures with new agencies will take time and effort to manage successfully.

Senior managers of the data integration projects point to two other lessons learned in the past few years. First, the city does not have the internal capacity to manage large system integration projects. External consultants are needed to oversee the technical aspects of system integration. The city needs to maintain some IT expertise to monitor consultants and to interact with other members of the policy team. Second, in designing new systems or processes that share data, simpler alternatives have many advantages. This simpler the IT system, the easier, faster, and cheaper it is to implement future changes as city processes evolve.



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## Endnotes

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<sup>1</sup>HHS agencies: Department of Health and Mental Hygiene (DOHMH), Human Resources Administration (HRA), Administration for Children's Services (ACS), Department of Homeless Services (DHS), Department for the Aging (DFTA), Department of Correction (DOC), Department of Probation (DOP). Other agencies, including the Criminal Justice Coordinator (CJC), Small Business Services (SBS), and Housing Preservation and Development (HPD), also provide human services and participate in HHS Accelerator, described in this brief.

<sup>2</sup> New York City, Office of the Deputy Mayor for Health and Human Services. HHS Accelerator: Achieving High Performance Relationships with Providers of Human Services. April 2010.

<sup>3</sup> In addition to Worker Connect, HHS Connect includes two additional initiatives: Access NYC and Enterprise Case Management. Access NYC is an online resource that provides city residents access to over 30 different city, state, and federal benefit programs and services in seven languages. City residents can enter household information to receive a list of the benefits and services for which they are potentially eligible, print application forms, search for office locations, and apply online for select programs. Enterprise Case Management is being designed to streamline the screening and eligibility determination processes, case management, and basic contract management functions within and across HHS agencies. HHS Connect was established by Executive Order 114 on March 18, 2008.

<sup>4</sup> See CIDI website: <http://www.nyc.gov/html/cidi/html/research/yymi.shtml>

<sup>5</sup> New York City, Office of the Deputy Mayor for Health and Human Services. HHS Accelerator: Achieving High Performance Relationships with Providers of Human Services. April 2010.

<sup>6</sup> For more information about HHS Accelerator see: <http://www.nyc.gov/html/hhsaccelerator/html/about/about.shtml>

<sup>7</sup> Service providers are required to provide organizational documents once every three years to be approved to compete over city contracts.

<sup>8</sup> HHS Connect Program Overview, September 2013, page 36.

<sup>9</sup> An Institutional Review Board (IRB) is a group that reviews research proposals to ensure compliance with the federal research ethics regulations as codified in 45 CFR 46.