Cross-Sector Data in Action
Case examples from the Iowa City Police Department and the Camden Coalition of Healthcare Providers

Individuals with complex health and social needs* represent a small portion of the population but account for a large share of healthcare spending.¹,² For this group, chronic illness and social barriers to wellness underlie extensive utilization of medical services as well as frequent contacts with other sectors, such as housing, behavioral health, and criminal justice. Care coordination and service integration facilitated by cross-sector data sharing can help service providers understand and adequately address these individuals’ needs.³,⁴

Sharing data may sound like a daunting task, but with trusting relationships⁵ and knowledge of legal frameworks,⁶ collaborators may be able to begin sharing data with the technical resources they already have. Simple yet effective approaches can build a foundation for collaboration and shed light on complex health and social needs. Using low-tech approaches or starting with publicly available data makes the process accessible. The findings from initial data-sharing efforts can help partners garner support for the more expensive and time intensive task of building an integrated data system. Once cross-sector data are integrated into one system, program designers and practitioners can use the data on an ongoing basis to advocate for new resources, identify potential program participants, and guide practice decisions.

This brief draws on the experiences of two leaders in cross-sector collaboration, the Iowa City Police Department (Iowa City PD) and the Camden Coalition of Healthcare Providers (Camden Coalition), to show how cross-sector data can guide the development of innovative initiatives to improve people’s lives. The Iowa City Police Department, using strong relationships and Microsoft Excel, built the case for a Housing First program. The Camden Coalition relies on integrated data to inform the planning, implementation, and assessment of its jail-based reentry pilot project. Lessons from both organizations’ experiences can be instructive to other groups at all stages of the data sharing process.

Iowa City Police Department: Making the case for Housing First through cross-sector data

Shared data can deepen understanding of the challenges individuals face across sectors, and bring to the surface the cost of attempting to address individuals’ needs in silos. When the Iowa City Police Department joined an existing cross-sector group, the Johnson County Local Homeless Coordinating Board (Johnson County LHCB), they brought data from the police department, housing sector, health, and mental healthcare sectors together. Their goal was to identify and address the needs of chronically homeless individuals in Johnson County. The shared data confirmed what the working group suspected: a few chronically homeless individuals cycled repeatedly through medical, mental health, and criminal justice systems.

The data sharing process started off low-tech: Iowa City PD shared its publicly available data using a Microsoft Excel spreadsheet, and partners compared this information with their own data. Each partner did this manually—they compared the list Iowa City PD provided with

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* **Complex health and social needs** describe a combination of medical, behavioral, and social barriers to health and wellness. Patients experiencing this combination of needs often have poor health outcomes despite accounting for a high proportion of healthcare spending.
their own lists to identify patterns of high utilization across sectors. In addition to Iowa City PD and the Johnson County Sheriff’s office, cross-sector partners included community behavioral health centers, Abbe Health and Prelude Behavioral Health Services; two large Iowa City hospital systems, Mercy Iowa City and University of Iowa Hospitals and Clinics; and the only housing shelter in the area, Shelter House.

Johnson County LHCB members agreed to reach out to some of the individuals with frequent arrests and jail stays with whom they had rapport. Four of these individuals agreed to allow the cross-sector partners to share their data with one another. The purpose of the case studies was to track interactions each of the four study participants had with each partner’s services over the study period. The group collected and shared the study participants’ utilization data for the previous four years; these data were tracked and analyzed using Microsoft Excel. Members of the Johnson County LHCB suspected that these individuals would continue to have repeated encounters with their organizations over the study period, and that the cost of these repeated encounters would be high, perhaps even higher than the cost of providing these individuals with a home.

The findings supported the working group’s hypothesis: the total cost to serve the four individuals over the four-year study totaled $2,159,105. Nearly $1.9 million was spent addressing medical and mental health needs, and substance abuse treatment costs equaled approximately $149,000. Legal fees totaled $73,000, and just over $43,000 was spent on housing and case management. Despite the very high cost of caring for these individuals—on average, close to $540,000 per person over four years—all four people remained homeless and continued to cycle through multiple systems.

Johnson County LHCB knew that these individuals experienced significant barriers to using the local homeless shelter, and they suspected that was a major contributor to the cycle of homelessness and high system utilization. The only homeless shelter in Johnson County, Shelter House, requires individuals to pass a breathalyzer in order to stay the night. Johnson County LHCB members, which included Shelter House staff, knew from experience that many chronically homeless individuals were unable to meet this requirement—and they agreed that Iowa City needed a better option.

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**Iowa City Police Department’s role in the city’s new Housing First initiative**

The Iowa City Police Department employs a Downtown Liaison Officer to build relationships with individuals experiencing homelessness and identify opportunities to better serve the community and reduce homelessness. Seeing community collaboration as an effective tool to address homelessness, the Iowa City Police Department’s Downtown Liaison Officer joined the Johnson County Local Homeless Coordinating Board, an existing cross-sector working group including representatives from hospitals, community mental health centers, homeless service organizations, and the county sheriff’s office. The group began sharing their data to illuminate the high costs of service fragmentation and to demonstrate the benefits of coordinating services through a Housing First initiative.

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1. **Housing First** is an approach that provides chronically homeless individuals with housing without attaching additional requirements common to shelters and other housing services, such as sobriety. For more about Iowa City’s program, visit [http://www.jchomeless.org/fuse---housing-first.html](http://www.jchomeless.org/fuse---housing-first.html).
A Housing First program seemed like the most appropriate choice. In order to gain support from funders, housing officials, and other stakeholders though, they needed to show that investing in it would be worthwhile. The group used the case study data to demonstrate the potential cost savings of reducing chronically homeless individuals’ cross-sector utilization.

They were able to secure $2,700,000 from the Iowa Finance Authority and a $463,000 grant from the Housing Trust Fund of Johnson County, which together cover most of the estimated $3,011,000 in construction costs to build a Housing First facility with 24 one-bedroom apartments projected to open in January 2019. The Housing First project is the first of its kind in Johnson County.

Through this work, Johnson County also became part of the Data Driven Justice Initiative, which aims to find better alternatives to jail for people with complex needs through cross-sector collaboration. The project was launched by the Obama administration in 2016, and continues through the work of the Laura and John Arnold Foundation and the National Association of Counties. The initiative has provided the Iowa City Police Department with funding for an integrated data system to replace their Excel spreadsheet. The goal is to include a wide range of datasets, including police contact and arrests, fire and ambulance dispatches, jail bookings and releases, housing, social services, and mental health and healthcare information.

These are the same data the group used for their study, but the new system will allow them to integrate the data to identify individuals with patterns of high cross-sector utilization more quickly and efficiently and discern patterns of multi-system utilization. Each agency will be able to run a daily report that will alert case workers across systems if their clients have been involved with the other systems. This will allow case workers to provide clients with support and services to reduce future system utilization.

Iowa City PD and its partners only needed access to a few key resources to get started: they had Microsoft Excel, they had relationships built on trust, they had researched and understood the legal and ethical guidelines for sharing data, and they were able to engage four individuals who consented to share their data for the four-year study. The technology used by Iowa City PD and its partners is easily accessible to most organizations interested in sharing data. Their experience shows that using a low-tech approach can open the door to innovative programming like Housing First.
Camden Coalition of Healthcare Providers: Using cross-sector data to drive a complex care intervention that begins in the jail

In 2015, the Camden Coalition established a data sharing agreement with the Camden County Police Department to integrate arrest data with the Camden Coalition’s existing data holdings from local hospital systems. The purpose of this initiative was to identify individuals caught in a cycle of arrest and hospital use, identify the drivers of extensive cross-system cycling, and design interventions to address underlying risk factors. Analysts found that housing instability, chronic medical conditions, substance use disorders, and mental health challenges were prevalent among the individuals identified in the data. This analysis led to the launch of Camden RESET (Re-Entering Society with Effective Tools), funded by the Laura and John Arnold Foundation.

Camden Coalition analysts worked with the Camden RESET care team, a three-person unit composed of a registered nurse, a social worker, and a community health worker, to develop the eligibility criteria for participation in the program. Together, they found that the top 1% of the incarcerated population had six or more jail stays in the previous year, and that individuals with six or more jail stays had a median number of four emergency department (ED) visits in a year. These parameters were set as the initial triage criteria for Camden RESET.

As the team learned more about the flow of people through the jail, however, they realized that six or more jail stays and four or more ED visits in a year would create too small of a pool of potential participants. This was because the timing of release from jail relative to booking is often unpredictable: some people who fit the criteria would have already been released before the care team could engage them. The team decided to enlarge the pool of potential participants by slightly lowering the threshold of jail visits to three or more in a year, and setting the hospital use criteria at either four or more ED visits or two or more hospital admissions. Lowering the utilization threshold more than tripled the size of the potentially eligible population on a given day at the Camden County Jail while still enabling the team to focus on individuals with high cross-system use. The care team chose to target individuals with the highest

The Camden Coalition of Healthcare Providers’ jail-based re-entry pilot project

Building on findings from its work integrating arrest and healthcare data, the Camden Coalition is piloting Camden RESET (Re-Entering Society with Effective Tools), a care intervention program to improve outcomes for people with complex health and social needs who are frequently incarcerated in the Camden County Correctional Facility. Launched in December 2017, the pilot program adapted the Camden Coalition’s traditional care management model, in which multi-disciplinary teams engage patients who have frequent hospitalizations beginning at the hospital bedside. In Camden RESET, care team members cultivate relationships with participants while they are in the jail and continue to work with them when they re-enter the community. The care team supports participants as they navigate multiple post-release appointments and obligations, coaches them to success as they pursue their goals, and connects them to services to help stabilize participants in the community.
The RESET participant selection process

First, Camden Coalition data analysts triage potential participants using jail data.

1. A partner from Camden County jail sends the Camden Coalition analysts four Microsoft Excel spreadsheets daily. There are spreadsheets for bookings, releases, charges, and aliases.

2. Using the jail's common booking identification number, which is consistent across all reports, the analysts reformat and import the data from each spreadsheet into their own database and create one record per period of incarceration.

3. From this database of historical bookings, analysts identify the individuals who meet the minimum number of jail stays (three or more within the preceding 12 months) to qualify for the program and create a spreadsheet with those individuals’ demographics and jail history.

Next, analysts combine the jail and healthcare data.

1. The Camden RESET care team uses patients’ information, such as name and date of birth, from the spreadsheet created by the analysts to find potential participants in the Camden Health Information Exchange (HIE).

2. The care team uses the HIE data to determine if potential participants meet healthcare utilization criteria (either four or more ED visits, or two or more hospital admissions in the preceding 12 months).

3. The care team checks the HIE to confirm that potential participants are Camden city residents.

4. If there are more participants on the list than expected, the care team attempts to engage participants who have the highest levels of dual-sector involvement based on the data.
department visits. Many participants are hesitant to discuss their health problems and healthcare decisions, so having the data gives care team staff objective information on which to base what may be emotional conversations.

Jail release times are sometimes changed without notice or happen in the middle of the night when program staff are unable to meet participants, which sometimes makes locating post-release participants difficult. Having regular access to jail feeds and receiving an email alert as soon as participants are seen at local EDs makes it possible for staff to connect with participants and support them in particularly vulnerable times.

Using cross-sector data for program planning means staff already have an idea of some of the barriers program participants might face and can prepare for those needs. Because earlier analysis revealed that many individuals with high dual-sector utilization also experienced housing instability, the Camden Coalition anticipated needing funds for transitional housing. But once the program was underway, staff realized housing instability was even more common than they had anticipated. The Camden Coalition used the data to demonstrate participants’ need for housing to funders and successfully advocated for a new budget that provides more funds for transitional housing. Staff also use cross-sector data regularly to literally meet participants where they are, in the jail or at hospital bedside. Using data throughout the process helps care team staff build the trusting, authentic relationships with participants that are key to a successful care management program.
About the Brief

This brief, made possible by the Aetna Foundation, is one of a series of briefs and webinars outlining considerations for cross-sector data sharing to improve health and well-being. Each brief builds upon content presented in a webinar of the same topic. Find recordings of the webinars and the series of briefs at https://www.nationalcomplex.care/blog/data-sharing/.

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About Us

The Camden Coalition of Healthcare Providers is a citywide coalition of over 25 hospitals, primary care providers, and community organizations working together to deliver better healthcare to vulnerable citizens in Camden, NJ. Founded by Dr. Jeffrey Brenner in 2002, the Coalition knits together a fragmented healthcare system for patients with complex needs and repeated, ineffective and expensive hospitalizations, using smart data and holistic, multi-disciplinary team care. We believe if we can deliver better care at lower cost here in Camden, it can be done for everyone, everywhere in America. Learn more about the Camden Coalition on our website: camdenhealth.org.

The National Center for Complex Health and Social Needs is an initiative of the Camden Coalition of Healthcare Providers in Camden, New Jersey. The National Center works to engage a wide range of national stakeholders across the spectrum of healthcare and health policy around improving care for high-cost, high-need consumers. The National Center is funded by the Robert Wood Johnson Foundation and the Atlantic Philanthropies. AARP is a founding member. Learn more about the National Center on our website: nationalcomplex.care.


