

Health Information Exchange between Jails and Their Communities: A Bridge That Is Needed under Healthcare Reform

by Ben Butler, MA

Abstract

Jails have often been compared to islands because they are thought to be cut off from the community both physically and perceptually. Few people understand that besides being places of confinement, jails function as health care providers. The separation of jails from community results in disjointed health care services and treatment for individuals cycling in and out of jail. Healthcare providers in the community have little knowledge of the care their patients have received in jail; the same can be said of jail health providers about care provided in the community. With the passage of the Affordable Care Act (ACA) and the Health Information Technology for Economic and Clinical Health Act (HITECH), the federal government took the lead respectively in expanding health insurance coverage and in spurring the adoption of electronic health records (EHRs) and the development of health information exchanges (HIEs). Taken together, these initiatives place a strong emphasis on promoting continuity of care. With the expansion of Medicaid under the ACA, many of the individuals leaving jail will have access to health insurance for the first time. Community-based providers to the newly insured will want to know about the care that was provided in the jail. The developing technological infrastructure would seem to offer the best way to access this information. However linking the community and jail information systems is not just a technological issue, but requires the cooperation of all stakeholders.

This paper presents two case studies: one in which a single champion made the decision to link the jail health care system to the local HIE and the other where all stakeholders were included in the process. In the first case study, the jail healthcare system reverted to its “island” status when the HIE was abandoned without protest from community stakeholders. In the second case study, the multiple stakeholder approach, while not necessarily a complete guarantee of long-term success, ensured that the jail healthcare system could not so easily go back to being an island cut off from the rest of the community.

Key words: ACA, HITECH, EHR, HIE, Medicaid, jails

In healthcare, information technology (IT) creates important bridges—between patients and their doctors, between different types of service providers, and between providers and payers. With implementation of the Affordable Care Act (ACA) imminent—and with it the induction of up to 32 million Americans into the ranks of the insured—we need IT to create yet another bridge: between community healthcare providers and local and county jails. Although jails serve as a crucial safety net provider for high-need, high-cost populations, they rarely are recognized as such. As a result, they tend to be excluded from discussions on healthcare reform and health IT, including—very importantly—the development of health information exchanges (HIEs), which have significant implications for both healthcare quality and costs.

The federal government has done much in recent years to spur the adoption of health IT, in particular electronic health record (EHR) systems and HIEs. The Health Information Technology for Economic and Clinical Health (HITECH) Act, passed by Congress in 2009 as part of economic stimulus legislation, authorized the spending of \$44 billion on EHRs, data connectivity, and the development of privacy and security standards. The meaningful use program provides incentive payments to eligible providers that demonstrate meaningful use of certified EHR technology.

The implementation of meaningful use has been staged in three phases so that providers can gradually adopt technology that will be interoperable and lead to the exchange of data through HIEs. Jails were not originally considered eligible providers under HITECH. Recently, however, this restriction has been eliminated. Providers with 30 percent or more of their patients enrolled in Medicaid are able to participate in Medicaid meaningful use incentive programs.¹ Previously, Medicaid meaningful use incentive payments were based on paid Medicaid encounters.

This inclusion of correctional institutions into the meaningful use incentive programs is due in large part to the Patient Protection and Affordable Care Act (ACA). Starting in 2014, the law will expand eligibility for Medicaid and subsidized health insurance to millions of previously uninsured, low-income people. It is believed that a substantial proportion of the millions who become newly eligible for coverage under the ACA will have had some involvement with local jails. Because the ACA also established parity for mental health and substance abuse treatment, many of these people will have access to behavioral healthcare services for the first time. To support better coordination of care under the expansion, the ACA has health IT–related provisions to provide a foundation for accountable care organizations (ACOs) and HIEs.

In addition, the ACA creates tremendous opportunities to improve both public health and public safety while reducing healthcare and criminal justice costs. Washington State shows that offering behavioral healthcare treatment to very low-income adults can significantly reduce crime and recidivism while improving both physical and mental health.²

Historically, correctional facilities have been viewed as separate from their communities—as islands, both metaphorically and physically. Think of Alcatraz and Riker’s Island. Jails are not perceived as places where very sick people receive healthcare, yet they are an important part of the healthcare system.

Every year, 10 million unique individuals cycle in and out of the 3,300 jails in the United States, which are run by county or local governments and are required by law to provide healthcare to the people in their custody.³ People in jail tend to have significantly higher rates of mental illness, substance addiction, and chronic and infectious diseases, including hypertension, diabetes, tuberculosis, HIV/AIDS, and hepatitis B and C, than the general population.^{4,5} Unlike prison inmates, who are incarcerated for sentences of at least a year, jail detainees are released quickly into their home communities: 64 percent are out within a week.⁶

Currently 90 percent of the jail-involved population is uninsured.⁷ After release, jail-involved individuals generally go without treatment for their underlying health problems, which then worsen and become part of the community health burden. When they do get healthcare, they typically get it at the local hospital emergency department.⁸ Untreated health problems—including mental illness and substance abuse disorders—may also contribute to repeat offenses and recidivism.

Under the ACA, most jail-involved individuals will become newly eligible for healthcare coverage in 2014.⁹ Some will be eligible for subsidized health insurance or included in Medicaid expansion. Outside of jail, their medical histories eventually will be captured by EHRs and integrated into HIEs if they wind up in an emergency room or with another community healthcare provider. Yet the healthcare that they receive in jail remains a black box because it is not connected with the healthcare they receive in the community.

This lack of connectivity between jails and their communities will undermine the potential for health IT and expanded healthcare coverage under the ACA to improve healthcare and lower costs through better care coordination. If jails continue to be excluded from community-based systems of care and their

HIEs, large numbers of vulnerable citizens will continue to receive disjointed and costly care. One solution is to include jails in HIEs so that jails can quickly identify the health concerns of their detainees and so that medical providers outside the jail can understand the treatment their patients receive while in jail.

To explore some of the issues involved in including jails in HIEs, this article takes a case study approach. Because HIEs are a relatively new phenomenon and their structures and methods vary widely, case studies were deemed the most effective way to delineate the complex issues involved in including a jail within an HIE. Thus, these findings are preliminary and exploratory, and drawing conclusions from this case study approach would be inappropriate. Rather, the author seeks to describe lessons learned from these two case studies so that policy makers, practitioners, and researchers can begin to identify some of the issues involved in having jails become HIE members.

To date, the experience of having jails in HIEs is rare, but the information that is available is instructive. In the first of the following two case studies, a county jail in California joined an HIE at the insistence of the jail's new medical director, without any big-picture thinking or discussion among the stakeholders as to the benefits of the venture. In the second example, from Camden, New Jersey, the jail entered into an HIE after stakeholders from the county government, the jail, and the HIE sat down together and discussed how bringing the jail into the HIE could help solve some serious healthcare problems in the community while reducing costs. In the end, they agreed that the jail was the missing part of the healthcare puzzle and that the HIE would bring that puzzle together.

Case Study 1: One Strong Advocate at a California Jail Does Not Bring Permanence

In California, serendipity enabled a county jail to join its county's HIE, creating a bidirectional data interface between the jail and community health providers, including the area's major hospital. Unfortunately, serendipity was not enough to maintain that partnership once its key advocate—the medical director for the jail—retired. Ironically, the ease with which the enterprise was accomplished proved to be its undoing. Unaware of the value that being in the HIE provided the jail, county officials failed to make HIE participation a requirement in their request for proposals (RFP) for a new medical provider.

The HIE was organized by an independent physician organization of about 3,000 physicians in the late 1990s. In 2001, the web-based HIE launched with a virtual medical record that served as a platform for participating providers to share an array of information electronically, including clinical lab results, prescription refill requests and authorizations, patient referrals, and specialist recommendations. As of early 2012, the HIE covered a patient population of 250,000 and included two full-service hospitals, more than 350 physicians, four outpatient laboratories, five radiology centers, the county health services department, several safety net clinics—and the county jail.

The jail came on board in 2007, at the request of its new medical director, who as a private practice physician had participated in the county HIE and found it enormously beneficial. When he arrived at the jail, he was stunned to learn that it was not already part of the HIE.

The jail had no way of communicating electronically with outside providers and accessing inmates' health information in real time, which the medical director felt was essential. In jail, he noted, patients are not reliable self-reporters. They frequently lie about their medical history, and they often are health illiterate. It is difficult for doctors in jail to build a trusting relationship with their patients, even though that relationship may turn out to be a long one given the high rates of recidivism in most jails. And because jail inmates tend to cycle back and forth between the jail and the community, where they get most of their healthcare in the hospital emergency room, it is impossible to provide continuity of care without linking information on healthcare delivered in these disparate settings.

Not only was the jail left out of the HIE; it had no EHR system at all. Much to the new medical director's dismay, it used paper records for everything. This situation certainly was not unusual. Few communities recognize jails as part of their healthcare safety net when they develop HIEs, even though

jails play an important role in treating some of society's most vulnerable patients. The majority of the nation's 3,300 jails lack EHR systems, mainly because their high cost often presents an insurmountable barrier.

However, the incoming medical director for this 500-bed jail demanded to be part of the HIE. The biggest point in his favor turned out to be the low cost of participation: \$25 per month per user. Unlike a commercial EHR system, the web-based HIE required no up-front capital investment. It was an easy sell.

Implementation was easy as well. It took the medical director and the jail nurses less than two hours to be trained on the system, and two weeks to put it into operation, with no loss in productivity and no complaints from nursing staff.

Some tweaks were required for the system to function effectively in a jail. The most significant fixes addressed gaps in medication order entry and certification and in the intake form. Nor did the system produce a discharge summary. Still, the system accomplished what the medical director wanted most: real-time access to emergency room and lab data.

When the medical director retired after five years at the jail, the county decided to outsource its healthcare services for the jail to a private vendor. Despite overall satisfaction with the HIE, no one thought to factor HIE participation into the RFP. The HIE was such a low-cost, uncontroversial item that it fell off the radar screen.

Initially, the new vendor liked the HIE, but then it hit a wall. The HIE system was not a management system. It did not record diagnostic or clinical procedure codes, and it did not help the new vendor manage utilization, referrals, or claims. In the end, the vendor decided it was not worthwhile to continue entering the jail's data into the HIE, which is now a legacy system as far as the jail is concerned. Instead, the new vendor adopted a commercial EHR system designed for community outpatient settings.

Once again, healthcare provided in the county jail is unconnected with healthcare provided in the community. Although providers in the jail can use the HIE to look up a patient in the community, providers in the community cannot tell what care their patients received while in jail. They are operating with incomplete information on their patients' health and healthcare experiences. Although the specific ramifications may never be entirely clear, this arrangement cannot be positive for patient outcomes.

In retrospect, the jail's push for connectivity with the community was won too easily, and was achieved in a vacuum, with no big-picture thinking or discussion. Without an outspoken champion, and without broad recognition and understanding of the value that the HIE brought to both the jail and the community, this important enterprise fell by the wayside.

Case Study 2: Stakeholders in Camden, New Jersey, Come to the Table

Serendipity also played a role in the events leading to the addition of the Camden County, New Jersey, jail to the Camden Health Information Exchange. The difference between Camden and the California county is that in New Jersey, the stakeholders involved recognized the opportunity as a way to improve the care coordination and management of a high-risk, high-cost population. A deliberate, strategic, and concerted effort was made to bring the jail into the HIE. Far from being forgotten, this new bridge between the jail and community is being monitored closely for results.

The arrangement began with New Jersey's efforts to improve its inmate reentry process. Under the American Recovery and Reinvestment Act (ARRA) of 2009, the New Jersey attorney general's office received funding to launch a new community reentry initiative in four counties. As part of the initiative, the attorney general's office also entered into a collaboration with the Robert Wood Johnson Foundation, the Jacob and Valeria Langeloth Foundation, and Community Oriented Correctional Health Services (COCHS) to build connectivity between jails and community healthcare providers in the four counties. COCHS, a nonprofit organization, provided technical assistance to the four counties in the process of creating connectivity as a way to improve community reentry from jails. Camden County was one of the four counties selected to participate in the initiative.

Separately, another significant movement was already underway in the city of Camden, one of the nation's most impoverished municipalities. Jeffrey Brenner, MD, a primary care physician and director of the Camden Coalition of Healthcare Providers, was working on a community-focused, data-driven intervention known as "hot spotting": identifying very high-cost patients (for example, those with multiple emergency room admissions in a year), concentrating resources on them, and coordinating their services in an effort to both improve health outcomes and reduce healthcare costs.¹⁰ Building on this initiative, the Camden Coalition in 2010 launched the Camden Health Information Exchange as a way to share admission, discharge, and transfer transaction data and lab and radiology results among the principal hospitals in Camden.

Upon learning of this development, COCHS staff approached leaders at the county, the Camden HIE, and the jail with the idea of bringing the jail into the HIE. They were all receptive, especially when they saw the potential for lowering healthcare costs. In July 2012, county officials, COCHS, the jail warden, and the Center for Family Guidance (CFG), the private healthcare contractor for the jail, met to discuss the proposal. CFG agreed to pay the \$20,000 licensing fee to connect the jail to the HIE, although the county would hold the actual license for the jail. These arrangements were completed by August, and 13 members of CFG's staff were trained on how to use the HIE by mid-November 2012, when the jail came online as part of the HIE.

By January 1, 2013, CFG staff had accessed 40 unique inmate records through the HIE—a very high level of use only five weeks following launch, in the Camden HIE's experience. These records included demographic information, lab and radiology results, and discharge summaries. The Camden Coalition will monitor CFG's utilization of the HIE and retrain staff as necessary to continue to increase their use of the HIE.

The jail is still in the early stages of its participation in the HIE. Hopes are high, however, that information sharing between the jail and community healthcare providers will significantly cut costs by, for example, reducing the number of duplicate medical tests and delayed diagnoses. Participants are optimistic that they can reduce recidivism by coordinating and improving treatment for people with mental illness and substance addictions. One thing is clear, however: The leaders involved in this initiative recognize that they cannot improve healthcare quality or reduce healthcare costs without meeting the needs of the jail-involved population, and the HIE is essential to that goal.

Conclusion

The experiences in these two counties underscore the importance of partnerships among stakeholders who frequently are not accustomed to working together but who share a serious problem: the enormous healthcare needs of the jail-involved population. Jails are part of the community healthcare system. An HIE that leaves out the local or county jail has a gaping hole in its network. Fortunately, the impetus of both the HITECH Act and healthcare reform under the ACA creates strong incentives to bridge this gap. If the county in California had been able to participate in the meaningful use incentive program with its emphasis on interoperability, would that county have abandoned its HIE so quickly? Likewise, in Camden, New Jersey, would it have been necessary for COCHS, together with its foundation partners, to initiate the connection to the HIE, if the jail could had taken advantage of the meaningful use incentives? The HIE in Camden would have been seen logically as an important partner.

As connectivity between community healthcare systems and local correctional facilities evolves, health IT—and particularly HIEs—will be the glue that enables effective collaborations to manage significant populations of high-risk, high-cost patients. Formulating and constructing these effective collaborations is likely to require both additional information on the experiences with the inclusion of jails in HIEs and empirical data that document the efficacy of HIEs in lowering costs, assuring quality, and increasing access to care.

Ben Butler, MA, is the chief information officer of Community Oriented Correctional Health Services in Oakland, CA.

Notes

1. “Federal EHR Incentive Program Now Applicable to Correctional Providers.” *CorrectCare* 27, no. 1 (Winter 2013).
2. Mancuso, D., and B. Felver. *Health Care Reform, Medicaid Expansion and Access to Alcohol/Drug Treatment: Opportunities for Disability Prevention* (Washington State Department of Social and Health Services Research and Data Analysis Report No. 4.84). Olympia, WA: Washington State Department of Social and Health Services, October 2010.
3. Regenstein, M., and J. Christie-Maples. “Medicaid Coverage for Individuals in Jail Pending Disposition: Opportunities for Improved Health and Health Care at Lower Costs.” Department of Health Policy, School of Public Health and Health Services, George Washington University, November 2012.
4. Conklin, T. J., T. Lincoln, and R. Wilson. *A Public Health Manual for Correctional Health Care*. Ludlow, MA: Hampden County Sheriff’s Department, 2002.
5. Veysey, B. “The Intersection of Public Health and Public Safety in U.S. Jails: Implications and Opportunities of Federal Health Care Reform.” Community Oriented Correctional Health Services Issue Paper, January 2011. Available at <http://www.cochs.org/files/Rutgers%20Final.pdf>.
6. Minton, T. D. “Jail Inmates at Midyear 2009: Statistical Tables.” *Bureau of Justice Statistics Statistical Tables* (NCJ230122). Washington, DC: US Department of Justice, 2010.
7. Wang, E. A., M. C. White, R. Jamison, J. Goldenson, M. Estes, and J. P. Tulsy. “Discharge Planning and Continuity of Health Care: Findings from the San Francisco County Jail.” *American Journal of Public Health* 98, no. 12 (2008): 2182–84.
8. Mallik-Kane, K., and K. Visser. *Health and Prisoner Reentry: How Physical, Mental, and Substance Abuse Conditions Shape the Process of Reintegration*. Washington, DC: Urban Institute Justice Policy Center, 2008. Available at http://www.urban.org/UploadedPDF/411617_health_prisoner_reentry.pdf.
9. Regenstein, M., and J. Christie-Maples. “Medicaid Coverage for Individuals in Jail Pending Disposition: Opportunities for Improved Health and Health Care at Lower Costs.”
10. Gawande, A. “The Hot Spotters: Can We Lower Medical Costs by Giving the Neediest Patients Better Care?” *The New Yorker*, January 24, 2011. Available at http://www.newyorker.com/reporting/2011/01/24/110124fa_fact_gawande.