

# Meaningful Use of an Electronic Health Record in the New York City Jail System

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Use of electronic health records (EHRs) is an important innovation for patients in jails and prisons. Efforts to incentivize health information technology, including the Medicaid EHR Incentive Program, are generally aimed at community providers; however, recent regulation changes allow participation of jail health providers. In the New York City jail system, the Department of Health and Mental Hygiene oversees care delivery and was able to participate in and earn incentives through the Medicaid EHR Incentive Program. Despite the challenges of this program and other health information innovations, participation by correctional health services can generate financial assistance and useful frameworks to guide these efforts. Policymakers will need to consider the specific challenges of implementing these programs in correctional settings. (*Am J Public Health*. 2015;105:1752–1754. doi:10.2105/AJPH.2015.302796.)

## KEY FINDINGS

- Use of health information technology, including the meaningful use of electronic health records, in jail health systems enhances their ability to deliver coordinated, quality care to a difficult-to-treat patient population in a challenging setting.
- Participation by correctional settings in these programs can generate financial assistance and useful frameworks to guide these efforts, but lawmakers will need to consider specific challenges of implementing these programs in correctional settings.

## INTEGRATION OF ELECTRONIC

health record (EHR) technology has been a primary feature of health care in the United States for more than a decade. The objectives of EHR adoption include improvements in continuity of care, evidence-based practice, and reduction of errors, and have been promoted through the Centers for Medicare and Medicaid Services (CMS) Medicaid and Medicare EHR Incentive Program, also known as meaningful use (MU).<sup>1</sup> Broadly, CMS has made incentive payments available to eligible health providers who can show that they have adopted, implemented, or upgraded to a certified version of an EHR and that they are using their

EHRs in a manner that meets the goals of the program.<sup>2</sup> These payments are delivered as providers demonstrate compliance with specific measures along 3 progressive stages. The first stage focuses on data capturing and sharing, the second on developing advanced clinical processes, and the third and final stage focuses on improving outcomes.<sup>3</sup>

In jails and prisons, adoption of EHRs has mirrored that of community providers, with large systems making headway before smaller ones.<sup>4</sup> Challenges to EHR adoption in correctional settings include the wide spectrum of care delivered, as well as reluctance to develop new health information infrastructure that may be perceived as contributing to legal liability. In the New York City jail system, the Department of Health and Mental Hygiene (DOHMH) is responsible for the provision of health services. From 2008 to 2011, DOHMH implemented the eClinicalWorks EHR system across a health system that spans 12 jails and provides approximately 750 000 annual medical and mental health encounters to an average daily population of approximately 11 000 people.<sup>5</sup> This product has been modified extensively to reflect the triple aims of our health system: patient

safety, population health, and human rights.<sup>6</sup> After a September 2012 regulatory amendment effectively allowed providers practicing in correctional health settings to become eligible, we decided to pursue certification and payments. (This regulation changed the definition of a Medicaid encounter so that services rendered to individuals enrolled in a Medicaid program, regardless of whether public insurance was billed for the service, could count toward proof of providing care to a minimum Medicaid patient population of 30%.<sup>7</sup>)

## INITIAL PHASE

Participation in the MU program is voluntary, but limited to specific provider types including physicians, nurse practitioners, certified nurse midwives, and dentists. (Physician assistants are also eligible, but only when they practice in a Federally Qualified Health Center that is “so led” by a physician assistant.<sup>2</sup>) After reviewing models in the community, we found that very few offered any incentive-sharing agreements, and those that did focused on funding continuing education. We opted for a layered gain-sharing model that featured both continuing education

funds and unrestricted money, with payments increasing on the basis of the number of participating providers. This agreement was based on negotiations with providers and their union. Ultimately, nearly 100 providers agreed to the incentive-sharing agreement; 65 providers have completed the steps required to formally attest, and 59 have received payments totaling \$1.25 million as of November 2014. Providers from each jail participated, and the primary reason for nonparticipation was being already enrolled though a position in the community. The remaining providers are at various points in the process, though we expect most to successfully attest by the 2014 deadline.

One of the requirements for MU participation is to show 30% Medicaid patient volume. Providers practicing in a group setting are permitted to use the group's Medicaid patient volume as a proxy for individual Medicaid patient volume. Starting in July 2013, we developed the capacity to check Medicaid status of each incoming patient (approximately 175 patients per day) to associate the status with medical and mental health encounters delivered in jail clinics. Results are entered into the EHR within approximately 24 hours of jail admission and Medicaid patient volume climbed steadily, reaching 36% within 5 months and leveling off at approximately 45% by the seventh month.

The attestation process for individual providers was another significant endeavor in the MU process. Because we cannot bill Medicaid for health services provided inside our system, most of our physicians are not registered Medicaid providers. We dedicated

both administrative and leadership resources to identifying and working with providers to complete program enrollment and attestation requirements. The primary tasks associated with this work became the responsibility of 1 full-time administrative employee who spent an estimated 20% of her time on this project at the height of these activities, and continues to dedicate approximately 10% of her time more than a year later. The initial investment of time and resources pays off, however, as the Medicaid MU payments are heavily weighted to attestation in the first year of program participation. Key elements to enrollment were the sharing of incentive payments with providers and having dedicated administrative staff to coordinate participation. The first-year Medicaid payment is \$21 250 per provider and is awarded for demonstrating eligibility and adoption, implementation, or upgrade to a certified EHR. Subsequent payments for the (up to) 5 years of

additional participation are \$8500 per provider per year, and are awarded on the basis of achievement of measures associated with the year and stage of the program, arguably a much lower payoff to achieve a much more challenging goal.

### FUTURE CONSIDERATIONS

Use of health information technology, including the meaningful use of EHRs, in jail health systems enhances their ability to deliver coordinated, quality care to a difficult-to-treat patient population in a challenging setting. Federal and local efforts to incentivize health information technology use are generally aimed at community providers; however, recent regulation changes allow jail health services to participate in and benefit from MU participation.

Although our initial efforts have focused on stage 1, we have identified and are addressing several key aspects of stages 2 and 3 (see the

box on this page). Although these stages are challenging, correctional health providers must implement health information technology systems to deliver the community standard of care to some of our nation's sickest individuals. We have found that adoption of the EHR must be supplemented by several other health information technology innovations that allow connection of the jail health service to community health records (see the box on this page). Furthermore, formal participation in the later stages of MU will require exceptions to be made for certain patient engagement measures that cannot be met in the security setting of jail. Correctional health services and other policymakers will likely need to advocate further changes to MU to ensure that patients in these settings can benefit from wider participation. ■

### Important Features of Meaningful Use (Stages 2, 3) for Correctional Health

**e-Prescribing:** The jail houses its own pharmacy on site, so traditional e-prescribing with community-based pharmacies is not possible. We have introduced a pharmacy system with an interface with eClinicalWorks electronic health records system (eCW), which will allow prescriptions to be "generated and transmitted electronically" as defined in the measure.

**Meaningful use measure performance tracking:** Although the community version of eCW rolled out the meaningful use adoption quality dashboards used to measure and track provider compliance with meaningful use measures when it became a certified in 2011, these dashboards were not implemented in the version of eCW used in the correctional setting. We expect to implement meaningful use adoption quality dashboards in the near future.

**Providing clinical summaries for office visits:** Patients in correctional settings do not have a safe place to securely store sensitive personal health information.<sup>8</sup> The realities of a correctional setting, with its heightened security measures, prohibition on contraband, and lack of dedicated personal storage space, make the distribution of confidential health information to incarcerated patients highly problematic with potentially harmful outcomes.

**Providing patients with the ability to view online, download, or transmit health information:** We would like patients to have access to their records online upon release. However, many of our patients may not have an e-mail address required for patient portal use, or, if they do, they may be unwilling to share it with jail-based staff. One alternative would be to create a patient portal and offer to send access information to patients via text message.

## Building Upon Meaningful Use in New York City Correctional Health

Community medication information from commercial pharmacies: In 2011, we started contracting with a third-party pharmacy service to allow lookup of community prescriptions filled at commercial pharmacies for every newly admitted patient. This service yields important information, but only for about 25% of our patients, as inconsistent patient demographic information remains a limitation in the correctional setting.

Medicaid claims information for behavioral health patients: Starting in 2013, with a patient's consent, we can access the Psychiatric Services and Clinical Knowledge Enhancement System, a Medicaid data warehouse that includes all claims information (both medical and mental health) for patients who have had a substance use or mental health diagnosis, psychiatric treatment, or psychotropic medication billed to Medicaid within the past 5 years. This information is extremely detailed and appears most useful to inform treatment (and correct diagnosis) of behavioral health concerns for patients in jail.

Community health information through a regional health information organization (RHIO): During this time, we have also achieved connection between our electronic health records and an RHIO, which is slated to connect to the statewide health information system early next year. Because community health systems are only beginning to participate in this process and individual RHIOs have not been connected to one another, there is less information available via our RHIO connection than the Medicaid claims database. However, importantly, we will be sharing information about jail-based care with the RHIO, making this information available to community providers.

Health home membership and program information: A final innovation will occur when we obtain access to information about New York State Health Home program membership and participation. The health home program represents the effort of New York State to identify a high-needs subset of Medicaid recipients and provide reimbursement for coordination of their care. Knowing this information will help expand the pilot programs currently in place to coordinate care for these patients between the jail health system and their community-based health home.

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### Contributors

M. Martelle led the conceptualization, drafting, and revision processes for this article. B. Farber and R. Stazesky contributed to drafting and revising the article with critical content. N. Dickey revised the article with critical content. A. Parsons contributed to report conceptualization and design and revised the article with critical content. H. Venters was responsible for oversight on report conceptualization and design; he also drafted and revised the article with critical content.

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### References

1. Division A, Title XIII, and Division B, Title IV, of Public Law 111-5. Available at: <http://www.hhs.gov/ocr/privacy/hipaa/understanding/cov-eredentities/hitechact.pdf>. Accessed February 16, 2015.
2. Medicare and Medicaid programs; Electronic Health Record Incentive Program, 75 *Federal Register* 44313 (2010). Available at: <https://federalregister.gov/a/2010-17207>. Accessed February 16, 2015.
3. An introduction to Medicaid EHR Incentive Program for eligible professionals. Available at: [http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/EHR\\_Medicaid\\_BegGuide\\_Stage1.pdf](http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/EHR_Medicaid_BegGuide_Stage1.pdf). Accessed February 16, 2015.
4. Butler B, Murphy J. The impacts of promoting health information technology on health care delivery in jails and local communities. *Health Aff (Millwood)*. 2014;33(3):487–492.
5. Stazesky R, Hughes J, Venters H. Implementation of an electronic health record in the New York City jail system. Community Oriented Correctional Health Services. 2012. Available at: <http://www.cochs.org/files/hieconf/implementation-ecw-new-york.pdf>. Accessed February 16, 2015.
6. Glowa-Kollisch S, Andrade K, Stazesky R, et al. Data-driven human rights: using the electronic health record to promote human rights in jail. *Health and Human Rights*. 2014; 16(1). Available at: <http://www.hhrjournal.org/2014/07/01/data-driven-human-rights-using-the-electronic-health-record-to-promote-human-rights-in-jail>. Accessed February 16, 2015.
7. Medicare and Medicaid programs; Electronic Health Record Incentive Program—Stage 2, 77 *Federal Register* 53967 (2012). Available at: <https://federalregister.gov/a/2012-21050>. Accessed February 16, 2015.
8. Anno BJ. *Correctional Health Care: Guidelines for the Management of an Adequate Delivery System*. Chicago, IL: National Commission on Correctional Health Care; 2001.