

Using Medicaid Claims Data to Identify Service Gaps for High-Need Clients: The NYC Mental Health Care Monitoring Initiative

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Public mental health authorities have access to large administrative databases. Advances in information technology now make it possible to use secondary analyses of these data to inform policy and clinical interventions. New York City and State mental health authorities developed an initiative using Medicaid claims and other administrative data to identify individuals with serious mental illness living in New York City (NYC) who are at risk of lapses in care. The NYC Mental Health Care Monitoring Initiative represents one of the first efforts to create “evidence-based policy.” The authors describe the initiative’s background, development, and key collaborations. (*Psychiatric Services* 62:9–11, 2011)

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Translating research findings into evidence-based practices is key to enhancing the quality of mental health care (1). Public health administrators are increasingly challenged to adopt a similar evidence-based approach to policy decision making. Such an approach requires that policy implementation plans include impact assessments (2). These are outcome evaluations that incorporate systematic review of the literature, adoption of standard measures, and documentation of intended and unintended consequences (2,3). Policy makers and services researchers can facilitate these impact assessments by taking advantage of large administrative databases and information technology infrastructures available in many public mental health systems (4).

Collaborations between governmental agencies, academics, and provider agencies with complementary expertise facilitate these activities. In New York City (NYC), the New York State (NYS) Office of Mental Health (OMH) and the NYC Department of Health and Mental Hygiene (DOHMH) collaborated to implement the NYC Mental Health Care Monitoring Initiative in 2009. The collaboration also includes services researchers at Columbia University and a not-for-profit managed care company. Here we describe the development of this evidence-based policy initiative, which uses state administrative data to inform clinical decision making and enhance access to services for persons with serious mental illness.

Background

In 2006–2007 instances of violence in the city involving individuals with serious mental illness received notable media coverage. Some involved assaults, including the murder of a psychologist by someone who had received state-funded mental health services. Other incidents involved police contacts with individuals with serious mental illness who were acting in a bizarre manner, including an instance in which an individual with serious mental illness died after being shot by a police officer. At the governor’s behest, state and city officials convened the NYS/NYC Mental Health–Criminal Justice Panel to examine cases, consider opinions of experts, and recommend actions to improve mental health services and promote safety. Members of the panel included top city and state officials in mental health, addiction, criminal justice, and adolescent services. The panel met from February to June 2008, reviewed cases involving individuals with serious mental illness who were involved in the violent episodes, and evaluated how NYC’s mental health system responds to high-need individuals with serious mental illness. The panel consulted with national experts in mental health and violence and in the interaction between individuals with serious mental illness and the criminal justice system. The panel’s charge was to identify opportunities to improve services for individuals with serious mental illness who are at risk of poor treat-

ment outcomes, involvement with the justice system, and acts of violence.

The main findings of the panel were grouped into four categories: poor coordination, fragmented oversight, and lack of accountability in the mental health treatment system; inconsistencies in quality of care within the mental health treatment system; limited capacity to share information within and between the mental health and the criminal or juvenile justice systems; and insufficient training, supports, and tools to identify and engage individuals with mental illnesses in the criminal and juvenile justice systems (8,9). The panel used Medicaid claims and other secondary data to track services received by individuals in cases that had poor outcomes and generated detailed descriptions of patterns of use and time points when individuals became disengaged from treatment. Coordination between service providers is a critical component of effective treatment, yet the panel noted that mental health service providers often acted in parallel rather than in concert. Further, individuals with serious mental illness did not always have a care provider with overall primary responsibility and accountability.

The panel issued recommendations that identified ways in which the mental health system could improve care (5,6). A key recommendation was for NYC and NYS mental health authorities to develop an initiative using administrative data to identify apparent interruptions in care and escalating need for services among identified cohorts of high-need individuals with serious mental illnesses in NYC, with the overall aim of facilitating timely interventions by the public mental health system. NYC DOHMH and NYS OMH launched the NYC Mental Health Care Monitoring Initiative in October 2009. The initiative uses administrative data to identify high-need individuals with serious mental illness living in NYC who may not be receiving adequate services.

The Care Monitoring Initiative

The project involved collaboration between city and state government. NYS OMH had recently undertaken ambitious statewide plans to reengineer its hospital-based services and redefine

reimbursement structure for community-based mental health clinic care. The addition of another project raised concerns about overburdening the NYC mental health provider system with new regulatory initiatives. At the same time, NYC DOHMH was managing severe budget shortfalls and facing the possibility of cutting funding to NYC mental health providers. City and state mental health leaders were aware of and discussed the potential impact of these pressures and priorities on the development of the new mandated initiative. An early decision was made to develop a memorandum of understanding (MOU) between the two agencies documenting the expectations, roles, and responsibilities related to the project. The initiative was planned as a demonstration project, with the understanding that there would be flexibility in planning and timing to allow the involved parties to manage the initiative effectively. This MOU guided decision making in the initial phases of the project.

Several high-need populations were chosen to have their use of services monitored under the Care Monitoring Initiative. The project's leadership developed a consensus ordering of the groups: an individual who belonged to more than one group—for example, a person under a court order for assisted outpatient treatment (AOT) who was also assigned to an assertive community treatment (ACT) team—was assigned to the higher group. The first group included individuals who currently or had ever received AOT services. NYS has a statute for court-ordered community-based treatment, “Kendra’s Law,” to ensure that individuals with mental illness and a history of hospitalizations or violence participate in services appropriate to their needs. Most active AOT recipients received ACT or case management services. The second group included individuals who received ACT services in the prior 12 months. ACT is the most intensive level of community-based care, targeting individuals with serious mental illness who are not able to engage in traditional clinic-based services. The third group consisted of individuals who received Medicaid-reimbursed case management services in the prior 12 months. Case managers

are assigned when an individual with serious mental illness is believed to need outreach and frequent contact in the community to maintain engagement with the treatment system.

The fourth group included individuals who had received prior treatment in the NYS forensic system. This population includes individuals with serious mental illness discharged from prison satellite mental health units as well as individuals discharged to the NYC community from state psychiatric facilities after receiving inpatient care under one of several forensic designations, including not competent to stand trial, not guilty by reason of insanity, or long-term inpatient civil commitment. The final group consisted of individuals with two or more psychiatric emergency room visits or inpatient admissions in the prior 12 months. These are individuals who either because of illness severity or lack of engagement with appropriate community-based services are frequent users of the most intensive and expensive services.

The New York State Psychiatric Institute is an OMH-funded state psychiatric research center that has a close relationship with Columbia University’s academic medical center. The NYS OMH and NYC DOHMH project leadership used the relationship to access local and national consultants who provided input on the design of the Care Monitoring Initiative. The project is one of the first known efforts to use secondary claims data to directly inform clinical decision making, and the project leadership requested that a formal outcomes assessment be undertaken to document its effectiveness. The academic collaboration also assisted this process, because the evaluation will be supported in part by outside funding from federal and foundation sources obtained by project staff with academic affiliations.

Pilot work indicated that at any given point in time the high-need cohorts described above include more than 20,000 individuals with serious mental illness in NYC. The Care Monitoring Initiative involves monthly examinations of Medicaid claims data to identify patterns of service use (or nonuse) that indicate that an individual in one of the identified cohorts might not be engaged in needed treatment. Three

patterns of service use that would trigger a clinical notification were defined. The first was having no claim indicating that a prescription for psychotropic medication had been filled in the prior 60 days. The second was having no claim indicating that an ambulatory mental health care or substance abuse services visit occurred in the prior 120 days. The third pattern was having two or more claims indicating a psychiatric emergency room visit or an inpatient hospitalization in the prior 120 days.

The initiative's project development team examined service use data from October 1, 2007, to September 30, 2008, to define cutoffs for patterns of service use indicating a potential concern. Claims lag—that is, the time from when a service is rendered until the claim is received and processed by the state Medicaid administrator—is one factor to consider when making claims-based decision rules. Some Medicaid claims, such as prescription drugs, are paid electronically at the time of fill in New York, allowing for virtually real-time monitoring of the provision of such services. In contrast, pilot analyses indicated that 62% of Medicaid claims for outpatient mental health services are adjudicated within 30 days and 79% are adjudicated within 60 days. The 60-day and 120-day look-back periods for the pharmacy and outpatient mental health—acute services notifications, respectively, were based on these data. The analyses indicated that as of October 1, 2008, more than 11,000 individuals in NYC had service patterns that would generate a notification. Further modeling suggested that in the subsequent 12 months, an additional 5,200 individuals had patterns of service use that would have generated a notification.

The Care Monitoring Initiative involves borough-based teams run jointly by NYC DOHMH and NYS OMH; the first team began in Brooklyn in October 2009. To expedite the launch of the initiative, a managed behavioral health care vendor was contracted to operate the day-to-day activities of the project. The initiative's "care monitors" on the vendor's staff review the monthly clinical notification reports and contact providers who last served the identified individuals to determine whether the clinical notification

indeed represents someone with a high level of clinical concern. If so, the care monitor works with provider staff to develop a plan for reengagement and stays in touch with the provider until the individual appears to be reengaged in appropriate care. If no mental health provider can provide outreach, the care monitor consults with the respective NYC mental health authorities about the feasibility of assigning a new provider. When this is not feasible (when a high-need individual is lost to care with no contact information), the care monitor continues to review monthly clinical notification reports to determine when the individual next accesses services (for example, an inpatient hospitalization or emergency room visit) and then contacts the provider to discuss the individual's needs and engagement in services. A provider outreach protocol has been developed to serve as a template for the care monitors' interactions with treatment providers. Detailed data reporting requirements will allow for monitoring of process and outcome indicators.

The initiative's contract with the vendor to inform providers about apparent lapses in care was one means of helping providers better serve individuals. In addition, the NYC DOHMH and NYS OMH each assigned a co-director to the project to oversee the vendor and act as liaisons to providers. Several open provider meetings were held and attended by DOHMH and OMH leadership, who endorsed the vendor and underscored its authority to monitor the care of high-need individuals. To ensure accountability at several levels, the vendor's contract includes requirements for performance reporting to allow DOHMH and OMH to assess the extent to which individuals who trigger notifications are being reengaged in care, to provide information on provider performance on reengagement, and to identify how reengagement varies in the cohorts. We plan to compare the outcomes of cohorts in the Care Monitoring Initiative with those of cohorts in upstate counties and in Pennsylvania. A qualitative interview study also is planned to identify themes that underlie clients' decisions to discontinue and reengage in care.

Conclusions

This is one of the first large-scale efforts to utilize secondary data to inform clinical decision making in a large public mental health system. Multiple key collaborations contributed to the successful development of the initiative. The NYS/NYC Mental Health–Criminal Justice Panel was initially convened because of incidents of violence involving individuals with mental illness that received significant media attention. The panel began with a broad focus, but thoughtful review and expert leadership allowed key government stakeholders (NYC DOHMH and NYS OMH) to rapidly develop an action plan. With clearly stated goals and combined resources, further collaborations were developed with academics and a vendor to provide the resources to carry out specific panel recommendations. These multiple partnerships were rarely contentious because of the initiative's clear focus, open communication, and equally shared oversight authority. The NYC Mental Health Care Monitoring Initiative should provide a model for administrators, academics, and private-sector entities who wish to develop similar collaborative efforts.

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References

1. Hogan MF: The President's New Freedom Commission: recommendations to transform mental health care in America. *Psychiatric Services* 54:1467–1474, 2003
2. Wharam JF, Daniels N: Toward evidence-based policy making and standardized assessment of health policy reform. *JAMA* 298:676–679, 2007
3. Gray M: Evidence based policy making. *British Medical Journal* 329:988–989, 2004
4. Riley GF: Administrative and claims records as sources of health care cost data. *Medical Care* 47(7 suppl 1):S51–S55, 2009
5. Hogan MF, Gibbs LI, O'Donnell DE, et al: New York State/New York City Mental Health–Criminal Justice Panel Report and Recommendations. Albany, New York State Office of Mental Health, 2008. Available at www.omh.state.ny.us/omhweb/justice_panel_report
6. Smith TE, Sederer LI: Changing the landscape of an urban public mental health system: the 2008 New York State/New York City Mental Health–Criminal Justice Review Panel. *Journal of Urban Health* 87:129–135, 2010