The New York City Department of Health and Mental Hygiene Automates Integration of Pharmacy and Case Data to Address Disparities in Mpox Treatment

CSTE

Stories FROM THE Field

CONTRIBUTOR: *New York City Department of Health and Mental Hygiene*

CATEGORY: **Interoperable Data Systems**

People with socioeconomic privilege will have the most access to the latest and best medical interventions unless efforts are made to mitigate long-standing inequities. Public health must center equity in a data-driven way. Using data integration, the NYC Health Department was able to identify and address inequities in access to mpox treatment based on neighborhood of residence as well as race and ethnicity.

The "What"

The NYC Health Department automated the integration of mpox pharmacy data and voluntary health care provider reporting data with case investigation data using a modern application programming interface. This allowed for the rapid analysis and use of the results for public health interventions to address inequities.

COVID-19 treatment data was incomplete and had to be analyzed manually. However, during the mpox outbreak, the NYC Health Department was able to set up an automated system to analyze treatment data, which was more complete since only a single pharmacy filled outpatient prescriptions for tecovirimat, the treatment for mpox, in NYC. Health care providers who prescribed tecovirimat entered information into a simple REDCap survey. These data were integrated with data provided by the pharmacy, then automatically uploaded into Maven (the NYC surveillance system containing mpox case investigation data), where matching with case data occurred.

Demographic and geographic information, including neighborhood of residence, age, and race and ethnicity, was used to assess whether the percentage of people who had mpox and received treatment was similar across NYC's diverse population and neighborhoods.

The NYC Health Department treated more than 1,300 New Yorkers for mpox, which accounted for 30% of all mpox cases in NYC (a high proportion compared to many other places).

Additionally, the NYC Health Department identified specific neighborhoods that had disproportionately low rates of treatment initiation among residents who had mpox. Targeted outreach to health care providers in those neighborhoods was implemented to encourage prescribing of tecovirimat and address barriers to the use of lifesaving therapy. The NYC Health Department also expanded the capacity to prescribe tecovirimat in the Sexual Health Clinics, which serve a high proportion of non-White and Hispanic patients, and integrated treatment messaging into routine case investigation.

The "So What"

After matching treatment and case investigation data, the NYC Health Department examined treatment initiations by race and ethnicity, and disparities were not observed when compared to the demographics of cases. However, when the NYC Health Department examined the proportion of people who had mpox that received treatment, disparities showed as a greater proportion of people with mpox who identified as White and received treatment than people who identified as Black or Hispanic and received treatment. If treatment data had not been cross matched with case data, this disparity would not have been apparent.

The "Now What"

The NYC Health Department treated more than 1,300 New Yorkers for mpox, which accounted for 30% of all mpox cases in NYC (a high proportion compared to many other places). This treatment helped relieve some of the suffering people experienced from mpox and reduce the risk of complications and death. The NYC Health

Department's approach may also have helped mitigate some inequities over time through data-driven course correction and advocacy. The NYC Health Department hopes to use the lessons learned from mpox and employ similar methods to inform future public health interventions and access to care in a data-driven, equity-centered approach.