

# Gap Analysis of Routine HIV Testing Among Medicaid Providers

**TARGET POPULATION:** Undiagnosed People Living with HIV

**LOCATION:** Illinois

**PROGRAM DESIGN:** Identifying Gaps in Routine HIV Testing Among Medicaid Providers

**ESTIMATED COST:** Staff time for analysis and cost of geo-mapping software license

**FUNDING SOURCE:** CDC Prevention PS12-1201 Category B

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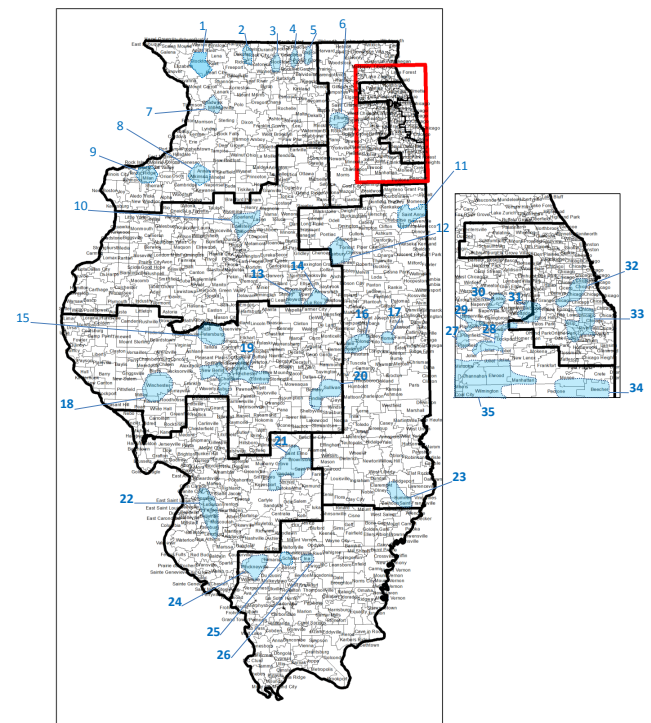
## CORE ACTIVITIES

### DATA COLLECTION & ANALYSIS

In June 2016, the Illinois Department of Public Health (IDPH) conducted a gap analysis of routine HIV testing delivered by Medicaid providers in the state. The gap analysis sought to identify areas impacted by HIV where Medicaid providers had not delivered HIV testing services in the previous six months.

Using provider-level data from the state's Medicaid claims database, IDPH generated a map comparing the zip code of the service delivery site to the distribution of HIV prevalence and incidence across the state.

To develop the gap analysis, IDPH requested a list of health care providers from the state's Medicaid claims database indicating whether the provider had submitted Current Procedural Terminology (CPT) codes for routine HIV testing. The Illinois Department of Healthcare and Family Services (DHFS)



provided the list, which identified approximately 1,940 providers who had submitted claims for HIV testing services between January 1 and June 30, 2016.

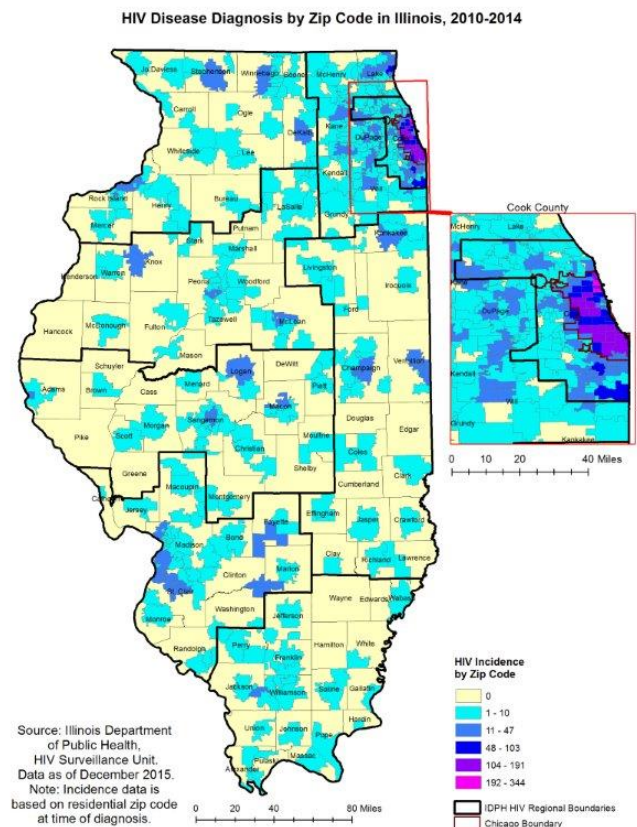
The list of Medicaid providers included information on the city, state, and zip code where the service was delivered. It included multiple types of providers, including: hospitals, federally qualified community health centers (FQHCs), primary care physician offices, and specialty provider group clinics. IDPH cleaned and imported the list of providers into ArcGIS to identify the number of clinical sites conducting testing by zip code. Providers that were located outside of the state were excluded from the analysis.

To compare this service-provision data to the distribution of the epidemic, IDPH imported zip code data points for newly diagnosed HIV cases by based on residence at time of diagnosis into ArcGIS. An additional map comparing the provider sites by county to the HIV prevalent cases based on current county of residence was also developed. The maps used geomapping techniques that strengthened the accuracy of the data analysis by estimating the distance to the nearest provider across zip code boundaries.

## DATA-DRIVEN PROVIDER ENGAGEMENT

In October 2016, the health department released a request for proposals for a new capacity-building project seeking to increase the number of clinical providers delivering routine HIV testing in the areas identified in the gap analysis. The program educates and conducts academic detailing for providers who have already contracted with Medicaid plans to increase their routine HIV testing efforts. It also provides education and training on billing-related topics such as credentialing and contracting with Medicaid and Medicare, support for the implementation of electronic health records systems (EHR), and revenue

cycle management systems for HIV community providers poised to bill third-party payers with additional capacity. Instead of using a traditional grant structure, the program gives incentive payments to providers that meet key goals such as HIV treatment initiation, linkage to partner services, and timely data reporting, among others.



## OUTCOMES

The results of the analysis helped the health department identify 30 high priority areas and target its capacity-building activities for Medicaid providers who serve over 1.3 million Illinoisans indicated for routine HIV testing.

The gap analysis allows the health department to focus capacity-building activities on the areas of the state where they will have the greatest impact on the epidemic.

## DATA

Overlaying the three data sets, IDPH identified the 30 most populous cities and counties in the state that have been heavily impacted by the epidemic and that have Medicaid providers not conducting routine HIV testing services.

## EVALUATION

The gap analysis has not undergone formal evaluation. The capacity-building project includes an external evaluator and Medicaid providers receiving capacity-building assistance for the routine testing project will submit data for further review and analysis.

IDPH is exploring opportunities to use Medicaid claims data as an instrument to evaluate the impact of the program's capacity-building activities to encourage Medicaid providers to conduct routine HIV testing in high priority areas over the life of the project.

## FUNDING & COST

IDPH staff conducted the gap analysis in approximately 30 staff hours and no other costs were associated with conducting the analysis. IDPH had already acquired a license to ArcGIS for other geospatial mapping analyses.

The routine HIV testing program is funded through state revenue funds and through the health department's PS12-1201 cooperative agreement with the Centers for Disease Control and Prevention (CDC). IDPH developed the funding mechanism for the project using a fee-for-service model that also includes incentive payments for the grantee, based on the program's outcomes.

## STRENGTHS

The gap analysis was a relatively inexpensive process that informed the health department's efforts to reduce gaps in routine HIV testing services across the state.

The use of claims data for the analysis increased IDPH's understanding of the distribution of the services that Medicaid providers are delivering across the state.

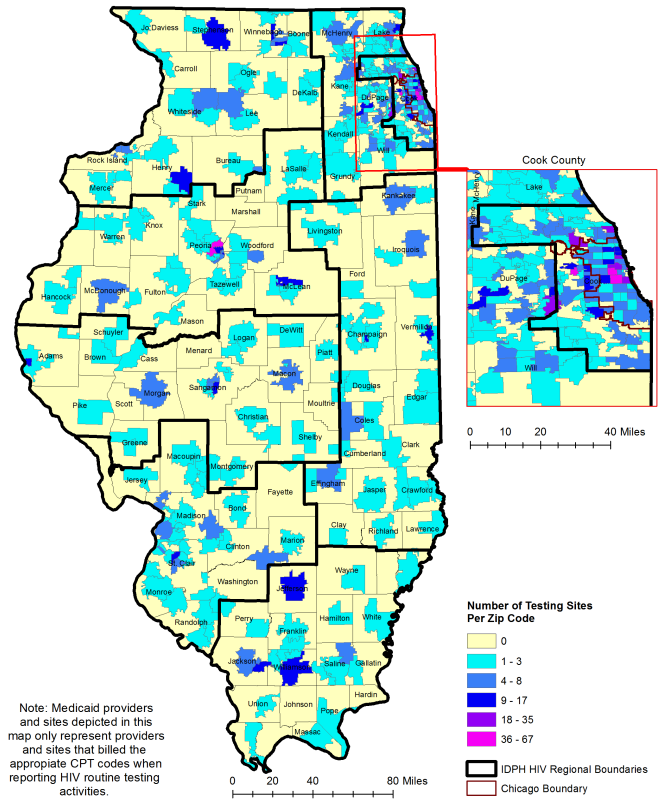
## LIMITATIONS

IDPH is exploring an expanded version of the gap analysis that enables the health department to monitor the impact of the project over time across providers that received capacity-building assistance. The health department is also considering whether to include data points to analyze the volume of tests conducted by each provider and including coding algorithms to evaluate the distribution of other services, including PrEP prescriptions and Hepatitis C screenings, in addition to HIV testing.

## STAKEHOLDERS

- IDPH Prevention and Surveillance Programs and Staff
- Public Health Institute of Metropolitan Chicago
- Illinois Public Health Association
- Illinois Department of Healthcare and Family Services, Medicaid Program

Illinois HIV Routine Testing Providers and Sites by Zip Code  
as reported by Medicaid, 2016



## PROGRAM CONTACTS

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