Georgia Department of Audits and Accounts
Performance Audit Division

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Follow-Up Review
Office of HIV/AIDS

Progress has been made on linkage and retention systems

Why we did this review

This follow-up review was conducted to determine the extent to which recommendations presented in our October 2018 performance audit (Report #16-13) have been addressed.

The program was selected for review because, at the time of the audit, Georgia had the fifth highest number of new HIV cases and the highest rate of new diagnoses per 100,000.

Because effective medical treatments are available, persons living with HIV can significantly reduce viral loads and infection rates if they are linked to and retained in medical care. The 2018 audit examined the systems and outcomes of the state to link people with HIV to medical care and to retain those receiving care at state sponsored HIV care clinics.

About the Office of HIV/AIDS (OHA)

OHA works to prevent the spread of HIV/AIDS, improve the health of citizens diagnosed with HIV, and reduce the overall burden of the HIV epidemic in Georgia. OHA receives prevention funding from the Centers for Disease Control and medical care and support funding from the Health Resources and Services Administration and the state. OHA distributes funds and monitors the activities and outcomes of local public/community-based testing sites and specialized medical clinics.

In 2018, OHA funded centers conducted approximately 108,000 tests; specialized care centers treated approximately 12,000 clients.

What we found

The Office of HIV/AIDS (OHA), within the Department of Public Health (DPH), has taken steps to improve its tracking of HIV-positive clients receiving care or services. The issue of ensuring clients are linked to, and remain in, care continues to be important. As in 2018, Georgia has the highest rate of new diagnoses per 100,000 people. In addition, it has the fourth highest number of new HIV cases according to latest available data.

OHA has improved the systems for managing client linkages to medical care and client retention and reengagement in medical care. It has also encouraged local health districts to formalize linkage to care protocols. However, most districts' protocols do not address strategies to link clients to care comprehensively and most have not established written protocols for reengaging clients back into care. In addition, some local staff report usability issues with state data systems used to track clients.

The original audit examined the systems and outcomes of state operations that link people with HIV to medical care and that retain people receiving care at state-funded HIV care clinics. It noted that OHA did not track linkage using person-based data and instead tracked linkage rates by using test data, and that there was no single data system capable of tracking clients through the care continuum from diagnosis to viral suppression. In addition, the review identified a need for OHA and local providers to develop and formalize linkage to care and retention protocols.

Linkage to Medical Care

In 2018, OHA began implementing its SendSS Linkage Module, which is an electronic database system that tracks clients using

unique identifiers instead of test data. Because each district uses the module, it serves as a shared data system for tracking unique clients linked to care in each district. However, local staff indicated some usability issues, such as not sharing complete information with other modules within SendSS. In addition, during the follow-up, OHA still required local staff to submit separate hardcopy monthly reports on the number of clients linked to and reengaged in care. Local staff at three districts indicated that the requirement to do both is time-consuming and may be a barrier to other linkage and retention activities. According to OHA, the requirement is being eliminated as the SendSS Linkage Module will incorporate electronic reports to replace separate monthly reporting.

Retaining/Re-engaging Clients in Medical Care

OHA and local staff have worked to reduce manual data entry of client lab results into CAREWare, the state's primary HIV care database that Ryan White clinics use to report HIV care and support services to the federal Health Resources and Services Administration (HRSA)[1]. Of the 14 health districts, 10 contract with lab providers to import HRSA-required labs directly into CAREWare, which should increase the timeliness of data entry. According to OHA, state case management staff use standard CAREWare reports to help local case managers identify clients who may have missed labs. However, 4 of the 14 health districts still manually enter client lab results into CAREWare, which could be a barrier to performing other reengagement activities and could result in labs not being entered in a timely manner.

During the original audit, OHA began implementing the Data to Care component within the SendSS Linkage Module. OHA projects this component will be fully implemented by the end of 2020. Staff report it will populate a queue of clients in each district who have not received a lab in the previous 12 months, but who did receive a lab in the prior 24 months; the manual will be revised to reflect changes.

Written Protocols

OHA and local districts have improved their written protocols on linkage to care, but more work is needed to develop and formalize comprehensive protocols, especially regarding reengagement procedures. While the statewide linkage strategy is still in draft form, OHA indicated it will formalize the strategy when its Data to Care portion of the SendSS Linkage Module is fully implemented. OHA also now requires districts have written policies on linkage to care and reengagement; however, 3 of 18 districts do not have them as of this report. Finally, most districts' policies are not comprehensive, and OHA has not provided written procedures on reengaging clients back into care.

Oversight

OHA's site visits continue to be limited to the lead county of each district, as they were at the time of the original audit. However, OHA's linkage to care site visits now examine linkage outcomes at each district. Staff randomly select approximately 20 clients reported as being linked to care by local districts and compare referral to medical care outcomes from the SendSS Linkage Module, monthly reports, as well as clinical paper charts and electronic health record entries. In addition, using the SendSS Linkage Module, OHA staff report that they can monitor district linkage to care results.

Department of Public Health (DPH) Response: In its response to the follow-up review, OHA concurred with the status as presented and provided additional information related to one area, which is noted in the following table.

The following table summarizes the findings and recommendations in our 2018 report and actions taken to address them. A copy of the 2018 performance audit report (#16-13) may be accessed at https://www.audits.ga.gov/rsaAudits/download/21545.

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[1] Ryan White clinics specialize in HIV care and receive funding from HRSA's Ryan White HIV/AIDS Program. Ryan White clinics may receive funding from HRSA in the form of Part A, Part B, Part C, Part D, and Part F funds. HRSA distributes Ryan White Part B funds to OHA, which distributes them to clinics in 16 of the state's 18 health districts for HIV care and support services.

<table>
<tr><th colspan="2">Office of HIV/AIDS
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<tr><th>Original Findings/Recommendations</th><th>Current Status</th></tr>
<tr><td>Finding 1: Using data from local clinics, we estimated that 72% of persons diagnosed in OHA-funded settings were successfully linked to care; 53% were linked within the 90-day time target.

The audit analysis was designed to identify unique clients who tested positive in OHA-funded testing centers. It also measured the success rates of, and time duration for, linking those clients to care. Due to data concerns (as discussed in Finding 3), we collected data directly from health districts for the analysis.

Our client-based linkage to care analysis differs from the one OHA uses. OHA uses the CDC's methodology of using test-event data (as opposed to person-based data) as a proxy for linkage to care. Based on testing data, in 2017, OHA reported a linkage to care rate of 78% within 90 days.

Under the most recent CDC grant (2018-2022), the performance target has been set at 85% of newly diagnosed clients being linked to care within 30 days.</td><td>No recommendation

This informational finding did not include recommendations.

As an update, OHA now reports linkage within 30 days as required under the current CDC grant. Using the CDC methodology of test-event data as a proxy for linkage, staff report that in fiscal year 2018, 77% of clients diagnosed at a health department were linked within 30 days and 85% were linked within 90 days.

The analysis from the original audit was not updated as part of this follow-up.</td></tr>
<tr><td>Finding 2: OHA and local managers have taken action to improve linkage to care, but additional steps are needed to clarify management expectations, formalize referral protocols, and expand oversight.

We commended OHA for adopting national goals for linking HIV-positive clients to medical care, focusing staffing and management attention on the process of linking clients to care, and in making improvements to data collection and monitoring for linkage to care activities and outcomes.

We recommended that local units develop written linkage to care protocols that are comprehensive and that OHA consider auditing the design and execution of linkage work.

In addition, we recommended that OHA continue to monitor linkage to care success and emphasize the importance of timely and accurate data being entered into system as well as new time target of 30 days.</td><td>Partially Addressed – OHA and local units have taken steps to improve linkage to care procedures and oversight. However, as noted below, there are additional actions they could take to ensure all aspects of the recommendations are addressed. OHA has funded local linkage to care coordinator (LCC) positions in all 18 health districts in the state. However, as of January 2020, three positions are vacant, and turnover appears high.

Currently, 15 of the 18 local units now have written linkage to care protocols. These have been improved, with most identifying staff responsibilities for linking HIV-positive clients to services. However, a review of the protocols found that nine have some gaps. For example, they do not explain what staff should do if a client is not ready to link to care and seven fail to explain how LCCs should coordinate referral and confirm medical visits for non-Ryan White medical providers.

OHA's audits of local districts continue to be limited to the lead county of each district, as they were during the original audit. However, OHA staff indicated site visits also occasionally take place at districts' satellite locations. In addition, for sites with funded LCCs, OHA now randomly selects 20 clients from each district prior to each site visit and verifies linkage outcomes by comparing the clients' SendSS Linkage Module files, clinical paper charts and electronic health records, and monthly reports submitted by LCCs.</td></tr>
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Finally, we recommended that OHA consider monitoring linkage by provider type (OHA funded and those outside the OHA system) and establish specific protocol for how/whether to confirm initial linkage appointment for non-Ryan White providers in particular.	As for monitoring linkage by provider type, staff at multiple health districts reported that OHA's audits do not differentiate between linkage outcomes to providers within the HRSA-funded Ryan White network and private providers. Patients who do not qualify for Ryan White services must receive medical care from private or nonprofit providers. These providers may not confirm with linkage coordinators that patients attended their medical appointments. According to OHA, the office is in the process of implementing a list of minimum requirements for local units' written linkage procedures. Among other requirements, a checklist will require districts' written procedures to outline partnerships with providers within the Ryan White network and private or nonprofit providers. However, OHA has not established specific protocols for confirming linkage appointments for private or nonprofit providers and the checklist does not require district protocols to explain what staff should do if a client is not ready to link to care. *DPH's response: OHA noted that it "requires districts to establish partnerships with non-Ryan White providers to ensure linkage options and resources for clients who are not eligible for Ryan White services." It also indicated it has "developed a consent document template to be used with private/non-Ryan White providers to allow for release of Medicaid record information for documentation of patient follow up of medical appointments as well as health outcomes"*
Finding 3: Data collected and maintained by OHA were not sufficiently reliable to estimate the percentage of clients successfully linked to a medical provider. We commended OHA for the efforts taken to improve data collection and client outcome monitoring related to linkage to care and recommended that OHA continue to work to assure that an accurate and timely record of unique clients can be monitored for relevant outcomes and performance by local and state staff. In addition, we recommended that OHA ensure that timely data entry into the SendSS Linkage Module occurs in all health districts.	**Partially Addressed** – Since the January 2018 rollout, OHA has utilized the SendSS Linkage Module as the primary data system for local district staff to document person-level data of client linkages to care and as a tool to monitor local districts' linkages. This is an improvement from the original audit, which found that the state relied on test data that were not sufficiently reliable to estimate the percentage of clients successfully linked to a medical provider. Some local district staff reported concerns with the implementation of the SendSS Linkage module, noting they are still required to submit monthly spreadsheets listing client linkages to medical care, which is a time-consuming duplication of effort. However, according to OHA, the SendSS Linkage Module will incorporate electronic reports to replace separate monthly reporting. Additionally, the module does not readily share information with other modules within SendSS that could facilitate location of HIV-positive individuals. OHA staff indicated that it is working to establish a data report within SendSS that will replace paper monthly reports and plans on integrating some variables between the STD and Linkage Modules following the Data to Care launch in the end of 2020. While OHA staff encourage LCCs to enter information into SendSS on a weekly basis, one local staff member indicated that it is time-consuming to enter information frequently and they may instead do so on a monthly basis; such practices could impact timely monitoring of client linkages. However, according to OHA,

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	because SendSS entries are timestamped, state staff could monitor the frequency of local entries into SendSS.
Finding 4: We estimate that OHA-funded medical care clinics successfully retained 58% of newly enrolled clients over a three-year period. The audit analysis was based on clients' lab results. This methodology was selected due to concerns expressed regarding the accuracy and completeness of medical visit information. HRSA counts clients as retained if they had at least 2 medical visit dates that were at least 90 days apart in the year. At the time of the audit, the 2016 rates were the most recent available. As reported under the HRSA methodology, Georgia's Ryan White program retention rate was 85.5% and OHA's Ryan White program retention rate was 80.2%.	**No recommendation** This informational finding did not include recommendations. As an update, Georgia's Ryan White 2018 retention rate, calculated according to the HRSA definition and based on medical visits, was 84.2%. OHA's Ryan White retention rate for the same year was 83.8%. During the same period, the national rate was 81.2%. The analysis from the original audit was not updated as part of this follow-up.
Finding 5: OHA should take steps to correct issues with the accuracy and completeness of data contained in its CAREWare system and consider additional uses for this data. We recommended that OHA conduct periodic data compiling/analysis to clean up CAREWare data and provide records of concern to local districts to help them eradicate problems. We also recommended that OHA ensure that staff responsible for entering key data fields (like enrollment status) are informed of the working definitions of the options so that data is consistent across the system and state. In addition, we recommended that OHA make sure local health districts promptly update enrollment status as client circumstances change. Finally, we recommended that OHA consider the benefits of using CAREWare lab test data as a proxy for early identification of clients who may have fallen out of care.	**Partially Addressed** – OHA has taken steps to improve data reliability within its CAREWare system and continues to offer trainings which health district staff indicated are helpful. However, there are additional action that could be taken to address all of the recommendations. OHA is updating the state's CAREWare software to the latest version and periodically has assisted local districts with routine data cleaning. However, it continues to allow local offices to define some data fields. For example, while CAREWare information now includes enrollment dates, there is no clear definition of enrollment status; each district defines enrollment status as it sees fit. Progress has been made on inputting client lab results automatically into CAREWare. During the prior audit, most districts were entering client labs into CAREWare manually. According to OHA, Ryan White clinics in ten out of 14 health districts now have agreements with contracted laboratory services to directly upload client labs into CAREWare. OHA Care Unit staff run standard CAREWare reports, at least quarterly, to assist local health districts' case managers in identifying clients who may have missed labs. Labs automatically uploading to CAREWare should reduce delays and inaccuracies and may speed up local districts' ability to identify clients who have missed labs. According to OHA staff, it is expected that three of the four remaining districts will upload client labs directly into CAREWare after the state transitions to the latest version of CAREWare. The remaining one contracts with a local laboratory and does not plan upload labs automatically into CAREWare. In addition, the SendSS Linkage Module's Data to Care component will utilize data from DPH's Surveillance unit to

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	identify some clients who may be out of care. While Data to Care will not serve for early identification of clients who may have fallen out of care, it will identify previously diagnosed HIV-positive individuals who had at least one lab in the preceding 24 months but did not have a lab within the last 12 months. According to OHA, Data to Care will rely on manual imports of Surveillance data via a secure flash drive until the office establishes automatic uploading of Surveillance data within the linkage module. According to OHA, Data to Care is projected to be fully implemented with all contracted health districts by the end of 2020, but the office does not have a timeline for establishing automatic uploading of Surveillance data.
Finding 6: Local medical clinics and OHA can improve protocols, coordination, and data used to guide follow-up and reengagement efforts with clients who miss appointments and/or cease treatment. We recommended that local clinics establish written protocols that clearly explain the roles, methods, and extent of follow up and reengagement efforts staff should execute; we recommended the protocols distinguish between short-term, mid-term, and long-term efforts and specific consideration be given to designing appropriate methods for mid-term follow-up efforts; we also recommended that OHA consider developing templates and/or standard protocols for short-term follow up and long-term reengagement efforts. In addition, we recommended that OHA and local Ryan White clinics consider coordinating with other public health staff trained for outreach and home visits (i.e., Infectious Disease Specialists and Community Health Workers). Finally, we recommended that OHA consider auditing follow up and reengagement efforts executed by local clinics during site reviews.	**Partially Addressed** – OHA and local clinics have taken steps to improve coordination and data used to guide follow-up and reengagement efforts, but more action is needed to improve protocols and address all aspects of the recommendations. While some local districts have incorporated follow-up and reengagement efforts into their written linkage to care protocols, OHA has not provided written protocols dedicated to reengagement efforts. Only three districts' written linkage protocols comprehensively explain reengagement activities and distinguish between short-term, mid-term, and long-term efforts. However, while OHA has not developed standard protocols or templates for short-term and long-term reengagement efforts, the checklist will require districts' written protocols to identify steps for following up with clients who missed their initial appointment or were not contacted successfully. According to OHA, LCCs collaborate with public health staff trained to perform investigations that may include home visits; however, no official guidance is provided on how or when to coordinate. OHA's Care Program site visits do not audit follow-up and reengagement strategies executed by local district staff. However, according to OHA, state case management staff will start running reports of clients from certain districts who did not pick up prescribed medications within 30 days and work with local case managers to identify barriers to care and how to address them. In addition, OHA created a document of notes from Ryan White site visits that summarizes some districts' reengagement strategies that it recognizes as more robust.
6 Findings	**0 Fully Addressed** **4 Partially Addressed** **0 Not Addressed** **2 No Recommendation**

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