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December 20, 2023

James V. McDonald, M.D., M.P.H.
Commissioner
Department of Health
Corning Tower
Empire State Plaza
Albany, NY 12237

Re: Use, Collection, and Reporting of Infection Control Data
Report 2023-F-13

Dear Dr. McDonald:

Pursuant to the State Comptroller's authority as set forth in Article V, Section 1 of the State Constitution and Article II, Section 8 of the State Finance Law, we have followed up on the actions taken by officials of the Department of Health (Department) to implement the recommendations contained in our initial audit report, *Use, Collection, and Reporting of Infection Control Data* (Report 2020-S-55).

Background, Scope, and Objective

On February 28, 2020, a case of COVID-19 was identified in a resident of a long-term care skilled nursing facility in King County, Washington. The patient died on March 2 – just 3 days later. Within one week, 81 residents, 34 staff members, and 14 visitors tested positive, and ultimately at least 37 people would die.[1] A March 18, 2020 report on this outbreak published by the Centers for Disease Control and Prevention (CDC) concluded:

> Once COVID-19 has been introduced into a long-term care facility, it has the potential to result in high attack rates among residents, staff members, and visitors. In the context of rapidly escalating COVID-19 outbreaks in much of the United States, it is critical that long-term care facilities implement active measures to prevent introduction of COVID-19. … Substantial morbidity and mortality might be averted if all long-term care facilities take steps now to prevent exposure of their residents to COVID-19. The underlying health conditions and advanced age of many long-term care facility residents and the shared location of patients in one facility places these persons at risk for severe morbidity and death. Rapid and sustained public health interventions focusing on surveillance, infection control, and mitigation efforts are resource-intensive but are critical to curtailing COVID-19 transmission and decreasing the impact on vulnerable populations, such as residents of long-term care facilities, and the community at large.[2]

1 U.S. Department of Health and Human Services, Office of Inspector General: Onsite Surveys of Nursing Homes During the COVID-19 Pandemic: March 23–May 30, 2020

2 McMichael TM, Clark S, Pogosjan S, et al.: COVID-19 in a Long-Term Care Facility – King County, Washington, February 27–March 9, 2020. *MMWR Morb Mortal Wkly Rep* 69:339-342

Within weeks, COVID-19 infection and death rates among New York State nursing home residents followed a similar trajectory as Washington State (see following table).

Number of Nursing Home Resident Deaths Due to COVID-19 as of April 11, 2023*

	Wave 1 3/4/20–7/15/20	Wave 2 7/16/20–3/16/21	Post-Wave 2 3/17/21–4/11/23	Total
Number of deaths	9,560	4,136	2,744	**16,440**

*The number of deaths in Wave 1 and Wave 2 are from the original audit report and include all confirmed and presumed deaths in nursing homes and other locations. Post-Wave 2 numbers were provided by the Department during the follow-up.

Infection control is an essential component of any health care delivery. Infection control measures can be as simple as thorough handwashing and as sophisticated as high-level disinfection of surgical instruments or the use of personal protective equipment (PPE). Implementing these measures can prevent transmission of disease in health care settings and the community. Infection control is a key concept in achieving the Department's mission to protect and promote the health of New Yorkers through prevention, science, and the assurance of quality health care delivery. Although infection control practices were always essential, the COVID-19 pandemic elevated the importance of establishing and adhering to strong practices. Older people are at a disproportionately greater risk of developing severe and life-threatening symptoms due to physiological changes that come with aging and potential underlying health conditions. Due to the highly contagious nature of COVID-19, the pandemic has had devastating consequences for older populations residing in congregate settings, such as nursing homes.

The Department is responsible for overseeing nursing homes, long-term care facilities, and hospitals (hereafter collectively referred to as facilities) and ensuring they comply with federal and State regulations, including infectious control requirements. These regulations include requirements for facilities to establish and maintain an infection control program and electronically report COVID-19 information in a standardized format. The Department uses three systems for collecting and reporting infection control data: the Nosocomial Outbreak Reporting Application (NORA); Health Electronic Response Data System (HERDS); and nursing home surveys. Most health care-associated infection outbreaks are reported to the Department via NORA, which receives over 1,000 reports from facilities per year. The Department uses HERDS to collect data from facilities via surveys, which are specific to an issue or public health emergency on a given day. The COVID-19 pandemic-related HERDS survey is the only one the Department has continuously issued daily since March 9, 2020 and was still issuing as of April 2023. HERDS surveys are also used to collect information on COVID-19 nursing home deaths. The Department also collects data through various surveys (e.g., quality of care, fire/safety, complaints, and most recently infection control).

The objective of our initial audit, issued on March 15, 2022 and covering the period January 2017 through November 2021, was to determine whether the Department was collecting necessary data to make informed decisions and promote strong infection prevention and control policies, and whether the data collected by the Department, including data reported to the public, was accurate and reliable. The audit found that while the Department's duty is to act solely to promote public health, instead of providing accurate and reliable information during a public health emergency, the Department conformed its presentation to the previous

Executive's[3] narrative, often presenting data in a manner that misled the public. As a result, the Department was not transparent in its reporting of COVID-19 deaths at nursing homes. Whether due to the poor-quality data that it was collecting initially or, later, a deliberate decision, for certain periods during the pandemic, the Department understated the number of deaths at nursing homes by as much as 50%. For instance, from April 12, 2020 through February 3, 2021, the Department frequently changed its basis for the public reporting of COVID-19 deaths in nursing homes (e.g., reporting only resident deaths that occurred at the nursing home vs. reporting all deaths regardless of where they occurred, such as at a hospital), with virtually no explanation publicly as to why it changed. All told, for the nearly 10-month period from April 2020 to February 2021, the Department failed to account for approximately 4,100 lives lost due to COVID-19.

The initial audit also found that persistent underinvestment in public health over the last decade may have limited the Department's ability to prepare and respond in the most effective way. Department staff, by all accounts, worked tirelessly throughout the pandemic. However, better data and information systems and an established system of proactive infection control reviews for facilities prior to the pandemic would have provided them with more accurate and complete information early on to assist them in their work and would have helped facilities be better prepared. Moreover, once the pandemic began, rapid and sustained public health interventions, including surveillance, infection control, and mitigation efforts, were critical to curtailing COVID-19 transmission to decrease the impact on vulnerable populations, such as residents of nursing home facilities, and the community at large. However, such efforts are resource-intensive, and it is clear that the Department was not adequately equipped in this regard. Especially given staffing limitations, it is incumbent on the Department to maximize the effective use of all its other available resources, including data. However, the Department did not cooperatively use the various data sources at its disposal to promote strong infection control practices through policy recommendations and oversight in response to this – or any other – infectious disease event. The Department collects a substantial amount of different but related data from NORA, HERDS, and its nursing home surveys – data that, analyzed collectively, can provide far more valuable information than merely the sum of their parts. However, the Department did not routinely analyze the data broadly to detect interfacility outbreaks, geographic trends, and emerging infectious diseases or to shape its infection control practices and policies and its oversight of facilities.

Following the initial audit, the Executive Chamber issued a Request for Proposal on July 20, 2022 to provide after-action review (AAR) and related services connected to the State's COVID-19 response. After the submitted proposals were evaluated, the Olson Group was selected to perform these services, and the contract was signed in late October 2022. As part of the contract, the services that the Olson Group may provide include, but are not limited to:

- Conducting AAR to evaluate the State's response to the COVID-19 pandemic, including deep dives into specific areas of the State's role in the COVID-19 response efforts.
- Recommending the appropriate research methodologies and conducting research, data collection and analysis, focus groups, and surveys.
- Soliciting input from key stakeholders, health experts, and university research institutions.

3 The Executive is defined to mean the former Governor, members of his staff within the Executive Chamber, and members of the New York State Interagency Task Force, including former health commissioner Howard Zucker.

- Identifying opportunities for improvements to the State's response efforts including urgent, high-priority recommendations and longer-term, strategic recommendations.
- Providing input on a statewide plan for future responses based on AAR findings and best practices.

The objective of our follow-up was to assess the extent of implementation, as of June 2023, of the five recommendations included in our initial audit report. The five recommendations included four recommendations to the Department and one to the Governor. While seemingly related to the scope of this follow-up, the Department did not provide information regarding how the AAR impacted the implementation of the recommendations.

Summary Conclusions and Status of Audit Recommendations

The Department and the Executive Chamber have made limited progress in addressing the problems we identified in the initial audit report. Of the initial report's four audit recommendations to the Department, one was implemented, one was partially implemented, and two were not implemented. The one recommendation to the Governor was partially implemented.

Follow-Up Observations

To the Department:

Recommendation 1

Develop and implement policies, procedures, or processes to:

- *Expand use of infection control data, including but not limited to NORA, HERDS, and nursing home survey data, to identify patterns, trends, areas of concerns, or non-compliance, and use this information as the basis for policy recommendations for infection control practices and for executing nursing home surveys, as necessary;*
- *Improve quality of publicly reported data;*
- *Strengthen communication and coordination with localities on collection, reporting, and use of infection control-related data; and*
- *Collect supplemental data through additional sources, such as the ICAR tool, and incorporate its use with current data sets.*

Status – Partially Implemented

Agency Action – Since our initial audit, the Department has improved the quality of its publicly reported data related to COVID-19 deaths. We compared the Department's publicly reported nursing home resident deaths from COVID-19 as of May 16, 2023 to the Department's internal documentation and determined the data sets matched, which was not the case for nearly the entire scope of the initial audit.

However, additional work is needed to address the other aspects of this recommendation. Department officials have stated that they are working toward expanding the use of infection control data and are in the process of developing a health care facility outbreak management system to integrate lab results; however, these steps have yet to be implemented. Furthermore, Department officials could not

provide any supporting documentation, including meeting minutes, status updates, or any additional details beyond meeting agendas, to support the Department's efforts. To strengthen communication and coordination with localities, Department officials within the Bureau of Healthcare Associated Infections stated that they hold weekly meetings with the Department's Bureau of Communicable Disease Control – which handles outbreaks within the community – as well as weekly conference calls with local epidemiologists to provide support. According to the Department, there are numerous standing meetings with the counties as well as the counties having access to the Health Commerce System, which includes data the Department receives. However, again, the Department was not able to provide meeting minutes to document what was actually discussed. Lastly, Department officials informed auditors that they met to discuss using the CDC's Infection Control Assessment and Response (ICAR) tool, which was updated in March 2023. However, similar to the actions taken by the Department on many of the other aspects of this recommendation, officials could not provide documentation on what was discussed. Department officials could only state that they meet monthly with epidemiologists across the State, and it is up to the epidemiologists' discretion on how to use the ICAR tool. The Department stated that the ICAR tool is for facilities to assess themselves and that the Department does not automatically request these reports. In addition, the Department did not have any policies or procedures regarding any of these activities.

As stated in the initial audit, the Department collects a substantial amount of data from various sources that, when analyzed, collectively can provide valuable information to detect interfacility outbreaks, geographic trends, and/or emerging infectious diseases to shape the Department's infection control policies and practices, as well as its oversight of facilities. However, such analysis is only useful with complete and accurate data. While Department officials claim to be working toward strengthening the collection, use, and analysis of the data at their disposal, these policies, practices, and systems need to be fully implemented to be effective and allow Department officials to make informed decisions centered on infection control. We urge the Department to fully implement the remaining aspects of this recommendation as soon as practical in preparation for any future public health emergencies. Without any documentation to support all these actions, we cannot assess whether the recommendation is truly being satisfied.

Recommendation 2

Provide guidance to facilities on how to submit information into NORA and maintain support for data submitted on HERDS surveys to improve data quality, consistency, and accountability.

Status – Not Implemented

Agency Action – The Department has not provided any new guidance to facilities on submitting information into NORA or internally for maintaining support for data submitted on HERDS surveys since our initial audit. Department officials stated that the same NORA manual and PowerPoint presentations provided to us during the initial audit are still available to facilities and that providing additional guidance was not necessary. Officials said that the issues identified in the initial audit were caused by human error. In addition, officials stated that, for HERDS submissions, there is a data team that algorithmically identifies data fluctuations to be confirmed or corrected, the same as during the initial audit. However, the initial audit found that there was likely a significant

underreporting of infections and outbreaks within NORA, as well as inaccuracies in non-death COVID-19 data (e.g., PPE inventory) within HERDS, which is indicative of something more than human error. This also points to flaws in the method used by the data team to identify data fluctuations to be confirmed or corrected. Providing additional guidance to facilities on submitting data to NORA would help increase the accuracy and reduce the underreporting of infections by facilities to the Department. By not taking action to implement this recommendation, there is a good chance that the Department is collecting, reporting on, and/or analyzing data that is, at times, inaccurate, inconsistent or incomplete.

Recommendation 3

Develop and implement processes to improve controls over additions and deletions from CMS' database and determine if publicly reported nursing home survey data is reliable.

Status – Not Implemented

Agency Action – The Department has not developed any new processes to improve controls over edits to the Centers for Medicaid & Medicare Services (CMS) database, nor has it taken steps to determine if publicly reported nursing home data is reliable. According to Department officials, the procedures that were in place during the initial audit are effective. However, we replicated our testing methodology from the initial audit, using smaller sample sizes, and found that some of the publicly reported nursing home data is still not reliable. While we found that all the data in our sample of 25 Department nursing home surveys matched the information in the Department's Open Data website, we identified discrepancies between the Department's and CMS' citation data for 22 of 25 (88%) nursing home providers that we selected in a separate sample. These discrepancies included different citations or surveys with the same citations occurring on different dates. Department officials stated that they accurately enter information into CMS' database but have no control over what information is accepted or how it is subsequently edited by CMS. However, officials did not provide any evidence that the data discrepancies we identified either in the initial audit or this follow-up were caused by CMS modifications to the data after it was submitted by the Department. While a few minor discrepancies may be understandable, the significant number of discrepancies in the citation data indicates that there is a larger problem, especially given that the information is pulled from the same system and entered by Department officials into the database maintained by CMS. By not taking action to implement this recommendation, the Department is not ensuring that all publicly reported data is reliable.

Recommendation 4

Evaluate and request resources as necessary to establish a foundation to adequately address public health emergencies in furtherance of the Department's mission.

Status – Implemented

Agency Action – Since our initial audit, the Department has evaluated and requested additional resources to improve its response to public health emergencies. The Department conducted a needs assessment to determine what additional resources were necessary for it to adequately address public health emergencies and, based on the results, requested 74 new staff positions, including data analysts and health care surveyors. Of

these 74 new positions, 55 are currently filled, eight are pending, and 11 are still vacant. The Department updated its organizational charts to reflect how these new positions fit into the overall mission of the Department.

To the Governor:

Recommendation 5

Assess and document the adequacy of the internal control environment at the Department and the Executive Chamber, and take necessary steps to ensure the control environment is adequate, including cooperation with authorized State oversight inquiries, communication with localities, and external reporting.

Status – Partially Implemented

Agency Action – According to the Executive Chamber, it has required State agencies to develop and implement Transparency Plans that include commitments to post more reports, data, and documents frequently requested pursuant to the Freedom of Information Law. The Executive Chamber stated that, as a result, the Department makes key data publicly available online via Open Data and has begun working directly with health care providers across the State to collect operational information. The Executive Chamber stated that it also encouraged the Department's cooperation with stakeholders, such as members of the Legislature and local governments, and has taken action to specifically address concerns regarding the prior administration's public disclosures of COVID-19 information. Since taking office in 2021, the Executive has appointed new leadership to run the Department (beginning in January 2022), and, according to the Executive Chamber, the Department has restructured to enable faster flow of information between relevant parties. However, the Executive Chamber did not provide information to support that it had assessed the internal control environment at the Department and Executive Chamber, or that it has taken all necessary steps to ensure the control environment's adequacy.

Major contributors to this report were Scott Heid, Andrew Philpott, Kyle Creech, and Lisa Dooley.

We would appreciate your response to this report within 30 days, indicating any actions planned to address the unresolved issues discussed in this report. We thank the management and staff of the Department and the Executive Chamber for the courtesies and cooperation extended to our auditors during this follow-up.

Very truly yours,

Andrea LaBarge, CFE
Audit Manager

cc: Melissa Fiore, Department of Health
Kathryn Garcia, Executive Chamber
Cherell Beddard, Executive Chamber