

## COVID-19 Update

## **November 11:** Federal Vaccination Mandate Goes Into Effect December 5, and Post-COVID-19 Cognitive Impairment

Today's issue features the federal mandate issued last week requiring **all** healthcare workers be fully vaccinated by January 4, 2022. It also includes information from Neuroinfectious Disease Specialist **Igor J. Koralnik, MD,** about the latest research on post-COVID-19 cognitive dysfunction.

## FEDERAL VACCINATION MANDATE GOES INTO EFFECT DECEMBER 5

The Centers for Medicare & Medicaid Services (CMS) is now requiring COVID-19 vaccination of physicians and staff working in facilities regulated under Medicare Conditions of Participation, Conditions for Coverage or Requirements for Participation.

The CMS rule is a federal vaccine mandate that preempts state and local laws.

Under the new CMS rule, the following applies to all physicians and staff who did not request an accommodation by the October deadline:

- Testing will no longer be an alternative for staff who choose not to be vaccinated.
- By December 5, staff must have received at least the first dose in a two-dose COVID-19 vaccination series (Pfizer-BioNTech or Moderna), or the single dose of the Johnson & Johnson vaccine.
- By January 4, staff must complete the vaccine series.
- Any staff member who is not vaccinated according to this timeline cannot provide care, treatment or any other services for the organization (unless 100% remote work).
- Healthcare organizations that do not comply face fines, non-payment from CMS for new admissions, and termination of Medicare/Medicaid provider agreements.

Review of accommodation requests is underway. Staff with pending requests will be notified of the result of their accommodation request in time to allow those whose requests are not approved to get the COVID-19 vaccine in compliance with this CMS rule.

COVID-19 workforce vaccine clinics are available and no appointment is necessary for first or second doses. You can view the schedule **here**.

For more information, view the Vaccine FAQ. If you have questions, email covid-19@nm.org.

## **POST-COVID-19 COGNITIVE IMPAIRMENT**

A **new study** published in a *Journal of the American Medical Association* Network Open Research letter shows that relatively young people — ranging from 38 to 59 years old — experienced

cognitive dysfunction or "brain fog" months after being diagnosed with COVID-19. More than seven months after acute infection, a substantial proportion of COVID-19 patients exhibited deficits in processing speed, executive functioning, category fluency, memory encoding and recall. While it is well known that older adults may be particularly susceptible to cognitive impairment after critical illness, this current study finds that a substantial proportion of young adults also exhibited cognitive dysfunction after recovering from COVID-19.

Study researchers evaluated 740 COVID-19 patients who had been followed through a Mount Sinai Health System registry from April 2020 to May 2021. All had tested positive for SARS-CoV-2 or had serum antibody positivity, and none had a history of dementia. The mean time from COVID-19 diagnosis was 7.6 months. The mean age of the group was 49, and 63% were women. About half (54%) were white, 20% were Hispanic, 15% were Black, and 11% were multiracial or other.

Of the 740 COVID-19 patients, 51% were treated as outpatients, 27% were hospitalized and 22% were treated in an emergency department. Overall, the most prominent deficits were in:

- Memory encoding: 24%
- Memory recall: 23%
- Category fluency: 20%
- Processing speed: 18%
- Executive functioning: 16%
- Phonemic fluency: 15%

Adjusted analyses showed that hospitalized patients with COVID-19 were more likely to have impairments in attention (OR 2.8, 95% CI 1.3-5.9), executive functioning (OR 1.8, 95% CI 1.0-3.4), category fluency (OR 3.0, 95% CI 1.7-5.2), memory encoding (OR 2.3, 95% CI 1.3-4.1), and memory recall (OR 2.2, 95% CI 1.3-3.8) than people in the outpatient group. COVID-19 patients treated in the emergency department were more likely to have impaired category fluency (OR 1.8, 95% CI 1.1-3.1) and memory encoding (OR 1.7, 95% CI 1.0-3.0) than those treated as outpatients.

The relative sparing of memory recognition in the context of impaired encoding and recall suggests an executive pattern. This pattern is consistent with early reports describing a dysexecutive syndrome after COVID-19 and has considerable implications for occupational, psychological and functional outcomes. Researchers conclude that of the more than 45 million people in the U.S. who have been diagnosed with COVID-19, between 20% and 30% will experience prolonged cognitive impairment. They recommend post-COVID-19 screenings for mental impairment regardless of patient age.

For patients who are experiencing prolonged symptoms more than one month since onset of COVID-19 symptoms, please consider consulting the **Northwestern Medicine Comprehensive COVID-19 Center**, which specializes in the treatment of long-term COVID-19 symptoms.

The new CMS rule is a crucial step in protecting our workforce, as well as our patients and families, to ensure that we can continue to provide the highest quality of care to the communities we serve. Please continue to educate those who remain unvaccinated by sharing the facts and latest research. Thank you for your dedication to our *Patients First* mission.

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