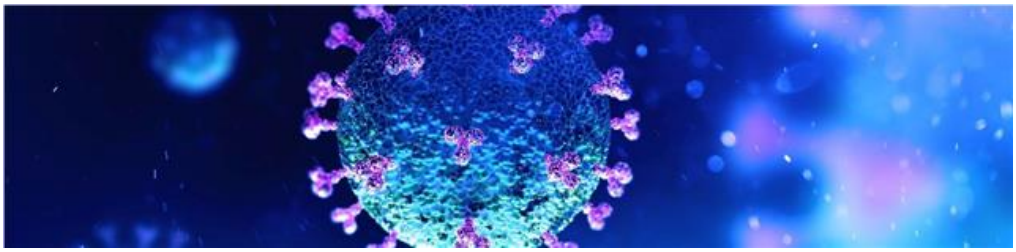


April 30: COVID-19 Clinical Update

Telehealth for NMG and RMG, COVID-19 Research and Leveraging EDW Data

This daily communication is intended to facilitate the sharing of important clinical information during the COVID-19 healthcare crisis and to help respond to questions from physicians across Northwestern Medicine.

In today's issue, you will find guidance about using video for Telehealth visits to comply with payor changes. Also, learn about COVID-19 clinical trials, including those from Infectious Disease Specialists Michael G. Ison, MD, MS, and Babafemi O. Taiwo, MD, as well as Pulmonary and Critical Care Specialist Richard G. Wunderink, MD.

In addition, Infectious Disease Physician Chad J. Achenbach, MD, MPH, and Manager of Research Analytics Daniel Schneider answer questions about using the Enterprise Data Warehouse (EDW) for COVID-19 research.

Telehealth Information for NMG and RMG Physicians
The Centers for Medicare & Medicaid Services (CMS), commercial payors, and Illinois Medicaid have published additional guidance on their expanded telehealth benefits for the COVID-19 Public Health Emergency (PHE). Please note the following changes:

- **Use video only** for patients with **Medicare, Humana and Medicare Advantage** to bill in-office evaluation and management (E&M) codes for telehealth visits. Telephone-only use is not supported for these codes and must be billed using the phone E&M codes.
- **Use video or telephone** for patients using all other commercial payors (**Aetna, BCBS, Cigna, UHC**) or **Illinois Medicaid** to bill in-office E&M codes for telehealth visits.

In light of this guidance, please use video visits when it is appropriate for the patient. Telephone visits remain an option if you or the patient is unable to successfully use video visit applications.

NM recommends Doximity for video visits until our long-term AmWell solution is available. Download and use the **Doximity app** on your personal devices to initiate video visits with patients via a text message link while masking your phone number.

Telehealth informational webinars to review the new guidelines will be held on Friday, May 1, Monday, May 4 and Tuesday, May 5. View dates and meeting links **here**. Please also view the **COVID-19 Telehealth Coding and Billing** and **Physician APP E-Visit** tip sheets on the Physician Forum **COVID-19 Telehealth Resources page** and the **Telehealth Medicare and Commercial Payor Guidance** deck for more information.

COVID-19 RESEARCH
Several research efforts are underway at NM to provide novel therapies to patients with COVID-19 and to better understand the pathophysiology of the disease.

Currently, two studies have enrolled patients at Northwestern Memorial Hospital.

- **Evaluation of the Efficacy and Safety of Sarilumab in Hospitalized Patients with COVID-19** (PI: Wunderink, ClinicalTrials.gov #NCT04315298): Launched in March, this trial will determine if sarilumab helps alleviate overactive inflammatory responses in the lungs when damaged by SARS-CoV-2. The study compares the responses of randomized patients hospitalized with COVID-19 who receive sarilumab in high doses, low doses or a placebo.

- **Adaptive COVID-19 Treatment Trial (ACTT)** (PI: Taiwo, ClinicalTrials.gov #NCT04280705): Initially, randomized patients receive remdesivir or a placebo. The first phase of the study announced preliminary results **yesterday.** Remdesivir had a 31% faster time to recovery than those who received placebo ($p<0.001$). Specifically, the median time to recovery was 11 days for patients treated with remdesivir compared with 15 days for those who received placebo. Results also suggested a survival benefit, with a mortality rate of 8.0% for the group receiving remdesivir versus 11.6% for the placebo group ($p=0.059$).

  The second phase of the study will treat randomized patients with remdesivir, baricitinib or a combination of both. Two additional studies evaluating hydroxychloroquine with or without azithromycin in outpatients and canakinumab for inpatients are expected to open soon.

Also, we recently launched the **Expanded Access to Convalescent Plasma Study** (PI: Ison, ClinicalTrials.gov #NCT04338360). This will allow teams at most NM hospitals to access convalescent plasma for the treatment of hospitalized adults over age 18. The biggest limitation to this study is the lack of availability of the plasma, which may take time to acquire.

Research to understand COVID-19
A multipronged, collaborative approach is underway to better understand COVID-19. Chad Achenbach, MD, is leading the use of clinical data (see below), and three projects are in progress to collect samples from patients who have SARS-CoV-2 infections:

- The **SCRIPT Study** (PI: Wunderink) builds upon an NIH-funded study to collect samples from clinical bronchoscopies to generate biomarkers of host, pathogen and/or microbiome patterns that predict successful pneumonia outcomes. The study will also collect samples from COVID-19 patients to learn about predictors and outcomes of severe infections.

- The **COVID-19 BioBank** (PI: Ison), funded by Northwestern University Clinical and Translational Sciences Institute (NUCATS), will collect samples of blood, urine and nasal swab secretions serially from patients with SARS-CoV-2 infections. To date, 37 patients have been enrolled, with a balance of patients admitted to the floor and ICU to study the clinical course and outcomes. This study is also linked to efforts to collect residual COVID-19 testing samples to sequence our isolates of the virus through a strong Infectious Disease collaboration with the Hultquist, Ozer and Lorenzo Redondo labs and two Transplant Infectious Disease fellows, Hannah Nam, MD, and Scott Roberts, MD.

- The **COVID-19 Convalescent BioBank** (PI: Ison), funded by Robert H. Lurie Comprehensive Cancer Center of Northwestern University, will collect samples of blood and nasal swab secretions from patients who have recovered from COVID-19 to help investigators better understand COVID-19 outcomes. This work is a collaboration among:

    - Lurie Cancer Center – Huiping Liu, MD, PhD; Deyu Feng, PhD; and Suchitra Swaminathan, PhD
    - Cardiology – Daniel Lee, MD; Matt Feinstein, MD; Eric Cantey, MD; and Doug Vaughan, MD
    - Antibody Team – Thomas McDade, PhD; Elizabeth McNally, MD, PhD; and Alexis Demonbreun, PhD

Additional research and resources are available from the **Northwestern University Office for Research** and **NUCATS**.

LEVERAGING COVID-19 DATA IN THE EDW FOR RESEARCH
Investigators in Infectious Disease, Pulmonary Medicine and Critical Care Medicine and representatives from EDW have formed a working group with the goal of creating a data mart for observational research on the diagnosis, management and treatment of COVID-19 patients across NM. Several groups have already been using data for preliminary studies on COVID-19 epidemiology, ICU care, therapeutics, co-infections and cardiac complications.

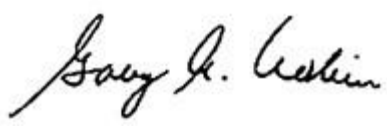
Who will have access to the NM EDW COVID-19 data mart for research?
After proper approvals from the Institutional Review Board, the NMHC data steward, and COVID-19 Task Force, any member of the NM EDW Analytics team or Feinberg School of Medicine power users will have access to data for research purposes.

When will the NM EDW COVID-19 data mart be ready?
We are in the final stages of creating quality-ensured research data tables and expect them to go live by May 1.

How do I find out about using the NM EDW COVID-19 data mart for my research?
Email **nmedw@northwestern.edu** to receive guidance about how this resource can aid your research and to be referred to other NM investigators who have successfully used the COVID-19 data mart.

Can the NM EDW COVID-19 data mart be combined with clinical data from other institutions in Chicago or across the U.S.?
We are working with several institutions locally on a common data model (CDM) for COVID-19. This will enable efficient pooling of COVID-19 data to aid research on regional differences in COVID-19 epidemiology, treatment and outcomes. Stay tuned for more information.

Thank you for your extraordinary dedication and collaboration in providing exceptional care to our patients and supporting one another during this unprecedented crisis. If you have questions regarding these research studies, please email us at **covid-19md@nm.org**.



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