



## REGULATORY COMMITTEE INSIGHT

# COVID-19 in children: The CDI team's effect

**A**s the *COVID-19 pandemic* progresses, CDI specialists play a crucial part in the effort to accurately track the public's health. As the link between clinicians and coders, CDI professionals are uniquely positioned to provide support to both services for coding COVID-19's impact. As the pandemic has evolved here in the United States, CDI teams have risen to the challenge of staying up to date with literature describing the various patient presentations and new ICD-10-CM codes for COVID-19.

CDI professionals have been busy educating and querying clinical teams to get clear documentation of COVID-19 as well as the secondary diagnoses in the disease cascade. They have also worked with coding teams to ensure that the coded data submitted to the various state and federal agencies accurately reflects their health systems' patient population. Up to now, public health data collection has been mainly focused on adult COVID-19 patients, but we are beginning to see data indicating

that COVID-19 is impacting children's health as well.

According to *the COVKID Project*, as of August 16, 2020, the United States has reported 486,016 COVID-19 cases in children and teens, with 105 of these cases resulting in death. Unfortunately, these numbers are probably inaccurate because there are significant problems with how states report pediatric COVID-19 data to the federal government.

(Let's pause here to give our pediatric CDI colleagues a moment

to shout at the screen that there is a general failure to recognize the unique characteristics of the pediatric population when it comes to defining ICD-10-CM codes and reporting data here in the United States. OK—let’s continue.)

The first issue is that there is no federal definition of “child” for data reporting purposes. This means that each state can define “child” differently, which leads to large discrepancies in data that the United States uses to make comparisons and define trends during the pan-

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demic. *For example*, Alabama reports COVID-19 cases in two groups: ages 0–4 and ages 5–24; Ohio, on the other hand, reports COVID-19 cases in children in just one large group of 0–19. Alabama’s pediatric COVID-19 data actually contains adults, and Ohio’s data does not allow us to see the differences in COVID-19 impact by age group.

Secondly, *few states are submitting data* on COVID-19 infections in children that include the setting of the infection, the percentage of children tested, whether the child was asymptomatic or required

hospitalization, and whether the child died from a COVID-19-related illness. The inconsistencies in the data reporting for pediatric COVID-19 infections will have an impact on our ability to identify public health trends that could influence both treatment of pediatric patients and public policies like reopening schools.

To further complicate matters, children with COVID-19 infections have a totally different presentation than their adult counterparts, called multisystem inflammatory syndrome in children (MIS-C). (Again, let’s pause out of respect for our pediatric CDI colleagues and acknowledge that they have been right about so many things all along.)

MIS-C is described by the *American College of Rheumatology* as “a condition characterized by fever, inflammation, and multiorgan dysfunction that manifests late in the course of SARS-CoV-2 infection,” with the epidemiologic link between MIS-C and COVID-19 defined as any of the following:

- Positive PCR COVID-19 test
- Positive COVID-19 serology
- A history of preceding COVID-19 like illness
- Close contact with a confirmed or suspected COVID-19 case in the last four weeks.

Presenting signs and symptoms are rash, gastrointestinal symptoms (diarrhea, abdominal pain, vomiting), edema of hands and/or feet, oral mucosal changes (red and/or cracked lips, strawberry tongue,

erythema of the oropharyngeal mucosa), conjunctivitis (bilateral), lymphadenopathy, and neurological symptoms (altered mental status, encephalopathy, focal neurological deficits, meningismus, papilledema).

The Centers for Disease Control and Prevention (CDC) began tracking MIS-C cases in May after New York, an early epicenter of the pandemic, reported 15 cases of an inflammatory condition in children that appeared to be linked to COVID-19. They used the coding of the listed MIS-C signs and symptoms to identify potential cases. As of August 6, 2020, the United States has reported 570 confirmed cases of MIS-C with 10 confirmed deaths, *according to the CDC*.

Again, though, it’s likely that these numbers are inaccurate. It is not our habit to list codes for signs and symptoms in the final coding summary, and provider documentation of MIS-C is not codable since there is no code for MIS-C in the ICD-10-CM code set. There wasn’t even a code for COVID-19 until the CDC activated U07.1 in *the April 2020 ICD-10-CM set update*.

The CDC does not seem inclined to activate a new code for MIS-C in the October 2020 ICD-10-CM update as it did previously with COVID-19. In lieu of a new code for MIS-C, *the American Hospital Association (AHA) Coding Clinic recommends* using ICD-10-CM code M35.8, other specified systemic involvement of connective tissue, to capture provider documentation of MIS-C.

According to Coding Clinic, coding professionals should assign code U07.1, COVID-19, as the principal diagnosis, and code M35.8, other specified systemic involvement of connective tissue, as a secondary diagnosis, for MIS-C that is documented as due to active COVID-19. Per the instructional note under code U07.1, COVID-19 should be sequenced as the principal diagnosis and additional codes should be assigned for the manifestations. As a secondary code, M35.8 is ranked as a CC in the MS-DRG system and has a severity of illness of 3 in the APR-DRG system. If MIS-C is thought to be a residual of COVID-19, code instead M35.8 with B94.8, sequelae of other specified infectious and parasitic diseases, as a secondary code.

If the documentation is not clear regarding whether the physician considers a condition to be an acute manifestation of a current COVID-19 infection versus a residual effect from a previous COVID-19 infection, CDI professionals should query the provider. As stated in the Official Guidelines for Coding and Reporting, the provider's documentation that the individual has COVID-19 is sufficient for coding purposes. Refer to ACDIS Advisory Board Member Erica Remer, MD, FACEP, CCDS's [article for help in composing these queries](#).


So, what can CDI professionals do to help with the accurate capture of MIS-C? Familiarize yourself

with the list of signs, symptoms, and testing commonly performed in the setting of MIS-C (see the resource box below). Educate your coding team to help them identify potential MIS-C patients when reviewing provider documentation. Educate your clinical staff on the documentation of MIS-C and the need for strong, consistent documentation of the link to COVID-19. Recognize query opportunities when providers are describing the condition of MIS-C without using the exact term in their documentation. Consider making this a performance improvement project for your department. This will allow you to dedicate resources for clinical education.

Define what signs and symptoms should be included in the final coding summary for MIS-C patients, retrospective chart review, and construction of query templates. Consider reaching out to your infection control team to find out how your health system is reporting MIS-C data to your state health department. This may offer your CDI team an opportunity to build a partnership and resource network with other departments that are impacted by the final coding summary.

If you're feeling particularly motivated, find out how your state collects and reports COVID-19 public health data and review your findings with your clinical staff. There may be an opportunity for you and your team to implement some changes that are long overdue and would

greatly benefit both children and their families in your community.

The COVID-19 pandemic has reinforced how crucial accurate data collection is for public health policy. It has also reinforced the impact that CDI teams have on data collection. CDI teams must continue to work with both the clinical and coding teams to ensure that final coding summaries are accurate and reflect the current state of the public's health. 

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## CDI RESOURCES FOR MIS-C

- [The COVKID Project](#)
- [The CDC resources on MIS-C](#)
- [The CDC and World Health Organization definitions of MIS-C](#)
- [Download and listen to the August 12, 2020, episode of the ACDIS Podcast: Talking CDI](#). The podcast features Dr. Kevin Friedman from Boston Children's Hospital speaking about MIS-C and its impact on the pediatric patient population.