<table>
<thead>
<tr>
<th>CHARACTERISTICS FORM</th>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>record_id</td>
<td>Record ID</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Required</td>
</tr>
<tr>
<td>date_form</td>
<td>Date this form is completed</td>
<td>MM-DD-YYYY</td>
<td></td>
<td>Required</td>
<td></td>
<td></td>
<td>Required</td>
</tr>
<tr>
<td>m_of_birth</td>
<td>Month of birth</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
<td>6, June</td>
</tr>
<tr>
<td>y_of_birth</td>
<td>Year of birth</td>
<td>YYYY</td>
<td>Note: if patient is &gt;90 years of age, &quot;[year of record]-90&quot;</td>
<td>Required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>age</td>
<td>Years; Patients age at onset of COVID-19 symptoms (if asymptomatic, at covid-19 diagnosis, i.e positive test)</td>
<td>0, 18-&lt;25 years</td>
<td>1, 25-&lt;35 years</td>
<td>2, 35-&lt;45 years</td>
<td>3, 45-&lt;55 years</td>
<td>4, 55-&lt;65 years</td>
<td>5, 65-&lt;75 years</td>
</tr>
<tr>
<td>newage</td>
<td>Age with ceiling of &gt;=90 years</td>
<td>Derived variable created from [age]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>agecat</td>
<td>Age category</td>
<td>0, 18-&lt;25 years</td>
<td>1, 25-&lt;35 years</td>
<td>2, 35-&lt;45 years</td>
<td>3, 45-&lt;55 years</td>
<td>4, 55-&lt;65 years</td>
<td>5, 65-&lt;75 years</td>
</tr>
<tr>
<td>zip_code</td>
<td>Patient's zip code-first 3 digits</td>
<td>First 3 digits of zip code</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>guid</td>
<td>GUID (Global Unique Identifier)</td>
<td>Guid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>site_num</td>
<td>Site ID</td>
<td>0, 1, 2, ...</td>
<td>3, 4, 5, 6, 7, 8</td>
<td>Required</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pt_last_set</td>
<td>In what medical setting was the patient last seen?</td>
<td>Hospital</td>
<td>Outpatient general neurology</td>
<td>Outpatient neuro-ophthalmology</td>
<td>Outpatient neurovascular</td>
<td>Outpatient neurocritical care/vascular</td>
<td>Outpatient neurosurgery</td>
</tr>
<tr>
<td>pt_last_set_oth_specify</td>
<td>Specify other setting where last seen</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
<td>6, June</td>
</tr>
<tr>
<td>month_last_seen</td>
<td>What month was the patient last seen in this setting?</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
<td>6, June</td>
</tr>
<tr>
<td>year_last_seen</td>
<td>What year was the patient last seen in this setting?</td>
<td>YYYY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sex</td>
<td>Patient's biological sex (sex assigned at birth)</td>
<td>Male</td>
<td>1, Female</td>
<td>2, Intersex</td>
<td>3, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>genident</td>
<td>Patient's self-identified gender</td>
<td>Male</td>
<td>1, Female</td>
<td>2, Intersex</td>
<td>3, Unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**RACE/ETHNICITY**

<table>
<thead>
<tr>
<th>Race. Choose all that apply</th>
<th>Race</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>race</td>
<td>Race. Choose all that apply</td>
<td>0, American Indian or Alaskan Native</td>
</tr>
<tr>
<td>race_amerind</td>
<td>American Indian or Alaskan Native</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>race_asian</td>
<td>Asian</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>race_blackaa</td>
<td>Black or African American</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>race_hawai</td>
<td>Native Hawaiian or Pacific Islander</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>race_white</td>
<td>White</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>race_oth</td>
<td>Other, specify</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>race_unkn</td>
<td>Unknown</td>
<td>0, Unchecked</td>
</tr>
<tr>
<td>Characteristic Form</td>
<td>Variable Name</td>
<td>Field label</td>
</tr>
<tr>
<td>---------------------</td>
<td>---------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Choose one race</strong></td>
<td>race_notrep</td>
<td>Race not represented</td>
</tr>
<tr>
<td></td>
<td>race_oth_det</td>
<td>Specify other race</td>
</tr>
<tr>
<td><strong>New race</strong></td>
<td>newrace</td>
<td>One single race</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td>ethnicity</td>
<td>Ethnicity</td>
</tr>
<tr>
<td><strong>Insurance status</strong></td>
<td>insurance</td>
<td>Insurance status</td>
</tr>
<tr>
<td></td>
<td>insu_unins</td>
<td>Uninsured</td>
</tr>
<tr>
<td></td>
<td>insu_com</td>
<td>Commercial insurance</td>
</tr>
<tr>
<td></td>
<td>insu_medicaid</td>
<td>Medicaid</td>
</tr>
<tr>
<td></td>
<td>insu_medicare</td>
<td>Medicare</td>
</tr>
<tr>
<td></td>
<td>insu_milit</td>
<td>Tricare or other military health care including Veterans Administration (VA) care</td>
</tr>
<tr>
<td></td>
<td>insu_ihs</td>
<td>Indian Health Service</td>
</tr>
<tr>
<td></td>
<td>insu_none</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>insu_other</td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>insu_unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td><strong>Disability</strong></td>
<td>cdc_disab_deaf</td>
<td>Deaf, or has serious difficulty hearing</td>
</tr>
<tr>
<td></td>
<td>cdc_disab_blind</td>
<td>Blind, or do you have serious difficulty seeing, even when wearing glasses?</td>
</tr>
<tr>
<td></td>
<td>cdc_disab_conc</td>
<td>Because of a physical, mental, or emotional condition, serious difficulty concentrating, remembering, or making decisions. (5 years old or older)</td>
</tr>
<tr>
<td></td>
<td>cdc_disab_walk</td>
<td>Serious difficulty walking or climbing stairs? (5 years old or older)</td>
</tr>
<tr>
<td></td>
<td>cdc_disab_dress</td>
<td>Difficulty dressing or bathing (15 years old or older)</td>
</tr>
<tr>
<td></td>
<td>cdc_disab_errand</td>
<td>Because of a physical, mental, or emotional condition, difficulty doing errands alone such as visiting a doctor's office or shopping (15 years old or older)</td>
</tr>
<tr>
<td><strong>Employment</strong></td>
<td>empstat_precovid</td>
<td>Employment status pre_COVID-19 illness</td>
</tr>
<tr>
<td></td>
<td>empstat_precovid_other</td>
<td>Other employment status pre-COVID branches from empstat_precovid=&quot;Other, specify&quot;</td>
</tr>
<tr>
<td></td>
<td>empstat_now</td>
<td>Employment status when last seen in this setting</td>
</tr>
<tr>
<td></td>
<td>empstat_now_other</td>
<td>Other type of employment when last seen in this setting</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
</tr>
<tr>
<td>----------------------------</td>
<td>--------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>empstat_covid_type</td>
<td>Branching Notes: Required or Core:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Since January 1, 2020, is/was patient a member of essential workforce? Defined as: State, local, tribal, and industry partners as they work to protect communities, while ensuring continuity of functions critical to public health and safety, as well as economic and national security. Includes healthcare, public health, emergency services, food and agriculture, energy, water and wastewater, transportation and logistics, communications and information technology, government operational and community-based essential functions, critical manufacturing, financial services, chemical and hazardous materials, defense industrial use, industrial, commercial, residential, and sheltering facilities and services - Child care and social services:</td>
<td>0, No</td>
</tr>
<tr>
<td>empstat_now_hc</td>
<td>Since January 2020 was or is the patient employed in healthcare with direct patient contact?</td>
<td>0, No</td>
</tr>
<tr>
<td>edulevel</td>
<td>Highest level of education completed</td>
<td>1, Did not complete Secondary School or less than High School</td>
</tr>
<tr>
<td>school_precovid</td>
<td>School status (pre COVID-19 infection)</td>
<td>0, No</td>
</tr>
<tr>
<td>school_now</td>
<td>School status when last seen in this setting</td>
<td>0, No</td>
</tr>
<tr>
<td>driving</td>
<td>Able to drive or take public transportation</td>
<td>0, No</td>
</tr>
<tr>
<td>lang_pref</td>
<td>Preferred language</td>
<td>0, English</td>
</tr>
<tr>
<td>lang_other_det</td>
<td>Specify other language</td>
<td></td>
</tr>
<tr>
<td>living_arrang</td>
<td>Living arrangements</td>
<td>0, Lives with family</td>
</tr>
<tr>
<td>long_ter_care</td>
<td>Was patient a long-term care facility resident prior to initial COVID-19 diagnosis?</td>
<td>0, No</td>
</tr>
<tr>
<td>notes_char</td>
<td>General notes/comments</td>
<td></td>
</tr>
</tbody>
</table>

**CHARACTERISTICS FORM**

**MEDICAL HISTORY FORM**

**Variable Name**

<table>
<thead>
<tr>
<th>BMI</th>
<th>Is patient's BMI available?</th>
<th>0, No</th>
<th>1, Yes</th>
<th>9, Unknown</th>
<th>Core</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bmi_available</td>
<td>If multiple BMI's, please use BMI closest to COVID-19 infection</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DC 03132024
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>bmi_ent</td>
<td>Body Mass Index entered directly</td>
<td>BMI available=1</td>
<td></td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>wt_ht_available</td>
<td>Are patients' weight and height available?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>BMI available=0</td>
</tr>
<tr>
<td>weight_unit</td>
<td>Weight unit</td>
<td>0, Kilogram(kg)</td>
<td>1, pounds(lbs)</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>weight_value</td>
<td>Weight</td>
<td></td>
<td>Core:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>height_unit</td>
<td>Height unit</td>
<td>0, Centimetres (cm)</td>
<td>1, Inches(in)</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>bmi_calc</td>
<td>Calculated BMI</td>
<td>round(if(weight_unit = 0 and height_unit = 0, weight_value<em>10000/(height_value</em>height_value), if(weight_unit = 1 and height_unit = 1, weight_value<em>703/(height_value</em>height_value)), if(weight_unit = 1 and height_unit = 0, weight_value<em>4536/(height_value</em>height_value))), 2)</td>
<td></td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>covid19_immun</td>
<td>Received immunization for COVID-19</td>
<td>0, No</td>
<td>1, Yes before COVID-19-associated illness</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>immune_dose</td>
<td>How many doses were received?</td>
<td>0, One dose</td>
<td>1, Two doses</td>
<td>2, Three doses</td>
<td>3, Four doses</td>
</tr>
<tr>
<td>immun_which</td>
<td>Specify which immunization was received. Check all that apply</td>
<td>0, Pfizer</td>
<td>1, Moderna</td>
<td>2, Astra-Zeneca</td>
<td>3, Janssen</td>
</tr>
<tr>
<td>im_rec_pfizer</td>
<td>Pfizer</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>im_rec_moderna</td>
<td>Moderna</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>im_rec_aztrazeneca</td>
<td>Astra-Zeneca</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>im_rec_janssen</td>
<td>Janssen</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>im_rec_novavax</td>
<td>Novavax</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>im_rec_sputnikv</td>
<td>Sputnik V</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>im_rec_oth</td>
<td>Other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>imm_clin_trial</td>
<td>Was this immunization part of a clinical trial?</td>
<td>0, No</td>
<td>1, Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>immun_one_month</td>
<td>Month when COVID-19 immunization(dose one) was received</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
</tr>
<tr>
<td>immun_one_year</td>
<td>Year when immunization(dose one) was received. If unknown, put YYYY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>imm_clin_trial</td>
<td>Was this immunization part of a clinical trial?</td>
<td>0, No</td>
<td>1, Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>immun_two_month</td>
<td>Month when COVID-19 immunization(dose two) was received</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
</tr>
<tr>
<td>immun_two_year</td>
<td>Year when immunization(dose two) was received. If unknown, put YYYY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>immun_three_month</td>
<td>Month when COVID-19 immunization(dose three) was received</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
</tr>
<tr>
<td>immun_three_year</td>
<td>Year when immunization(dose three) was received. If unknown, put YYYY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DC 03132024
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>immun_four_month</td>
<td>Month when COVID-19 immunization(dose four) was received</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[immune_dose]=3</td>
<td></td>
<td></td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>immun_four_year</td>
<td>Year when immunization(dose four) was received</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
</tr>
<tr>
<td>influenza_mo</td>
<td>Most recent influenza vaccination, month</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
</tr>
<tr>
<td>influenza_yr</td>
<td>Most recent influenza vaccination, year</td>
<td>YYYY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMORBID MEDICATIONS</td>
<td>Please specify medications patient was taking within 14 days prior to experiencing the first symptom or sign associated with COVID-19-related illness</td>
<td>999, Unknown</td>
<td>0, Non-steroidal anti-inflammatory drug (NSAID)</td>
<td>1, Angiotensin converting enzyme (ACE) inhibitor</td>
<td>2, Angiotensin I receptor blocker (ARB)</td>
<td>3, Anti-coagulant</td>
</tr>
<tr>
<td>comorbidmeds_1</td>
<td>COMORBID MEDICATIONS</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med NSAIDs</td>
<td>Non-steroidal anti-inflammatory drug (NSAID)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med ACE</td>
<td>Angiotensin converting enzyme (ACE) inhibitor</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med ARB</td>
<td>Angiotensin I receptor blocker (ARB)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med antcoag</td>
<td>Anti-coagulant</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med antiplt</td>
<td>Anti-platelet</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med cort steroids</td>
<td>Corticosteroids</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med hiv</td>
<td>Anti-retrovirals (i.e. HIV medications)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med abx</td>
<td>Antibiotics (other than to treat COVID-19)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med antivir</td>
<td>Other antivirals (other than to treat COVID-19)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med zinc</td>
<td>Zinc</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med none</td>
<td>None of these</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_med unk</td>
<td>Unknown comorbids</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cmemd steroid spec</td>
<td>Specify corticosteroid generic name and dose</td>
<td>[cmemd steroid spec]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibio ot cov sp</td>
<td>Specify antibiotics generic name</td>
<td>[cmemd abx]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antiviral sp</td>
<td>Specify antiviral generic name</td>
<td>[cmemd antivir]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_meds</td>
<td>Additional comorbid medications. Check all that apply</td>
<td>999, Unknown</td>
<td>0, Acetaminophen</td>
<td>1, Aspirin</td>
<td>2, Analgesic</td>
<td>3, Antidepressant</td>
</tr>
<tr>
<td>add_com_md acne</td>
<td>Acetaminophen</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_md aspir</td>
<td>Aspirin</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med anxiarx</td>
<td>Anxiolytic</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med antidepress</td>
<td>Antidepressant</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med stim</td>
<td>Stimulant</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med neurolep</td>
<td>Neuroleptic</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med opioid</td>
<td>Opioid</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med antiiii</td>
<td>Anti-hypertensive</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med diab</td>
<td>Diabetes medications including insulin</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med statins</td>
<td>Statin</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med immunsuppressor</td>
<td>Immunosuppressant</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_com_med antiseizure</td>
<td>Anti-seizure medication</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>add_commeds_vitc</td>
<td>Ascorbic acid (vitamin C)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_commeds_pnv</td>
<td>Prenatal vitamins</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_commeds_vitd</td>
<td>Vitamin D</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_commeds_other</td>
<td>Other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_commeds_none</td>
<td>None of these</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>add_commeds_other</td>
<td>Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cmed_other_med_sp</td>
<td>Other comorbid medications, specify</td>
<td>[add_commeds_other]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| com_neuro_any | Comorbid neurological conditions that the patient had before the onset of COVID-19-associated illness | 99, Unknown | 0, None | 1, Comorbid CNS infection/inflammatory disease/demyelinating disease | 2, Comorbid Stroke (ischemic stroke, TIA, intracerebral hemorrhage, subarachnoid hemorrhage, cerebral venous thrombosis) | 3, Comorbid Neuromuscular Disease (neuropathy, myopathy, neuromuscular junction disorder such as myasthenia gravis) | 4, Comorbid Dementia or Neurodegenerative Disease (Parkinson’s disease, Alzheimer’s disease, ADRD—Alzheimer’s disease related dementias, cognitive impairment) | 5, Comorbid Psychiatric Condition (e.g. mood or thought disorder) | 6, Comorbid Headache | 7, Comorbid Traumatic Brain Injury | 8, Comorbid Toxic Metabolic Encephalopathy | 9, Comorbid Movement Disorder | 10, Comorbid Brain or Spinal cord tumor | 11, Comorbid Spinal cord disease | 12, Comorbid Neuro ophthalmologic Disease | 13, Comorbid Seizure Disorder or Epilepsy | 14, Comorbid Dysautonomia (including POTS) | 15, Comorbid Pain syndrome | 16, Other | Core |}
<p>| com_neuro_unk | Comorbid neurological conditions unknown | Comorbid neurological conditions unknown |          |           |       |                 |
| com_neuro_none | No comorbid neurological conditions | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_inflam | Comorbid CNS infection/inflammatory disease/demyelinating disease | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_strok | Comorbid Stroke (ischemic stroke, TIA, intracerebral hemorrhage, subarachnoid hemorrhage, cerebral venous thrombosis) | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_musc | Comorbid Neuromuscular Disease (neuropathy, myopathy, neuromuscular junction disorder such as myasthenia gravis) | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_dem | Comorbid Dementia or Neurodegenerative Disease (Parkinson’s disease, Alzheimer’s disease, ADRD—Alzheimer’s disease related dementias, cognitive impairment) | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_psysc | Comorbid Psychiatric Condition (e.g. mood or thought disorder) | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_ha | Comorbid Headache | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_tbi | Comorbid Traumatic Brain Injury | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_tme | Comorbid Toxic Metabolic Encephalopathy | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_move | Comorbid Movement Disorder | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_brstum | Comorbid Brain or Spinal cord tumor | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_cord | Comorbid Spinal cord disease | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_oph | Comorbid Neuro ophthalmologic Disease | 0, Unchecked | 1, Checked |           |       |                 |
| com_neuro_move | Comorbid Seizure Disorder or Epilepsy | 0, Unchecked | 1, Checked |           |       |                 |</p>
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_neuro_dysau</td>
<td>Comorbid Dysautonomia (including POTS)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>Derived from com_neuro_any</td>
</tr>
<tr>
<td>com_neuro_pain</td>
<td>Comorbid Pain syndrome</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>Derived from com_neuro_any</td>
</tr>
<tr>
<td>com_neuro_oth</td>
<td>Comorbid neurological condition, other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>Derived from com_neuro_any</td>
</tr>
<tr>
<td>com_neuro_any_other</td>
<td>Other comorbid neurological condition, specify</td>
<td>[com_neuro_oth]= '1'</td>
<td></td>
<td>Core</td>
<td></td>
</tr>
</tbody>
</table>

**Type of comorbid CNS infection/inflammatory disease/demyelinating disease.** Check all that apply

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_cnsinf_type</td>
<td>Type of comorbid CNS infection/inflammatory disease/demyelinating disease. Check all that apply</td>
<td>[com_cnsinf_othcns]= '1'</td>
<td></td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>com_cnsinf_men</td>
<td>Comorbid meningitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_men)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_enc</td>
<td>Comorbid encephalitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_enc)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_trmy</td>
<td>Comorbid transverse myelitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_trmy)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_ms</td>
<td>Comorbid multiple sclerosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_ms)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_vasc</td>
<td>CNS vasculitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_vasc)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_othmy</td>
<td>Comorbid other infectious myelitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_othmy)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_othcns</td>
<td>Comorbid other CNS inflammatory condition</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_cnsinf_othcns)= '1'</td>
<td>Derived from com_cnsinf_type</td>
</tr>
<tr>
<td>com_cnsinf_oth</td>
<td>Specify other type of comorbid CNS infection/inflammatory disease/demyelinating disease</td>
<td>(com_cnsinf_oth)= '1'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Type of comorbid stroke**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_stroke_type</td>
<td>Type of comorbid stroke</td>
<td>99, Unknown</td>
<td>0, Comorbid ischemic stroke or TIA</td>
<td>1, Comorbid intraparenchymal hemorrhage or intraventricular hemorrhage</td>
<td>(com_stroke_type)= '1'</td>
</tr>
<tr>
<td>com_str_ty_isctia</td>
<td>Comorbid ischemic stroke or TIA</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_str_ty_isctia)= '1'</td>
<td></td>
</tr>
<tr>
<td>com_str_ty_ipsvh</td>
<td>Comorbid intraparenchymal hemorrhage or intraventricular hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_str_ty_ipsvh)= '1'</td>
<td></td>
</tr>
<tr>
<td>com_str_ty_sah</td>
<td>Comorbid spontaneous or aneurysmal subarachnoid hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_str_ty_sah)= '1'</td>
<td></td>
</tr>
<tr>
<td>com_str_ty_cvth</td>
<td>Comorbid cerebral venous thrombosis or cerebral sinus thrombosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_str_ty_cvth)= '1'</td>
<td></td>
</tr>
<tr>
<td>com_str_ty_unk</td>
<td>Comorbid stroke type: Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_str_ty_unk)= '1'</td>
<td></td>
</tr>
<tr>
<td>com_str_ty_oth</td>
<td>Comorbid stroke type: Other specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(com_str_ty_oth)= '1'</td>
<td></td>
</tr>
</tbody>
</table>

**Type of comorbid neuromuscular disease**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_neuro_infla</td>
<td>Comorbid neurological condition, other, specify</td>
<td>Other comorbid neurological condition, specify [com_neuro_oth]= '1'</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DC 03132024
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_neuro_type</td>
<td>Type of comorbid neuromuscular disease. Check all that apply</td>
<td>0, Comorbid Guillain-Barré Disease, AIDP-acute inflammatory demyelinating polyneuropathy, AMAN-acute motor axonal neuropathy, Miller Fisher, or other variant</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_neum_ty_gbd</td>
<td>Comorbid Guillain-Barré Disease, AIDP-acute inflammatory demyelinating polyneuropathy, AMAN-acute motor axonal neuropathy, Miller Fisher, or other variant</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_cidp</td>
<td>Comorbid CIDP-chronic inflammatory demyelinating polyneuropathy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_othneurop</td>
<td>Comorbid other neuropathy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_nmj</td>
<td>Comorbid neuromuscular junction disorder (e.g. myasthenia gravis, Lambert Eaton)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_myop</td>
<td>Comorbid myopathy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_als</td>
<td>Comorbid Amyotrophic lateral sclerosis (ALS)/Motor neuron disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_radic</td>
<td>Comorbid Radiculopathy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_oth</td>
<td>Comorbid other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_musc] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_oth_neurod</td>
<td>Specify other type of comorbid neuromuscular disease</td>
<td>[com_neurps_ty_oth_neurod] = '1'</td>
<td>core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_neurodeg_type</td>
<td>Type of comorbid neurodegenerative disease. Check all that apply</td>
<td>0, Comorbid Alzheimer’s disease</td>
<td>1, Comorbid Parkinson’s-related dementia</td>
<td>2, Comorbid normal pressure hydrocephalus</td>
<td>4, Comorbid other neurodegenerative disease</td>
<td>[com_neuro_dem] = '1'</td>
</tr>
<tr>
<td>com_neurodeg_ty_alz</td>
<td>Comorbid Alzheimer’s disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_dem] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurodeg_ty_park</td>
<td>Comorbid Parkinson’s-related dementia</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_dem] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurodeg_ty_othdement</td>
<td>Comorbid other dementia</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_dem] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurodeg_ty_oth Neurod</td>
<td>Comorbid normal pressure hydrocephalus</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_dem] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurodeg_ty_oth_neurod</td>
<td>Comorbid other neurodegenerative disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_dem] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurodeg_ty_devel</td>
<td>Comorbid cognitive developmental delay</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_dem] = '1'</td>
<td>core</td>
<td>7/19/2023: Added response</td>
</tr>
<tr>
<td>com_oth_neurodemen</td>
<td>Specify other neurodegenerative disease</td>
<td>[com_neurodeg_ty_oth_neurod] = '1'</td>
<td>core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_neurpsyc_type</td>
<td>Type of comorbid psychiatric condition. Check all that apply</td>
<td>0, Comorbid depression</td>
<td>1, Comorbid anxiety/panic disorder</td>
<td>2, Comorbid PTSD</td>
<td>3, Comorbid schizophrenia, thought disorder, or other psychosis</td>
<td>[com_neuro_psych] = '1'</td>
</tr>
<tr>
<td>com_neurps_ty_depr</td>
<td>Comorbid depression</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_psych] = '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_bipol</td>
<td>Comorbid bipolar disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[com_neuro_psych] = '1'</td>
<td>core</td>
<td></td>
</tr>
</tbody>
</table>
### CHARACTERISTICS FORM

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_neurps_ty_anx</td>
<td>Comorbid anxiety/panic disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_psych</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_schiz</td>
<td>Comorbid schizophrenia, thought disorder, or other psychosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_psych</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_ptsd</td>
<td>Comorbid PTSD-post-traumatic stress disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_psych</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_neurps_ty_other</td>
<td>Comorbid neuropsychiatric condition, other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_psych</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_neurpsyc_other</td>
<td>Specify other type of comorbid psychiatric condition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[com_neurps Türk] = '1'</td>
</tr>
<tr>
<td>com_ha_type</td>
<td>Type of comorbid headache. Check all that apply</td>
<td>0, Comorbid migraine</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td>core</td>
</tr>
<tr>
<td>com_ha_ty_migr</td>
<td>Comorbid migraine</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_ha_ty_tension</td>
<td>Comorbid tension-type headache</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_ha_ty_clus</td>
<td>Comorbid trigeminal autonomic cephalalgias (e.g. cluster, paroxysmal hemicranias, hemicranias continua, SUNCT-Short-lasting, unilateral neuralgiform headache attacks with conjunctival injection and tearing)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_ha_ty_othprim</td>
<td>Comorbid other primary headache (e.g. new daily persistent, cough, exercise, cold, coital, primary stabbing, nummular, hypnic, TMI, sinus)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_ha_ty_othsecon</td>
<td>Comorbid other secondary headache (e.g. from brain tumor or other)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_ha_ty_pseudot</td>
<td>Comorbid pseudotumor cerebri</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_ha</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_ha_type_other</td>
<td>Specify other primary headache</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[com_ha_ty_othprim] = '1'</td>
</tr>
<tr>
<td>com_tbi_type</td>
<td>Type of comorbid traumatic brain injury (TBI). Check all that apply</td>
<td>0, Comorbid post-concussive syndrome</td>
<td>1, Comorbid chronic traumatic encephalopathy</td>
<td>com_neuro_tbi</td>
<td>'1'</td>
<td>core</td>
</tr>
<tr>
<td>com_tbi_ty_seconc</td>
<td>Comorbid post-concussive syndrome</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_tbi</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_tbi_ty_enceph</td>
<td>Comorbid chronic traumatic encephalopathy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_tbi</td>
<td>'1'</td>
<td></td>
</tr>
<tr>
<td>com_tbi_ty_subdur</td>
<td>Comorbid chronic subdural hematoma</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>com_neuro_tbi</td>
<td>'1'</td>
<td></td>
</tr>
</tbody>
</table>

### Type of comorbid traumatic brain injury (TBI)

- Check all that apply

### Type of comorbid toxic metabolic encephalopathy

- Check all that apply
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>com_tme_type</td>
<td>Type of comorbid toxic metabolic encephalopathy</td>
<td>2, Comorbid drug-related (prescribed or illicit), toxin, poisoning, intoxication, or withdrawal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5, Comorbid electrolyte abnormalities (e.g. hyponatremia, hypernatremia, hypoglycemia, hypocalcemia, hypercalcemia, academia, alkalosis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0, Comorbid hepatic encephalopathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Comorbid uremic encephalopathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3, Comorbid toxic/nutritional disorder (e.g. B12 or vitamin E deficiency, radiation, hepatomyelopathy)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6, Comorbid sepsis encephalopathy/infection/fever</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7, Comorbid hypoxia, including post-cardiac arrest</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8, Comorbid hypercarbia</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9, Comorbid environmental (e.g ICU delirium, hypothermia/exposure)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4, Comorbid other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_hepenc</td>
<td>Comorbid hepatic encephalopathy</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_uremia</td>
<td>Comorbid uremic encephalopathy</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_drugwith</td>
<td>Comorbid drug-related (prescribed or illicit), toxin, poisoning, intoxication, or withdrawal</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_toxnutr</td>
<td>Comorbid toxic/nutritional disorder (e.g. B12 or vitamin E deficiency, radiation, hepatomyelopathy)</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_other</td>
<td>Comorbid other</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_eleetro</td>
<td>Comorbid electrolyte abnormalities (e.g. hyponatremia, hypernatremia, hypoglycemia, hypocalcemia, hypercalcemia, academia, alkalosis)</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_sepsis</td>
<td>Comorbid sepsis encephalopathy/infection/fever</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_hypoxia</td>
<td>Comorbid hypoxia, including post-cardiac arrest</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_hypercarb</td>
<td>Comorbid hypercarbia</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tme_ty_envirom</td>
<td>Comorbid environmental (e.g ICU delirium, hypothermia/exposure)</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tmetype_other</td>
<td>Specify other type of comorbid toxic metabolic encephalopathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(com_neuro_tme)= '1'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of comorbid movement disorder</td>
<td>Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_movdis_type</td>
<td>Type of comorbid movement disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8, Comorbid other type of movement disorder</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td>core</td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_park</td>
<td>Comorbid Parkinson Disease</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_hunt</td>
<td>Comorbid Huntington’s disease</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_estrem</td>
<td>Comorbid essential tremor</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_dysto</td>
<td>Comorbid dystonia</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_tardisc</td>
<td>Comorbid tardive dyskinesia</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_touret</td>
<td>Comorbid Tourette syndrome</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_restleg</td>
<td>Comorbid restless legs syndrome</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_myocl</td>
<td>Comorbid myoclonus</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_mov_ty_oth</td>
<td>Comorbid other type of movement disorder</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_move)= '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oth_comov</td>
<td>Other type of comorbid movement disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>Type of comorbid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain or spinal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cord tumor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_tumor_brsp</td>
<td>Type of comorbid brain or spinal cord tumor</td>
<td>0, Comorbid brain tumor</td>
<td>1, Comorbid spinal cord tumor</td>
<td>2, Comorbid both brain and spinal cord tumor</td>
<td>(com_neuro_bstu) = '1'</td>
<td>core</td>
</tr>
<tr>
<td>com_brain_sc_tumor</td>
<td>Primary or metastatic tumor Specify one</td>
<td>0, Primary</td>
<td>1, Metastatic</td>
<td>9, Unknown type</td>
<td>(com_neuro_bstu) = '1'</td>
<td>core</td>
</tr>
<tr>
<td>Type of comorbid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>spinal cord disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_spdz_ty_type</td>
<td>Type of comorbid spinal cord disease Check all that apply</td>
<td>0, Comorbid trauma</td>
<td>2, Comorbid degenerative spine disease or compressive myelopathy (e.g. disc herniation, spondylothesis, spondylosis, bone, tumor, epidural abscess, hematoma, OPLL-Ossification of posterior longitudinal ligament, cervical spondylytic myelopathy, etc.)</td>
<td>3, Comorbid infectious myelitis</td>
<td>1, Comorbid other spinal cord myelitis (e.g. autoimmune)</td>
<td>4, Comorbid other</td>
</tr>
<tr>
<td>com_spdz_ty_trauma</td>
<td>Comorbid trauma</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_cord) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_spdz_ty_othscmyel</td>
<td>Comorbid other spinal cord myelitis (e.g. autoimmune)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_cord) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_spdz_ty_degen</td>
<td>Comorbid degenerative spine disease or compressive myelopathy (e.g. disc herniation, spondylothesis, spondylosis, bone, tumor, epidural abscess, hematoma, OPLL-Ossification of posterior longitudinal ligament, cervical spondylytic myelopathy, etc.)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_cord) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_spdz_ty_infmyel</td>
<td>Comorbid infectious myelitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_cord) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_spdz_ty_oth</td>
<td>Comorbid other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_cord) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_spinaldz_other</td>
<td>Specify other type of comorbid spinal cord disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_spdz_ty_oth) = '1'</td>
<td></td>
</tr>
<tr>
<td>Type of comorbid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuro-opthalmologic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_n_opth_type</td>
<td>Type of comorbid neuro-opthalmologic disease. Check all that apply</td>
<td>0, Comorbid inflammation vasculitis, iritis,retinitis,uvetis and/or optic neuritis</td>
<td>1, Comorbid cranial nerve disorder</td>
<td>2, Comorbid papiledema/optic nerve injury</td>
<td>3, Comorbid other</td>
<td>(com_neuro_opt) = '1'</td>
</tr>
<tr>
<td>com_n_op_th_infl</td>
<td>Comorbid inflammation vasculitis, iritis,retinitis,uvetis and/or optic neuritis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_opt) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_n_op_th_cndis</td>
<td>Comorbid cranial nerve disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_opt) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_n_op_th_papill</td>
<td>Comorbid papiledema/optic nerve injury</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_opt) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_n_op_th_oth</td>
<td>Comorbid ophthalmologic disease other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_opt) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_n_opth_other</td>
<td>Specify other type of comorbid Neuro-opthalmologic Disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_n_op_th_oth) = '1'</td>
<td></td>
</tr>
<tr>
<td>Type of comorbid</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seizure disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seizure_type</td>
<td>Type of Seizure Disorder Check all that apply</td>
<td>0, Generalized</td>
<td>1, Focal</td>
<td>2, Non Epileptogenic seizures</td>
<td>3, Unclassified</td>
<td>4, Unconfirmed</td>
</tr>
<tr>
<td>com_s2_typ_genl</td>
<td>Comorbid generalized seizures</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_s2) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_s2_typ_focal</td>
<td>Comorbid focal seizures</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_s2) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_s2_typ_non_epi</td>
<td>Comorbid non Epileptogenic seizures</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_s2) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_s2_typ_unclass</td>
<td>Comorbid unclassified seizures</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_s2) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_s2_typ_unconf</td>
<td>Comorbid unconfirmed seizure type</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_s2) = '1'</td>
<td></td>
</tr>
<tr>
<td>com_s2_typ_unkn</td>
<td>Comorbid unknown seizure type</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td>(com_neuro_s2) = '1'</td>
<td></td>
</tr>
</tbody>
</table>
### Type of comorbid dysautonomia

<table>
<thead>
<tr>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>com_dysautonomia_type</strong></td>
<td>Type of comorbid dysautonomia. Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0. Comorbid postural orthostatic tachycardia syndrome (POTS)</td>
<td>[com_neuro_dysautonomia]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Comorbid autonomic neuropathy</td>
<td>[com_neuro_dysautonomia]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Comorbid orthostatic hypotension/intolerance</td>
<td>[com_neuro_dysautonomia]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Comorbid sympathetic storming, paroxysmal sympathetic hypersensitivity</td>
<td>[com_neuro_dysautonomia]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Comorbid other</td>
<td>[com_neuro_dysautonomia]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Type of comorbid pain syndrome

<table>
<thead>
<tr>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>com_pain_type</strong></td>
<td>Comorbid pain syndrome. Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0. Cancer-related pain</td>
<td>[com_neuro_pain]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Neuropathic pain (e.g. radicular, small fiber, complex regional pain syndrome, etc.)</td>
<td>[com_neuro_pain]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Musculoskeletal (including arthritis, spine/back pain)</td>
<td>[com_neuro_pain]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Fibromyalgia</td>
<td>[com_neuro_pain]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Other</td>
<td>[com_neuro_pain]=1'</td>
<td>core</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Comorbid rheumatologic, autoimmune, or connective tissue disease.

Check all that apply

Check unknown or none if applicable

### Autoimmune_history

<table>
<thead>
<tr>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>autoimmune_history</strong></td>
<td>Comorbid nonneurologic rheumatologic, autoimmune, or connective tissue disease. Check all that apply. Check unknown or none if applicable</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>99. Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17. None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16. Anti-phospholipid syndrome</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0. Lupus (SLE—systemic lupus erythematosus)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Sjögren’s syndrome</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Hashimoto’s thyroiditis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. Celiac Disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20. Sarcoidosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Mixed connective tissue disorder</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. Systemic sclerosis, scleroderma, CREST syndrome</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>8. Inflammatory bowel disease (Crohn’s or ulcerative colitis)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Rheumatoid arthritis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Psoriasis/Psoriatic arthritis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11. Ankylosing spondylitis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>12. Giant cell arteritis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>13. Polymyalgia rheumatica</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>14. ANCA associated vasculitis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>15. Temporal arteritis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18. Graves anti-thyroidism</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>19. Autoimmune encephalitis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20. Myasthenia gravis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- **4/20/2022:** Added the following choices: 18, Graves anti-thyroidism | 19, Autoimmune encephalitis | 20, Myasthenia gravis | core

### autoimmune_lupus

<table>
<thead>
<tr>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>autoimmune_lupus</strong></td>
<td>Lupus (SLE—systemic lupus erythematosus)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0. Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### autoimmune_ra

<table>
<thead>
<tr>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>autoimmune_ra</strong></td>
<td>Rheumatoid arthritis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0. Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>autoimm_his_poor</td>
<td>Psoriasis/Psoriatic arthritis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_sjogr</td>
<td>Sjögren’s syndrome</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_hashim</td>
<td>Hashimoto’s Thyroiditis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_mctd</td>
<td>Mixed connective tissue disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_crest</td>
<td>Systemic sclerosis, scleroderma, CREST syndrome</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_celiac</td>
<td>Celiac Disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_ided</td>
<td>Inflammatory bowel disease (Crohn’s or ulcerative colitis)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_oth</td>
<td>Other autoimmune, rheumatologic, connective tissue disorder, or arthritis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_sarcod</td>
<td>Sarcoidosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_anakag</td>
<td>Amyloidosis sporidulitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_giantcl</td>
<td>Giant cell arteritis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_hystpol</td>
<td>PolyMyalgia rheumatica</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_shlava</td>
<td>ANCA associated vasculitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_tempart</td>
<td>Temporal arteritis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_wntphph</td>
<td>Anti-phospholipid syndrome</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_autoenph</td>
<td>Autoimmune encephalitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_myestgh</td>
<td>Myasthenia gravis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autoimm_his_ankn</td>
<td>Autoimmune History unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oth_autoimm_sp</td>
<td>Other autoimmune disorder, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Non-neurologic comorbid medical disorders.

Check all that apply

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>non_neuro_comorbid</td>
<td>Non-neurologic comorbid medical disorders. Check all that apply</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_none</td>
<td>None</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_tobacco</td>
<td>Tobacco smoking, current</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_diabetes</td>
<td>Diabetes</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_cvdchf</td>
<td>Cardiovascular disease, CHF-- congestive heart failure, heart failure</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_atr fibr</td>
<td>Atrial fibrillation/atrial flutter</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_hnt</td>
<td>Hypertension/high blood pressure-with or without treatment</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_obesity</td>
<td>Obesity</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_asthma</td>
<td>Asthma</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_copd</td>
<td>Chronic obstructive pulmonary disease (COPD)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_pe</td>
<td>History of venous thromboembolism and/or pulmonary embolism</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com Liver</td>
<td>Chronic liver disease/hepatitis/cirrhosis thromboembolism and/or pulmonary embolism</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_kidney</td>
<td>Chronic kidney disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_immunosu</td>
<td>Immunosuppression/asplenia</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_cancer</td>
<td>Cancer/malignancy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_iva</td>
<td>HIV infection</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_sleep</td>
<td>Sleep apnea</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_partdz</td>
<td>Peripheral artery disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------</td>
<td>------------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>non_neuro_com_gastro</td>
<td>Gastrointestinal disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_transpl</td>
<td>History of transplantation</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_oth_anemia</td>
<td>Other anemia</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_fibromyalgia</td>
<td>Fibromyalgia</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_alcohol</td>
<td>History of alcohol overuse</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_illdrugs</td>
<td>History of illegal drug use (not including marijuana)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_othpulm</td>
<td>Other chronic lung/pulmonary disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_chrfatig</td>
<td>Myalgic encephalomyelitis (Chronic Fatigue Syndrome)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_myocard</td>
<td>Myocarditis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_autism</td>
<td>Autism or autism spectrum disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_othdevelop</td>
<td>Developmental disorder, learning disability, static encephalopathy/cognitive impairment since childhood</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_mi</td>
<td>History of myocardial infarction/heart attack</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_specify</td>
<td>Specify other non-neurologic comorbid disorder</td>
<td>[non_neuro_com_oth] = '1'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>com_need_o2</td>
<td>Comorbid need for oxygen at home</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[non_neuro_com_othpulm]=1' or [non_neuro_com_copd]=1'</td>
<td></td>
</tr>
<tr>
<td>non_neuro_com_diabetes</td>
<td>Type of diabetes</td>
<td>0, Type 1</td>
<td>1, Type 2</td>
<td>2, Mixed Type 1/Type 2</td>
<td>[non_neuro_com_diabetes]=1'</td>
<td></td>
</tr>
<tr>
<td>com_cancer_type</td>
<td>Type of cancer</td>
<td>0, Bladder</td>
<td>1, Blood/leukemia/lymphoma/myeloma</td>
<td>2, Bone/sarcoma</td>
<td>3, Breast</td>
<td>4, Cervical</td>
</tr>
<tr>
<td>com_cancer_type_blad</td>
<td>Bladder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_blood</td>
<td>Blood/leukemia/lymphoma/myeloma</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_bone</td>
<td>Bone/sarcoma</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_breast</td>
<td>Breast</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_cervix</td>
<td>Cervical</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_colec</td>
<td>Colon/rectal</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_endoc</td>
<td>Endocrine</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_endometrial</td>
<td>Endometrial</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_esoph</td>
<td>Esophageal</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_eye</td>
<td>Eye</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_headnec</td>
<td>Head/neck</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_kidney</td>
<td>Kidney</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_lung</td>
<td>Lung</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_ovary</td>
<td>Ovarian</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_pancr</td>
<td>Pancreatic</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_prost</td>
<td>Prostate</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_skin</td>
<td>Skin</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_stom</td>
<td>Stomach</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>com_cancer_type_thyroid</td>
<td>Thyroid</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td>[non_neuro_com_cancer]=1'</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>399</td>
<td>com_cancer_ty_other</td>
<td>Other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td>com_renai_dialy</td>
<td>Receives dialysis</td>
<td>0, With dialysis</td>
<td>1, Without dialysis</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>401</td>
<td>com_renai_dialy_Yes</td>
<td>Receives dialysis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>402</td>
<td>com_renai_dialy_No</td>
<td>Does not receive dialysis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>403</td>
<td>com_renai_dialy_unk</td>
<td>Dialysis status unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>404</td>
<td>notes_mh</td>
<td>General notes/comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>405</td>
<td>COVID-19 ILLNESS FORM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>406</td>
<td>month_covid</td>
<td>Month of patient’s first symptom associated with COVID-19</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
</tr>
<tr>
<td>407</td>
<td>year_covid</td>
<td>Year of patient’s first symptom associated with COVID-19 illness</td>
<td>YYYY</td>
<td>6/9/2022: Added variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>408</td>
<td>non_neuro_covid_sx</td>
<td>Did patient have non-neurologic symptoms of COVID-19 infection</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>6/9/2022: Added variable</td>
</tr>
<tr>
<td>409</td>
<td>new_vs_worsened</td>
<td>Specify whether the patient had a new neurological condition/s and/or worsening of a pre-existing neurological condition/s associated with COVID-19 infection.</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>410</td>
<td>new_vs_worsened2</td>
<td>New neurological condition/s and/or worsening of a pre-existing neurological condition/s associated with COVID-19 infection.</td>
<td>0, New neurological condition/s</td>
<td>1, Worsening of pre-existing neurological condition/s</td>
<td>2, Past medical history of neurological condition is unclear; it is uncertain whether neurological condition is new vs. worsened.</td>
<td></td>
</tr>
<tr>
<td>411</td>
<td>new_vs_wors2_unk</td>
<td>Past medical history of neurological condition is unclear; it is uncertain whether neurological condition is new vs. worsened.</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
</tr>
<tr>
<td>412</td>
<td>timing_of_covid</td>
<td>Time (# of days) between onset of COVID-19 illness and first new or worsened neurological condition. If neurological symptom was the first manifestation of COVID-19, put 0. If unknown, put 9999.</td>
<td>0, New neurological condition/s</td>
<td>1, Worsening of pre-existing neurological condition/s</td>
<td>2, Past medical history of neurological condition is unclear; it is uncertain whether neurological condition is new vs. worsened.</td>
<td></td>
</tr>
<tr>
<td>413</td>
<td>daysbefimm</td>
<td>How many days elapsed between patient’s new or worsened neurological condition and subsequent COVID-19 immunization ?</td>
<td>[covid19_immun]= 2</td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>414</td>
<td>daysaftimm</td>
<td>How many days elapsed between patient’s COVID-19 immunization and patient’s subsequent new or worsened neurological condition?</td>
<td>[covid19_immun] + 1</td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>415</td>
<td>m_first_nonneuro_cov_sx</td>
<td>Month of patient’s first non-neurologic symptom associated with COVID-19 illness</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
</tr>
<tr>
<td>416</td>
<td>y_first_nonneuro_cov_sx</td>
<td>Year of patient’s first non-neurologic symptom associated with COVID-19 illness</td>
<td>YYYY -Note: If patient is &gt; 90 years of age, ”[todays year]-90”</td>
<td>6/9/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>417</td>
<td>demyel_wm_dz</td>
<td>Demyelinating/white matter disease (DWMD)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history, unknown whether new or worsened</td>
</tr>
</tbody>
</table>

**Characteristics Form**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>399</td>
<td>com_cancer_ty_other</td>
<td>Other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
</tr>
<tr>
<td>400</td>
<td>com_renai_dialy</td>
<td>Receives dialysis</td>
<td>0, With dialysis</td>
<td>1, Without dialysis</td>
</tr>
<tr>
<td>401</td>
<td>com_renai_dialy_Yes</td>
<td>Receives dialysis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
</tr>
<tr>
<td>402</td>
<td>com_renai_dialy_No</td>
<td>Does not receive dialysis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
</tr>
<tr>
<td>403</td>
<td>com_renai_dialy_unk</td>
<td>Dialysis status unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
</tr>
<tr>
<td>404</td>
<td>notes_mh</td>
<td>General notes/comments</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**COVID-19 Illness Form**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>405</td>
<td>COVID-19 ILLNESS FORM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>406</td>
<td>month_covid</td>
<td>Month of patient’s first symptom associated with COVID-19</td>
<td>1, January</td>
<td>2, February</td>
</tr>
<tr>
<td>407</td>
<td>year_covid</td>
<td>Year of patient’s first symptom associated with COVID-19 illness</td>
<td>YYYY</td>
<td>6/9/2022: Added variable</td>
</tr>
<tr>
<td>408</td>
<td>non_neuro_covid_sx</td>
<td>Did patient have non-neurologic symptoms of COVID-19 infection</td>
<td>0, No</td>
<td>1, Yes</td>
</tr>
<tr>
<td>409</td>
<td>new_vs_worsened</td>
<td>Specify whether the patient had a new neurological condition/s and/or worsening of a pre-existing neurological condition/s associated with COVID-19 infection.</td>
<td>0, New neurological condition/s</td>
<td>1, Worsening of pre-existing neurological condition/s</td>
</tr>
<tr>
<td>410</td>
<td>new_vs_wors2_unk</td>
<td>Past medical history of neurological condition is unclear; it is uncertain whether neurological condition is new vs. worsened.</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
</tr>
<tr>
<td>411</td>
<td>timing_of_covid</td>
<td>Time (# of days) between onset of COVID-19 illness and first new or worsened neurological condition. If neurological symptom was the first manifestation of COVID-19, put 0. If unknown, put 9999.</td>
<td>0, New neurological condition/s</td>
<td>1, Worsening of pre-existing neurological condition/s</td>
</tr>
<tr>
<td>412</td>
<td>daysbefimm</td>
<td>How many days elapsed between patient’s new or worsened neurological condition and subsequent COVID-19 immunization ?</td>
<td>[covid19_immun]= 2</td>
<td>Core</td>
</tr>
<tr>
<td>413</td>
<td>daysaftimm</td>
<td>How many days elapsed between patient’s COVID-19 immunization and patient’s subsequent new or worsened neurological condition?</td>
<td>[covid19_immun] + 1</td>
<td>Core</td>
</tr>
<tr>
<td>414</td>
<td>m_first_nonneuro_cov_sx</td>
<td>Month of patient’s first non-neurologic symptom associated with COVID-19 illness</td>
<td>1, January</td>
<td>2, February</td>
</tr>
<tr>
<td>415</td>
<td>y_first_nonneuro_cov_sx</td>
<td>Year of patient’s first non-neurologic symptom associated with COVID-19 illness</td>
<td>YYYY -Note: If patient is &gt; 90 years of age, ”[todays year]-90”</td>
<td>6/9/2022: Became hidden</td>
</tr>
</tbody>
</table>

**Demyelinating/white matter disease**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>416</td>
<td>time2neuro</td>
<td>Time (# of days) between onset of COVID-19 illness and first new or worsened neurological condition. If neurological symptom was the first manifestation of COVID-19, put 0. If unknown, put 9999.</td>
<td>0, New neurological condition/s</td>
<td>1, Worsening of pre-existing neurological condition/s</td>
</tr>
<tr>
<td>417</td>
<td>daysbefimm</td>
<td>How many days elapsed between patient’s new or worsened neurological condition and subsequent COVID-19 immunization ?</td>
<td>[covid19_immun]= 2</td>
<td>Core</td>
</tr>
<tr>
<td>418</td>
<td>daysaftimm</td>
<td>How many days elapsed between patient’s COVID-19 immunization and patient’s subsequent new or worsened neurological condition?</td>
<td>[covid19_immun] + 1</td>
<td>Core</td>
</tr>
<tr>
<td>419</td>
<td>m_first_nonneuro_cov_sx</td>
<td>Month of patient’s first non-neurologic symptom associated with COVID-19 illness</td>
<td>1, January</td>
<td>2, February</td>
</tr>
<tr>
<td>420</td>
<td>y_first_nonneuro_cov_sx</td>
<td>Year of patient’s first non-neurologic symptom associated with COVID-19 illness</td>
<td>YYYY -Note: If patient is &gt; 90 years of age, ”[todays year]-90”</td>
<td>6/9/2022: Became hidden</td>
</tr>
<tr>
<td>421</td>
<td>demyel_wm_dz</td>
<td>Demyelinating/white matter disease (DWMD)</td>
<td>0, Not present</td>
<td>1, New</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>timing_dwmd</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of demyelinating/white matter disease. If demyelinating/white matter disease was the first manifestation of COVID-19, put &quot; &lt; 1 month&quot; to 0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>dwmd_etiology</td>
<td>Potential etiology of new or worsened demyelinating white matter disease/leukoencephalopathy other than COVID-19.</td>
<td>0, Unknown</td>
<td>1, Multiple sclerosis</td>
<td>2, Autoimmune (sarcoid, Lupus, Sjogren’s)</td>
</tr>
<tr>
<td>dwmd_etiol_ms</td>
<td>DWMD etiology was multiple sclerosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_autoimm</td>
<td>DWMD etiology was autoimmune (sarcoid, Lupus, Sjogren’s)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_othimm</td>
<td>DWMD etiology was other immune mediated (ADEM, NMO, Anti-MOG, Neuromyelitis optica, sarcoid)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_vasc</td>
<td>DWMD etiology was vasculitis (Behcet’s, polyarteritis nodosum, Wegener’s, primary angiitis of CNS)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_amyloid</td>
<td>DWMD etiology was amyloid angiopathy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_paraneo</td>
<td>DWMD etiology was paraneoplastic</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_inf</td>
<td>DWMD etiology was infectious (PML, Progressive Multifocal Leukoencephalopathy, HIV, Lyme, syphilis)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_genet</td>
<td>DWMD etiology was genetic (metachromatic leukodystrophy, AID, CADASIL, CARASIL)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>dwmd_etiol_ischem</td>
<td>DWMD etiology was post-hypoxic ischemic injury/post hypoxic demyelination</td>
<td>0, Unchecked 1, Checked</td>
<td>[demyel_wm_dz]=1 or [demyel_wm_dz]=2 or [demyel_wm_dz]=3</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_pres</td>
<td>DWMD etiology was posterior reversible encephalopathy syndrome</td>
<td>0, Unchecked 1, Checked</td>
<td>[demyel_wm_dz]=1 or [demyel_wm_dz]=2 or [demyel_wm_dz]=3</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_other</td>
<td>DWMD etiology was other</td>
<td>0, Unchecked 1, Checked</td>
<td>[demyel_wm_dz]=1 or [demyel_wm_dz]=2 or [demyel_wm_dz]=3</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiol_unkn</td>
<td>DWMD etiology was other</td>
<td>0, Unchecked 1, Checked</td>
<td>[demyel_wm_dz]=1 or [demyel_wm_dz]=2 or [demyel_wm_dz]=3</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>dwmd_etiology_other</td>
<td>Specify other etiology of new or worsened demyelinating white matter disease/leukoencephalopathy</td>
<td>0, Unchecked 1, Checked</td>
<td>[demyel_wm_dz]=1 or [demyel_wm_dz]=2 or [demyel_wm_dz]=3</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>covid_in_brain</td>
<td>SARS-COV-2 detected in CSF/brain tissue by PCR or immunohistochemistry AND/OR Evidence of COVID-19 specific intrathecal antibody</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>other_expl1</td>
<td>Other possible explanation for this neurologic condition, other than COVID-19 infection</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>assoc_vasc_covid</td>
<td>ASSOCIATION OF THIS CONDITION WITH COVID-19 INFECTION. If vasculitis, grade the association of vasculitis with COVID-19 infection (according to criteria below) &gt;0=possible, 1=probable, 2=confirmed</td>
<td>Calculated variable adapted from: Ellul MA et al. Neurological associations of CPVOD-19. Lancet Neurol 2020 Sep;19(9):767-783. doi: 10.1016/S1474-4422(20)3022-0</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>assoc_adem_sarscov19</td>
<td>If acute disseminated encephalomyelitis (ADEM), grade the association of ADEM with COVID-19 infection (according to criteria below) 0=possible, 1, Probable</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>assoc2</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
</tbody>
</table>

**WHO criteria for grading the potential association of vasculitis with COVID-19 infection**

- **vasculitis**
  - Presence of vasculitis
  - 0, No | 1, Yes | 9, Unknown

- **covid_in_brain**
  - SARS-COV-2 detected in CSF/brain tissue by PCR or immunohistochemistry AND/OR Evidence of COVID-19 specific intrathecal antibody
  - 0, No | 1, Yes | 9, Unknown
  - (demyel_wm_dz)=1 or (demyel_wm_dz)=2 and [vasculitis]=1

- **other_expl1**
  - Other possible explanation for this neurologic condition, other than COVID-19 infection
  - 0, No | 1, Yes | 9, Unknown
  - (demyel_wm_dz)=1 or (demyel_wm_dz)=2 and [vasculitis]=1

**WHO criteria for grading the potential association of ADEM with COVID-19 infection**

- **assoc_adem_sarscov19**
  - If acute disseminated encephalomyelitis (ADEM), grade the association of ADEM with COVID-19 infection (according to criteria below) 0=possible, 1, Probable
  - (demyel_wm_dz)=1 or (demyel_wm_dz)=2 and [vasculitis]=1

- **assoc2**
  - WHO criteria for the grading the potential association of this condition with COVID-19 infection
  - (demyel_wm_dz)=1 or (demyel_wm_dz)=2 and [vasculitis]=1

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>0, None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>1, Prednisone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>2, Dimethyl fumarate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>3, Glatiramer - Acetate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>4, Teriflunomide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>5, Natalizumab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>6, Fingolimod</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>7, Ocrelizumab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>8, Rituximab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>9, Alemtuzumab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>10, Cladribine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>11, Interferon therapies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz</td>
<td>Patient on disease-modifying therapy</td>
<td>12, Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>0, None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>1, Prednisone</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>2, Dimethyl fumarate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>3, Glatiramer - Acetate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>4, Teriflunomide</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>5, Natalizumab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>6, Fingolimod</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>7, Ocrelizumab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>8, Rituximab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>9, Alemtuzumab</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>10, Cladribine</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>11, Interferon therapies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_dr_mod_tz_best</td>
<td>Patient on disease-modifying therapy</td>
<td>12, Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The table represents different disease-modifying therapies and their respective value labels. Each entry includes a variable name, field label, value labels, and field notes including the notation for disease-modifying variables and their corresponding value labels.
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>dwmd_dz_mod_tz___other</td>
<td>Other disease modifying therapy</td>
<td>0, Unchecked 1, Checked</td>
<td>(demel_wm_dz)=1 or (demel_wm_dz)=2 or (demel_wm_dz)=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dwmd_outcome</td>
<td>Demyelinating White Matter</td>
<td>Disease current status at follow up</td>
<td>(demel_wm_dz)=1 or (demel_wm_dz)=2 or (demel_wm_dz)=3</td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>timingres_dwmd</td>
<td>Length of time between onset of COVID-19 illness</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>em_procedure</td>
<td>Related to a neurologic or neurosurgical procedure</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cause_em_id</td>
<td>Is there an identified potential cause of new or</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>em_cause</td>
<td>Potential cause of new or worsened encephalitis or meningitis other than COVID-19</td>
<td>0, Infectious (bacterial, viral, fungal, mycobacterial)</td>
<td>1, Cancer, paraneoplastic</td>
<td>2, Auto-immune</td>
<td>3, Other potential cause</td>
<td></td>
</tr>
<tr>
<td>em_cause_infest</td>
<td>Infectious (bacterial, viral, fungal, mycobacterial)</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>em_cause_cancer</td>
<td>Cancer, paraneoplastic</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>em_cause_autoimm</td>
<td>Auto-immune</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>em_cause_oth</td>
<td>Other potential cause</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[encephalitis] = '1' or [meningitis] = '1' or [encephalitis]=2 or [meningitis]=2 and [cause_em_id]=1</td>
<td>12/20/2022: Became non-core</td>
<td></td>
</tr>
<tr>
<td>covid_in_brain2</td>
<td>Association of encephalitis or meningitis with COVID-19 infection (according to criteria below). Possible, 1, Probable, 2, Confirmed</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[encephalitis] = '1' or [meningitis] = '1' or [encephalitis]=2 or [meningitis]=2 or [encephalitis]=3 or [meningitis]=3</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>assn_encep_menin_cov19</td>
<td>WHO criteria for the grading the potential association of encephalitis or meningitis with COVID-19 infection</td>
<td>0, Possible</td>
<td>1, Probable</td>
<td>2, Confirmed</td>
<td>[encephalitis] = '1' or [meningitis] = '1' or [encephalitis]=2 or [meningitis]=2 or [encephalitis]=3 or [meningitis]=3</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>em_outcome</td>
<td>Current status of encephalitis or meningitis at follow-up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>[encephalitis] = '1' or [meningitis] = '1' or [encephalitis]=2 or [meningitis]=2 or [encephalitis]=3 or [meningitis]=3</td>
<td>Core</td>
</tr>
<tr>
<td>timing_res_em</td>
<td>Length of time between onset of COVID-19 illness and resolution of encephalitis or meningitis</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>stroke</td>
<td>Ischemic or hemorrhagic stroke or transient ischemic attack (TIA)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>Core</td>
</tr>
<tr>
<td>timing_stroke</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of stroke or transient ischemic attack. If stroke was the first manifestation of COVID-19, put &lt;1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[stroke]=1 or [stroke]=2 or [stroke]=3</td>
</tr>
<tr>
<td>ischemic_stroke or TIA</td>
<td>Ischemic stroke</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>Core</td>
</tr>
<tr>
<td>ischemic_stroke</td>
<td>Ischemic stroke</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[stroke]=1 or [stroke]=2 or [stroke]=3</td>
</tr>
<tr>
<td>tia</td>
<td>Transient Ischemic Attack (TIA)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[stroke]=1 or [stroke]=2 or [stroke]=3</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Note</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>----------------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>nihss</td>
<td>Admission NIH Stroke Score (0-42)</td>
<td>If there is no NIH Stroke Score, can be determined post hoc from information in the chart, if available. Otherwise leave blank.</td>
<td>0-42</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>time_lkwt_arr_isch</td>
<td>If new ischemic stroke or TIA: Time from last down normal to arrival during ischemic stroke</td>
<td># hours and # minutes</td>
<td></td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mech_thrombec</td>
<td>If new ischemic stroke or TIA: mechanical thrombectomy</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>tici_score</td>
<td>If new ischemic stroke or TIA: thrombolysis in Cerebral Infarction (TICI) score</td>
<td>0, 0</td>
<td>1, 1</td>
<td>2, 2</td>
<td>3, 3</td>
<td>4, 4</td>
</tr>
<tr>
<td>tte_performed</td>
<td>Transthoracic echocardiogram (TTE) performed</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>eject_fraction</td>
<td>If new ischemic stroke or TIA: ejection fraction</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>wall_mot_abn</td>
<td>If new ischemic stroke or TIA: wall motion abnormalities</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>cardiac_thromb_type</td>
<td>If new ischemic stroke or TIA: regional vs global cardiac thrombus</td>
<td>0, None</td>
<td>1, Regional</td>
<td>2, Global</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
</tr>
<tr>
<td>telemetry_af</td>
<td>If new ischemic stroke or TIA telemetry showing atrial fibrillation</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>tee</td>
<td>If new ischemic stroke or TIA transesophageal echocardiogram (TEE) performed</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>cns_vasculitis</td>
<td>If new stroke, was there angiographic or laboratory evidence of central nervous system (CNS) vasculitis?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>reperfusion</td>
<td>Successful reperfusion following thrombectomy (e.g. TICI 2b)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>stroke_surgery</td>
<td>If new stroke, was hemicraniectomy or suboccipital craniotomy performed?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ischemic_stroke]=1 or [ischemic_stroke]=3 or [tia]=1 or [tia]=3</td>
<td></td>
</tr>
<tr>
<td>toast_subtype</td>
<td>If new stroke, subtype using TOAST criteria</td>
<td>5, Large-artery atherosclerosis (embolus/thrombosis)</td>
<td>1, Small-vessel occlusion (lacunar)</td>
<td>2, Cardioembolism</td>
<td>3, Stroke of other determined etiology</td>
<td>4, Stroke of undetermined etiology</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------</td>
<td>----------------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>hemorr_stroke</td>
<td>Hemorrhagic stroke</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(stroke)=1 or (stroke)=2 or (stroke)=3</td>
</tr>
<tr>
<td>intra_cran_he_typ</td>
<td>Type of hemorrhagic stroke</td>
<td>0, Intracerebral hemorrhage</td>
<td>1, Intraventricular hemorrhage</td>
<td>2, Subarachnoid hemorrhage</td>
<td>3, Other</td>
<td>9, Unknown</td>
</tr>
</tbody>
</table>

**Intraventricular/intracerebral hemorrhage (ICH/IVH)**

| Potential etiology of new or worsened ICH/IVH other than COVID-19 | 99, Unknown | 0, Hypertension | 1, Tumor | 2, Amyloid angiopathy | 3, Coagulopathy (iatrogenic or innate) | 4, Cerebral vein thrombosis | 5, Arteriovenous malformation (AVM) or aneurysm | 6, Other | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 | Core |

| Potential etiology of new or worsened ICH/IVH other than COVID-19 | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Hypertension | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Tumor | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Amyloid angiopathy | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Coagulopathy (iatrogenic or innate) | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Cerebral vein thrombosis | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Arteriovenous malformation (AVM) or aneurysm | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Other etiology of ICH/IVH | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Unknown etiology of ICH/IVH | 0, Unchecked | 1, Checked | (hemorr_stroke)=1 OR (hemorr_stroke)=2 OR (hemorr_stroke)=3 |

| Specify other etiology of new or worsened ICH/IVH | (ich_ivh_etiol(6)) = 1 |

| If new intra cerebral hemorrhage (ICH): NIH Stroke Score-hemorrhagic stroke | (hemorr_stroke)=1 OR (hemorr_stroke)=3 |

| If new ICH: ICH score | 1, 1 | 2, 2 | 3, 3 | 4, 4 | 5, 5 | 6, 6 | (hemorr_stroke)=1 OR (hemorr_stroke)=3 |

<p>| Time from last known normal to arrival during hemorrhagic stroke | || hours and # minutes | (hemorr_stroke)=1 OR (hemorr_stroke)=3 |</p>
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>vascular_imag</td>
<td>Vascular imaging findings</td>
<td>0, None</td>
<td>1, Vascular malformation</td>
<td>2, Arteriovenous malformation (AVM)</td>
<td>3, Aneurysm</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=2 or [hemorr_stroke]=3</td>
</tr>
<tr>
<td>ich_loc</td>
<td>Intracranial hemorrhage (ICH) location</td>
<td>0, Lobar</td>
<td>1, Deep</td>
<td>2, Both</td>
<td>9, Unknown</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=3</td>
</tr>
<tr>
<td>wh_adult</td>
<td>If new ICH: was intraventricular hemorrhage (IVH) also present?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=3</td>
<td></td>
</tr>
<tr>
<td>ich_volume</td>
<td>If new ICH: What was intracranial hemorrhage volume?</td>
<td>volume in ml</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>multifocal</td>
<td>If new ICH: Was it multifocal?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=3</td>
<td></td>
</tr>
<tr>
<td>ich_while_antico</td>
<td>If new ICH: Intracranial hemorrhage occurred while patient was anti-coagulated</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=3</td>
<td></td>
</tr>
<tr>
<td>ich_wh_antico_type</td>
<td>If new ICH while anti-coagulated, type of anticoagulation</td>
<td>0, Therapeutic heparin</td>
<td>1, Therapeutic enoxaparin</td>
<td>2, Warfarin</td>
<td>3, Rivaroxaban</td>
<td>4, Apixaban</td>
</tr>
<tr>
<td>ich_wh_antico_ty_oth</td>
<td>If ICH while anti coagulated, specify other type</td>
<td>[ich_wh_antico_ty_oth]=7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hematoma_expan</td>
<td>If new ICH: Hematoma expansion</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[hemorr_stroke]=1 or [hemorr_stroke]=3</td>
<td></td>
</tr>
<tr>
<td>evacuation</td>
<td>If new ICH, was surgical intervention performed?</td>
<td>0, None</td>
<td>1, Craniectomy</td>
<td>2, Craniotomy</td>
<td>3, Minimally invasive evacuation</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>sah</td>
<td>Subarachnoid Hemorrhage (SAH)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>Core</td>
</tr>
<tr>
<td>timing_sah</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of subarachnoid hemorrhage. If SAH was the first manifestation of COVID-19, put &lt; 1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[sah]=1 or [sah]=2 or [sah]=3</td>
</tr>
<tr>
<td>aneurism_locat</td>
<td>If aneurysm: aneurysm location</td>
<td>0, None</td>
<td>1, Anterior communicating artery (ACOM)</td>
<td>2, Posterior communicating artery (PCOM)</td>
<td>3, Middle cerebral artery (MCA)</td>
<td>4, Internal carotid artery (ICA)</td>
</tr>
<tr>
<td>coiling_clipping</td>
<td>Coiling or clipping</td>
<td>0, Clip</td>
<td>1, Coil</td>
<td>2, Both clip and coil</td>
<td>3, Neither clip nor coil</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>ups</td>
<td>Ventriculoperitoneal shunt</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[sah]=1 or [sah]=2 or [sah]=3</td>
<td></td>
</tr>
<tr>
<td>hunt_hess</td>
<td>Hunt and Hess score</td>
<td>1, 1</td>
<td>2, 2</td>
<td>3, 3</td>
<td>4, 4</td>
<td>5, 5</td>
</tr>
<tr>
<td>fisher_mod</td>
<td>Modified Fisher Score</td>
<td>1, 1</td>
<td>2, 2</td>
<td>3, 3</td>
<td>4, 4</td>
<td></td>
</tr>
<tr>
<td>rebleed</td>
<td>Aneurysm rebleed</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>symptoms_vasospasm</td>
<td>Symptomatic vasospasm or delayed cerebral ischemia</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst</td>
<td>Cerebral venous thrombosis (CVST)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>Core</td>
</tr>
<tr>
<td>timing_cvst</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of CVST. If CVST was the first manifestation of COVID-19, put &lt; 1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[cvst]=1 or [cvst]=2 or [cvst]=3</td>
</tr>
<tr>
<td>dural_av_fistula</td>
<td>Dural arteriovenous fistula</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[cvst]=1 or [cvst]=2 or [cvst]=3</td>
<td></td>
</tr>
<tr>
<td>Thrombus location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>----------------</td>
</tr>
<tr>
<td>arryo</td>
<td>Thrombus location</td>
<td>0, Deep venous system</td>
<td>1, Superficial venous system</td>
<td>2, Cortical vein</td>
<td>9, Unknown</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
</tr>
<tr>
<td>cvst_loc_deepven</td>
<td>Deep venous system</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_loc_supven</td>
<td>Superficial venous system</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_loc_cortven</td>
<td>Cortical vein</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_loc_unkn</td>
<td>Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag</td>
<td>Identified risk factor for hypercoagulability other than COVID-19</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_preg</td>
<td>Pregnancy</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_genetic</td>
<td>Genetic (Factor V Leiden, Antithrombin gene mutation)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_atgenemut</td>
<td>Acquired antithrombin III deficiency</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_nephrot</td>
<td>Nephrotic syndrome or protein C or S deficiency</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_lupus</td>
<td>Lupus anticoagulant, antiphospholipid</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_homocys</td>
<td>Elevated homocysteine</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_cancer</td>
<td>Cancer</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_oth</td>
<td>Other risk factor for hypercoag</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_hypercoag_unkn</td>
<td>Risk factors for hypercoag unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cvst_diagnosis</td>
<td>Method of diagnosis</td>
<td>0, MRI</td>
<td>1, MRV</td>
<td>2, CTV</td>
<td>3, Angiography</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
</tr>
<tr>
<td>cvst_diagnosis</td>
<td>Method of diagnosis</td>
<td>0, MRI</td>
<td>1, MRV</td>
<td>2, CTV</td>
<td>3, Angiography</td>
<td>(cvst)=1 or (cvst)=2 or (cvst)=3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>assoc_stroke_sarcov19</td>
<td>For ischemic or hemorrhagic stroke, and/or Cerebral Venous Thrombosis: Grade the association of ischemic or hemorrhagic stroke, or CVT with COVID-19 infection [according to criteria below]: 0, Possible; 1, Probable</td>
<td>[\text{other_cv_risk}=1,0,\text{if}(\text{other_cv_risk})=0,1]</td>
<td>[stroke]=1 or [stroke]=2 or [stroke]=3 or [cvst]=1 or [cvst]=2 or [cvst]=3</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHO criteria for the grading the potential association of stroke-associated vasculitis with COVID19 infection</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td>[\text{vasculitis2}=1]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>assoc5</td>
<td>Other possible explanatory cause for vasculitis found, other than COVID-19 infection</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[vasculitis2]=1</td>
<td>became core</td>
</tr>
<tr>
<td>other_cause_vasc_str</td>
<td>If vasculitis, grade the association of vasculitis with COVID-19 infection [according to criteria below]: 0, Possible; 1, Probable; 2, Confirmed</td>
<td>[\text{other_cause_vasc_str}=1,0,\text{if}(\text{other_cause_vasc_str})=0,1]</td>
<td>[vasculitis2]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>assoc_strok_vasc_covid</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td>[\text{vasculitis2}=1]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke outcome</td>
<td>Stroke outcome for ischemic or hemorrhagic stroke, SAH, or CVST</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>[stroke_outcome]=2</td>
<td>added variable</td>
</tr>
<tr>
<td>timingres_stroke</td>
<td>Length of time between onset of COVID-19 illness and resolution of ischemic or hemorrhagic stroke, SAH, or CVST</td>
<td>[\text{stroke_outcome}=2]</td>
<td></td>
<td></td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>Myopathy</td>
<td>Myopathy</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot; been hidden</td>
</tr>
<tr>
<td>sym_muscle_pain</td>
<td>Muscle pain, aches (symptom)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot; been hidden</td>
</tr>
<tr>
<td>sym_weak</td>
<td>Symptom of weakness of arms or legs</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot; been hidden</td>
</tr>
<tr>
<td>any_muscle_cond</td>
<td>Any muscle condition or symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot; been hidden</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>timing_myopathy_2</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of myopathy and/or symptoms. If myopathy/symptoms was the first manifestation of COVID-19, put &lt; 1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[myopathy]=1 or [myopathy]=2 or [myopathy]=3 or [sym_weak]=1 or [sym_weak]=2 or [sym_weak]=3 or [sym_muscle_pain]=1 or [sym_muscle_pain]=2 or [sym_muscle_pain]=3</td>
</tr>
<tr>
<td>myopathy etiology</td>
<td>Potential etiology of new or worsened myopathy other than COVID-19</td>
<td>0, Unknown</td>
<td>1, Genetic, hereditary or inborn errors of metabolism</td>
<td>2, Endocrine/electrolyte</td>
<td>3, Drugs/toxins</td>
<td>4, Injury/rhabdomyolysis</td>
</tr>
<tr>
<td>myop_etiol_genet</td>
<td>Genetic, hereditary or inborn errors of metabolism</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_inflamm</td>
<td>Inflammatory/infectious</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_endo</td>
<td>Endocrine/electrolyte</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_drugtox</td>
<td>Drugs/toxins</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_injury</td>
<td>Injury/rhabdomyolysis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_critill</td>
<td>Critical illness</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_other</td>
<td>Myopathy etiology other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_unkn</td>
<td>Myopathy etiology unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_etiol_other spe</td>
<td>Specify other etiology of new or worsened myopathy</td>
<td>[myop_etiol_other]=1 &quot;1&quot;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myop_dx_emg_ncs</td>
<td>Myopathy diagnosed by EMG/NCS</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[myopathy]=1 OR [myopathy]=2 OR [myopathy]=3</td>
<td></td>
</tr>
<tr>
<td>myop_outcome</td>
<td>Current status of myopathy and/or symptoms at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>[myopathy]=1 or [myopathy]=2 or [myopathy]=3 or [sym_weak]=1 or [sym_weak]=2 or [sym_weak]=3 or [sym_muscle_pain]=1 or [sym_muscle_pain]=2 or [sym_muscle_pain]=3</td>
</tr>
<tr>
<td>myop_outcome</td>
<td>Current status of myopathy and/or symptoms at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>[myopathy]=1 or [myopathy]=2 or [myopathy]=3 or [sym_weak]=1 or [sym_weak]=2 or [sym_weak]=3 or [sym_muscle_pain]=1 or [sym_muscle_pain]=2 or [sym_muscle_pain]=3</td>
</tr>
<tr>
<td>neuropathy</td>
<td>Neuropathy</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>sym_numbness</td>
<td>Symptoms of Paresthesia, Numbness, Tingling, and/or Burning</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>9, Unknown</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
</tr>
<tr>
<td>any_neurop_numb</td>
<td>Any neuropathy or symptoms of paresthesia, numbness, tingling, and/or burning</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>9, Unknown</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
</tr>
<tr>
<td>mn_dz_or_als</td>
<td>Motor neuron disease or amyotrophic lateral sclerosis</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>9, Unknown</td>
<td>Core</td>
</tr>
<tr>
<td>plexopathy</td>
<td>Plexopathy (brachial, lumbar/sacral)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>9, Unknown</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
</tr>
<tr>
<td>radiculopathy</td>
<td>Radiculopathy</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>9, Unknown</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
</tr>
<tr>
<td>timing_neuropathy</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of neuropathy or symptoms of paresthesias, numbness, tingling, burning. If neuropathy/symptoms was the first manifestation of COVID-19, put &lt; 1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>neurop_etiol</td>
<td>Potential etiology of new or worsened neuropathy other than COVID-19</td>
<td>99, Unknown</td>
<td>0, Injury, compression</td>
<td>1, Guillain-Barre and variants, CIDP (chronic inflammatory demyelinating polyneuropathy)</td>
<td>2, Infectious (e.g. HIV, hepatitis B/C, Lyme disease)</td>
<td>3, Vasculitis/autoimmune (e.g. polyarteritis nodosa, Lupus, Sjogren's)</td>
</tr>
</tbody>
</table>

**Neuropathy etiology**

Potential etiology of new or worsened neuropathy other than COVID-19 Check all that apply

- 99, Unknown
- 0, Injury, compression
- 1, Guillain-Barre and variants, CIDP (chronic inflammatory demyelinating polyneuropathy)
- 2, Infectious (e.g. HIV, hepatitis B/C, Lyme disease)
- 3, Vasculitis/autoimmune (e.g. polyarteritis nodosa, Lupus, Sjogren's)
- 4, Toxin/drug/alcohol
- 5, Genetic (e.g. Charcot Marie Tooth)
- 6, Paraneoplastic, amyloidosis or other gammopathy
- 7, Nutritional (e.g. B12 deficiency)
- 8, Diabetes/hypothyroid or other endocrinopathy
- 9, Renal failure/uremia
- 10, Critical illness
- 11, Other

- [neuropathy]=1 or [neuropathy]=2 or [neuropathy]=3

**Check all that apply**

DC 03132024
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>617 neurop_esi_injury</td>
<td>Injury, compression neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>618 neurop_esi_gb</td>
<td>Guillain-Barre and variants, CIDP (chronic inflammatory demyelinating polyneuropathy)</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>619 neurop_esi_infect</td>
<td>Infectious neuropathy etiology (e.g. HIV, hepatitis B/C, Lyme disease)</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>620 neurop_esi_vascul</td>
<td>Vasculitis/autoimmune neuropathy etiology (e.g. polyarteritis nodosa, Lupus, Sjogren’s)</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>621 neurop_esi_toxin</td>
<td>Toxic/drug/alcohol neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>622 neurop_esi_genet</td>
<td>Genetic (e.g. Charcot Marie Tooth) neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>623 neurop_esi_paraneo</td>
<td>Paraneoplastic, amyloidosis or other gammopathy neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>624 neurop_esi_nutrit</td>
<td>Nutritional (e.g. B12 deficiency) neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>625 neurop_esi_diab</td>
<td>Diabetes/hypothyroid or other endocrinopathy neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>626 neurop_esi_renal</td>
<td>Renal failure/uremia neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>627 neurop_esi_critill</td>
<td>Critical illness neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>628 neurop_esi_oth</td>
<td>Other neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>629 neurop_esi_unkn</td>
<td>Unknown neuropathy etiology</td>
<td>0, Unchecked</td>
<td>Checked</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>630 neurop_esi_other</td>
<td>Specify other etiology of new or worsened neuropathy</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>631 neuropathy_dx_emg_nec</td>
<td>Was neuropathy diagnosed by EMG/NCS</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
</tr>
<tr>
<td>632 guillain_barre</td>
<td>Was patient diagnosed with Guillain-Barre Syndrome or AIDP</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>neuropathy=1 or neuropathy=2 or neuropathy=3</td>
<td></td>
</tr>
<tr>
<td>633 guillain_barre_acs</td>
<td>Was there evidence of another common cause of Guillain-Barré syndrome or AIDP other than COVID-19 infection?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>neuropathy=1 or guillain_barre = 1</td>
<td></td>
</tr>
<tr>
<td>634 assoc_gb_covid19</td>
<td>If Guillain Barre Syndrome or variant, or other acute neuropathy present, please grade association with COVID-19 infection (according to criteria below)</td>
<td>0, Possible</td>
<td>1, Probable</td>
<td>2, Confirmed</td>
<td>neuropathy=1 or guillain_barre = 1</td>
<td></td>
</tr>
<tr>
<td>635 guillain_barre_calcul</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td>guillain_barre=1 or guillain_barre_oi=0</td>
<td>guillain_barre=1 or guillain_barre_oi=0</td>
<td>neuropathy=1 or guillain_barre = 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>636 guillain_barre_calcul2</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td>guillain_barre=1 or guillain_barre_oi=0</td>
<td>guillain_barre=1 or guillain_barre_oi=0</td>
<td>neuropathy=1 or guillain_barre = 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>637 assoc5</td>
<td>Brighton Level</td>
<td>1, Brighton Level 1</td>
<td>2, Brighton Level 2</td>
<td>3, Brighton Level 3</td>
<td>neuropathy=1 or guillain_barre = 1</td>
<td></td>
</tr>
<tr>
<td>638 brighton_scale</td>
<td>Brighton Level</td>
<td>1, Brighton Level 1</td>
<td>2, Brighton Level 2</td>
<td>3, Brighton Level 3</td>
<td>neuropathy=1 or guillain_barre = 1</td>
<td></td>
</tr>
</tbody>
</table>


WHO criteria for the grading the potential association of neuropathy-associated vasculitis with COVID19 infection.
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>neurop_ma_location</td>
<td>Neuropathy pattern</td>
<td>0, Sensory</td>
<td>1, Motor</td>
<td>2, Sensory-motor</td>
</tr>
<tr>
<td>Neuropathy outcome</td>
<td></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>neurop_outcome</td>
<td>Current status of neuropathy and/or symptoms at follow up</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>timingres_neurop</td>
<td>Length of time between onset of COVID-19 illness and resolution of neuropathy/symptom outcome</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>Neuromuscular junction disorder</td>
<td></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>neurom_junc</td>
<td>Neuromuscular junction disorder</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>timing_neurom_junc</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of neuromuscular junction disorder; if neuromuscular junction disorder was the first manifestation of COVID-19, put &lt; 1 month</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>neurom_junc_spec</td>
<td>Specify neuromuscular junction disorder</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>Neuromuscular junction outcome</td>
<td></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>neurom_junc_outcome</td>
<td>Current status of neuromuscular junction at follow up</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>timingres_neurom_junc</td>
<td>Length of time between onset of COVID-19 illness and resolution of neuromuscular junction disorder</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>Anosmia/Ageusia</td>
<td></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>anosmia</td>
<td>Anosmia</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>ageusia</td>
<td>Ageusia</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>sym_loss_tasm</td>
<td>Loss of taste and/or smell</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>any_loss_tasm</td>
<td>Loss of taste and/or smell condition or general symptom</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>timing_anos_agus</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of anosmia and/or ageusia. If anosmia/ageusia was the first manifestation of COVID-19, put &lt; 1 month</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>an_ag_severity</td>
<td>Severity</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>Anosmia/ageusia type</td>
<td>Type of deficit</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>an_ag_checktype</td>
<td>Check all that apply</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>an_ag_ty_sweet</td>
<td>Sweet affected</td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
<td><img src="image.png" alt="Image" /></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>662 an_ag_ty_salty</td>
<td>Salty affected</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ageusia] = '1' or [ageusia] = '2' or [ageusia] = '3'</td>
</tr>
<tr>
<td>663 an_ag_ty_sour</td>
<td>Sour affected</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ageusia] = '1' or [ageusia] = '2' or [ageusia] = '3'</td>
</tr>
<tr>
<td>664 an_ag_ty_bitter</td>
<td>Bitter affected</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ageusia] = '1' or [ageusia] = '2' or [ageusia] = '3'</td>
</tr>
<tr>
<td>665 an_ag_ty_umami</td>
<td>Umami affected</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ageusia] = '1' or [ageusia] = '2' or [ageusia] = '3'</td>
</tr>
<tr>
<td>666 an_ag_ty_othertst</td>
<td>Other taste affected</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ageusia] = '1' or [ageusia] = '2' or [ageusia] = '3'</td>
</tr>
<tr>
<td>667 an_ag_ty_tstunkn</td>
<td>Unknown taste affected</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ageusia] = '1' or [ageusia] = '2' or [ageusia] = '3'</td>
</tr>
<tr>
<td>668 an_ag_outcome</td>
<td>Both taste and smell recovery at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
</tr>
<tr>
<td>669 an_an_tim_recover</td>
<td>Time to recovery, weeks</td>
<td>0, No recovery</td>
<td>1, Partial recovery</td>
<td>3, Full recovery</td>
</tr>
<tr>
<td>670 ag_recovery</td>
<td>Taste recovery</td>
<td>0, No recovery</td>
<td>1, Partial recovery</td>
<td>3, Full recovery</td>
</tr>
<tr>
<td>671 an_recovery</td>
<td>Smell recovery</td>
<td>0, No recovery</td>
<td>1, Partial recovery</td>
<td>3, Full recovery</td>
</tr>
<tr>
<td>672 an_ag_outcome</td>
<td>Both taste and smell recovery at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
</tr>
<tr>
<td>673 timingres_an_ag</td>
<td>Length of time between onset of COVID-19 illness and resolution of anosmia and ageusia</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
</tr>
<tr>
<td>674 neurocog_yn</td>
<td>NEUROCOGNITIVE DISORDER OR CONDITION. (e.g. Brain fog, Dementia, Cognitive deficit/s)</td>
<td>0, Not Present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>675 sym_brain_fog</td>
<td>&quot;Brain fog&quot;, difficulty thinking or concentrating, or unusual forgetfulness/memory problems</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>676 any_cog_b_fog</td>
<td>cognitive condition or brain fog</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>677 develop_delay</td>
<td>Developmental delay</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>678 Dementia</td>
<td></td>
<td></td>
<td>12/20/2022: Added variable</td>
<td>Core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>dementia_y_n</td>
<td>Dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>timing_neurocog</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of neuro-cognitive condition/s. If neuro-cognitive condition/s were the first manifestation of COVID-19, put &lt; 1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
</tr>
<tr>
<td>alzheim_demen</td>
<td>Alzheimer's dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>valc_demen</td>
<td>Vascular dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>front_temp_demen</td>
<td>Frontal temporal dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>lewy_body_demen</td>
<td>Lewy Body Disease</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>parkinsons_dementia</td>
<td>Parkinson disease dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>hiv_dementia</td>
<td>HIV dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>688 progr_sn_palsy</td>
<td>Progressive supranuclear palsy</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[dementia_y_n]=1</td>
</tr>
<tr>
<td>689 mul_sys_atrophy</td>
<td>Multi-system atrophy</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>690 norm_pres_hydroc</td>
<td>Normal pressure hydrocephalus</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>691 prion_dz</td>
<td>Prion disease (Creutzfeldt-Jakob Disease)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>692 dementia_other</td>
<td>Other dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>693 neurocog_oth_spec</td>
<td>Describe other neurocognitive condition</td>
<td></td>
<td></td>
<td>[neurocog_yn]=1</td>
</tr>
<tr>
<td>695 neurocog_outcome</td>
<td>Current status of neurocognitive condition at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
</tr>
<tr>
<td>696 timingres_neurocog</td>
<td>Length of time between onset of COVID-19 illness and resolution of neurocognitive condition</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
</tr>
<tr>
<td>697 Mood disorders</td>
<td>MOOD DISORDERS. DEPRESSION, ANXIETY, BIPOLAR, POST-TRAUMATIC STRESS DISORDER (PTSD)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>698 mood</td>
<td>MOOD DISORDERS. DEPRESSION, ANXIETY, BIPOLAR, POST-TRAUMATIC STRESS DISORDER (PTSD)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Depression</td>
<td>Depression and/or loss of interest in normal activities</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>sym_gn_depression</td>
<td>Depression general symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>any_depress</td>
<td>Depression and/or loss of interest in normal activities or general depression symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Anxiety</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>sym_gn_anxiety</td>
<td>Anxiety general symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>any_anxiety</td>
<td>any anxiety or general symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>Other mood</td>
<td>bipolar</td>
<td>Bipolar disorder and/or mania</td>
<td>0, Not present</td>
<td>1, New</td>
</tr>
<tr>
<td>ptsd</td>
<td>Post-traumatic stress disorder (PTSD)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>mood_oth_spec</td>
<td>Describe other mood conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timing_mood</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of mood condition/s. If mood condition/s were the first manifestation of COVID-19, put &lt; 1 month</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
</tr>
<tr>
<td>mood_outcome</td>
<td>Current status of mood condition at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
</tr>
<tr>
<td>--------------------</td>
<td>--------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td>714 timingres_mood</td>
<td>Length of time between onset of COVID-19 illness and resolution of mood condition</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
</tr>
<tr>
<td>715 thought_dis</td>
<td>DEPRESSION, ANXIETY, BIPOLAR, POST-TRAUMATIC STRESS DISORDER (PTSD)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>717 timing_thoughtdis</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of thought disorder, if thought disorder was the first manifestation of COVID-19, put &lt; 1 month.</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
</tr>
<tr>
<td>718 psycho_fea_halluc</td>
<td>Hallucinations</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>719 psycho_fea_del_paran</td>
<td>Delusions/paranoia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>720 schizophrenia</td>
<td>Schizophrenia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>721 thought_dis_oth_spec</td>
<td>Describe other thought disorder</td>
<td>[thought_dis]=1</td>
<td>[thought_dis]=2 or [thought_dis]=3</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>722 thought disorder outcome</td>
<td>Current status of thought disorder at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
</tr>
<tr>
<td>723 thoughtdis_outcome</td>
<td>Length of time between onset of COVID-19 illness and resolution of thought disorder</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
</tr>
<tr>
<td>724 other_neuropsy_spec</td>
<td>Other neuro-cognitive, mood, delirium, and/or psychiatric condition, specify</td>
<td>[dementia_y_n]=1 or [dementia_y_n]=2 or [dementia_y_n]=3</td>
<td>12/20/2022: Become hidden</td>
<td></td>
</tr>
<tr>
<td>725 Any neuropsychiatric condition</td>
<td>Any neuropsychiatric disorders, mood, thought, cognitive/dementia</td>
<td>[dementia_y_n]=1 or [dementia_y_n]=2 or [dementia_y_n]=3</td>
<td>12/20/2022: Become hidden</td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
</tr>
<tr>
<td>-------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>727 neuropsych</td>
<td>Any neuropsychiatric or mood disorders, anxiety and/or dementia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
</tr>
<tr>
<td>728 neuropsych_outcome</td>
<td>Current status of neuropsychiatric and delirium at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
</tr>
<tr>
<td>729 timingres_neuropsych</td>
<td>Length of time between onset of COVID-19 illness and resolution of neurocognitive, mood, delirium, and/or psychiatric condition or dementia</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
</tr>
</tbody>
</table>

**Fatigue disorders**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>731 fatigue_disorders</td>
<td>Fatigue, Exercise intolerance, and/or Sleep disturbance</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>732 sym_fatigue</td>
<td>Fatigue</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>733 sym_post_exertional</td>
<td>Post-exertional worsening of symptoms or exercise intolerance</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>734 any_fatigue</td>
<td>Fatigue and/or symptoms of post exertional worsening of symptoms or exercise intolerance</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>timing_fatigue</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of fatigue, endurance, and/or sleep problems</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[fatigue_disorders]=1 or [fatigue_disorders]=2 or [fatigue_disorders]=3</td>
</tr>
<tr>
<td>sym_diff_sleep</td>
<td>Sleeping less or difficulty falling or staying asleep</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>sym_sleep_more</td>
<td>Sleeping more</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>sleep_apnea</td>
<td>Sleep apnea</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>sleep_con_y_n</td>
<td>Does patient have additional diagnosed sleep-related conditions?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>d_insomnia</td>
<td>Insomnia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new or worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>d_c_apnea</td>
<td>Central sleep apnea syndrome</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new or worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>d_ob_apnea</td>
<td>Obstructive sleep apnea disorders</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new or worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>d_hypox</td>
<td>Sleep related hypoxemia disorders</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new or worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
<td>-----------</td>
<td>------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>744 d_narcolep</td>
<td>Narcolepsy</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>745 d_id_hypersom</td>
<td>Idiopathic hypersomnia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>746 d_insuf_slp</td>
<td>Insufficient sleep syndrome</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>747 d_nrem_paras</td>
<td>NREM parasomnia (sleep walking, sleep terrors)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>748 d_rem_paras</td>
<td>REM parasomnia (nightmares, sleep paralysis)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>749 d_restless</td>
<td>Restless legs syndrome/periodic limb movement disorder</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>750 d_cramp</td>
<td>Sleep-related cramps</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>751 d_bruxism</td>
<td>Sleep-related bruxism (teeth grinding)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
<tr>
<td>752 d_rhyth_resti</td>
<td>Sleep-related rhythmic movement disorder/periodic limb movements of sleep</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with uncler past history, unknown whether new or worsened</td>
<td>[sleep_con_y_n]=1</td>
</tr>
</tbody>
</table>

### Fatigue outcome

<table>
<thead>
<tr>
<th>753 fatigueness</th>
<th>Fatigue or sleep outcome at follow up</th>
<th>0, No improvement</th>
<th>1, Partial recovery</th>
<th>2, Full recovery</th>
<th>[fatigue_disorders]=1 or [fatigue_disorders]=2 or [fatigue_disorders]=3</th>
<th>12/20/2022: Added variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>754 timing_fatigue</td>
<td>Length of time between onset of COVID-19 illness and resolution of fatigue condition</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
</tbody>
</table>

### Headache

<table>
<thead>
<tr>
<th>756 headache</th>
<th>Headache</th>
<th>0, Not present</th>
<th>1, New</th>
<th>2, Worsened</th>
<th>3, Present, with uncler past history, unknown whether new vs worsened</th>
<th>[headache]=1 or [headache]=2 or [headache]=3</th>
<th>12/20/2022: Added variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>758 timing_headache</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of headache</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Added variable</td>
<td></td>
</tr>
</tbody>
</table>

### Headache type

<p>| 760 ha_type            | Type of headache. Check all that apply | 0, Migraine | 1, Tension type | 2, Trigeminal autonomic cephalalgia (cluster, paroxysmal hemicrania, hemicrania continua, SUNCT) | 3, Other primary headache (cough, exercise, cold, cital, primary stabbing, nummular, hypnic, new daily persistent) | 4, Pseudotumor cerebri | 5, Post-traumatic headache | 6, Giant cell arteritis | 7, Other vasculitis | 8, Temporal mandibular joint related | 9, Sinus headache | 10, Occipital neuralgia | 11, Other secondary headache, e.g. brain tumor | 12, Other | [headache]=1 or [headache]=2 or [headache]=3 | 12/20/2022: Became non-core |
|------------------------|--------------------------------------|--------------|---------------|------------------|-------------------------------------------------------------------------|-----------------------------|------------------------|
| 761 ha_ty_migrain      | Migraine                             | 0, Unchecked | 1, Checked    | [headache]=1 or [headache]=2 or [headache]=3 | 12/20/2022: Became non-core |
| 762 ha_ty_tension      | Tension type                         | 0, Unchecked | 1, Checked    | [headache]=1 or [headache]=2 or [headache]=3 | 12/20/2022: Became non-core |</p>
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>ha_ty_cluster</td>
<td>Trigeminal autonomic cephalalgias (cluster, paroxysmal hemicrania, hemicrania continua, SUNCT)</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_othprim</td>
<td>Other primary headache (cough, exercise, cold, coital, primary stabbing, nummular, hypnic, new daily persistent)</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_pseudotum</td>
<td>Pseudotumor cerebri</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_posttraum</td>
<td>Post-traumatic headache</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_giantcell</td>
<td>Giant cell arteritis</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_othvasc</td>
<td>Other vasculitis</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_tmj</td>
<td>Temporal mandibular joint related</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty sinus</td>
<td>Sinus headache</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_occipineur</td>
<td>Occipital neuralgia</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_brain tum</td>
<td>Other secondary headache, e.g. brain tumor</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_oth</td>
<td>Other</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_ty_unkn</td>
<td>Unknown</td>
<td>0, Unchecked 1, Checked</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became non-core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_increase_freq</td>
<td>If worsened pre existing headache: increased in frequency with COVID-19</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[headache]=2</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>ha_increase_dur</td>
<td>If worsened pre existing headache: increased in duration with COVID-19</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[headache]=2</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>ha_increase_severe</td>
<td>If worsened pre existing headache: increased in severity with COVID-19</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[headache]=2</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>ha_new_feath</td>
<td>If worsened pre existing headache: new headache features with COVID-19</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[headache]=2</td>
<td>12/20/2022: Became non-core</td>
</tr>
<tr>
<td>new_ha_feat_sp</td>
<td>Specify new headache features</td>
<td>[ha_new_feath]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ha_intensity</td>
<td>Headache intensity</td>
<td>0, Mild</td>
<td>1, Moderate</td>
<td>3, Severe</td>
<td>9, Unknown</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>ha_aura</td>
<td>Aura</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>ha_nausea</td>
<td>Nausea</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>784 ha_vomit</td>
<td>Vomiting</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>785 ha_photoph</td>
<td>Photophobia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>786 ha_phonoph</td>
<td>Phonophobia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>787 ha_tinnitus</td>
<td>Tinnitus</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>788 ha_auton_unil_eye_tear</td>
<td>Autonomic unilateral eye tearing</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>789 ha_auton_unilat_eye_red</td>
<td>Autonomic unilateral eye redness</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Required or Core</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>790 ha_auto_unil_ptosis</td>
<td>Autonomic unilateral ptosis</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>791 ha_auto_other_sp</td>
<td>Specify other autonomic features</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>792 ha_propylactic_tx</td>
<td>Prophylactic headache treatment</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>793 Headache outcome</td>
<td>Headache outcome</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>[headache]=1 or [headache]=2 or [headache]=3</td>
</tr>
<tr>
<td>794 timing_res_headache</td>
<td>Length of time between onset of COVID-19 illness and resolution of headache condition</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>795 vision</td>
<td>Vision disorder and/or symptoms</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
</tr>
<tr>
<td>796 timing_vision</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of vision disorder</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
</tr>
<tr>
<td>797 sym_vision_abn</td>
<td>Vision abnormalities (for example seeing spots, stars, lines, flashing lights, zigzag lines, heat waves or tiny dots on a gray, white or black background sometimes referred to as “snow”)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
</tr>
<tr>
<td>798 any_vision</td>
<td>Any vision condition or symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>799 Etiology of neuroophthalmologic condition</td>
<td>Identify etiology for neuro-ophthalmic disorder other than COVID-19.</td>
<td>99, Unknown</td>
<td>0, Inflammation/vasculitis/iritis/retinitis/uveitis/optic neuritis</td>
<td>1, Cranial nerve disorder</td>
<td>2, Retinal infarct</td>
<td>3, Papilledema/optic nerve injury</td>
</tr>
<tr>
<td>800 Check all that apply</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>801 etiology_n_o_disord</td>
<td>Identify etiology for neuro-ophthalmic disorder other than COVID-19. Check all that apply</td>
<td>99, Unknown</td>
<td>0, Inflammation/vasculitis/iritis/retinitis/uveitis/optic neuritis</td>
<td>1, Cranial nerve disorder</td>
<td>2, Retinal infarct</td>
<td>3, Papilledema/optic nerve injury</td>
</tr>
<tr>
<td>802 etiol_n_o_dis_inflam</td>
<td>Inflammation/vasculitis/iritis/retinitis/uveitis/optic neuritis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>803 etiol_n_o_dis_crannv</td>
<td>Cranial nerve disorder</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>804 etiol_n_o_dis_retin</td>
<td>Retinal infarct</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>805 etiol_n_o_dis_papill</td>
<td>Papilledema/optic nerve injury</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[vision]=1 or [vision]=2 or [vision]=3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
<td>Required or Core</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------------</td>
<td>-------------------------------------------</td>
<td>------------</td>
<td>-----------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>etiol_n_o_dis_nystag</td>
<td>Nystagmus</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etiol_n_o_dis_oth</td>
<td>Other</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etiol_n_o_dis_unkn</td>
<td>Unknown</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>etiology_n_o_disord_other</td>
<td>Specify other etiology of neuroophthalmic disorder</td>
<td>etiology_n_o_disord(5) = '1'</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHO criteria for the grading the potential association of neuroophthalmologic condition with COVID19 infection</td>
<td>SARS-COV-2 detected in CSF/brain tissue by PCR or immunohistochemistry Evidence of COVID-19 specific intrathecal antibody</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>etiology_n_o_disord(2) = '1' or etiology_n_o_disord(3) = '1' or etiology_n_o_disord(4) = '1'</td>
<td></td>
</tr>
<tr>
<td>other_cause_eye</td>
<td>Grade the association of new uveits, iritis, or retinitis?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>etiology_n_o_disord(2) = '1' or etiology_n_o_disord(3) = '1' or etiology_n_o_disord(4) = '1'</td>
<td></td>
</tr>
<tr>
<td>assoc_n_o_sz covid19</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td>(other_cause_eye)=1,0,if((covid_in_brain4)[1,2,3,4,5,6,7,8,9])</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroophalmologic outcome</td>
<td>Current status of neuroophthalmologic condition at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>vision=1 or vision=2 or vision=3</td>
</tr>
<tr>
<td>opth_outcome</td>
<td>Length of time between onset of COVID-19 illness and resolution of vision condition</td>
<td>0, &lt; 3 months</td>
<td>1, 3 - 6 months</td>
<td>2, 6 - 12 months</td>
<td>3, 12 - 18 months</td>
<td>4, 18 - 24 months</td>
</tr>
<tr>
<td>Hearing condition</td>
<td>Hearing or ear symptoms</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>hearing_ear_sx=1 or hearing_ear_sx=2 or hearing_ear_sx=3</td>
</tr>
<tr>
<td>timing_hearing</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of hearing or ear symptoms</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>hearing_ear_sx=1 or hearing_ear_sx=2 or hearing_ear_sx=3</td>
</tr>
<tr>
<td>sym_problem_hear</td>
<td>Problems hearing and ear ringing</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>hearing_ear_sx=1 or hearing_ear_sx=2 or hearing_ear_sx=3</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>sym_ears_ringing</td>
<td>Problems hearing</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
</tr>
<tr>
<td>hearingearsoth_sp</td>
<td>Hearing/ears other, specify</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>timing_hearing</td>
<td>Length of time between onset of COVID-19 illness and resolution of hearing symptoms</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>3, 6 - &lt; 12 months</td>
<td>4, 12 - &lt; 18 months</td>
<td>5, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>hearing_outcome</td>
<td>Current status of hearing symptoms at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>dysautonomia</td>
<td>Signs or symptoms of dysautonomia and/or sympathetic storming Examples: POTS (Postural Orthostatic Tachycardia Syndrome), intermittent fluctuating blood pressure, or tachycardia or palpitations, diaphoresis (sweating)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
</tr>
<tr>
<td>sym_dizzy</td>
<td>Dizziness/lightheadedness</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
</tbody>
</table>
| 833 sym_irregular_heartbeat | Irregular heartbeat or palpitations | 0, Not present | 1, New | 2, Worsened | 3, Present, with unclear past history; unknown whether new vs worsened | 9, Unknown | [12/20/2022: Added "3, Present, with unclear past history; unknown whether new vs worsened"
12/20/2022: "9, Unknown" became hidden
8/28/2023: Removed branching logic "[dysautonomia] = '1' or [dysautonomia] = '2' or [dysautonomia] = '3'" ] |
| 834 sym_syncope | Syncope/fainting/blackouts | 0, Not present | 1, New | 2, Worsened | 3, Present, with unclear past history; unknown whether new vs worsened | 9, Unknown | [12/20/2022: Added variable
8/28/2023: Removed branching logic "[dysautonomia] = '1' or [dysautonomia] = '2' or [dysautonomia] = '3'" ] |
<p>| 835 sym_sweat | Sweating | 0, Not present | 1, New | 2, Worsened | 3, Present, with unclear past history; unknown whether new vs worsened | 9, Unknown | [derived variable: created from: (sym_dizzy OR sym_sweat OR sym_syncope OR sym_irregular_heartbeat) ] |
| 836 any_dysautonomia | Any dysautonomia-like or related signs and/or symptoms | 0, Not present | 1, New | 2, Worsened | 3, Present, with unclear past history; unknown whether new vs worsened | 9, Unknown | [ ] |</p>
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>timing_dysautonomia</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of Signs or symptoms of dysautonomia and/or sympathetic storming including intermittent fluctuating blood pressure, tachycardia, diaphoresis, tachypnea, and/or extensor posturing (exclude patients on vasopressors) or symptoms of: dizziness, palpitations, sweating</td>
<td>(dysautonomia)=1 or (dysautonomia)=2 or (dysautonomia)=3 or [sym_dizzy]=1 or [sym_dizzy]=2 or [sym_dizzy]=3 or [sym_irregular_heartbeat]=1 or [sym_irregular_heartbeat]=2 or [sym_irregular_heartbeat]=3 or [sym_syncope]=1 or [sym_syncope]=2 or [sym_syncope]=3 or [sym_sweat]=1 or [sym_sweat]=2 or [sym_sweat]=3</td>
<td>12/20/2022: Added variable 8/28/2023: Added branching logic “Added “[sweat]=1 or [sweat]=2 or [sweat]=3”</td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of dysautonomia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_new_wor</td>
<td>Type of new or worsened dysautonomia; Check all that apply</td>
<td>0, Postural orthostatic tachycardia syndrome (POTS)</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_nw_ty_pots</td>
<td>Postural orthostatic tachycardia syndrome (POTS)</td>
<td>0, Unchecked 1, Checked</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_nw_ty_auton</td>
<td>Autonomic neuropathy</td>
<td>0, Unchecked 1, Checked</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_nw_ty_orth</td>
<td>Orthostatic hypotension/intolerance</td>
<td>0, Unchecked 1, Checked</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_nw_ty_symp</td>
<td>Sympathetic storming, paroxysmal sympathetic hypersensitivity</td>
<td>0, Unchecked 1, Checked</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_nw_ty_oth</td>
<td>Dysautonomia type other</td>
<td>0, Unchecked 1, Checked</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>dysaut_nw_ty_car</td>
<td>Cardiac etiology (heart disease)</td>
<td>0, Unchecked 1, Checked</td>
<td>(dysautonomia) +1’ or (dysautonomia) +2’ or (dysautonomia) +3’</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>new_wor_dysaut_sp</td>
<td>Specify other type of new or worsened dysautonomia</td>
<td>(dysaut_new_wor)=1</td>
<td>(dysaut_new_wor)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dysautonomia outcome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------</td>
<td>---------------------------------------------------</td>
<td>-------------------------------------------------</td>
<td>-----------</td>
<td>------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>849 dysauto_outcome</td>
<td>Current status of dysautonomia at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>([dysautonomia]=1 or [dysautonomia]=2 or [dysautonomia]=3 or [sym_dizzy]=1 or [sym_dizzy]=2 or [sym_dizzy]=3 or [sym_irregular_heartbeat]=1 or [sym_irregular_heartbeat]=2 or [sym_irregular_heartbeat]=3 or [sym_syncope]=1 or [sym_syncope]=2 or [sym_syncope]=3 or [sym_sweat]=1 or [sym_sweat]=2 or [sym_sweat]=3)</td>
</tr>
<tr>
<td>850 timingres_dysauto</td>
<td>Length of time between onset of COVID-19 illness and resolution of dysautonomia-related symptoms</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>851 Seizures</td>
<td>Seizures</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
</tr>
<tr>
<td>852 timing_seizures</td>
<td>Length of time between onset of COVID-19 illness and worsening of seizures</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
</tr>
<tr>
<td>853 sz_status_epil</td>
<td>Status epilepticus</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
</tr>
<tr>
<td>854 sz_etiology</td>
<td>Seizure etiology classification</td>
<td>0, Genetic/presumed genetic</td>
<td>1, Epilepsy of unknown cause</td>
<td>2, Structural</td>
<td>3, Metabolic</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>855 Seizure type</td>
<td>Type of seizures</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>857 Check all that apply</td>
<td>Type of seizures Check all that apply</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>858 sz_type</td>
<td>Type of seizures</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>859 sz_ty_generaliz</td>
<td>Generalized</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>860 sz_ty_focal</td>
<td>Focal</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>861 sz_ty_nonepile</td>
<td>Non-epileptic seizure</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>862 sz_ty_unclass</td>
<td>Unclassified seizures</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>863 sz_ty_unconfrm</td>
<td>Unconfirmed seizure (primary clinician does not have &gt;80% certainty that events are seizures)</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>864 sz_ty_unkn</td>
<td>Unknown neuropathy etiology</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>865 sz_increase_duration</td>
<td>Seizures increased in duration with COVID-19</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>866 sz_new_location</td>
<td>Seizure type unknown</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>867 sz_new_semiology</td>
<td>New seizure semiology with COVID-19</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>868 new_semiology_sp</td>
<td>Specify new seizure semiology</td>
<td>([seizures]=1 or [seizures]=2) or [seizures]=3</td>
<td>Core</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Notes</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>-------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>gn_sz_tonic_clonic</td>
<td>Generalized tonic clonic</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>gn_sz_absence</td>
<td>Generalized absence</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>gn_sz_myoclonic</td>
<td>Generalized myoclonic</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>gn_sz_clonic</td>
<td>Generalized clonic</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>gn_sz_tonic</td>
<td>Generalized tonic</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>gn_sz_aclonic</td>
<td>Generalized aclonic</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>875 gn_sz_epi_spasms</td>
<td>Generalized epileptic spasms -- focal or generalized</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>876 fc_sz_no_impair</td>
<td>Focal: Without impairment of consciousness or responsiveness</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>877 fc_sz_simp_par</td>
<td>Focal: Simple partial seizure (without impairment of consciousness or responsiveness AND with observable motor or autonomic component)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>878 fc_sz_simp_par_waura</td>
<td>Focal: Without impairment of consciousness or responsiveness AND with subjective sensory or psychic phenomena only (“aura”)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>879 fc_sz_impair_consc</td>
<td>Focal: WITH impairment of consciousness or responsiveness</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>880 fc_sz_evolv_genl</td>
<td>Focal: Evolving to bilateral, convulsive seizure (involving tonic/clonic components, &quot;secondarily generalized seizure&quot;)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown</td>
</tr>
<tr>
<td>881 sz_freq</td>
<td>Frequency</td>
<td>0, Intermittent</td>
<td>1, Refractory</td>
<td>2, Super refractory</td>
<td>9, Unknown</td>
<td>[seizures]=1 or [seizures]=2 or [seizures]=3</td>
</tr>
<tr>
<td>882 sz_num_drugs</td>
<td>Number of drugs</td>
<td>0, 0</td>
<td>1, 1</td>
<td>2, 2</td>
<td>3, 3 or more</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------</td>
<td>---------------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>sz_cont_drug_inf</td>
<td>Continuous drug infusion</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(seizures)=1 or (seizures)=2 or (seizures)=3</td>
<td></td>
</tr>
<tr>
<td>sz_outcome</td>
<td>Current status of seizure at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>(seizures)=1 or (seizures)=2 or (seizures)=3</td>
</tr>
<tr>
<td>timingres_seizure</td>
<td>Length of time between onset of COVID-19 illness and resolution of seizure condition</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>timing_tbi</td>
<td>Length of time between onset of COVID-19 illness and worsening of traumatic brain injury</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>(tbi)=1 or (tbi)=2 or (tbi)=3</td>
</tr>
<tr>
<td>tbi_concussion</td>
<td>Traumatic concussion</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(tbi)=1 OR (tbi)=2 or (tbi)=3</td>
</tr>
<tr>
<td>tbi_contusion_iph</td>
<td>Traumatic contusion/intraparenchymal hemorrhage</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(tbi)=1 OR (tbi)=2 or (tbi)=3</td>
</tr>
<tr>
<td>tbi_sdh</td>
<td>Traumatic subdural hematoma</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(tbi)=1 OR (tbi)=2 or (tbi)=3</td>
</tr>
<tr>
<td>tbi_edh</td>
<td>Traumatic epidural hematoma</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(tbi)=1 OR (tbi)=2 or (tbi)=3</td>
</tr>
<tr>
<td>tbi_sah</td>
<td>Traumatic subarachnoid hemorrhage</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(tbi)=1 OR (tbi)=2 or (tbi)=3</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>tbi_dai</td>
<td>Traumatic diffuse axonal injury</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color: #e0f0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>tbi_surg_interven</td>
<td>Surgical intervention required for TBI</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color: #e0f0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>tbi_p_conc_ha</td>
<td>Post concussion headache</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color: #e0f0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>tbi_p_conc_mood_dis</td>
<td>Post concussion mood disorder</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color: #e0f0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>tbi_p_conc_vertigo</td>
<td>Post concussion vertigo</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color: #e0f0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>tbi_p_conc_cog_abn</td>
<td>Post concussion cognition abnormalities</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, &lt;p style=&quot;color: #e0f0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>--------------------------------</td>
<td>---------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>tbi_p_conc_sz</td>
<td>Post concussion seizure</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[tbi]=1 OR [tbi]=2 or [tbi]=3</td>
</tr>
</tbody>
</table>
| tbi_p_conc_sleep_dis | Post concussion sleep disorder                   | 0, Not present | 1, New | 2, Worsened | 3, Present, with unclear past history; unknown whether new vs worsened | [tbi]=1 OR [tbi]=2 or [tbi]=3                       | 12/20/2022: Added "Unknown\[tbi]=1 OR [tbi]=2 or [tbi]=3"
|                       |                                                 |                                                                                                                                             |            |                                | 12/20/2022: "9, Unknown" became hidden |                  |
| tbi_outcome   | Outcome of TBI                                  | 0, No improvement | 1, Partial recovery | 2, Full recovery | 9, Unknown | [tbi_outcome]=2                  | Core                      |
| timingres_tbi | Length of time between onset of COVID-19 illness and resolution of traumatic brain injury | 0, < 2 months | 1, 2 - < 6 months | 2, 6 - < 12 months | 3, 12 - < 18 months | 4, 18 - < 24 months | 5, 24 - < 30 months | 6, 30 - < 36 months | 7, 36+ months | 9, Unknown | [tbi_outcome]=2                  | 12/20/2022: Added variable | Core |

**Toxic Metabolic Encephalopathy**

<table>
<thead>
<tr>
<th>tox_metab_encep</th>
<th>Toxic metabolic encephalopathy (TME) or delirium</th>
<th>0, Not present</th>
<th>1, New</th>
<th>2, Worsened</th>
<th>3, Present, with unclear past history; unknown whether new vs worsened</th>
<th>(tox_metab_encep)=1 or (tox_metab_encep)=2 or (tox_metab_encep)=3</th>
<th>Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>delirium</td>
<td>Delirium</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>(neurocog_yn)=1 or (neurocog_yn)=2 or (neurocog_yn)=3</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>any_tme_delir</td>
<td>Any toxic metabolic encephalopathy or delirium</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unclear whether new or worsened</td>
<td>derived variable created from (toxic_metab_encep OR delirium)</td>
<td>Core</td>
</tr>
<tr>
<td>timing_tme</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of toxic metabolic encephalopathy or delirium</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt;3 months</td>
<td>9, Unknown</td>
<td>(tox_metab_encep)=1 or (tox_metab_encep)=2 or (tox_metab_encep)=3</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>tme_etiology</td>
<td>Potential etiology for toxic metabolic encephalopathy or delirium other than COVID-19. Check all that apply</td>
<td>99, Unknown</td>
<td>0, Drug/toxin/poisoning intoxication or withdrawal</td>
<td>1, Electrolyte abnormalities (e.g. hyponatremia, hypernatremia, hypoglycemia, hyperglycemia, hypocapnia, hypercapnia, acidemia, alkalis)</td>
<td>2, Organ failure (e.g. uremia, hepatic encephalopathy)</td>
<td>3, Hypertensive crisis</td>
<td>4, Hypercapnia/hypocapnia</td>
</tr>
<tr>
<td>tme_etiol_toxin</td>
<td>Drug/toxin/poisoning intoxication or withdrawal</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_electr</td>
<td>Electrolyte abnormalities (e.g. hyponatremia, hypernatremia, hypoglycemia, hyperglycemia, hypocapnia, hypercapnia, acidemia, alkalis)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
<td></td>
</tr>
<tr>
<td>tme_etiol_organfa</td>
<td>Organ failure (e.g. uremia, hepatic encephalopathy)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_hypertens</td>
<td>Hypertensive crisis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_hyperhypocalc</td>
<td>Hypercalcemia/hypocalcemia</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_wernick</td>
<td>Nutritional deficiency (e.g. Wernicke’s encephalopathy, Vitamin B12 deficiency, niacin deficiency)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_sepsis</td>
<td>Sepsis encephalopathy/infection/fever</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_hypox</td>
<td>Hypoxic ischemic brain injury</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_environ</td>
<td>Environmental (e.g. hypothermia/exposure)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_other</td>
<td>TME etiology other</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_unkn</td>
<td>TME etiology unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[tox_metab_encep] = 1 or [tox_metab_encep] = 2 or [tox_metab_encep] = 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_etiol_other_sp</td>
<td>Specify other etiology of toxic metabolic encephalopathy or delirium</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tme_outcome</td>
<td>Current status of TME or delirium at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>timingres_tme</td>
<td>Length of time between onset of COVID-19 illness and resolution of toxic metabolic encephalopathy or delirium</td>
<td>0, &lt; 2 months</td>
<td>1, 2-6 months</td>
<td>2, 6-12 months</td>
<td>3, 12-18 months</td>
<td>4, 18-24 months</td>
<td>5, 24-30 months</td>
</tr>
<tr>
<td>hi_inj</td>
<td>Hypoxic ischemic injury</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td></td>
<td></td>
</tr>
<tr>
<td>timing_hie</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of hypoxic ischemic injury</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt;3 months</td>
<td>9, Unknown</td>
<td>12/20/2022: Added variable</td>
<td>Core</td>
</tr>
<tr>
<td>hi_injury_etiol</td>
<td>Hypoxic/ischemic injury etiology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_injury_etc</td>
<td>Hypoxic/ischemic injury due to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hypoxic Ischemic Injury**

**Check all that apply**

| hi_inj | Hypoxic ischemic injury | 0, Cardiac arrest | 1, Prolonged hypotension | 2, Prolonged hypoxia | 3, Prolonged hypoglycemia | 9, Other | | | | |

**Check all that apply**

<p>| hi_injury_etc | Hypoxic/ischemic injury due to: | 0, Cardiac arrest | 1, Prolonged hypotension | 2, Prolonged hypoxia | 3, Prolonged hypoglycemia | 9, Other | | | | |</p>
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Note</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>hi_inj_etiol_cardarres</td>
<td>Cardiac arrest</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_inj_etiol_hypot</td>
<td>Prolonged hypotension</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_inj_etiol_hypox</td>
<td>Prolonged hypoxia</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_inj_etiol_hypogly</td>
<td>Prolonged hypoglycemia</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_inj_etiol_unkn</td>
<td>Etiology of HIE injury unknown</td>
<td>0, Unchecked 1, Checked</td>
<td></td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_i_abs_n20s</td>
<td>Absent N20s bilaterally on SSEP in 48-72 hours?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
</tr>
<tr>
<td>hi_i_nse</td>
<td>NSE level at 24-48 hours</td>
<td>(micrograms/L)</td>
<td></td>
<td>hi_inj=1 or 2 or 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hi_i_outcome</td>
<td>Current status of Hypoxic Ischemic Injury (HII) at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>hi_inj=1 or 2 or 3</td>
</tr>
<tr>
<td>timingres_hie</td>
<td>Length of time between onset of COVID-19 illness and resolution of hypoxic ischemic injury</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>movement</td>
<td>Movement disorder or MOVEMENT SYMPTOMS (e.g. tremors, shaking, ataxia/balance, rigidity, tics, etc)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs worsened</td>
<td>hi_inj=1 or 2 or 3</td>
</tr>
<tr>
<td>sym_tremors</td>
<td>Tremors</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>sym_jerking_limbs</td>
<td>Jerking of limbs</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>sym_stiff_rigid</td>
<td>Stiffness of muscles including rigidity</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>950 sym_slowness</td>
<td>Slowness of movement</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>951 any_movement</td>
<td>Any movement sign or symptom</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>952 timing_movement</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of movement disorder or movement symptoms</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt;3 months</td>
<td>9, Unknown</td>
<td>12/20/2022: Added variable Core</td>
</tr>
<tr>
<td>953 parkinsonism</td>
<td>Parkinsonism (bradykinesia, stiffness, freezing, resting tremor (or any combination of these)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>954 tremor</td>
<td>Tremor</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>955 any_tremor</td>
<td>Tremor or general symptom of tremors</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether now or worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>956 myoclonus</td>
<td>Myoclonus, jerking of limbs</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>957 tics</td>
<td>Tics</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>958 chorea</td>
<td>Chorea</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>959 dystonia</td>
<td>Dystonia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>960 tard_dyskin</td>
<td>Tardive dyskinesia</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>961 plus</td>
<td>Periodic limb movements of sleep or restless leg syndrome</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>962 gait_dis</td>
<td>Ataxia, problems with balance</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>sym_balance</td>
<td>Problems with balance</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>ot_move</td>
<td>Other movement disorder</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>other_move_specify</td>
<td>Other movement disorder, specify</td>
<td>[ot_move]=1 or [ot_move]=2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>movement_outcome</td>
<td>Current status of movement disorder or movement symptoms at follow-up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>12/20/2022: Added &quot;9, Unknown&quot; became hidden</td>
</tr>
<tr>
<td>timingres_movement</td>
<td>Length of time between onset of COVID-19 illness and resolution of movement disorder or movement symptoms</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>Brain Tumor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tumor</td>
<td>Brain or spinal cord tumor</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>timing_brainium</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of brain or spinal cord tumor</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>brain_tum_type</td>
<td>Primary or metastatic tumor</td>
<td>0, Primary (eg. glioma, meningioma)</td>
<td>1, Metastatic</td>
<td>2, Primary Central Nervous System (CNS) lymphoma</td>
<td>3, Meningioma</td>
<td>4, Pituitary tumor</td>
</tr>
<tr>
<td>brain_tum_diag</td>
<td>Type of primary brain or spinal cord tumor</td>
<td>0, Low grade glioma</td>
<td>1, High grade glioma</td>
<td>2, Primary Central Nervous System (CNS) lymphoma</td>
<td>3, Meningioma</td>
<td>4, Pituitary tumor</td>
</tr>
<tr>
<td>brain_tu_typ_oth_sp</td>
<td>Specify other type of primary brain or spinal cord tumor</td>
<td>[brain_tum_type]=0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Brain tumor treatment</td>
<td>Tumor treatment</td>
<td>0, Steroids</td>
<td>1, Surgical resection</td>
<td>2, Chemotherapy</td>
<td>3, Immune-modulating therapy</td>
<td>4, Gamma knife</td>
</tr>
<tr>
<td>brain_tumor_treat</td>
<td>Tumor treatment. Check all that apply</td>
<td>0, Steroids</td>
<td>1, Surgical resection</td>
<td>2, Chemotherapy</td>
<td>3, Immune-modulating therapy</td>
<td>4, Gamma knife</td>
</tr>
</tbody>
</table>

---

**Movement disorder or MOVEMENT SYMPTOMS (e.g. tremors, shaking, ataxia/balance, rigidity, tics, etc)**

- **sym_balance**: Problems with balance
- **ot_move**: Other movement disorder
- **other_moveSpecify**: Other movement disorder, specify
- **movement_outcome**: Current status of movement disorder or movement symptoms at follow-up
- **timingres_movement**: Length of time between onset of COVID-19 illness and resolution of movement disorder or movement symptoms
- **brain_tumor**: Brain or spinal cord tumor
- **brain_tum_type**: Primary or metastatic tumor
- **brain_tum_diag**: Type of primary brain or spinal cord tumor
- **brain_tu_typ_oth_sp**: Specify other type of primary brain or spinal cord tumor
- **Brain tumor treatment**: Tumor treatment
- **brain_tumor_treat**: Tumor treatment. Check all that apply

**Brain Tumor**

- **brain_tumor**: Brain or spinal cord tumor
- **timing_brainium**: Length of time between onset of COVID-19 illness and onset or worsening of brain or spinal cord tumor
- **brain_tum_type**: Primary or metastatic tumor
- **brain_tum_diag**: Type of primary brain or spinal cord tumor
- **brain_tu_typ_oth_sp**: Specify other type of primary brain or spinal cord tumor
- **Brain tumor treatment**: Tumor treatment
- **brain_tumor_treat**: Tumor treatment. Check all that apply

---

**Branching Notes**

- Added "3, Present, with unclear past history; unknown whether new vs worsened" to the "sym_balance" field.
- Added "9, Unknown" became hidden.
- Removed branching logic "[movement]=1 or [movement]=2 or [movement]=3" from the "movement_outcome" field.
- Added variable "[brain_tum_type]=2" to the "brain_tumor" field.

---

**Related Variables**

- **movement_outcome**: Length of time between onset of COVID-19 illness and movement disorder or symptoms at follow-up.
- **timingres_movement**: Length of time between onset of COVID-19 illness and resolution of movement disorder or movement symptoms.
- **brain_tumor**: Brain or spinal cord tumor.
- **brain_tum_type**: Primary or metastatic tumor.
- **brain_tum_diag**: Type of primary brain or spinal cord tumor.
- **brain_tu_typ_oth_sp**: Specify other type of primary brain or spinal cord tumor.
- **Brain tumor treatment**: Tumor treatment.
- **brain_tumor_treat**: Tumor treatment. Check all that apply.

---

**Notes**

- Added "3, Present, with unclear past history; unknown whether new vs worsened" to the "sym_balance" field.
- Added "9, Unknown" became hidden.
- Removed branching logic "[movement]=1 or [movement]=2 or [movement]=3" from the "movement_outcome" field.
- Added variable "[brain_tum_type]=2" to the "brain_tumor" field.

---

**Required or Core**

- Symptom status is required to be one of 0 (Not present), 1 (New), 2 (Worsened), or 3 (Present with unclear past history).
- Treatment options are required to be one of Steroids, Surgical resection, Chemotherapy, Immune-modulating therapy, Gamma knife, Targeted radiation therapy, Whole brain radiation therapy, or Other.

---

**Data Collections**

- DC 031224
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>brain_tum_trt_steroid</td>
<td>Steroids</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_surg</td>
<td>Surgical resection</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_chemo</td>
<td>Chemotherapy</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_immun</td>
<td>Immune-modulating therapy</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_gama</td>
<td>Gamma knife</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_tgt_rad</td>
<td>Targeted radiation therapy</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_wb_rad</td>
<td>Whole brain radiation therapy</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tum_trt_oth</td>
<td>Other tumor treatment</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tumor_treat_other_sp</td>
<td>Other type of brain treatment, specify</td>
<td>0, Unchecked 1, Checked</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain tumor outcome</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_tmor_outcome</td>
<td>Brain or spinal cord tumor outcome</td>
<td>1, Partial recovery</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td>12/20/2022: Added &quot;3, Present, with unclear past history; unknown whether new vs worsened&quot;</td>
<td>Core</td>
</tr>
<tr>
<td>brain_tmor_outcome</td>
<td>Brain or spinal cord tumor outcome</td>
<td>2, Full recovery</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td>12/20/2022: 9, Unknown became hidden</td>
<td></td>
</tr>
<tr>
<td>brain_tmor_outcome</td>
<td>Brain or spinal cord tumor outcome</td>
<td>3, No improvement</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timingres_brainum</td>
<td>Length of time between onset of COVID-19 illness and resolution of brain or spinal cord tumor</td>
<td>0, &lt; 2 months</td>
<td>[brain_tumor]=1 or [brain_tumor]=2 or [brain_tumor]=3</td>
<td></td>
<td>12/20/2022: Added variable</td>
<td>Core</td>
</tr>
<tr>
<td>Myelopathy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myelopathy</td>
<td>Myelopathy or spinal cord disease</td>
<td>0, Not present</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>myelopathy</td>
<td>Myelopathy or spinal cord disease</td>
<td>1, New</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myelopathy</td>
<td>Myelopathy or spinal cord disease</td>
<td>2, Worsened</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>myelopathy</td>
<td>Myelopathy or spinal cord disease</td>
<td>3, Present, with unclear past history; unknown whether new vs worsened</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timing_myelopathy</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of myelopathy or spinal cord disease</td>
<td>0, &lt; 1 month</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td>12/20/2022: Added variable</td>
<td>Core</td>
</tr>
<tr>
<td>timing_myelopathy</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of myelopathy or spinal cord disease</td>
<td>1, 1-3 months</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timing_myelopathy</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of myelopathy or spinal cord disease</td>
<td>2, &gt; 3 months</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>timing_myelopathy</td>
<td>Length of time between onset of COVID-19 illness and onset or worsening of myelopathy or spinal cord disease</td>
<td>3, 9, Unknown</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myelopathy etiology</td>
<td>Etiology of myelopathy or spinal cord disease</td>
<td>0, Trauma</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>mye_etiology</td>
<td>Etiology of myelopathy or spinal cord disease</td>
<td>1, Degenerative spine disease (e)</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_trauma</td>
<td>Trauma</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------</td>
<td>------------------------</td>
<td>-----------------------------------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>mye_etiol_degen</td>
<td>Degenerative spine disease</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_cov19</td>
<td>COVID-19</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_tb</td>
<td>Tuberculosis/Pott's Disease</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_syph</td>
<td>Neurosyphilis</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_lyme</td>
<td>Lyme disease</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_htlv</td>
<td>HTLV I or II</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_hiv</td>
<td>HIV</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_othinfab</td>
<td>Other infection/abscess</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_neumyop</td>
<td>Neuromyelitis Optica/Devic's disease</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_ms</td>
<td>Multiple sclerosis</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_adem</td>
<td>Acute Disseminated Encephalomyelitis (ADEM)</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_ischstrok</td>
<td>Ischemic (stroke or related to cardiothoracic surgery)</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_avm</td>
<td>Arteriovenous malformation</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_hemorr</td>
<td>Hemorrhage including epidural hematoma</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_oth-demyel</td>
<td>Other demyelinating disease</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_vitdef</td>
<td>Vitamin deficiency (e.g. B12, vitamin E, copper)</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mye_etiol_heredit</td>
<td>Hereditary (e.g. A1S, hereditary spastic paraparesis, adrenoleukodystrophy, Friedreich ataxia--specify)</td>
<td>0, Unchecked 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------</td>
<td>--------------------------------</td>
<td>------------------------------------------------</td>
<td>----------------------------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>1014 mye_etiol_paraneo</td>
<td>Paraneoplastic</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1015 mye_etiol_sarcoid</td>
<td>Sarcoid</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1016 mye_etiol_tumor</td>
<td>Tumor</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1017 mye_etiol_hepatic</td>
<td>Hepatic myelopathy</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1018 mye_etiol_radiat</td>
<td>Radiation myelopathy</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1019 mye_etiol_inflamm</td>
<td>Inflammatory (lupus, mixed</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1020 mye_etiol_oth</td>
<td>Other etiology of myelopathy or spinal cord disease</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1021 mye_etiol_unkn</td>
<td>Unknown etiology of myelopathy or spinal cord disease</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1022 myo_int_oth_spec</td>
<td>If other infectious cause of myelopathy or spinal cord disease, specify cause</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1023 mye_etiology_oth_spec</td>
<td>Specify other etiology of myelopathy or spinal cord disease</td>
<td>0, Unchecked, 1, Checked</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**WHO criteria for the grading the potential association of neuroophthalmologic condition with COVID19 infection**


<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>1026 other_cause5</td>
<td>Any diagnosed potential etiology or explanation of myelopathy other than Covid_19 infection?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
</tr>
<tr>
<td>1027 covid_in_brain5</td>
<td>SARS-COV-2 detected in CSF/brain tissue by PCR or Immunohistochemistry AND/OR Evidence of COVID-19 specific intrathecal antibody</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
</tr>
</tbody>
</table>

**Grade the association of myelopathy or spinal cord disease with COVID19 infection (according to criteria below): 0
Possible; 1, Probable; 2, Confirmed**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>1028 assoc_myel_covid</td>
<td>WHO criteria for the grading the potential association of this condition with COVID-19 infection</td>
<td>0, No</td>
<td>[other_cause5]=1,0, if([covid_in_brain5]=1,1,if([covid_in_brain5]=2,0))</td>
<td>[myelopathy]=1 or [myelopathy]=2 or [myelopathy]=3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Other cause5**

Any diagnosed potential etiology or explanation of myelopathy other than Covid_19 infection?

**Covid_in_brain5**

SARS-COV-2 detected in CSF/brain tissue by PCR or Immunohistochemistry AND/OR Evidence of COVID-19 specific intrathecal antibody

**Assoc_myel_covid**

Grade the association of myelopathy or spinal cord disease with COVID19 infection (according to criteria below): 0: Possible; 1, Probable; 2, Confirmed

**Assoc8**

WHO criteria for the grading the potential association of this condition with COVID-19 infection

**Myelopathy outcome**

DC 03132024
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>myelopathy_outcome</td>
<td>Current status of myelopathy at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>(myelopathy)=1 or (myelopathy)=2 or (myelopathy)=3</td>
</tr>
<tr>
<td>timingres_myelopathy</td>
<td>Length of time between onset of COVID-19 illness and resolution of myelopathy</td>
<td>0, &lt; 2 months</td>
<td>1, 2 - &lt; 6 months</td>
<td>2, 6 - &lt; 12 months</td>
<td>3, 12 - &lt; 18 months</td>
<td>4, 18 - &lt; 24 months</td>
</tr>
<tr>
<td>chest_pain</td>
<td>Chest pain</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>chills</td>
<td>Chills</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>cough</td>
<td>Cough</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>dvt</td>
<td>Deep venous thrombosis (DVT)</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>diarrhea</td>
<td>Diarrhea</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>1039</td>
<td>fever</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>1040</td>
<td>gn_headache</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>1041</td>
<td>joint_pain</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>1042</td>
<td>loss_appetite</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>1043</td>
<td>covidtoes</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>1044</td>
<td>nausea</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>1045</td>
<td>urine_bowel</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p&gt;&lt;span style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/span&gt;</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
<td>Required or Core</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------------</td>
<td>------------------</td>
<td></td>
</tr>
<tr>
<td>1046 swallow_dis</td>
<td>Problems swallowing</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>1047 bowel_mov</td>
<td>Problems with bowel movements</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>1048 breath</td>
<td>Shortness of breath</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>1049 aphasia</td>
<td>Speech problems</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>1050 throat_pain</td>
<td>Throat pain</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>1051 wheezing</td>
<td>Wheezing</td>
<td>0, Not present</td>
<td>1, New</td>
<td>2, Worsened</td>
<td>3, Present with unclear past history; unknown whether new vs. worsened</td>
<td>9, &lt;p style=&quot;color:#ecf0f1;&quot;&gt;Unknown&lt;/p&gt;</td>
</tr>
<tr>
<td>1052 gl_sy_outcome</td>
<td>Non-neurologic symptoms/signs outcome at follow up</td>
<td>0, No improvement</td>
<td>1, Partial recovery</td>
<td>2, Full recovery</td>
<td>9, Unknown</td>
<td>99, Not applicable, no non-neurological symptoms or signs</td>
</tr>
</tbody>
</table>
**WHO Clinical Progression Score**

1054. `who_pscor_fig` World Health Organization Clinical Progression Score

Using The WHO Clinical Progression Score, shown in the figure above: Select the category that best describes the most severe state of the patient during the illness associated with COVID-19 infection.

- 0, Ambulatory mild disease
- 1, Hospitalized: moderate disease
- 2, Hospitalized: severe diseases
- 3, Dead

1055. `who_cl_prog_sc` Enrolled in one or more clinical trials

Specify which clinical trial/s (clinicaltrials.gov numbers)

1056. `clinical_trial` Included in RECOVER study

- 0, No
- 1, Yes
- 9, Unknown

1058. `re recover` Did patient have new or continued substance overuse >4 weeks after onset of COVID-19 illness

Check all that apply

- 0, None
- 1, Alcohol overuse
- 2, Illegal drug use (not including marijuana)
- 3, None
- 9, Unknown

1061. `sub stance_overuse` Did patient use any medication during the acute COVID-19-related illness?

Check all that apply

- 0, No
- 1, Yes
- 9, Unknown

**Medications to treat COVID-19 infection**

Please note all medications that patient took during the acute COVID-19-associated illness.

**Acute Medications 1**

1069. `covid_meds` Did patient use any medication during the acute COVID-19-related illness?

- 0, No
- 1, Yes
- 9, Unknown

### CHARACTERISTICS FORM

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branching Notes</td>
<td>Required or Core</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_meds_1_eculizu</td>
<td>Eculizumab (Soliris)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_meds]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_meds_1_ruxolit</td>
<td>Ruxolitinib (Jakafi)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_meds]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_meds_1_unkn</td>
<td>Covid meds 1 unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_meds]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oth_antibiotics_tx</td>
<td>Specify other antibiotics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>oth_antivirals_tx</td>
<td>Specify other antivirals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cov_tx_antifungals_spec</td>
<td>Specify other antifungals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cov_tx_ot_immmsup</td>
<td>Specify other immunosuppressant</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cov_meds_2</td>
<td>Acute Medications 2. Note all</td>
<td>99, Unknown</td>
<td>0, None of these</td>
<td>1, Nonsteroidal anti inflammatory drugs (NSAIDS)</td>
<td>2, Prednisone</td>
<td>3, Dexamethasone</td>
</tr>
<tr>
<td>cov_meds_3</td>
<td>None of these meds</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_meds]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### HOSPITALIZATION FORM

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching Notes</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_hospitalisation</td>
<td>Did this patient have a hospital</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td></td>
<td>admission associated with SARS-CoV-2 infection or was diagnosed with SARS-CoV-2 positivity during hospitalization? (Defined as being admitted to the hospital for at least one overnight)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hosp_mo</td>
<td>Month of hospital admission</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
</tr>
<tr>
<td>hosp_yr</td>
<td>Year of hospital admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hosp_days</td>
<td>Number of days in the hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hospital_id</td>
<td>Name of institution/hospital</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>days_covid_hosp</td>
<td>Number of days from onset of first COVID-associated symptoms to hospital admission. If the date of the first COVID-associated symptom was the first day of hospital admission, put &quot;0.&quot; If the date of the first COVID-associated symptom was after hospital admission, use a minus sign (ex -4 days)</td>
<td>[covid_hospitalisation]=1</td>
<td></td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>days_neuro_hosp</td>
<td>Number of days from onset of neurologic symptoms to hospital admission. If the date of the onset of neurologic symptoms, was the first day of hospital admission, put &quot;0.&quot; If the date of the onset of neurologic symptoms was after hospital admission, use a minus sign (ex -4 days)</td>
<td>[covid_hospitalisation]=1</td>
<td></td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>icu_admission</td>
<td>Admitted to Intensive Care Unit (ICU)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid_hospitalisation]=1</td>
<td>Core</td>
</tr>
<tr>
<td>icu_days</td>
<td>Total number of days in ICU if unknown, put 9999</td>
<td>[icu_admission]=1 and [covid_hospitalisation]=1</td>
<td></td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>days_admit_icu</td>
<td>Number of days from hospital admission to ICU admission</td>
<td>[icu_admission]=1 and [covid_hospitalisation]=1</td>
<td></td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td>icd_discharge</td>
<td>Did patient have at least one discharge ICD10 code for pneumonia?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid_hospitalisation]=1</td>
<td>Core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1110 admit_nihss</td>
<td>Admission NIH Stroke Score (0-42). If there is no NIH Stroke Score, can be determined post hoc from information in the chart, if available. Otherwise leave blank. If neurologic exam is documented normal, put 0.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1111 admit_sofa</td>
<td>Admission Sequential Organ Failure Assessment (SOFA) score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1112 worst_sofa</td>
<td>Worst SOFA score during admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1113 admit_gcs</td>
<td>Admission Glasgow Coma Score</td>
<td>3, 3</td>
<td>4, 4</td>
<td>5, 5</td>
<td>6, 6</td>
<td>7, 7</td>
</tr>
<tr>
<td>1114 cam_icu_pos</td>
<td>Ever Confusion Assessment Measure (CAM)-ICU positive for delirium during hospital stay</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1115 baso2_sat</td>
<td>Baseline oxygen saturation. Put 9999, if unavailable</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1116 base_abg_o2</td>
<td>Baseline arterial blood gas for partial pressure of oxygen (pao2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1117 lowest_o2_sat</td>
<td>Lowest oxygen saturation/saturation on pulse oximetry) during hospitalization</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1118 day_hosp_min_pao2</td>
<td>Day of hospital admission of lowest pao2 during hospital admission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1119 oxygen</td>
<td>Patient required oxygen</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1120 oxygen_time</td>
<td>Number of days after first symptom of COVID19 when oxygen requirement first noted. If unknown, put 9999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1121 oxygen_days</td>
<td>Oxygen_days-- total days receiving oxygen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1122 noninvasive_vant</td>
<td>Patient required non-invasive positive pressure ventilation</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1123 noninv_vent_days</td>
<td>Number of days the patient received non-invasive ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1124 proned</td>
<td>Was patient proned (excluding self-proning)?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1125 intubation</td>
<td>Patient had intubation/invasive mechanical ventilation</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1126 intubat_days</td>
<td>Number of intubation/invasive ventilation days. If unknown, put 9999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1127 trach</td>
<td>Tracheostomy</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1128 paralytics</td>
<td>Patient required paralytics (excluding for intubation)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1129 paralytics_days</td>
<td>Number of days patient received paralytics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1130 mod_deep_sedat</td>
<td>Patient required moderate-deep sedation (excluding for intubation)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1131 m_d_sedat_days</td>
<td>Number of moderate/heavy sedation days</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1132 ards</td>
<td>Acute Respiratory Distress Syndrome (ARDS)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1133 ecmo</td>
<td>Extra Corporeal Membrane Oxygenation (ECMO)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ecmo admission]=1 and [covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1134 ecmo_days</td>
<td>Number of days receiving ECMO</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ecmo]=1 and [covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1135 cardiacarrest</td>
<td>Cardiac arrest</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td>Core</td>
</tr>
<tr>
<td>1136 time_to_rosc</td>
<td>If cardiac arrest, time to resuscitation, minutes</td>
<td>[cardiacarrest]=1 and [covid hospitalization]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1137 hypo_vaspo</td>
<td>Hypotension requiring vasopressors</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1138 sepsis</td>
<td>Sepsis</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1139 therm_managem</td>
<td>Therapeutic hypothermia</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1140 refractory_shock</td>
<td>Refractory shock while hospitalized</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1141 vps</td>
<td>Patient had new ventriculoperitoneal shunt</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1142 hosp_ass_inf</td>
<td>Patient had hospital-associated infection</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1143 pegTube</td>
<td>Patient had Percutaneous endoscopic gastrostomy (PEG) tube</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, UNKNOWN</td>
<td>[covid hospitalization]=1</td>
<td>Core</td>
</tr>
<tr>
<td>1144 pulmon_embol</td>
<td>Patient had pulmonary embolus (PE)/deep vein thrombosis (DVT)</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1145 arf</td>
<td>Patient had acute renal failure</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1146 renal_repl</td>
<td>Patient had renal replacement therapy (continuous or intermittent hemodialysis or peritoneal dialysis)</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, Unknown</td>
<td>[arf]=1 and [covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1147 renal_rep_days</td>
<td>Total number of days of renal replacement therapy</td>
<td>[renal_repl]=1 and [covid hospitalization]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1148 dnr</td>
<td>Patient had DNR (Do Not Resuscitate) status during hospital admission</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1149 comfort_care</td>
<td>Patient had comfort care in hospital</td>
<td>0, NO</td>
<td>1, YES</td>
<td>9, Unknown</td>
<td>[covid hospitalization]=1</td>
<td></td>
</tr>
<tr>
<td>1150 hosp_dispo</td>
<td>Hospital disposition</td>
<td>Home</td>
<td>Nursing home/SNF</td>
<td>LTACH</td>
<td>1, Home</td>
<td>6, Death</td>
</tr>
<tr>
<td>1151 discharge_month</td>
<td>Month of discharge</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
</tr>
<tr>
<td>1152 discharge_year</td>
<td>Year of discharge</td>
<td>[hosp_dispo]=0 or [hosp_dispo]=1 or [hosp_dispo]=2 or [hosp_dispo]=3 or [hosp_dispo]=4 or [hosp_dispo]=5 or [hosp_dispo]=6 or [hosp_dispo]=7 or [hosp_dispo]=8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1153 death</td>
<td>Death</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>2/12/2022: Became hidden</td>
<td>Core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>death_covid</td>
<td>Did this person die during acute COVID-19 infection? (or during hospitalization associated with acute COVID-19 infection)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[covid_hospitalisation]=1 and [hosp_dispo]=6</td>
<td>2/12/2022: Added variable</td>
</tr>
<tr>
<td>days_until_death</td>
<td>Number of days from first COVID-19 symptom until death</td>
<td>0, Respiratory failure</td>
<td>1, Septic shock</td>
<td>2, Multi-organ failure</td>
<td>3, Heart failure</td>
<td>4, Pulmonary thromboembolism</td>
</tr>
<tr>
<td>death_cause</td>
<td>Cause of death</td>
<td>0, Respiratory failure</td>
<td>1, Septic shock</td>
<td>2, Multi-organ failure</td>
<td>3, Heart failure</td>
<td>4, Pulmonary thromboembolism</td>
</tr>
<tr>
<td>death_place</td>
<td>Place of death</td>
<td>0, Home</td>
<td>1, Hospital</td>
<td>2, Nursing home/SNF</td>
<td>3, LTACH</td>
<td>4, Hospice</td>
</tr>
<tr>
<td>death_total</td>
<td>Total death</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[death_covid]=1 and [covid_hospitalisation]=1</td>
<td>Core</td>
</tr>
<tr>
<td>covid_test_types</td>
<td>Positive COVID-19 test types</td>
<td>0, Positive PCR test (molecular)</td>
<td>1, Positive antigen test (ELISA, rapid test, neutralization or chemiluminescent immunoassay, immunohistochemical test)</td>
<td>2, Positive antibody test</td>
<td>3, Positive T-Detect COVID test</td>
<td>9, Unknown type of positive test</td>
</tr>
<tr>
<td>covid_test_types_pcr</td>
<td>Positive PCR test (molecular)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_test_types_antigen</td>
<td>Positive antigen test (ELISA, rapid test, neutralization or chemiluminescent immunoassay, immunohistochemical test)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_test_types_antibody</td>
<td>Positive antibody test</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_test_types_tdetect</td>
<td>Positive T-Detect COVID test</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_test_types_unkn</td>
<td>Unknown type of positive test</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pcr_source</td>
<td>Source of positive PCR test.</td>
<td>0, Respiratory (nasopharyngeal, NP, nasal, lung)</td>
<td>1, Saliva</td>
<td>2, Cerebral spinal fluid (CSF)</td>
<td>4, Tissue</td>
<td>5, Other</td>
</tr>
<tr>
<td>tisspcr_source_resp</td>
<td>Respiratory (nasopharyngeal, NP, nasal, lung)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_test_types]=1 and [hosp_dispo]=6</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>pcr_source_saliva</td>
<td>Saliva</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_test_types]=1 and [hosp_dispo]=6</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>pcr_source_csf</td>
<td>Cerebral spinal fluid (CSF)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[covid_test_types]=1 and [hosp_dispo]=6</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------</td>
<td>---------------------</td>
<td>---------------------------------------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>pcr_source_tissue</td>
<td>Tissue</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(0)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pcr_source_oth</td>
<td>Other pcr source</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(0)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pcr_source_unk</td>
<td>Unknown pcr source</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(0)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>oth_pcr_spec</td>
<td>Other source of positive PCR, specify</td>
<td></td>
<td></td>
<td>(pcr_source(5)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>covid_doc</td>
<td>Is laboratory report (source document) available for at least one positive COVID test?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>(covid_test_types(0)] = '1' or (covid_test_types(1)] = '1' or (covid_test_types(2)] = '1' or (covid_test_types(3)] = '1' or (covid_test_types(9)] = '1'</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>tissue_type</td>
<td>Specify tissue type</td>
<td>Check one or more</td>
<td></td>
<td>(pcr_source(4)] = '1'</td>
<td>Required</td>
<td></td>
</tr>
<tr>
<td>tissue_type_brain</td>
<td>Brain</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(pcr_source(4)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tissue_type_placenta</td>
<td>Placenta</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(pcr_source(4)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tissue_type_other</td>
<td>Other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(pcr_source(4)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>tissue_type_unkn</td>
<td>Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(pcr_source(4)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other_tissue_sp</td>
<td>Other tissue source, specify</td>
<td></td>
<td></td>
<td>(tissue_type(5)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antigen_source</td>
<td>Source of positive antigen test, check one or more</td>
<td>0, Respiratory (nasopharyngeal, NP, nasal, lung)</td>
<td>1, Saliva</td>
<td>5, Other</td>
<td>9, Unknown</td>
<td>(covid_test_types(1)] = '1'</td>
</tr>
<tr>
<td>antigen_source_resp</td>
<td>Respiratory (nasopharyngeal, NP, nasal, lung)</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(1)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antigen_source_saliva</td>
<td>Saliva</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(1)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antigen_source_other</td>
<td>Other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(1)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antigen_source_unkn</td>
<td>Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(1)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other_antigen_spec</td>
<td>Other source of positive antigen test, specify</td>
<td></td>
<td></td>
<td>(antigen_source(5)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_type</td>
<td>Positive antibody test, specify type</td>
<td>Check all that apply</td>
<td>0, IgG</td>
<td>1, IgM</td>
<td>2, IgA</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>antibody_type_igg</td>
<td>IgG</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_type_igm</td>
<td>IgM</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_type_iga</td>
<td>IgA</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_type_unkn</td>
<td>Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_source</td>
<td>Source of positive antibody test</td>
<td>Check at least one</td>
<td>0, Cerebrospinal fluid (CSF) or intrathecal fluid</td>
<td>3, Blood</td>
<td>5, Other</td>
<td>9, Unknown</td>
</tr>
<tr>
<td>antibody_source_csf</td>
<td>Cerebrospinal fluid (CSF) or intrathecal fluid</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_source_blood</td>
<td>Blood</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_source_other</td>
<td>Other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>antibody_source_unkn</td>
<td>Unknown</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(covid_test_types(2)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other_antibody_sp</td>
<td>Other source of positive antibody test, specify</td>
<td></td>
<td></td>
<td>(antibody_source(5)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>positive_test_time</td>
<td>Day of illness of first positive test for COVID-19</td>
<td></td>
<td></td>
<td>(positive_test_time(5)] = '1'</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brain_mri</td>
<td>Any brain MRI performed</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(mri_brain_done) = '1'</td>
<td>Core</td>
</tr>
<tr>
<td>mri_brain_abnormal</td>
<td>Any brain MRI abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(mri_brain_abnormal) = '1'</td>
<td>Core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>mri_brain_abn_check</td>
<td>Brain MRI abnormalities. Check all that apply</td>
<td>0, MRI showed dural/leptomeningeal enhancement</td>
<td>1, MRI showed venous sinus thrombosis</td>
<td>2, MRI showed intracranial hemorrhage</td>
<td>3, MRI showed brain mass</td>
<td>4, MRI showed ischemic stroke</td>
</tr>
<tr>
<td>mri_brab_chk_durenh</td>
<td>MRI showed dural/leptomeningeal enhancement</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_vst</td>
<td>MRI showed venous sinus thrombosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_ich</td>
<td>MRI showed intracranial hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_mass</td>
<td>MRI showed brain mass</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_ischstk</td>
<td>MRI showed ischemic stroke</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_encep</td>
<td>MRI showed encephalitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_edema</td>
<td>MRI showed cerebral edema</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_wmdz</td>
<td>MRI showed white matter disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_micbleed</td>
<td>MRI showed microbleeds</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_oth</td>
<td>MRI showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mri_brain_abnormal]=1</td>
<td>5/13/2022: Added response</td>
<td></td>
</tr>
<tr>
<td>mri_brab_chk_othspec</td>
<td>Brain MRI showed other, specify</td>
<td>[mri_brain_abnormal]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mrv_done</td>
<td>MRV done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[mri_brain_abnormal]=1</td>
<td>Core</td>
</tr>
<tr>
<td>mrv_vst</td>
<td>MRV showed venous sinus thrombosis</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[mrv_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>mra_done</td>
<td>MRA was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[mri_brain_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>mra_abnormal</td>
<td>MRA was abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[mra_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>mra_abn_check</td>
<td>Abnormalities on MRA Check all that apply</td>
<td>0, MRA showed large vessel occlusion</td>
<td>1, MRA showed large vessel stenosis</td>
<td>2, MRA showed venous sinus thrombosis</td>
<td>3, MRA showed vascular malformation</td>
<td>4, MRA showed other results</td>
</tr>
<tr>
<td>mra_ab CHK lvocc</td>
<td>MRA showed large vessel occlusion</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mra_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mra_ab CHK lvsten</td>
<td>MRA showed large vessel stenosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mra_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mra_ab CHK vst</td>
<td>MRA showed venous sinus thrombosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mra_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mra_ab CHK malfor</td>
<td>MRA showed vascular malformation</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mra_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mra_ab CHK other</td>
<td>MRA showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[mra_abnormal]=1</td>
<td>5/13/2022: Added response</td>
<td></td>
</tr>
<tr>
<td>mra_v_malf_ot_sp</td>
<td>MRA, specify other type of vascular malformation</td>
<td>[mra_abnormal]=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ct_br_done</td>
<td>Any brain CT performed</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ct_brain_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>brain_ct_abn_check</td>
<td>Check all brain CT abnormalities that apply</td>
<td>0, CT showed dural/leptomeningeal enhancement</td>
<td>1, CT showed intracranial hemorrhage</td>
<td>2, CT showed venous sinus thrombosis</td>
<td>3, CT showed brain mass</td>
<td>4, CT showed ischemic stroke</td>
</tr>
<tr>
<td>brain_ct_abn_check_durenh</td>
<td>CT showed dural/leptomeningeal enhancement</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_vst</td>
<td>CT showed venous sinus thrombosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_ich</td>
<td>CT showed intracranial hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_mass</td>
<td>CT showed brain mass</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_ischstr</td>
<td>CT showed ischemic stroke</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_enceph</td>
<td>CT showed encephalitis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_edema</td>
<td>CT showed cerebral edema</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_wmdz</td>
<td>CT showed white matter disease</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>brainct_abn_chk_other</td>
<td>CT showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td>5/23/2022: Added response</td>
</tr>
<tr>
<td>ct_brain_sp_other</td>
<td>Brain CT showed other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[ct_br_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ctv_done</td>
<td>CTV was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ct_brain_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>ctv_vst</td>
<td>CTV showed venous sinus thrombosis</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ctv_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>cta_done</td>
<td>CTA was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[ct_brain_done]=1</td>
<td>Core</td>
</tr>
<tr>
<td>cta_abn_check</td>
<td>CTA abnormalities. Check all that apply</td>
<td>0, CTA showed large vessel occlusion</td>
<td>1, CTA showed large vessel stenosis</td>
<td>2, CTA showed venous sinus thrombosis</td>
<td>3, CTA showed vascular malformation</td>
<td>4, CTA showed other results</td>
</tr>
<tr>
<td>cta_abn_chk_lvocc</td>
<td>CTA showed large vessel occlusion</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[cta_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cta_abn_chk_lvsten</td>
<td>CTA showed large vessel stenosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[cta_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cta_abn_chk_vst</td>
<td>CTA showed venous sinus thrombosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[cta_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cta_abn_chk_malform</td>
<td>CTA showed vascular malformation</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[cta_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cta_abn_chk_oth</td>
<td>CTA showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>[cta_abnormal]=1</td>
<td></td>
<td>5/23/2022: Added response</td>
</tr>
<tr>
<td>cta_v_malf_ot_sp</td>
<td>CTA, specify other type of vascular malformation</td>
<td></td>
<td></td>
<td>[cta_abnormal]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropsch_test_yn</td>
<td>Did patient receive any neuropsychological testing? (e.g. MOCA [Montreal Cognitive Assessment], Modified Rankin Score, PHQ-9, anxiety testing, other cognitive or neuropsychological testing)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mocadone</td>
<td>Was Montreal Cognitive Assessment (MOCA) done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>[neuropsch_test_yn]=1</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>timing_moca</td>
<td>Length of time between onset of COVID-19 illness and onset and the latest MOCA</td>
<td>0, &lt; 1 month</td>
<td>1, 1-3 months</td>
<td>2, &gt; 3 months</td>
<td>9, Unknown</td>
<td>[mocadone]=1</td>
</tr>
<tr>
<td>moca_type</td>
<td>Most recent MOCA--in person or telephone?</td>
<td>0, In person</td>
<td>1, Telephone</td>
<td>9, Unknown</td>
<td>[mocadone]=1</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>moca_results</td>
<td>MOCA score</td>
<td>Enter a number, from 0 to 30</td>
<td>From 0-30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mrs</td>
<td>Modified Rankin Score when last evaluated at current setting. If there is no Modified Rankin Score, can be determined post hoc from information in the chart, if available</td>
<td>0, No symptoms at all</td>
<td></td>
<td></td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>timing_mrs_anytime</td>
<td>Length of time between onset of COVID-19 illness and the most recent Modified Rankin Scale</td>
<td>0, &lt; 1 month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>phq9</td>
<td>Most recent PHQ-9--Total score (0-27)</td>
<td>From 0-27</td>
<td>[neuropsych_test_y][n]=1</td>
<td></td>
<td></td>
<td>Added variable</td>
</tr>
<tr>
<td>timing_phq9</td>
<td>Length of time between onset of COVID-19 illness and onset and the most recent PHQ-9 testing</td>
<td>0, &lt; 1 month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>anxiety_test</td>
<td>Most recent anxiety testing specify name of anxiety test and result</td>
<td></td>
<td>[neuropsych_test_y][n]=1</td>
<td></td>
<td></td>
<td>Added variable</td>
</tr>
<tr>
<td>timing_anxietytest</td>
<td>Length of time between onset of COVID-19 illness and onset and the most recent anxiety testing</td>
<td>0, &lt; 1 month</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom</td>
<td>If the patient had abnormal findings on other neuropsychological testing, please indicate the domains of the abnormal results check all that apply</td>
<td>0, Attention/concentration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom_attn</td>
<td>Attention/concentration</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom_proc</td>
<td>Processing speed</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom_lang</td>
<td>Language abilities</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom_visuspac</td>
<td>Visuospatial processing</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom_exec</td>
<td>Executive function</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom__memory</td>
<td>Memory (verbal and/or visual)</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_dom_orient</td>
<td>Orientation</td>
<td>0, Unchecked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>neuropych_notes</td>
<td>Which additional neuropsychological batteries were administered? Please list which results.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>upsit</td>
<td>University of Pennsylvania Smell Identification Test score (UPSIT)</td>
<td>UPSIT (10-40)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>smell_other</td>
<td>Please list other type of smell test if applicable, and result</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CRP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Characteristic</td>
<td>Field Name</td>
<td>Field Label</td>
<td>Value Labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
</tr>
<tr>
<td>---------------</td>
<td>------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1316 crp</td>
<td></td>
<td>Did patient have CRP?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1317 first_crp</td>
<td></td>
<td>CRP closest to presentation mg/L (if not applicable/available, put 9999) (Please specify units)</td>
<td>(crp)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1318 crpunits</td>
<td></td>
<td>CRP units</td>
<td>0, mcg/ml (micrograms/ml)</td>
<td>1, mg/L</td>
<td>2/3/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1319 peak_crp</td>
<td></td>
<td>CRP at peak mg/L, please specify units</td>
<td>(crp)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1320 peak_crpunits</td>
<td>aley_crpunits</td>
<td>Peak CRP units</td>
<td>0, mg/ml (micrograms/ml)</td>
<td>1, mg/L</td>
<td>2/3/2022: units added</td>
<td></td>
</tr>
<tr>
<td><strong>Ferritin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1322 ferritin</td>
<td></td>
<td>Was ferritin done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1323 first_ferritin</td>
<td></td>
<td>Ferritin at presentation, please specify units</td>
<td>(ferritin)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1324 ferritinunit</td>
<td></td>
<td>Ferritin units</td>
<td>0, Mcg/L (Micrograms per liter)</td>
<td>1, Ng/ml (Nanograms per milliliter)</td>
<td>2, Pmol/L (Picomoles per liter)</td>
<td>2/3/2022: units added</td>
</tr>
<tr>
<td>1325 ferritin_peak</td>
<td></td>
<td>Peak ferritin, please specify units</td>
<td>(ferritin)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1326 ferritinunit</td>
<td></td>
<td>Peak ferritin units</td>
<td>0, Mcg/L (Micrograms per liter)</td>
<td>1, Ng/ml (Nanograms per milliliter)</td>
<td>2, Pmol/L (Picomoles per liter)</td>
<td>2/3/2022: units added</td>
</tr>
<tr>
<td><strong>Procalcitonin</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1328 procalcitonin</td>
<td></td>
<td>Was procalcitonin done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1329 first_procalcit</td>
<td></td>
<td>Procalcitonin at presentation, please specify units</td>
<td>(procalcitonin)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1330 procalcunits</td>
<td></td>
<td>Procalcitonin</td>
<td>0, ng/ml (Nanograms per milliliter)</td>
<td>1, μ/L (Micrograms per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1331 peak_procalcit</td>
<td></td>
<td>Peak procalcitonin, please specify units</td>
<td>(procalcitonin)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1332 procalcunits</td>
<td></td>
<td>Peak procalcitonin units</td>
<td>0, ng/ml (Nanograms per milliliter)</td>
<td>1, μ/L (Micrograms per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td><strong>CBC</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1334 cbc</td>
<td></td>
<td>Was CBC collected?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1335 wbc</td>
<td></td>
<td>WBC closest to the time of COVID-19 symptom onset (if asymptomatic, closest to COVID-19 diagnosis.). (if missing, put 9999) (Please specify units)</td>
<td>(cbc)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1336 wbcunits</td>
<td></td>
<td>WBC units</td>
<td>0, WBC per microliter (mcL)</td>
<td>1, WBC X 1,000/L</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1337 lymphs</td>
<td></td>
<td>Absolute lymphocytes at admission (Please specify units)</td>
<td>(cbc)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1338 abslymphunits</td>
<td></td>
<td>Absolute lymph units</td>
<td>0, AL/microliter (mlCl)</td>
<td>1, AL X 1,000/L</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1339 lymph_lowest</td>
<td></td>
<td>Lowest absolute lymphocyte count during hospitalization (Please specify units)</td>
<td>(cbc)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1340 lowestalunits</td>
<td></td>
<td>Lowest absolute lymph units</td>
<td>0, AL/microliter (mlCl)</td>
<td>1, AL X 1,000/L</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching Notes</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------</td>
<td>-----------------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1341</td>
<td>hemoglobin</td>
<td>Hemoglobin level on admission or if not admitted, first available hemoglobin since illness onset (If missing, put 9999). (Please specify units)</td>
<td>[cbc]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1342</td>
<td>hemoglobin_units</td>
<td>Hemoglobin units</td>
<td>0, g/dL</td>
<td>1, mol/L</td>
<td>2/1/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1343</td>
<td>platelets</td>
<td>Platelets level on admission or if not admitted, first available platelets since illness onset (If missing, put 9999). (Please specify units)</td>
<td>[cbc]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1344</td>
<td>platelet_units</td>
<td>Platelet units</td>
<td>0, Platelets X 1,000/L</td>
<td>1, Platelets/microliter</td>
<td>2/1/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1345</td>
<td>pltl_lowest</td>
<td>Lowest platelet count during hospitalization (Please specify units)</td>
<td>[cbc]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1346</td>
<td>lowestplateletunits</td>
<td>Lowest platelets count</td>
<td>0, Platelets X 1,000/L</td>
<td>1, Platelets/microliter</td>
<td>2/1/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1347</td>
<td>tiphospholipid antibody</td>
<td>Did patient have Antiphospholipid testing (Lupus anticoagulant, Anticardiolipin antibody, Anti-beta 2 glycoprotein)?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1348</td>
<td>antiphos</td>
<td>Was this antiphospholipid antibody testing performed during the first &lt; 4 weeks following onset of COVID-19 acute illness (if asymptomatic, within &lt; 4 weeks of the first positive test)</td>
<td>[antiphos]=1</td>
<td>12/20/2022: Added variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1349</td>
<td>antiphos_ac_ya</td>
<td>Was this antiphospholipid antibody testing performed during the first &lt; 4 weeks following onset of COVID-19 acute illness (if asymptomatic, within &lt; 4 weeks of the first positive test)</td>
<td>[antiphos]=1</td>
<td>12/20/2022: Added variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1350</td>
<td>antip_lupus</td>
<td>Lupus anticoagulant</td>
<td>0, Negative</td>
<td>1, Positive</td>
<td>2/1/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1351</td>
<td>antip_igg</td>
<td>Anticardiolipin IgG (GPL units)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1352</td>
<td>antip_igm</td>
<td>Anti-cardiolipin IgM (MPL units)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1353</td>
<td>anti_b2gp_igg</td>
<td>Anti-beta 2 glycoprotein IgG</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1354</td>
<td>anti_b2gp_igm</td>
<td>Anti-beta 2 glycoprotein, IgM</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1355</td>
<td>tiphospholipid antibody</td>
<td>Did patient have Antiphospholipid testing (Lupus anticoagulant, Anticardiolipin antibody, Anti-beta 2 glycoprotein)?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
</tr>
<tr>
<td>1356</td>
<td>rheuma_done</td>
<td>Was this autoimmune/rheumatologic testing performed during the first &lt; 4 weeks following onset of COVID-19 acute illness (if asymptomatic, within &lt; 4 weeks of the first positive test)</td>
<td>[rheuma_done]=1</td>
<td>12/20/2022: Added variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1357</td>
<td>rheuma_dn_ac_ya</td>
<td>Was this autoimmune/rheumatologic testing performed during the first &lt; 4 weeks following onset of COVID-19 acute illness (if asymptomatic, within &lt; 4 weeks of the first positive test)</td>
<td>[rheuma_done]=1</td>
<td>12/20/2022: Added variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1358</td>
<td>ana_lab</td>
<td>Antinuclear antibody (ANA), titer</td>
<td>0, Homogeneous (diffuse)</td>
<td>1, Peripheral</td>
<td>2, Peckled</td>
<td>3, Nucleolar</td>
</tr>
<tr>
<td>1359</td>
<td>antinuclearunit</td>
<td>Antinuclear antibody type</td>
<td>[antinuclearunit]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1360</td>
<td>antinu_oth</td>
<td>Antinuclear antibody other units</td>
<td>[antinuclearunit]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1361</td>
<td>anti_ds dna</td>
<td>Anti-double stranded DNA, international units</td>
<td>[anti_ds dna]=1</td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1362</td>
<td>antidiaunit</td>
<td>Anti-double-stranded DNA</td>
<td>0, IU/ml, (International units/ml)</td>
<td>2/1/2022: units added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>rf_lab</td>
<td>Rheumatoid factor (RF), international units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>rheumunit</td>
<td>Rheumatoid factor units</td>
<td>0, IU/ml (International units/ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>anti_ro_ssa</td>
<td>Anti-ro/SSA, please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antirounit</td>
<td>Anti-ro/SSA units</td>
<td>0, U (Units)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>anti_la_ssb</td>
<td>Anti-LA/SSB, please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antilaunit</td>
<td>Anti-LA/SSB Units</td>
<td>0, U (Units)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>anti_smith_ab</td>
<td>Anti-Smith antibody, please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antismunit</td>
<td>Anti-Smith Antibody units</td>
<td>0, U (Units)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>anti_rnp</td>
<td>Anti-ribonuclear protein, please specify units (anti RNP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>antiripunit</td>
<td>Anti-ribonuclear protein units</td>
<td>0, U (Units)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>anti_ccp_lab</td>
<td>Anti citric citrullinated peptide (anti-CCP), please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>anticitunit</td>
<td>Anti citric citrullinated peptide units</td>
<td>0, U (Units)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>cyto_done</td>
<td>Any Cytokines collected? (Interleukin 2 receptor, Interleukin 1 beta, Interleukin 3, Interleukin 4, Interleukin 5, Interleukin 6, Interleukin 8, Interleukin 10, Interleukin 13, Interleukin 17, Interferon gamma, Tumor necrosis factor alpha)&lt;/span&gt;&lt;/p&gt;&lt;/div&gt;</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>il2_receptor</td>
<td>Interleukin 2 receptor, most abnormal, please specify units (IL2 receptor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>il2unit</td>
<td>IL2 receptor units</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>il1_beta</td>
<td>Interleukin 1 beta, most abnormal, please specify units (IL1 beta)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>il1unit</td>
<td>IL1 beta units</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>il2</td>
<td>Interleukin 2, most abnormal, please specify units (IL2)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>il2unit</td>
<td>Interleukin 2 (IL2) units</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>il4</td>
<td>Interleukin 4, most abnormal, please specify units (IL4)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>il4unit</td>
<td>IL4 units</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td>1, U/ml (Units per ml)</td>
<td></td>
<td>2/4/2022: units added</td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>1385 il5</td>
<td>Interleukin 5, most abnormal, please specify units (IL5)</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1386 il5unit</td>
<td>IL5 units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1387 il_6_peak</td>
<td>Interleukin 6 (IL-6, most abnormal). (If not applicable/available, put 9999). Please specify units</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1388 il6unit</td>
<td>IL6 Units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1389 il8</td>
<td>Interleukin 8, most abnormal, please specify units (IL8)</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1390 il8unit</td>
<td>IL8 Units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1391 il10</td>
<td>Interleukin 10, most abnormal, please specify units (IL10)</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1392 il10unit</td>
<td>IL10 Units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1393 il13</td>
<td>Interleukin 13, most abnormal, please specify units (IL13)</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1394 il13unit</td>
<td>IL13 Units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1395 il17</td>
<td>Interleukin 17, most abnormal, please specify units (IL17)</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1396 il17unit</td>
<td>IL17 Units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1397 if_gamma</td>
<td>Interferon gamma, most abnormal, please specify units</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1398 ilgunit</td>
<td>Interferon gamma units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1399 inf_alpha</td>
<td>Tumor necrosis factor alpha, most abnormal, please specify units (TNF alpha)</td>
<td>0, Pg/ml (Picograms per ml)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1400 infunit</td>
<td>Tumor necrosis factor alpha units</td>
<td>0, U/ml (Units per ml)</td>
<td>(cyto_done)=1'</td>
<td>1/22/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1401 Coagulation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1402 pt_done</td>
<td>Was PT done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>1403 pt</td>
<td>First PT since presentation, seconds</td>
<td>if not applicable/available, put 9999</td>
<td>(pt_done)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1404 pt_highest</td>
<td>Highest PT, seconds</td>
<td>(pt_done)=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1405 ptt_done</td>
<td>Was PTT done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>1406 ptt</td>
<td>First PTT since presentation, seconds</td>
<td>if not applicable/available, put 9999</td>
<td>(ptt_done)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1407 ptt_highest</td>
<td>Highest PTT, seconds</td>
<td>(ptt_done)=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1408 inr</td>
<td>First INR since presentation</td>
<td>(inr_done)=1 or (ptt_done)=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1409 ntt_highest</td>
<td>Highest INR</td>
<td>(inr_done)=1 or (ptt_done)=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1410 d_dimer</td>
<td>Did patient have D-Dimer?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1411 first_d_dimer</td>
<td>D-dimer closest to presentation. (Please specify units)</td>
<td>(d_dimer)=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1412 ddimerunits1</td>
<td>D-dimer units</td>
<td>0, mg/L</td>
<td>1, micrograms/ml (mcg/ml)</td>
<td>2, mcg/L</td>
<td>3, nanograms/ml (ng/ml)</td>
<td>1/22/2022: added</td>
</tr>
<tr>
<td>1413 ddimerunits2</td>
<td>D-dimer units 2</td>
<td>0, FEU</td>
<td>1, DDU</td>
<td>2/2/2022: added</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1414 d_dimer_peak</td>
<td>Peak D-dimer (Please specify units)</td>
<td>(d_dimer)=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1415 peakddimerunits1</td>
<td>Peak D-dimer units</td>
<td>0, mg/L</td>
<td>1, micrograms/ml (mcg/ml)</td>
<td>2, mcg/L</td>
<td>3, nanograms/ml (ng/ml)</td>
<td>1/22/2022: added</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------------------</td>
<td>---------------------------------</td>
<td>------------</td>
<td>-----------</td>
<td>---------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>peakddimerunits2</td>
<td>Peak d-dimer units 2</td>
<td>0, FEU</td>
<td>1, DDU</td>
<td></td>
<td>2/14/2022: units added</td>
<td></td>
</tr>
<tr>
<td>fibrinogen_done</td>
<td>Was fibrinogen done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(fibrinogen_done) +1</td>
<td>Core</td>
</tr>
<tr>
<td>fibrinogen</td>
<td>Fibrinogen at presentation. If not applicable/available, put 9999 (Please specify units)</td>
<td>(fibrinogen_done) +1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>fibrinogen_units</td>
<td>Fibrinogen units</td>
<td>0, mg/dL</td>
<td>1, g/L</td>
<td></td>
<td>2/14/2022: units added</td>
<td></td>
</tr>
<tr>
<td>fibrinogen_lowest</td>
<td>Lowest fibrinogen. (Please specify units)</td>
<td>(fibrinogen_done) +1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lowestfibrinogenunits</td>
<td>Lowest fibrinogen units</td>
<td>0, mg/dL</td>
<td>1, g/L</td>
<td></td>
<td>2/14/2022: units added</td>
<td></td>
</tr>
<tr>
<td>any_chem</td>
<td>Were any of the following chemistry labs collected? CPK, ammonia, B12</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(any_chem)=1</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>chemlab dn ac yn</td>
<td>Was this chemistry testing performed during the first &lt; 4 weeks following onset of COVID-19 acute illness (if asymptomatic, within &lt; 4 weeks of the first positive test)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(any_chem)=1</td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>alt</td>
<td>First ALT, Intl U/L, or IU/L</td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>altunit</td>
<td>First ALT units</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>alt highest</td>
<td>Highest ALT, Intl U/L</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>haltunit</td>
<td>Highest ALT units</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ast</td>
<td>First AST, Intl U/L</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>astunit</td>
<td>First AST unit</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ast _highest</td>
<td>Highest AST</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hastunit</td>
<td>Highest AST units</td>
<td>0, Units per liter (U/L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glucose</td>
<td>First glucose, please specify units</td>
<td>0, Mg/dL (Milligram per decilitre)</td>
<td>1, mmol/L (Millimole per liter)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glucoseunit</td>
<td>First glucose units</td>
<td>0, Mg/dL (Milligram per decilitre)</td>
<td>1, mmol/L (Millimole per liter)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glucose_min</td>
<td>Lowest glucose, please specify units</td>
<td>(fibrinogen_done) +1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glucoseunit</td>
<td>Lowest glucose units</td>
<td>0, Mg/dL (Milligram per decilitre)</td>
<td>1, mmol/L (Millimole per liter)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glucose_highest</td>
<td>Highest glucose, please specify units</td>
<td>(fibrinogen_done) +1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>glucoseunit</td>
<td>Highest glucose unit</td>
<td>0, Mg/dL (Milligram per decilitre)</td>
<td>1, mmol/L (Millimole per liter)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>bun</td>
<td>First BUN, please specify units</td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>bununit</td>
<td>First BUN units</td>
<td>0, Mg/dL (Milligram per deciliter)</td>
<td>1, mmol/L (Millimole per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>bun_highest</td>
<td>Highest BUN, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h bununit</td>
<td>Highest BUN unit</td>
<td>0, Mg/dL (Milligram per deciliter)</td>
<td>1, mmol/L (Millimole per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>creat_first</td>
<td>First creatinine, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>creatunit</td>
<td>First creatinine units</td>
<td>0, Mg/dL (Milligram per deciliter)</td>
<td>1, umol/L or mcg/L (Micromole per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>creat_high</td>
<td>Highest creatinine, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h creatunit</td>
<td>Highest creatinine units</td>
<td>0, Mg/dL (Milligram per deciliter)</td>
<td>1, umol/L or mcg/L (Micromole per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>sodium_first</td>
<td>First sodium, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sodiumunit</td>
<td>First sodium unit</td>
<td>0, mEq/L (Milliequivalents per liter)</td>
<td>1, mmol/L (Millimoles per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>sodium_highest</td>
<td>Highest sodium, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h sodiumunit</td>
<td>Highest sodium unit</td>
<td>0, mEq/L (Milliequivalents per liter)</td>
<td>1, mmol/L (Millimoles per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>creatine_kin</td>
<td>First creatine phosphokinase (creatine kinase, CPK), please specify units</td>
<td></td>
<td></td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>cpkunit</td>
<td>CPK units</td>
<td>0, mcg/L (Micrograms per liter)</td>
<td>1, U/L (Units per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>aldolase</td>
<td>Aldolase, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aldolunit</td>
<td>Aldolase Units</td>
<td>0, U/L (units per liter)</td>
<td>1, microcat/L (microkatal per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>ammonia</td>
<td>First ammonia, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ammounit</td>
<td>Ammonia Units</td>
<td>0, mcg/dL (Micrograms per deciliter)</td>
<td>1, umol/L (Micromoles per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>high_ammonia</td>
<td>Highest ammonia, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h ammonunit</td>
<td>Highest ammonia units</td>
<td>0, mcg/dL (Micrograms per deciliter)</td>
<td>1, umol/L (Micromoles per liter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>serum_b12</td>
<td>Serum B12, please specify units</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b12unit</td>
<td>Serum B12 units</td>
<td>0, pg/ml (Picograms per milliliter)</td>
<td>1, pmol/ml (Picomoles per milliliter)</td>
<td>2/3/2022: units added</td>
<td>12/20/2022: Became hidden</td>
<td></td>
</tr>
<tr>
<td>Epstein Barr Virus (EBV)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>1462 ebv</td>
<td>Any EBV done? (Anti-VCA IgM, Anti-VCA IgG, EA, EBV NA, Monospot)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1463 evb_dn_ac_yn</td>
<td>Was this EBV testing performed during the first &lt; 4 weeks following onset of COVID-19 acute illness (if asymptomatic, within &lt; 4 weeks of the first positive test)</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>1464 ebv_monospot</td>
<td>Heterophile antibody (Monospot)</td>
<td>0, Negative</td>
<td>1, Positive</td>
<td>9, Unknown</td>
<td></td>
<td>12/20/2022: Added variable</td>
</tr>
<tr>
<td>1465 anti_vca_igm</td>
<td>Antiviral capsid antigen IgM, (Anti-VCA IgM) Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1466 aigmunit</td>
<td>Anti-VCA IgM units</td>
<td>0, Positive</td>
<td>1, Negative</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1467 anti_vca_igg</td>
<td>Antiviral capsid antigen IgG, (Anti-VCA IgG) Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1468 aiggunit</td>
<td>Anti-VCA IgG units</td>
<td>0, Positive</td>
<td>1, Negative</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1469 early_antig</td>
<td>Early Antigen, (EA) Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1470 eaunit</td>
<td>EA units</td>
<td>0, Positive</td>
<td>1, Negative</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1471 ebv_na</td>
<td>EBV nuclear antigen, (EBV NA) Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1472 ebvunit</td>
<td>EBV NA units</td>
<td>0, Positive</td>
<td>1, Negative</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1473 monospot</td>
<td>Monospot Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1474 monounit</td>
<td>Monospot units</td>
<td>0, Positive</td>
<td>1, Negative</td>
<td></td>
<td></td>
<td>12/20/2022: Became hidden</td>
</tr>
<tr>
<td>1475 CSF</td>
<td>CSF culture/viral testing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1476 pnc_bld_cx</td>
<td>Positive blood culture</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>1477 pnc_bc_specifics</td>
<td>Positive blood culture organism</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1478 resp_virus</td>
<td>Respiratory viral panel results</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1479 CSF</td>
<td>Lumbar puncture performed?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>1480 countwbcunit</td>
<td>CSF WBC count in last tube. If not applicable/available, put 9999. Please specify units</td>
<td>0, Cells/mm^3 (Cells/cubic millimeter, or cells/µl, or cells/ml, or cells/microliter)</td>
<td>1, 10^6/L (Cells * 10^6 per liter)</td>
<td></td>
<td>12/20/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1481 ccf_wbc_ct</td>
<td>CSF WBC count in last tube. If not applicable/available, put 9999. Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1482 countwbcunit</td>
<td>CSF WBC count in last tube units</td>
<td>0, Cells/mm^3 (Cells/cubic millimeter, or cells/µl, or cells/ml, or cells/microliter)</td>
<td>1, 10^6/L (Cells * 10^6 per liter)</td>
<td></td>
<td>12/20/2022: units added</td>
<td></td>
</tr>
<tr>
<td>1483 ccf_d</td>
<td>CSF WBC differential in last tube. If missing, put 9999</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1484 wbc_pmins</td>
<td>% PMNS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1485 wbc_lmpho</td>
<td>% Lymphocytes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>wbc_monocy</td>
<td>% Monocytes</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>csf_rbc_count</td>
<td>CSF RBC count in last tube. (If not applicable/available, put 9999). Please specify units</td>
<td>0, Cells/mm^3, Cells/cubic millimeter, or cells/µl, or cells/mL, or cells/microliter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>proctunit</td>
<td>Protein units</td>
<td>0, mg/dL (Milligram per deciliter)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cff_albumin</td>
<td>CSF Albumin (mg/dl) / Plasma Albumin (g/dl)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cff_igg</td>
<td>CSF IgG Index</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cff_igg_syn</td>
<td>CSF IgG synthesis rate (mg/day)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pos_csf_cx</td>
<td>Positive CSF culture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pos_csf_cx</td>
<td>Positive CSF culture organism. (If not applicable/available, put 9999) Please specify units</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cff_op</td>
<td>CSF opening pressure in cm H20</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cff_oligoclonal</td>
<td>CSF oligoclonal bands</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EEG</td>
<td>One or more routine or continuous EEGs performed</td>
<td>0, None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>any_eeg</td>
<td>One or more routine or continuous EEGs performed</td>
<td>0, None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>any_eeg_none</td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>any_eeg_spot</td>
<td>Routine (spot)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>any_eeg_contin</td>
<td>Continuous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>any_eeg_unkn</td>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_abnormal</td>
<td>Any EEG abnormal</td>
<td>0, No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results</td>
<td>Abnormal EEG results. Check all that apply</td>
<td>0, EEG epileptiform interictal discharges</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results</td>
<td>EEG epileptiform interictal discharges</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results</td>
<td>EEG slowing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results</td>
<td>EEG slowing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------</td>
<td>------------------------------------</td>
<td>-------------------------------------------</td>
<td>-----------------------------------</td>
<td>-----------</td>
<td>----------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>eeg_results_seizure</td>
<td>EEG electrographic seizures</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(eeg_abnormal)=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results_status</td>
<td>EEG status epilepticus</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(eeg_abnormal)=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results_react</td>
<td>EEG reactivity</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(eeg_abnormal)=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results_absleep</td>
<td>EEG abnormal sleep architecture</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(eeg_abnormal)=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results_oth</td>
<td>EEG showed other results</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(eeg_abnormal)=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>eeg_results_abnsleep</td>
<td>EEG abnormal sleep architecture</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td>(eeg_abnormal)=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ncs_emgncs</td>
<td>Electromyogram and nerve conduction studies</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>ncs_emg_neurop_any</td>
<td>NCS/EMG showed any neuropathy</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(ncs_emgncs)=1</td>
<td>Core</td>
</tr>
<tr>
<td>ncs_emg_neuropath_check</td>
<td>Check all neuropathies found by NCS/EMG</td>
<td>0, EMG/NCS showed neuropathy: entrapment</td>
<td>1, EMG/NCS showed neuropathy: radiculopathy</td>
<td>3, EMG/NCS showed neuropathy: polyneuropathy</td>
<td>4, EMG/NCS showed neuropathy: mononeuropathy</td>
<td>5, EMG/NCS showed neuropathy: axonal disorder</td>
</tr>
<tr>
<td>ncs_emg_myop_any</td>
<td>EMG/NCS showed any myopathy or neuromuscular junction disorder</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td>(ncs_emgncs)=1</td>
<td>Core</td>
</tr>
<tr>
<td>ncs_eeg_myopath_check</td>
<td>Check all myopathies found by NCS/EMG</td>
<td>0, EMG/NCS showed myopathy: proximal</td>
<td>1, EMG/NCS showed myopathy: distal</td>
<td>2, EMG/NCS showed myopathy: upper extremity</td>
<td>3, EMG/NCS showed myopathy: lower extremity</td>
<td>4, EMG/NCS showed myopathy: inflammatory</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>cceeg_my_chk_presyn</td>
<td>EMG/NCS showed myopathy: pre-synaptic neuromuscular junction blockade</td>
<td>0, Unchecked 1, Checked</td>
<td>(ncs_emg_myop_pre)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cceeg_my_chk_postsyn</td>
<td>EMG/NCS showed myopathy: post-synaptic neuromuscular junction blockade</td>
<td>0, Unchecked 1, Checked</td>
<td>(ncs_emg_myop_post)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cceeg_my_chk_oth</td>
<td>EMG/NCS showed myopathy: other results</td>
<td>0, Unchecked 1, Checked</td>
<td>(ncs_emg_myop_oth)=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>csp_mri_abn</td>
<td>Specific results of MRI/EMG</td>
<td></td>
<td></td>
<td></td>
<td>5/23/2022: Added response</td>
<td></td>
</tr>
<tr>
<td>cerv_spine_ct_done</td>
<td>Cervical spine CT was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>spine_dn</td>
<td>Any spine imaging done?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>cerv_spine_ct_abn</td>
<td>Cervical spine CT showed other abnormalities</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cerv_spine_abn</td>
<td>Cervical spine abnormalities on CT</td>
<td>0, Cervical spine CT showed fracture</td>
<td>1, Cervical spine CT showed ligamentous injury</td>
<td>2, Cervical spine CT showed hemorrhage</td>
<td>3, Cervical spine CT showed canal stenosis</td>
<td>4, Cervical spine CT showed other results</td>
</tr>
<tr>
<td>cerv_spine_ct_abn_check</td>
<td>Cervical spine abnormalities on CT - Check all that apply</td>
<td>0, Cervical spine CT showed fracture</td>
<td>1, Cervical spine CT showed ligamentous injury</td>
<td>2, Cervical spine CT showed hemorrhage</td>
<td>3, Cervical spine CT showed canal stenosis</td>
<td>4, Cervical spine CT showed other results</td>
</tr>
<tr>
<td>cerv_spine_abn</td>
<td>Cervical spine abnormalities on CT</td>
<td>0, Cervical spine CT showed fracture</td>
<td>1, Cervical spine CT showed ligamentous injury</td>
<td>2, Cervical spine CT showed hemorrhage</td>
<td>3, Cervical spine CT showed canal stenosis</td>
<td>4, Cervical spine CT showed other results</td>
</tr>
<tr>
<td>cerv_spine_mri_abn</td>
<td>Cervical spine MRI was abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>cerv_spine_mri_done</td>
<td>Cervical spine MRI was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td>Core</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>c_sp_mri_abn_check</td>
<td>Abnormal cervical spine MRI findings Check all that apply</td>
<td>0, Cervical spine MRI showed fracture</td>
<td>1, Cervical spine MRI showed ligamentous injury</td>
<td>2, Cervical spine MRI hemorrhage</td>
<td>3, Cervical spine MRI canal stenosis</td>
<td>4, Cervical spine MRI root compression</td>
</tr>
<tr>
<td>cspnri_ab_chk_frac</td>
<td>Cervical spine MRI showed fracture</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_ligam</td>
<td>Cervical spine MRI showed ligamentous injury</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_hem</td>
<td>Cervical spine MRI hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_csten</td>
<td>Cervical spine MRI canal stenosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_cinfar</td>
<td>Cervical spine MRI cord infarct</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_csten</td>
<td>Cervical spine MRI root compression</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_csten</td>
<td>Cervical spine MRI root enhancement</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_csten</td>
<td>Cervical spine MRI cord compression</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_csten</td>
<td>Cervical spine MRI cord signal change</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>cspnri_ab_chk_oth</td>
<td>Cervical spine MRI showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c_sp_mri_oth_sp</td>
<td>Cervical spine MRI other specifics</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>th_sp_ct_done</td>
<td>Thoracic spine CT was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_sp_mri_done</td>
<td>Thoracic spine MRI was abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_sp_mri_done</td>
<td>Thoracic spine MRI was abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>t_sp_mri_done</td>
<td>Thoracic spine MRI done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------</td>
<td>-----------</td>
<td>-------</td>
<td>------------------</td>
</tr>
<tr>
<td>1624 t_sp_mri_abn_check</td>
<td>Thoracic spine abnormalities on MRI. Check all that apply</td>
<td>0, Thoracic spine MRI done</td>
<td>1, Thoracic spine MRI showed fracture</td>
<td>2, Thoracic spine MRI showed ligamentous injury</td>
<td>3, Thoracic spine MRI showed hemorrhage</td>
<td>4, Thoracic spine MRI showed stenosis</td>
</tr>
<tr>
<td>1625 tspmri_abn_chk_done</td>
<td>Thoracic spine MRI done</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1626 tspmri_abn_chk_frac</td>
<td>Thoracic spine MRI showed fracture</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1627 tspmri_abn chk_liga</td>
<td>Thoracic spine MRI showed ligamentous injury</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1628 tspmri_abn_chk_hem</td>
<td>Thoracic spine MRI showed hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1629 tspmri_abn chk_stenos</td>
<td>Thoracic spine MRI showed stenosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1630 tspmri_abn chk_cinfar</td>
<td>Thoracic spine MRI showed cord infarct</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1631 tspmri_abn chk_rcomp</td>
<td>Thoracic spine MRI showed root compression</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1632 tspmri_abn chk_renhanc</td>
<td>Thoracic spine MRI showed root enhancement</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1633 tspmri_abn chk_csten</td>
<td>Thoracic spine MRI showed canal stenosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1634 tspmri_abn chk_csignal</td>
<td>Thoracic spine MRI showed cord signal change</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1635 tspmri_abn chk_oth</td>
<td>Thoracic spine MRI showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1636 tspmri_oth_sp</td>
<td>Thoracic spine MRI showed other specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1637 ls_sp_mri_abn</td>
<td>Lumbosacral spine MRI was abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1650 ls_sp_mri done</td>
<td>Lumbosacral spine MRI done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1651 ls_sp_mri_abn</td>
<td>Lumbosacral MRI was abnormal</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LS spine CT**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>1639 ls_spine_ct_done</td>
<td>Lumbosacral spine CT was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Spine MRI abnormalities**

Check all that apply Lumbosacral spine CT abnormalities.

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>1643 ls_sp_abn_check</td>
<td>Lumbosacral spine CT abnormalities. Check all that apply</td>
<td>0, Lumbosacral spine CT showed CT ligamentous injury</td>
<td>1, Lumbosacral spine CT showed CT showed canal stenosis</td>
<td>2, Lumbosacral spine CT showed canal stenosis</td>
<td>3, Lumbosacral spine CT showed other results</td>
<td></td>
</tr>
<tr>
<td>1644 lssp_abn_abn</td>
<td>Lumbosacral spine CT showed CT ligamentous injury</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1645 lssp_abn_hem</td>
<td>Lumbosacral spine showed hemorrhage</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1646 lssp_abn_csten</td>
<td>Lumbosacral spine showed canal stenosis</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1647 lssp_abn_oth</td>
<td>Lumbosacral spine showed other results, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1648 ls_sp_oth_sp</td>
<td>Lumbosacral spine CT showed other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**LS spine MRI**

Check all that apply Lumbosacral spine abnormalities on MRI.
<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Field label</th>
<th>Value labels</th>
<th>Field Note</th>
<th>Branching</th>
<th>Notes</th>
<th>Required or Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>ls_sp_mri_check</td>
<td>Lumbosacral spine abnormalities on MRI</td>
<td>0, Lumbosacral spine MRI showed fracture</td>
<td>[ls_sp_mri_abn]=1</td>
<td>Core</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1, Lumbosacral spine MRI showed ligamentous injury</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2, Lumbosacral spine MRI showed hemorrhage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3, Lumbosacral spine MRI showed stenosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4, Lumbosacral spine MRI showed cord infarct</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5, Lumbosacral spine MRI showed root compression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6, Lumbosacral spine MRI showed root enhancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7, Lumbosacral spine MRI showed cord enhancement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>8, Lumbosacral spine MRI showed cord compression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>9, Lumbosacral spine MRI showed cord signal change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10, Lumbosacral spine MRI showed other results</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_frac</td>
<td>Lumbosacral spine MRI showed fracture</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_liga</td>
<td>Lumbosacral spine MRI showed ligamentous injury</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_hem</td>
<td>Lumbosacral spine MRI showed hemorrhage</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_sten</td>
<td>Lumbosacral spine MRI showed stenosis</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_cinfarc</td>
<td>Lumbosacral spine MRI showed cord infarct</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_rcompr</td>
<td>Lumbosacral spine MRI showed root compression</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_renhanc</td>
<td>Lumbosacral spine MRI showed root enhancement</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_cenhanc</td>
<td>Lumbosacral spine MRI showed cord enhancement</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_csignal</td>
<td>Lumbosacral spine MRI showed cord signal change</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_check_oth</td>
<td>Lumbosacral spine MRI showed other results, specify</td>
<td>0, Unchecked</td>
<td>[ls_sp_mri_abn]=1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ls_sp_mri_oth_sp</td>
<td>Lumbosacral spine MRI showed other specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xray_month</td>
<td>Month of chest X-ray</td>
<td>1, January</td>
<td>2, February</td>
<td>3, March</td>
<td>4, April</td>
<td>5, May</td>
</tr>
<tr>
<td>xray_year</td>
<td>Year of chest X-ray</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>abnormal_cxr</td>
<td>Did patient have an abnormal chest X-ray?</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>other_testin</td>
<td>Other testing was done</td>
<td>0, No</td>
<td>1, Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other_testin_spe</td>
<td>Specify other type of testing done and results</td>
<td></td>
<td></td>
<td>[other_testin]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autopsy</td>
<td>Autopsy performed</td>
<td>0, No</td>
<td>1, Yes</td>
<td>9, Unknown</td>
<td></td>
<td></td>
</tr>
<tr>
<td>autopsy_findings</td>
<td>Autopsy findings, specify</td>
<td></td>
<td></td>
<td>[autopsy]=1</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain</td>
<td>Biospecimens obtained. Please check all that apply</td>
<td>0, None</td>
<td>1, Blood</td>
<td>2, CSF</td>
<td>3, Feces</td>
<td>4, Urine</td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Biospecimens obtained. Please check all that apply</td>
<td>0, None</td>
<td>1, Blood</td>
<td>2, CSF</td>
<td>3, Feces</td>
<td>4, Urine</td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>None</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Blood</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>CSF</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Feces</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Urine</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Tissue</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Nasal or pharyngeal swab</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Saliva</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>biospecimen_obtain_oth</td>
<td>Other, specify</td>
<td>0, Unchecked</td>
<td>1, Checked</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sp_other Specify</td>
<td>Other specimen, describe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sp_blood_details</td>
<td>Blood--describe specimen details</td>
<td></td>
<td></td>
<td>[biospecimen_obt an(8)]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sp_csf_details</td>
<td>CSF-describe specimen details</td>
<td></td>
<td></td>
<td>[biospecimen_obt an(2)]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sp_urine_details</td>
<td>Urine--describe specimen details</td>
<td></td>
<td></td>
<td>[biospecimen_obt an(4)]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sp_tissue_details</td>
<td>Tissue--describe specimen details</td>
<td></td>
<td></td>
<td>[biospecimen_obt an(5)]=1</td>
<td>Core</td>
<td></td>
</tr>
<tr>
<td>sp_nasal_details</td>
<td>Nasal or pharyngeal swab--describe specimen details</td>
<td></td>
<td></td>
<td>[biospecimen_obt an(6)]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sp_saliva_details</td>
<td>Saliva--describe specimen details</td>
<td></td>
<td></td>
<td>[biospecimen_obt an(7)]=1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variable Name</td>
<td>Field label</td>
<td>Value labels</td>
<td>Field Note</td>
<td>Branching</td>
<td>Notes</td>
<td>Required or Core</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
<td>------------</td>
<td>-----------</td>
<td>-------</td>
<td>-----------------</td>
</tr>
<tr>
<td>spec_biorepository</td>
<td>Biospecimens will be sent to NeuroCOVID Biorepository</td>
<td>0, No</td>
<td>1, Yes</td>
<td>[biospecimen_obtain(1)] = '1' or [biospecimen_obtain(2)] = '1' or [biospecimen_obtain(3)] = '1' or [biospecimen_obtain(4)] = '1' or [biospecimen_obtain(5)] = '1' or [biospecimen_obtain(6)] = '1' or [biospecimen_obtain(7)] = '1' or [biospecimen_obtain(8)] = '1'</td>
<td></td>
<td>Required</td>
</tr>
<tr>
<td>notes_test</td>
<td>General notes/comments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>