

Clinical Policy: Polymerase Chain Reaction Respiratory Viral Panel Testing

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ImplicationsCoding Implications Date of Last Revision: 5/22	Revision
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<u>See Important Reminder at</u> <u>See Important Reminder at</u> the end of this policy for important regulatory and legal information.

Description

Medical necessity criteria for multiplex respiratory polymerase chain reaction (PCR) testing.

Note: For PCR testing for COVID-19, refer to LA.CP.MP.183 2019-Novel Coronavirus Testing.

Policy/Criteria

- I. It is the policy of Louisiana Healthcare Connections that respiratory viral panels (RVPs) testing for five pathogens or lessfewer are considered **medically necessary** when meeting oneall of the followingfollowing¹⁻⁷:
 - <u>A. Performed in the outpatient setting, The member/enrollee has one of the following clinical indications for infectious disease testing:</u>
 - 1. The member/enrollee is immunocompetent, and the clinical indication includes a presumption of active infection or infection-associated complications (which may include exacerbation of underlying disease) that require the identification of a causative organism for appropriate management. Note: Atypical clinical presentations of disease are considered appropriate indications for special populations who may not present with classic symptoms of infection (i.e., the elderly);
 - 2. The member/enrollee is immunocompromised (i.e., those with weakened immune systems including those with human immunodeficiency virus (HIV) or acquired immunodeficiency syndrome (AIDS), those who are taking immunosuppressive medications (i.e., chemotherapy, biologics, transplant-related immunosuppressive drugs, high-dose systemic corticosteroids) and those with inherited diseases that affect the immune system (i.e., congenital immunoglobulin deficiencies). Note: atypical clinical presentations of disease are considered appropriate indications for testing. In this population, testing may be performed once as part of a pre-transplant evaluation, regardless of the presence of symptoms;
 - B. The results of testing will influence the plan of impact clinical management in a manner already demonstrated in the peer-reviewed published literature to improve outcomes;
 - C. Testing is performed according to the intended use of the test in the intended population for which the test was developed and validated;
 - D. Targeted testing is not appropriate (i.e., will not provide sufficient information for the appropriate clinical management);
 - E. The panel performed includes at least the minimum pathogens required for clinical decision making for its intended use that can be reasonably detected by the test;
 - F. The registered test demonstrates equivalent or superior test performance characteristics analytical validity (AV) and clinical validity (CV) - to established standard-of-care (SOC) methods (i.e., culture, pathogen-specific PCR) for the majority of targets included on the panel;
 - G. Documentation of the following is clearly stated in the medical record:
 - 1. Specific clinical indications for testing (i.e., clinical suspicion of a pathogen as the cause of the medical condition);
 - 2. Specific reasons for performing panel testing;

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3. Provider type/specialty and Place of Service.

- **II.** It is the policy of Centene Corporation Louisiana Healthcare Connections that RVPs testing for six pathogens or more are considered **medically necessary** when meeting the following:
 - A. The criteria in section I are met, and any of the following:
 - 1. To assess for infection by other pathogens when COVID-19 is suspected and a COVID-19specific test result will not be available soon enough to influence the plan of care;
 - 2. The member is immunocompromised;
 - 3. The test is ordered by an infectious disease specialist, or an infectious disease specialist is not available;
 - **B.**<u>1.</u> Performed in a healthcare setting that cares for critically ill <u>patientsindividuals</u>, such as the emergency department or inpatient hospital, <u>includingand includes</u> those in observation status-<u>:</u>

H. It is the policy of Louisiana Healthcare Connections that respiratory viral panels (RVPs) testing for six pathogens or more are considered **medically necessary** in a healthcare setting that cares for critically ill patients, such as the emergency department or inpatient hospital, including those in observation status.

III. It is the policy of Louisiana Healthcare Connections that RVPs are considered **not medically necessary** for all other indications.

- 2. Member/enrollee is immunocompromised, as defined in section I.A.2.;
- 3. Member/enrollee is immunocompetent and both of the following:
 - a. A severe and established underlying respiratory pathology is present (i.e., severe asthma, chronic obstructive pulmonary disease (COPD), cystic fibrosis, pulmonary fibrosis, radiation therapy to the lung);
 - b. Treatment with antibiotics may be indicated according to established guidelines.^{17, 18}

Background

Polymerase chain reaction (PCR) respiratory viral panels (RVPRVPs) may detect the RNA or DNA of multiple types of respiratory viruses as a single test, often through a nasal, nasopharyngeal, or oropharyngeal swab.⁶ Viral pathogens are the most common cause of respiratory tract infections. PCR testing is effective for confirming respiratory viral infections with very high sensitivity and specificity.⁸ Rhinovirus, parainfluenza virus, coronavirus, adenovirus, respiratory syncytial virus, (RSV), Coxsackie virus, human metapneumovirus, and influenza virus account for most cases of viral respiratory infections.⁹ Immunocompromised patients can develop severe lower respiratory tract infections from common respiratory viral pathogens that otherwise cause mild upper respiratory tract infections in healthy patients.⁹¹⁰

PCR testing is generally effective for confirming respiratory viral infections with very high sensitivity and specificity.^{7,1311} Respiratory viral infections often have nonspecific clinical presentations and, therefore, accurate and timely identification through PCR testing has the potential to optimize antiviral use when appropriate, decrease the spread of any viral infection, and to reduce the number of patients being treated with antibiotics unnecessarily.^{8,10-12,13,14,15} Multiplex PCR testing can detect a variety of respiratory viruses depending on the type and brand of testing being used.¹² However, the diagnostic role and importance of these multi-pathogen panels in identifying specific viruses in the setting of a respiratory infection is quite limited because the care and management of the individual patient is rarely altered based upon the pathogen identified.¹⁴¹⁶



Infectious Disease Society of America (IDSA)

The IDSA recommends that "clinicians should use multiplex RT-PCR assays targeting a panel of respiratory pathogens, including influenza viruses, in hospitalized immunocompromised patients." Further, "clinicians can consider using multiplex RT-PCR assays targeting a panel of respiratory pathogens, including influenza viruses, in hospitalized patients who are not immunocompromised if it might influence care (e.g., aid in cohorting decisions, reduce testing, or decrease antibiotic use)."^{6(p898)}

Coding Implications

This clinical policy references Current Procedural Terminology (CPT[®]). CPT[®] is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 20202022, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage and may not support medical necessity. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

Table 1: CPT codes that support medical necessity in any place of service, without diagnosis code requirements

CPT Codes®	Description
87631	Infectious agent detection by nucleic acid (DNA or RNA); respiratory virus (e.g., adenovirus, influenza virus, coronavirus, metapneumovirus, parainfluenza virus, respiratory syncytial virus, rhinovirus), includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, multiple types or subtypes, 3-5 targets.

Table 2: CPT codes that support medical necessity when billed with place of service codes in table 3, or a diagnosis code in both table 4 and table 5, or a diagnosis code in table 6

CPT Codes®	Description
0098U	Respiratory pathogen, multiplex reverse transcription and multiplex amplified probe- technique, multiple types or subtypes, 14 targets (adenovirus, coronavirus, human- metapneumovirus, influenza A, influenza A subtype H1, influenza A subtype H3, influenza A subtype H1-2009, influenza B, parainfluenza virus, human- rhinovirus/enterovirus, respiratory syncytial virus, Bordetella pertussis, Chlamydophila- pneumoniae, Mycoplasma pneumoniae)

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CPT Codes®	Description
0099U	Respiratory pathogen, multiplex reverse transcription and multiplex amplified probe- technique, multiple types or subtypes, 20 targets (adenovirus, coronavirus 229E, coronavirus HKU1, coronavirus, coronavirus OC43, human metapneumovirus, influenza A, influenza A subtype, influenza A subtype H3, influenza A subtype H1-2009, influenza, parainfluenza virus, parainfluenza virus 2, parainfluenza virus 3, parainfluenza virus 4, human rhinovirus/enterovirus, respiratory syncytial virus, Bordetella pertussis, Chlamydophila pneumonia, Mycoplasma pneumoniae)
0100U	Respiratory pathogen, multiplex reverse transcription and multiplex amplified probe- technique, multiple types or subtypes, 21 targets (adenovirus, coronavirus 229E, coronavirus HKU1, coronavirus NL63, coronavirus OC43, human metapneumovirus, human rhinovirus/enterovirus, influenza A, including subtypes H1, H1-2009, and H3, influenza B, parainfluenza virus 1, parainfluenza virus 2, parainfluenza virus 3, parainfluenza virus 4, respiratory syncytial virus, Bordetella parapertussis [IS1001], Bordetella pertussis [ptxP], Chlamydia pneumoniae, Mycoplasma pneumoniae)
0115U	Respiratory infectious agent detection by nucleic acid (DNA and RNA), 18 viral types and subtypes and 2 bacterial targets, amplified probe technique, including multiplex reverse transcription for RNA targets, each analyte reported as detected or not detected
<u>0202U</u>	Infectious disease (bacterial or viral respiratory tract infection), pathogen-specific nucleic acid (DNA or RNA), 22 targets including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), qualitative RT-PCR, nasopharyngeal swab, each pathogen reported as detected or not detected
<u>0223U</u>	Infectious disease (bacterial or viral respiratory tract infection), pathogen-specific nucleic acid (DNA or RNA), 22 targets including severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), qualitative RT-PCR, nasopharyngeal swab, each pathogen reported as detected or not detected
<u>0225U</u>	Infectious disease (bacterial or viral respiratory tract infection) pathogen-specific DNA and RNA, 21 targets, including severe acute respiratory syndrome coronavirus 2 (SARS- CoV-2), amplified probe technique, including multiplex reverse transcription for RNA targets, each analyte reported as detected or not detected
87632	Infectious agent detection by nucleic acid (DNA or RNA); respiratory virus (eg,e.g., adenovirus, influenza virus, coronavirus, metapneumovirus, parainfluenza virus, respiratory syncytial virus, rhinovirus), includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, multiple types or subtypes, 6-11 targets
87633	Infectious agent detection by nucleic acid (DNA or RNA); respiratory virus (eg,e.g., adenovirus, influenza virus, coronavirus, metapneumovirus, parainfluenza virus, respiratory syncytial virus, rhinovirus), includes multiplex reverse transcription, when performed, and multiplex amplified probe technique, multiple types or subtypes, 12-25 targets



Table 3: Place of service codes supporting medical necessity for codes in table 2

Place of Service Code	Place of Service Name	Place of Service Description
<u>19</u>	Off Campus- Outpatient Hospital	A portion of an off-campus hospital provider based department which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization.
21	Inpatient Hospital	A facility other than psychiatric which primarily provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services by, or under, the supervision of physicians to patients admitted for a variety of medical conditions.
22*	Outpatient Hospital (Observation)	A portion of a hospital which provides diagnostic, therapeutic (both surgical and nonsurgical), and rehabilitation services to sick or injured persons who do not require hospitalization or institutionalization.
23	Emergency Room – Hospital	A portion of a hospital where emergency diagnosis and treatment of illness or injury is provided.

*NOTE: PCR testing in an outpatient place of service is reimbursable only when performed as part of the diagnostic work-up for a patient admitted for Observation.

Table 4: ICD-10 Diagnosis Codes that Support Medical Necessity for CPT Codes in Table 2 when Billed with a Diagnosis Code in Table 5

Table 2 when D	silied with a Diagnosis Code in Table 5
ICD-10-CM	Description
Code	
<u>A37.00</u>	Whooping cough due to Bordetella pertussis without pneumonia
<u>A37.01</u>	Whooping cough due to Bordetella pertussis with pneumonia
<u>A37.10</u>	Whooping cough due to Bordetella parapertussis without pneumonia
<u>A37.11</u>	Whooping cough due to Bordetella parapertussis with pneumonia
<u>A37.80</u>	Whooping cough due to other Bordetella species without pneumonia
<u>A37.81</u>	Whooping cough due to other Bordetella species with pneumonia
<u>A37.90</u>	Whooping cough, unspecified species without pneumonia
<u>A37.91</u>	Whooping cough, unspecified species with pneumonia
<u>A41.81</u>	Sepsis due to Enterococcus
<u>A41.89</u>	Other specified sepsis
<u>A41.9</u>	Sepsis, unspecified organism
<u>A48.1</u>	Legionnaires' disease



A48.2	Nonpneumonic Legionnaires' disease [Pontiac fever]
B25.0	Cytomegaloviral pneumonitis
<u>B33.23</u>	<u>Viral pericarditis</u>
<u>B33.24</u>	<u>Viral cardiomyopathy</u>
<u>B59</u>	Pneumocystosis
<u>B97.21</u>	SARS-associated coronavirus as the cause of diseases classified elsewhere
<u>B97.29</u>	Other coronavirus as the cause of diseases classified elsewhere
<u>J05.0</u>	Acute obstructive laryngitis [croup]
<u>J06.9</u>	Acute upper respiratory infection, unspecified
<u>J09.X1</u>	Influenza due to identified novel influenza A virus with pneumonia
<u>J09.X2</u>	Influenza due to identified novel influenza A virus with other respiratory manifestations
J09.X3	Influenza due to identified novel influenza A virus with gastrointestinal
	manifestations
<u>J09.X9</u>	Influenza due to identified novel influenza A virus with other manifestations
<u>J10.01</u>	Influenza due to other identified influenza virus with the same other identified
	influenza virus pneumonia
<u>J10.08</u>	Influenza due to other identified influenza virus with other specified pneumonia
<u>J10.1</u>	Influenza due to other identified influenza virus with other respiratory manifestations
<u>J10.2</u>	Influenza due to other identified influenza virus with gastrointestinal manifestations
<u>J10.81</u>	Influenza due to other identified influenza virus with encephalopathy
<u>J10.82</u>	Influenza due to other identified influenza virus with myocarditis
<u>J10.83</u>	Influenza due to other identified influenza virus with otitis media
<u>J10.89</u>	Influenza due to other identified influenza virus with other manifestations
<u>J11.08</u>	Influenza due to unidentified influenza virus with specified pneumonia
<u>J11.1</u>	Influenza due to unidentified influenza virus with other respiratory manifestations
<u>J11.2</u>	Influenza due to unidentified influenza virus with gastrointestinal manifestations
<u>J11.81</u>	Influenza due to unidentified influenza virus with encephalopathy
<u>J11.82</u>	Influenza due to unidentified influenza virus with myocarditis
<u>J11.83</u>	Influenza due to unidentified influenza virus with otitis media
<u>J11.89</u>	Influenza due to unidentified influenza virus with other manifestations
<u>J12.0</u>	Adenoviral pneumonia
<u>J12.1</u>	Respiratory syncytial virus pneumonia
<u>J12.2</u>	Parainfluenza virus pneumonia
<u>J12.3</u>	Human metapneumovirus pneumonia
<u>J12.81</u>	Pneumonia due to SARS-associated coronavirus
<u>J12.82</u>	Pneumonia due to coronavirus disease 2019
J12.89	Other viral pneumonia
<u>J12.9</u>	Viral pneumonia, unspecified
<u>J13</u>	Pneumonia due to Streptococcus pneumoniae
<u>J15.0</u>	Pneumonia due to Klebsiella pneumoniae
<u>J15.1</u>	Pneumonia due to Pseudomonas
<u>J15.20</u>	Pneumonia due to staphylococcus, unspecified



J15.211	Pneumonia due to Methicillin susceptible Staphylococcus aureus
<u>J15.211</u> J15.212	Pneumonia due to Methicillin resistant Staphylococcus aureus
<u>J15.212</u> J15.29	Pneumonia due to other staphylococcus
<u>J15.29</u> J15.3	Pneumonia due to streptococcus, group B
<u>J15.3</u> J15.4	Pneumonia due to other streptococci
<u>J15.4</u> J15.7	
<u>J15.7</u> J15.8	Pneumonia due to Mycoplasma pneumoniae Pneumonia due to other specified bacteria
<u>J15.8</u> J15.9	<u>Unspecified bacterial pneumonia</u>
<u>J15.9</u> J16.0	Chlamydial pneumonia
<u>J16.8</u>	Pneumonia due to other specified infectious organisms
<u>J18.0</u>	Bronchopneumonia, unspecified organism
<u>J18.1</u>	Lobar pneumonia, unspecified organism
<u>J18.2</u>	Hypostatic pneumonia, unspecified organism
<u>J18.8</u>	Other pneumonia, unspecified organism
<u>J18.9</u>	Pneumonia, unspecified organism
<u>J20.0</u>	Acute bronchitis due to Mycoplasma pneumoniae
<u>J20.1</u>	Acute bronchitis due to Hemophilus influenzae
<u>J20.2</u>	Acute bronchitis due to streptococcus
<u>J20.3</u>	Acute bronchitis due to coxsackievirus
<u>J20.4</u>	Acute bronchitis due to parainfluenza virus
<u>J20.5</u>	Acute bronchitis due to respiratory syncytial virus
<u>J20.6</u>	Acute bronchitis due to rhinovirus
<u>J20.8</u>	Acute bronchitis due to other specified organisms
<u>J20.9</u>	Acute bronchitis, unspecified
<u>J21.9</u>	Acute bronchiolitis, unspecified
<u>J22</u>	Unspecified acute lower respiratory infection
<u>J44.0</u>	Chronic obstructive pulmonary disease with (acute) lower respiratory infection
<u>J44.1</u>	Chronic obstructive pulmonary disease with (acute) exacerbation
<u>J45.31</u>	Mild persistent asthma with (acute) exacerbation
<u>J45.32</u>	Mild persistent asthma with status asthmaticus
<u>J45.41</u>	Moderate persistent asthma with (acute) exacerbation
<u>J45.42</u>	Moderate persistent asthma with status asthmaticus
<u>J45.51</u>	Severe persistent asthma with (acute) exacerbation
<u>J45.52</u>	Severe persistent asthma with status asthmaticus
<u>J45.901</u>	Unspecified asthma with (acute) exacerbation
<u>J45.902</u>	Unspecified asthma with status asthmaticus
<u>J84.116</u>	Cryptogenic organizing pneumonia
<u>J84.117</u>	Desquamative interstitial pneumonia
<u>J84.2</u>	Lymphoid interstitial pneumonia
<u>J85.0</u>	Gangrene and necrosis of lung
<u>J85.1</u>	Abscess of lung with pneumonia
<u>J85.2</u>	Abscess of lung without pneumonia
<u>J85.3</u>	Abscess of mediastinum
R05.1	Acute cough



<u>R05.2</u>	Subacute cough
<u>R05.3</u>	Chronic cough
<u>R05.8</u>	Other specified cough
<u>R06.02</u>	Shortness of breath
<u>R06.03</u>	Acute respiratory distress
<u>R06.2</u>	Wheezing
<u>R50.9</u>	Fever, unspecified
<u>R65.20</u>	Severe sepsis without septic shock
<u>R65.21</u>	Severe sepsis with septic shock
<u>R78.81</u>	Bacteremia
<u>T86.33</u>	Heart-lung transplant infection
<u>T86.812</u>	Lung transplant infection
<u>Z03.818</u>	Encounter for observation for suspected exposure to other biological agents ruled
	out
<u>Z20.822</u>	Contact with and (suspected) exposure to COVID-19
<u>Z20.828</u>	Contact with and (suspected) exposure to other viral communicable diseases
<u>U07.1</u>	COVID-19

Table 5: ICD-10 Diagnosis Codes that Support Medical Necessity for CPT codes inTable 2 when Billed with a Diagnosis Code in Table 4

ICD-10-CM Code	Description
<u>B20</u>	Human immunodeficiency virus [HIV] disease
<u>C46.0</u>	Kaposi's sarcoma of skin
<u>C46.1</u>	Kaposi's sarcoma of soft tissue
<u>C46.2</u>	Kaposi's sarcoma of palate
<u>C46.3</u>	Kaposi's sarcoma of lymph nodes
<u>C46.4</u>	Kaposi's sarcoma of gastrointestinal sites
<u>C46.50</u>	Kaposi's sarcoma of unspecified lung
<u>C46.51</u>	Kaposi's sarcoma of right lung
<u>C46.52</u>	Kaposi's sarcoma of left lung
<u>C46.7</u>	Kaposi's sarcoma of other sites
<u>D57.01</u>	Hb-SS disease with acute chest syndrome
<u>D61.09</u>	Other constitutional aplastic anemia
<u>D61.1</u>	Drug-induced aplastic anemia
<u>D61.2</u>	Aplastic anemia due to other external agents
<u>D61.3</u>	Idiopathic aplastic anemia
<u>D61.810</u>	Antineoplastic chemotherapy induced pancytopenia
<u>D61.811</u>	Other drug-induced pancytopenia
<u>D61.818</u>	Other pancytopenia
<u>D61.82</u>	<u>Myelophthisis</u>
<u>D61.89</u>	Other specified aplastic anemias and other bone marrow failure syndromes
<u>D61.9</u>	Aplastic anemia, unspecified
<u>D64.81</u>	Anemia due to antineoplastic chemotherapy



<u>D64.89</u>	Other specified anemias		
<u>D70.0</u>	Congenital agranulocytosis		
D70.1	Agranulocytosis secondary to cancer chemotherapy		
<u>D70.2</u>	Other drug-induced agranulocytosis		
D70.3	Neutropenia due to infection		
D70.4	Cyclic neutropenia		
D70.9	Neutropenia, unspecified		
D80.0	Hereditary hypogammaglobulinemia		
D80.1	Nonfamilial hypogammaglobulinemia		
D80.2	Selective deficiency of immunoglobulin A [IgA]		
D80.3	Selective deficiency of immunoglobulin G [IgG] subclasses		
D80.4	Selective deficiency of immunoglobulin M [IgM]		
D80.5	Immunodeficiency with increased immunoglobulin M [IgM]		
D80.6	Antibody deficiency with near-normal immunoglobulins or with		
	hyperimmunoglobulinemia		
<u>D80.8</u>	Other immunodeficiencies with predominantly antibody defects		
<u>D80.9</u>	Immunodeficiency with predominantly antibody defects, unspecified		
<u>D81.0</u>	Severe combined immunodeficiency [SCID] with reticular dysgenesis		
<u>D81.1</u>	Severe combined immunodeficiency [SCID] with low T- and B-cell numbers		
<u>D81.2</u>	Severe combined immunodeficiency [SCID] with low or normal B-cell numbers		
<u>D81.30</u>	Adenosine deaminase deficiency, unspecified		
<u>D81.31</u>	Severe combined immunodeficiency due to adenosine deaminase deficiency		
<u>D81.32</u>	Adenosine deaminase 2 deficiency		
<u>D81.39</u>	Other adenosine deaminase deficiency		
<u>D81.4</u>	<u>Nezelof's syndrome</u>		
<u>D81.5</u>	Purine nucleoside phosphorylase [PNP] deficiency		
<u>D81.6</u>	Major histocompatibility complex class I deficiency		
<u>D81.7</u>	Major histocompatibility complex class II deficiency		
<u>D81.810</u>	Biotinidase deficiency		
<u>D81.818</u>	Other biotin-dependent carboxylase deficiency		
<u>D81.82</u>	Activated Phosphoinositide 3-kinase Delta Syndrome [APDS]		
<u>D81.89</u>	Other combined immunodeficiencies		
<u>D81.9</u>	Combined immunodeficiency, unspecified		
<u>D82.0</u>	Wiskott-Aldrich syndrome		
<u>D82.1</u>	Di George's syndrome		
<u>D82.2</u>	Immunodeficiency with short-limbed stature		
<u>D82.3</u>	Immunodeficiency following hereditary defective response to Epstein-Barr virus		
<u>D82.4</u>	Hyperimmunoglobulin E [IgE] syndrome		
<u>D82.8</u>	Immunodeficiency associated with other specified major defects		
<u>D83.0</u>	Common variable immunodeficiency with predominant abnormalities of B-cell		
	numbers and function		
<u>D83.1</u>	Common variable immunodeficiency with predominant immunoregulatory T-cell		
	disorders		





<u>D83.2</u>	Common variable immunodeficiency with autoantibodies to B- or T-cells		
<u>D83.8</u>	Other common variable immunodeficiencies		
<u>D83.9</u>	Common variable immunodeficiency, unspecified		
<u>D84.0</u>	Lymphocyte function antigen-1 [LFA-1] defect		
<u>D84.1</u>	Defects in the complement system		
<u>D84.821</u>	Immunodeficiency due to drugs		
D84.822	Immunodeficiency due to external causes		
<u>D84.89</u>	Other immunodeficiencies		
<u>D84.9</u>	Immunodeficiency, unspecified		
<u>D89.0</u>	Polyclonal hypergammaglobulinemia		
<u>D89.1</u>	Cryoglobulinemia		
<u>D89.3</u>	Immune reconstitution syndrome		
<u>D89.41</u>	Monoclonal mast cell activation syndrome		
<u>D89.42</u>	Idiopathic mast cell activation syndrome		
D89.43	Secondary mast cell activation		
D89.44	Hereditary alpha tryptasemia		
D89.49	Other mast cell activation disorder		
D89.810	Acute graft-versus-host disease		
D89.811	Chronic graft-versus-host disease		
D89.812	Acute on chronic graft-versus-host disease		
D89.813	Graft-versus-host disease, unspecified		
D89.82	Autoimmune lymphoproliferative syndrome [ALPS]		
D89.89	Other specified disorders involving the immune mechanism, not elsewhere		
	classified		
<u>E08.43</u>	Diabetes mellitus due to underlying condition with diabetic autonomic		
	(poly)neuropathy		
<u>E10.43</u>	Type 1 diabetes mellitus with diabetic autonomic (poly)neuropathy		
<u>E11.43</u>	Type 2 diabetes mellitus with diabetic autonomic (poly)neuropathy		
<u>E13.43</u>	Other specified diabetes mellitus with diabetic autonomic (poly)neuropathy		
<u>E84.0</u>	Cystic fibrosis with pulmonary manifestations		
<u>J44.9</u>	Chronic obstructive pulmonary disease, unspecified		
<u>J45.991</u>	Cough variant asthma		
<u>J70.1</u>	Chronic and other pulmonary manifestations due to radiation		
<u>J84.01</u>	<u>Alveolar proteinosis</u>		
<u>J84.02</u>	Pulmonary alveolar microlithiasis		
<u>J84.03</u>	Idiopathic pulmonary hemosiderosis		
<u>J84.10</u>	Pulmonary fibrosis, unspecified		
<u>J84.112</u>	Idiopathic pulmonary fibrosis		
<u>J84.114</u>	Acute interstitial pneumonitis		
<u>J84.170</u>	Interstitial lung disease with progressive fibrotic phenotype in diseases classified		
	elsewhere		
<u>J84.178</u>	Other interstitial pulmonary diseases with fibrosis in diseases classified elsewhere		
<u>J84.81</u>	Lymphangioleiomyomatosis		
<u>J84.82</u>	Adult pulmonary Langerhans cell histiocytosis		





<u>J84.89</u>	Other specified interstitial pulmonary diseases			
<u>098.711</u>	Human immunodeficiency virus [HIV] disease complicating pregnancy, first			
	trimester			
<u>098.712</u>	Human immunodeficiency virus [HIV] disease complicating pregnancy, second			
	trimester			
<u>098.713</u>	Human immunodeficiency virus [HIV] disease complicating pregnancy, third			
	trimester			
<u>T80.82XS</u>	Complication of immune effector cellular therapy, sequela			
<u>Z51.11</u>	Encounter for antineoplastic chemotherapy			
<u>Z92.850</u>	Personal history of Chimeric Antigen Receptor T-cell therapy			
<u>Z92.858</u>	Personal history of other cellular therapy			
<u>Z92.86</u>	Personal history of gene therapy			
<u>Z94.0</u>	Kidney transplant status			
<u>Z94.1</u>	Heart transplant status			
<u>Z94.2</u>	Lung transplant status			
<u>Z94.3</u>	Heart and lungs transplant status			
<u>Z94.4</u>	Liver transplant status			
<u>Z94.5</u>	Skin transplant status			
<u>Z94.6</u>	Bone transplant status			
<u>Z94.81</u>	Bone marrow transplant status			
<u>Z94.82</u>	Intestine transplant status			
<u>Z94.83</u>	Pancreas transplant status			
<u>Z94.84</u>	Stem cells transplant status			
<u>Z94.89</u>	Other transplanted organ and tissue status			

<u>Table 6: ICD-10 Diagnosis Codes that Support Medical Necessity for CPT codes in</u> Table 2

Table 2	
<u>ICD-10-CM</u>	Description
<u>Code</u>	
<u>Z94.0</u>	Kidney transplant status
<u>Z94.1</u>	Heart transplant status
<u>Z94.2</u>	Lung transplant status
<u>Z94.3</u>	Heart and lungs transplant status
<u>Z94.4</u>	Liver transplant status
<u>Z94.5</u>	Skin transplant status
<u>Z94.6</u>	Bone transplant status
<u>Z94.81</u>	Bone marrow transplant status
<u>Z94.82</u>	Intestine transplant status
<u>Z94.83</u>	Pancreas transplant status
<u>Z94.84</u>	Stem cells transplant status
<u>Z94.89</u>	Other transplanted organ and tissue status

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Reviews, Revisions, and Approvals	Revision Date	Approval Date
Converted corporate to local policy.	08/15/2020	
Annual review. References reviewed and updated. Updated	5/22	
background with no clinical significance. Specialist reviewed. Added		
and may not support medical necessity to Coding Implications section		
Replaced prior criteria in sections I. and II. with current criteria.	<u>706/23</u>	
Removed policy statement III. Background updated with no impact on		
criteria. Updated verbiage in Table 2 description to include new		
diagnosis code requirements. Added Place of Service Code 19 in Table		
3. Added Table 4, Table 5, and Table 6 which include ICD-10		
diagnosis codes. References reviewed and updated. Removed note		
after the policy description referring to CP.CPC.03 Preventive Health		
and Clinical Practice Guidelines for PCR testing for COVID-19. Added		
<u>0202U, 0223U and 0225U to CPT table 2.</u>		

References

- Local coverage determination.article. Billing and coding: MoIDX: multiplex nucleic acid amplified tests for respiratory viralmolecular syndromic panels (L37315). Centers for Medicare and Medicaid Services Web site. <u>http://www.ems.hhs.gov/med/seareh.asp</u>. for infectious disease pathogen identification testing (A58710). Centers for Medicare and Medicaid Services Web site. <u>Published May 13,</u> 2019<u>http://www.cms.hhs.gov/mcd/search.asp</u>. Published April 17, 2022 (revised OctoberJanuary 01, 20192023). Accessed February 03, 2022.09, 2023.
- Local coverage determination.article. Billing and coding: MoIDX: multiplex nucleic acid amplified tests for respiratory viralmolecular syndromic panels (L37301for infectious disease pathogen identification testing (A58720). Centers for Medicare and Medicaid Services Web site. <u>http://www.cms.hhs.gov/mcd/search.asp</u>. Published <u>May 13, 2019April</u> <u>17, 2022</u> (revised OctoberJanuary 01, 20192023). Accessed February 07, 202209, 2023.
- 3. Local coverage determination. MoIDX: multiplex nucleic acid amplified tests for respiratory viral panels (L37348). Local coverage article. Billing and coding: MoIDX: molecular syndromic panels for infectious disease pathogen identification testing (A58726). Centers for Medicare and Medicaid Services Web site. http://www.cms.hhs.gov/mcd/search.asp. Published April 17, 2022 (revised January 01, 2023). Accessed February 09, 2023.
- 4. Local coverage article. Billing and coding: MolDX: molecular syndromic panels for infectious disease pathogen identification testing (A58747). Centers for Medicare and Medicaid Services Web site. http://www.cms.hhs.gov/mcd/search.asp. Published April 17, 2022 (revised January 01, 2023). Accessed February 10, 2023.
- Local coverage article. Billing and coding: MolDX: molecular syndromic panels for infectious disease pathogen identification testing (A58761). Centers for Medicare and Medicaid Services Web site. <u>http://www.cms.hhs.gov/mcd/search.asp</u>. Published December 03, 2018<u>April 17, 2022</u> (revised November 30, 2020January 01, 2023). Accessed February 08, 2022.
- 4. Local coverage determination. MoIDX: multiplex nucleic acid amplified tests for respiratory viral panels (L37713). Centers for Medicare and Medicaid Services Web site. http://www.cms.hhs.gov/mcd/search.asp. Published November 12, 2018 (revised November

Polymerase chain reaction respiratory viral panel testing



11, 2019). Accessed February 08, 2022.

- Local coverage determination. MoIDX: multiplex nucleic acid amplified tests for respiratory viral panels (L37764). Centers for Medicare and Medicaid Services Web site. <u>http://www.ems.hhs.gov/med/search.asp</u>. Published December 17, 2018 (revised October 10, 2020). Accessed February 08, 2022<u>2023</u>.
- Uyeki TM, Bernstein HH, Bradley JS, et al. Clinical Practice Guidelines by the Infectious Diseases Society of America: 2018 Update on Diagnosis, Treatment, Chemoprophylaxis, and Institutional Outbreak Management of Seasonal Influenzaa. *Clin Infect Dis*. 2019;68(6):895-<u>to</u>902. doi:10.1093/cid/ciy874
- Esposito S, Mencacci A, Cenci E, Camilloni B, Silvestri E, Principi N. Multiplex Platforms for the Identification of Respiratory Pathogens: Are They Useful in Pediatric Clinical Practice?. *Front Cell Infect Microbiol*. 2019;9:196. Published 2019 Jun 4. doi:10.3389/fcimb.2019.00196
- 8. Echavarría M, Marcone DN, Querci M, et al. Clinical impact of rapid molecular detection of respiratory pathogens in patients with acute respiratory infection. *J Clin Virol*. 2018;108:90-<u>to</u> 95. doi:10.1016/j.jcv.2018.09.009
- 9. Weston S, Frieman MB. Respiratory Viruses. *Encyclopedia of Microbiology*. 2019;85 to -101. doi:10.1016/B978-0-12-801238-3.66161-5
- 9.10. Ramirez JA, Musher DM, Evans SE, et al. Treatment of Community-Acquired Pneumonia in Immunocompromised Adults: A Consensus Statement Regarding Initial Strategies. *Chest.* 2020;-158(5):1896-<u>to</u> 1911. doi:10.1016/j.chest.2020.05.598
- <u>11.</u> Busson L, Bartiaux M, Brahim S, et al. Contribution of the FilmArray Respiratory Panel in the management of adult and pediatric patients attending the emergency room during 2015 to 2016 influenza epidemics: An interventional study. *Int J Infect Dis.* 2019;83:32 to 39. doi:10.1016/j.ijid.2019.03.027
- 10.12. Hill AT, Gold PM, El Solh AA, et al. Adult Outpatients with Acute Cough Due to Suspected Pneumonia or Influenza: CHEST Guideline and Expert Panel Report. Chest. 2019;155(1):155-to 167. doi:10.1016/j.chest.2018.09.016
- 11.13. Molecular Test Assessment. FilmArray <u>Respiratory Panelrespiratory panel</u> (BioFire Diagnostics LLC). Hayes. <u>www.hayesinc.com</u>. Published May 21, 2020 (annual review June 28, 2021 May 31, 2022). Accessed February 07, 2022. 22, 2023.
- 12.14. Molecular Test Assessment. FilmArray <u>Respiratory Panelrespiratory panel</u> 2 (BioFire Diagnostics LLC). Hayes. <u>www.hayesinc.com</u>. Published March 10, 2020 (annual review February 24, 2021). Accessed February 07, 2022. 22, 2023.
- 15. Wils J, Saegeman V, Schuermans A. Impact of multiplexed respiratory viral panels on infection control measures and antimicrobial stewardship: a review of the literature. *Eur J Clin Microbiol Infect Dis.* 2022;41(2):187 to 202. doi:10.1007/s10096-021-04375-3
- 13. Busson L, Bartiaux M, Brahim S, et al. Contribution of the FilmArray Respiratory Panel in the management of adult and pediatric patients attending the emergency room during 2015-2016 influenza epidemics: An interventional study. *Int J Infect Dis.* 2019;83:32-39. doi:10.1016/j.ijid.2019.03.027
- 14.16. Ralston SL, Lieberthal AS, Meissner HC, et al. Clinical practice guideline: the diagnosis, management, and prevention of bronchiolitis [published correction appears in Pediatrics. 2015 Oct;136(4):782]. *Pediatrics*. 2014;134(5):e1474-<u>to</u>e1502. doi:10.1542/peds.2014-

Polymerase chain reaction respiratory viral panel testing



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- 17. Metlay JP, Waterer GW, Long AC, et al. Diagnosis and treatment of adults with communityacquired pneumonia. An official clinical practice guideline of the American Thoracic Society and Infectious Diseases Society of America. *Am J Respir Crit Care Med.* 2019;200(7):e45e67.
- 18. Global Initiative for Asthma®. Global strategy for asthma management and prevention. https://ginasthma.org/wp-content/uploads/2018/04/wms-GINA-2018-reporttracked_v1.3.pdf . Published 2015. Updated 2018.
- 15.<u>1.</u> Wils J, Saegeman V, Schuermans A. Impact of multiplexed respiratory viral panels on infection control measures and antimicrobial stewardship: a review of the literature. *Eur J Clin Microbiol Infect Dis.* 2022;41(2):187-202. doi:10.1007/s10096-021-04375-3

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This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

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