

**Appendix 1: Feature definitions**

<b>Features</b>	<b>Definitions</b>
Cough	Cough is a reflex that keeps your throat and airways clear.
Sputum	Sputum is a thick type of mucus made in lungs. If you have an infection or chronic illness affecting the lungs or airways, it can make you cough up sputum.
Achypnea	A normal breathing rate for an adult at rest is 16 to 20 breaths per minute. Achypnea is the term that your health care provider uses to describe your breathing if it is too fast, especially if you have fast, shallow breathing from a lung disease or other medical cause.
Hemoptysis	Hemoptysis is the spitting up of blood or bloody mucus from the lungs and respiratory tract.
Fever	A fever is a body temperature that is higher than normal. A normal temperature can vary from person to person, but it is usually around 98.6 °F (37 °C).
Chest pain	Chest pain is pain that you feel anywhere along the front of your body between your neck and upper abdomen. Chest pain appears in many forms, ranging from a sharp stab to a dull ache. Sometimes chest pain feels crushing or burning.
Chest discomfort	Pressure, tightness, or other discomfort originating in or radiating to the chest.
Pulmonary function test	Pulmonary function tests (PFTs) are noninvasive tests that show how well the lungs are working. The tests measure lung volume, capacity, rates of flow, and gas exchange. Normal values for PFTs vary from person to person. The amount of air inhaled and exhaled in your test results are compared to the average for someone of the same age, height, sex, and race.
Lung cavity	Lung cavity is an abnormal, thick-walled, air-filled space within the lung. Diagnosis of a lung cavity is made with a chest X-ray or CT scan of the chest.
Atelectasis	Atelectasis is the collapse or closure of a lung resulting in reduced or absent gas exchange. It is usually unilateral, affecting part or all of one lung. Diagnosis of atelectasis is made with a chest X-ray or CT scan of the chest.