



# COVID-19: A Lack of Early Testing and Limitations of Telemedicine Leads to Multiple Readmissions

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## Learning Objectives

1. Present a positive COVID-19 patient with multiple comorbidities who was readmitted hours after discharge
2. Question how assessment and documentation could affect care
3. Highlight how the indirect patient contact of telemedicine could influence exam evaluations

## Case Description

A 40-year-old male with severe asthma and congestive heart failure presented to a tertiary care center Emergency Department (ED) after four days of worsening nonproductive cough and shortness of breath (SOB). The patient was seen one day prior at a neighboring community hospital for evaluation of symptoms suggesting viral infection and was referred to their outpatient COVID-19 testing site. Before being tested, his symptoms worsened and he presented to the ED.

Upon arrival, he was afebrile with an oxygen saturation of 99% on 11L aerosol face mask. He stated his symptoms were similar to asthma exacerbations that lead to intubations in the past. He denied chest pain, palpitations, and dizziness. His lungs showed diffuse wheezing with poor air movement. The patient tested positive for COVID-19, and radiographs showed left lower pneumonia with atypical features. He was then admitted to inpatient care. Nine days later, he desaturated to 87% during a telehealth guided Physical Therapy (PT) discharge evaluation. His oxygen saturation dropped during sitting-balance assessment and recovered within one minute of rest. The following day, he was discharged home based on his demonstration of mobile independence during PT and overall symptom improvements. Arriving home, the patient's SOB worsened while climbing the stairs to his apartment, and an ambulance service brought him back

to the hospital the same day. Upon arrival, the patient appeared SOB with an oxygen saturation of 99% on 4L nasal canula. The patient was admitted and was stable when discharged three days later.

## Discussion

Here we reported a clinically symptomatic COVID-19 positive patient with a history of severe asthmatic exacerbations experiencing multiple readmissions during his clinical course. Disease novelty, resource allocations, inconsistent home access documentation, and telehealth limitations may have played roles in readmittance. In the patient's initial ED evaluation, limited test access prolonged testing approval. A study describing COVID-19 screening from 1/20/2020 to 3/24/2020 noted continual reductions in testing restrictions and turnaround times as their COVID-19 laboratory infrastructure developed.<sup>1</sup>

During the discharge evaluation, PT determined the number of steps to his home entrance. However, a home suitability assessment questionnaire, forwarded to inpatient care, lacked questions regarding home access. In an investigation of hospital readmissions, interventions combining discharge planning and support reduced readmittance.<sup>2</sup> Due to documentation discrepancies, alternative discharge plans were not considered that may have changed the patient's course.

Additionally, PT evaluated the patient's mobile independence while physically distancing themselves from direct patient contact. The inability to perform critical exam components (palpitation & touching) can be a significant limitation for clinicians.<sup>3</sup> In addition to the inconsistent documentation across disciplines, this report observed how telemedicine evaluation protocols may also influence patient readmissions. Future research investigating discharge and diagnostic measures will be pivotal in shaping patient care beyond the current pandemic.

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