Help manage the long-term effects of COVID-19 with timely care

COVID-19 remains a major public health concern. Unlike other respiratory diseases, COVID-19 is present year-round and may lead to a second peak in cases during the summer months. COVID-19 infections range in severity for patients 50+ years old or with certain underlying medical conditions, increasing risk of severe illness.²

Severe COVID-19 can affect most bodily systems, significantly impacting patient health.3 As we move into a post-pandemic era, healthcare leaders must recognize the long-term impacts that COVID-19 can have on patient outcomes and health system performance. There is an opportunity to shift our care mindset from reactive to proactive by adopting standardized workflows that prioritize timely, equitable treatment.

The long-term impacts of COVID-19

AT THE PATIENT LEVEL

Long-term health impacts of COVID-19



Post-acute sequelae (PASC) or post-COVID conditions (PCCs)*

Per the Centers for Disease Control and Prevention (CDC), PCC is also known as Long COVID. The CDC states while anyone who gets COVID-19 can develop Long COVID, studies have shown that some groups of people are more likely to develop Long COVID than others, including those people who have experienced more severe COVID-19 illness, especially those were hospitalized or needed intensive care.4 Symptoms of Long COVID, such as fatigue, cognitive impairment, breathing issues,⁵ chest pain, psychiatric issues,⁶ joint pain, gastrointestinal issues, and cough,⁷ are difficult to attribute to one diagnosis.

*According to the CDC, PCC is also known as Long COVID. The agency also notes that the definition of Long COVID continues to be evaluated as data are collected, analyzed, and reported, and understanding of the chronic condition improves. (CDC. Clinical Overview of Long COVID. July 24, 2025).



Worsening chronic conditions

Preexisting chronic conditions are not only risk factors for severe COVID-19 but can also be worsened by a COVID-19 infection due to heightened inflammation, added strain on bodily systems, and immune dysregulation.^{8,9} For example, COVID-19 infection is linked to:



Exacerbation of neurological symptoms in patients with a history of stroke, Parkinson's disease (PD), Alzheimer's disease, multiple sclerosis, and epilepsy.¹⁰



Metabolic dysregulation and stress, resulting in higher insulin resistance, reduced glycemic control, and increased risk of diabetic ketoacidosis in patients with type 1 diabetes and severe COVID-19.¹¹⁻¹³



leading to worsening of previous respiratory diseases like asthma, chronic obstructive pulmonary disease (COPD), and interstitial lung disease for patients hospitalized with COVID-19.14

Respiratory complications,



Cardiovascular complications, increasing incidence of cardiovascular diseases,† and structural heart changes, particularly for those with preexisting heart conditions. 15,16

fincluding stroke, arrhythmia, myocarditis, cardiomyopathy, coronary heart disease, hypertension, heart failure, thromboembolic disease, and cardiogenic shock.



New-onset chronic conditions

COVID-19 can also jump-start a long list of conditions, including:

DIABETES

diabetes compared with patients without COVID-19; risk and burden of diabetes increases with COVID-19 severity.¹⁷

increased risk of incident

ACUTE KIDNEY INJURY (AKI)

higher risk for AKI and 1.6x higher risk for declined kidney function[‡] in hospitalized COVID-19 patients vs nonhospitalized COVID-19 patients.¹⁸

increased risk of MACE in hospitalized

COVID-19 cases without history

of cardiovascular disease (CVD),

compared with COVID-19-negative

‡Glomerular filtration rate < 60 mL/min/1.73 m².

MAJOR ADVERSE CARDIAC EVENTS (MACE)

ASTHMA

higher risk for developing asthma in patients with severe COVID-19 compared with those with nonsevere COVID-19.19

subjects with CVD.²⁰

AUTOIMMUNE DISEASES

increased risk of acquiring an autoimmune disease among patients with COVID-19, with greater risk among patients with severe COVID-19.22

PSYCHIATRIC DISORDERS increased incidence of first

psychiatric diagnosis post COVID-19, with higher risk for psychiatric sequelae after hospitalization.²¹

AT THE SYSTEM LEVEL **Quality measures**

COVID-19 may negatively impact performance on multiple quality measures. Many Healthcare Effectiveness Data and Information Set (HEDIS) and Centers for Medicare & Medicaid Services (CMS) quality measures are focused on high-risk factors for severe COVID-19.^{2,23}

For example: Condition-specific measures§ related to chronic conditions impacted by COVID-19

- Comprehensive diabetes care: Hemoglobin A1C poor control (>9.0%) COPD or asthma in older adults admission rate
- Heart failure admission rate
- Depression remission at 12 months
- §Across Medicaid Adult Core Set, Merit-based Incentive Payment Systems (MIPS), Medicare Shared Savings Program (MSSP), and Medicare Stars.

From reactive to proactive COVID-19 care²⁴

EARLY COVID-19 Responding to emergency

("reactive mode")

Treatment uncertainty,

emerging therapies reserved

for the most severe cases

Ad hoc, resource-intensive

workflows that contribute to staff

burnout and economic losses

Loosened quality reporting



public health emergency, requiring reactive measures like social distancing and quarantine to prevent hospitalization and death

Responding to COVID-19 as a

TODAY'S COVID-19 Treating to prevent exacerbation

("proactive mode")



of broader respiratory disease initiatives, requiring a proactive approach focused on education and vaccination to prevent hospitalization, death, and the risk of chronic disease

Responding to COVID-19 in the context



Guideline-endorsed, 25,26,¶ testing and treatment options used widely in outpatient and acute care settings to prevent disease progression



that prioritize timely testing and treatment to preserve healthcare resources

Standardized, streamlined workflows



Growing focus on COVID's

As part of their Core Elements of Hospital Antibiotic Stewardship Programs, the CDC recommends changing from IV to oral antibiotic therapy to improve patient safety.

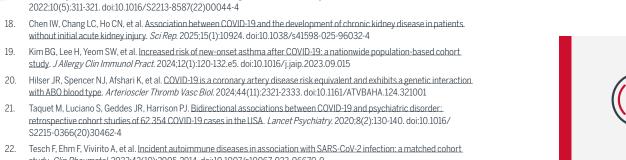
connection to quality measures



requirements during the pandemic



processes to enable more standardized COVID-19 care without added



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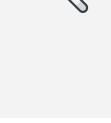
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burden on clinicians. Learn more about how to protect patients and mitigate broader systemic impacts related to COVID-19.

Look for opportunities to leverage existing infrastructure, adapt current



